From 6053441953394372793
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15f443,be02a3368cfb3f4f,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 11946d,be02a3368cfb3f4f,start
X-Google-Attributes: gid11946d,public
X-Google-Thread: 151e61,be02a3368cfb3f4f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-07 09:30:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site kitty.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!rocksanne!sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.dcom,net.ham-radio,net.wanted
Subject: Baudot --> ASCII Software Wanted
Message-ID: <693@kitty.UUCP>
Date: Tue, 7-Jan-86 12:30:37 EST
Article-I.D.: kitty.693
Posted: Tue Jan 7 12:30:37 1986
Date-Received: Fri, 10-Jan-86 06:37:36 EST
Distribution: net
Organization: Recognition Research Corp., Clarence, NY
Lines: 18
Xref: linus net.dcom:1389 net.ham-radio:3106 net.wanted:7167

I would like to monitor (receive-only) a Baudot data stream and display the characters on a Radio Shack Model 100 for ease of portability. It seems to me that the bar code wand input port to the Model 100 would be an ideal way to get access to a data stream (through a suitable polar or neutral to TTL converter circuit, which I would furnish).

Does anyone have any software to do this using the above or any other input means for the Model 100? I have very little experience with the Model 100 other than to use it as a portable terminal, I don't have an assembler for it, and I *detest* BASIC - so I am not inclined to write it myself.

Thanks to any who respond.

==> Larry Lippman @ Recognition Research Corp., Clarence, New York   <==
==> UUCP   {decvax|dual|rocksanne|rocksvax|watmath}!sunybcs!kitty!larry <==
==> VOICE   716/741-9185   {rice|shell}!baylor!/   <==
==> FAX   716/741-9635 {G1, G2, G3 modes}   duke!ethos!/   <==
==>   burl!gladys!/   <==
==> "Have you hugged your cat today?"   ihnp4!/   <==

From -8664242155217623564
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d168c82c7e3fa0a5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-07 09:34:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles hp 1.3 exp 09/24/84; site hplsla.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tikal!

hplsla!glenne
From: glenne@hplsla.UUCP (Glenn Engel)
Newsgroups: net.ham-radio
Subject: CQ 440 MHz
Message-ID: <13500003@hplsla.UUCP>
Date: Tue, 7-Jan-86 12:34:00 EST
Article-I.D.: hplsla.13500003
Posted: Tue Jan 7 12:34:00 1986
Date-Received: Thu, 9-Jan-86 00:11:47 EST
Lines: 19
Nf-ID: #N:hplsla:13500003:000:786
Nf-From: hplsla!glenne   Jan 7 10:34:00 1986

Our amateur radio club is installing a 440 MHz repeater. We will be building our own computer-based controller, but want to buy the transmitter and receiver. Possible options are :

1. Cannibalize a commercial solid-state mobile radio (GE, Motorola, etc.)
2. ICOM IC-RP3010 UHF Repeater
3. SPECTRUM COMMUNICATIONS Transmitter and Receiver (SCR450A, SCT410B)
4. Duplexers: either WACOM or TX/RX SYSTEMS

Does anyone have experience with any of these (or other UHF repeaters)? Any good deals out there ?

Any comments or suggestions on UHF transceivers, handie-talkies, etc. will also be appreciated.

Glenn Engel, NN7N (hplabs!hp-pcd!hplsla!glenne) 206-335-2066

From -1284107758777294847
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eaec9d43f2038375,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-07 13:31:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!hoffmann%marie@mc.lcs.mit.edu
From: hoffmann%marie@mc.lcs.mit.edu (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Broadcast polarization
Message-ID: <1325@brl-tgr.ARPA>
Date: Tue, 7-Jan-86 16:31:20 EST
Article-I.D.: brl-tgr.1325
Posted: Tue Jan 7 16:31:20 1986
Date-Received: Fri, 10-Jan-86 06:43:58 EST
Sender: news@brl-tgr.ARPA
Lines: 18

The use of circular polarization is television broadcasting has been, as far as I know, restricted to certain subscription stations operating in the UHF band. By transmitting with, for example, right-hand circular-polarization and equipping the receivers with a similar antenna, they can effect considerable attenuation of odd-number reflection ghosts, since these would have opposite polarization sense. And actually, it is really just the first reflection that is a problem, second, third... bounces are usually too far attenuated to create a visible problem. Actually, the visual aspect of the problem is only secondary to the technical problem of decoding suppressed-synch type scrambled transmissions. Multipath makes decoding a stable image more difficult.

Now, in the case of broadcast FM stations, some proportion of the carrier is transmitted in both the horizontal and vertical planes. This is mostly as a concession to mobile receivers that commonly posses vertical whip antennas.

From -4630592663349243850
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ed42d0a5b2d6838c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-07 18:28:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Scanner frequencies database...
Message-ID: <732@ihu1h.UUCP>
Date: Tue, 7-Jan-86 21:28:27 EST
Article-I.D.: ihu1h.732
Posted: Tue Jan 7 21:28:27 1986
Date-Received: Wed, 8-Jan-86 06:24:48 EST
References: <1211@brl-tgr.ARPA>
Organization: AT&T Bell Laboratories
Lines: 41

x

FCC records are available from the US National Technical Information Service in three forms:

1. Microfiche - catalog PR-718-1 contains all of the FCC datafiles that are available on microfiche from NTIS.

2. Magnetic tape - catalog PR-718-2 contains all of the FCC datafiles that are available on magnetic tape from NTIS. EBCDIC tapes are available in 7 track 1600 bpi, and 9 track 800, 1600, or 6250

bpi.

3. 5.25" floppy diskette in ASCII format, compatible with the IBM-PC. I don't think a catalog is available yet, so call the NTIS if interested in floppies.

Call the NTIS at (703)254-7160 for the catalogs or other information.

I think microfiche is the cheapest media, cheaper yet if you buy the set Bob Grove sells at about $150. The magnetic tape version is available from NTIS for over $7200.00!

> I am interested in building an online database of frequencies for my scanner.
> I seem to remember reading somewhere about the FCC having this data on
> magtape in ANSI format available for rent. I have small group of people
> interested in this so a fee could be provided. Does anyone know if this
> really exists and if so, how to order it? I have tried plowing through
> Government Documents at the library with no luck. Thanks in advance.
>
> Michael Harpe
> University of Louisville
>
--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 7255780194239653341
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,968e22c1dbe62c93,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-07 18:59:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Fix your Bearcat 250 now or never
Message-ID: <733@ihu1h.UUCP>
Date: Tue, 7-Jan-86 21:59:05 EST
Article-I.D.: ihu1h.733
Posted: Tue Jan 7 21:59:05 1986
Date-Received: Wed, 8-Jan-86 06:25:23 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 33

x

Been procrastinating about getting your broken Bearcat 250 scanner repaired? You had better do it quickly, or else it may be impossible to fix.

I've been asked to repair a few defective Bearcat 250s with the same complaint: the LED display is blank, except for a single decimal point in the lower right hand corner. This usually means something in the switching power supply chain is defective.

Part of this chain contains IC6, an Exar NC57902 custom divider chip, Electra part #NC57-902. Uniden just discontinued this part, so I couldn't repair the last 250 in for service.

Just before this custom IC was discontinued, a quantity of these ICs were bought by an authorized Bearcat repair agent, Electronic Repair Center, in Franklin Park, Illinois. This facility won't sell Bearcat parts, but they will repair your scanner for a flat fee.

It's already too late for those of you wishing factory service for your BC101, Bearcat's first synthesized scanner. Bearcat will not service this unit as the main CPU, a custom IC, is no longer available. Luckily, the last BC101 I repaired (on the morning of my wedding) had a good CPU.

--

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -6771021119622711732
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,968e22c1dbe62c93
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-08 05:37:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxk.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!houxk!djt
From: djt@houxk.UUCP (#D.TRULLI)
Newsgroups: net.ham-radio
Subject: Re: Fix your Bearcat 250 now or never
Message-ID: <509@houxk.UUCP>
Date: Wed, 8-Jan-86 08:37:06 EST
Article-I.D.: houxk.509
Posted: Wed Jan 8 08:37:06 1986

Date-Received: Thu, 9-Jan-86 02:44:25 EST
References: <733@ihu1h.UUCP>
Organization: AT&T Information Systems, Holmdel NJ
Lines: 16

I also have a Bearcat 210 with a bad IC6. Uniden
told me that the part was unavailable but they
would send a form for a 50% discount on a
new scanner. I received the form and found these
prices to be no bargin. The ads in QST
match or beat these prices. So lets thank
Bearcat Uniden for leaving us old customers
out in the cold.

Dave Trulli NN2Z
houxk!djt
201-949-4774

From -571121936394085625
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,46c7345d2af18b4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-08 09:08:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!wjc@ll-vlsi
From: wjc@ll-vlsi (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: digital data svc.
Message-ID: <1342@brl-tgr.ARPA>
Date: Wed, 8-Jan-86 12:08:51 EST
Article-I.D.: brl-tgr.1342
Posted: Wed Jan 8 12:08:51 1986
Date-Received: Fri, 10-Jan-86 06:47:12 EST
Sender: news@brl-tgr.ARPA
Lines: 8

Unfortunately, non-cellular mobile phone services occupy a rather small
slice of spectrum. However, the general area of 800-1000 MHz (inside of
which cellular services reside) could be interesting to look at for a
digital data service.

Bill
N1CPK

From -195869715030430269

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a937b2797e27f32
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-08 19:11:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: $Revision: 1.6.2.13 $; site hpuslma.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ltuxa!we53!busch!wucs!wuphys!hpuslma!scott
From: scott@hpuslma.UUCP
Newsgroups: net.ham-radio
Subject: Re: What kind of keys do you like?
Message-ID: <894300002@hpuslma.UUCP>
Date: Wed, 8-Jan-86 22:11:00 EST
Article-I.D.: hpuslma.894300002
Posted: Wed Jan 8 22:11:00 1986
Date-Received: Fri, 10-Jan-86 05:14:19 EST
References: <244@kvue.UUCP>
Lines: 17
Nf-ID: #R:kvue:-24400:hpuslma:894300002:000:521
Nf-From: hpuslma!scott   Jan 8 21:11:00 1986

Since I only received my license again in August, I can't give you much
of a recommendation on paddles, but I thought I would mention that I just
built an 8044 keyer from scratch. My wife gave me a Meisel Music paddle
for Christmas so that's what I am using right now.

I am sure that it may not be as good as the Bencher or Vibroplex, but I got
a good price on it! One thing is for sure--it does beat my J38 and old bug
that I once used!

Hope to catch you on CW someday.

73,
Jim
N0GLP
Hewlett Packard
St. Louis

From 117120467685594611
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6425b33f88cdbc34,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-09 05:11:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Uniden CR2021
Message-ID: <734@ihu1h.UUCP>
Date: Thu, 9-Jan-86 08:11:22 EST
Article-I.D.: ihu1h.734

Posted: Thu Jan 9 08:11:22 1986
Date-Received: Fri, 10-Jan-86 05:15:16 EST
References: <1270@brl-tgr.ARPA>
Organization: AT&T Bell Laboratories
Lines: 13

Couldn't reach you via electronic mail.

See if you can order a service manual for a Realistic DX400
from Radio Shack. It's a CR2021 clone.

  > About a year ago, I queried the group about getting a schematic
  > for a Uniden CR2021 .... Can anyone help out?

  > Jim, wa1uou
  > <jberets@bbn-vax.arpa>
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5983679316261981359
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,40f4640d1419e4a7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-09 05:33:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!linus!philabs!cmcl2!seismo!lll-crg!ucdavis!ucbvax!decwrl!dec-rhea!dec-
beta!blanchard
From: blanchard@beta.DEC
Newsgroups: net.ham-radio
Subject: BC-348-R
Message-ID: <341@decwrl.DEC.COM>
Date: Thu, 9-Jan-86 08:33:07 EST
Article-I.D.: decwrl.341
Posted: Thu Jan 9 08:33:07 1986
Date-Received: Sat, 11-Jan-86 06:06:33 EST
Sender: daemon@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 21

Subject: BC-348-R

To: Andrew Jonathan Fine

     Concerning the BC-348-R, I beleive that in my archives I would have
all the information that you would need. You should have at least given a
call letter, address, or phone number to contact you. I'm not a software
type and have no idea how to mail directly to you over the net, maybe you
can help me and tell me how its done given your Path listing?

Dennis Blanchard

(603) 884-5813 days (work)

143 East Rd.
Hampstead, N.H. 03841

....decvax!decwrl!rhea!beta!blanchard

From -7995423770964318083
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cf29bf9be12c4bcd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-09 09:49:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site techsup
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!convex!techsup!mikey
From: mikey@techsup
Newsgroups: net.ham-radio
Subject: Re: Proposal (LONG!!!)
Message-ID: <-27771444@techsup>
Date: Thu, 9-Jan-86 12:49:00 EST
Article-I.D.: techsup.-27771444
Posted: Thu Jan 9 12:49:00 1986
Date-Received: Fri, 17-Jan-86 01:29:32 EST
References: <277714@techsup>
Lines: 26
Nf-ID: #R:techsup:-27771447:techsup:-27771444:000:1119
Nf-From: techsup!mikey   Jan 9 11:49:00 1986

I posted the original of Mr. Stoners letter to usenet, and I'll forward
all respones to him.

All comments are appreciated, both pro and con.

For the record, I've gotten information that the ARRL will oppose
this proposal.

Finally, I'll reread the original and other documents that I didn't post
to usenet and any that are relevent, I will post here. I didn't post
them all before, but I see a need now as there seems to be the feeling
here that we are 'giving up' a section of the spectrum when the feeling
from the other documents is that this will not be a surrender, just that
there would be an additional service, as it would require a license to
operate but that would be allowed under technician and higher class
license. In other words, this would be a new 'no code' license for
'digital' use only. I personally think it is a great vehicle for enticing

new blood into the HAM ranks, as newcomers will get a taste of the RF spectrum and then want to move up to VHF high or UHF once they get their TECH license, or into HF if they learn more than the minimum code.

mikey N1DVJ
trsvax!techsup!bbimg!mikey

From -6619986457323894673
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f48487742270a768,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,f48487742270a768,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 15f443,f48487742270a768,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1986-01-09 15:07:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site nvuxh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!pyuxww!pyuxv!nvuxh!pmbs
From: pmbs@nvuxh.UUCP (P.BILODEAU)
Newsgroups: net.audio,net.wanted,net.ham-radio
Subject: Pioneer CTF900 Click
Message-ID: <111@nvuxh.UUCP>
Date: Thu, 9-Jan-86 18:07:03 EST
Article-I.D.: nvuxh.111
Posted: Thu Jan 9 18:07:03 1986
Date-Received: Fri, 10-Jan-86 07:28:15 EST
Organization: Bell Communications Research, Inc.
Lines: 19
Xref: watmath net.audio:7055 net.wanted:7881 net.ham-radio:3724

I have a Pioneer CTF900 Cassette Player that has developed an annoying click in the output to my amplifier. It doesn't matter whether the tape has anything recorded on it or not, so I am tending to shy away from the record portion of the circuitry. The beast is so complex that before I go too far and wished I hadn't, I thought that I would poll the net to see if anyone has had a static click appear on their machine, and if they found or knew the fix. (The click seems to be at random intervals and affects both channels).

Thanks for your help and if I stumble across the solution I will query the net to see if anyone else needs it.

Paul Bilodeau
Bell Communications Research
NVC-2X229
331 Newman Springs Road
Red Bank, NJ 07701
201-758-5397

From -6137459426071253041
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1363ce,72a624439019f99,start
X-Google-Attributes: gid1363ce,public
X-Google-Thread: 151e61,72a624439019f99,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-09 19:13:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.auto
Subject: US govt operated travelers' info radio stations
Message-ID: <735@ihu1h.UUCP>
Date: Thu, 9-Jan-86 22:13:44 EST
Article-I.D.: ihu1h.735
Posted: Thu Jan 9 22:13:44 1986
Date-Received: Fri, 10-Jan-86 07:33:48 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 218
Xref: watmath net.ham-radio:3725 net.auto:9022

x

Several weeks ago, I posted a list of low power, FCC-licensed stations which broadcast information of interest to travelers.

A search of federal IRAC records unearthed another list of stations which provide the same type of services. These are operated by agencies of the United States Government and are not under FCC jurisdiction.

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US: Agriculture, TIS, 10w

[Blanchar, AR]_____	0.5300____call?	(govt recds)
" [Boulder R, MT]_____	1.6100____call?	(govt recds)
" [Bozeman, MT]_____	1.6100____call?	(govt recds)
" [Bsqdlapc, NM]_____	1.6100____call?	(govt recds)
" [Canyon Pt, AZ]_____	1.6100____KIF782	(govt recds)
" [Cle Elum, WA]_____	0.5300____call?	(govt recds)
" [Clodcrft, NM]_____	1.6100____KIF780	(govt recds)
" [Cook Cy, MT]_____	1.6100____call?	(govt recds)
" [Eldon, AZ]_____	1.6100____KGD49	(govt recds)
" [Gardiner, MT]_____	1.6100____call?	(govt recds)
" [Glenada, OR]_____	1.6100____KOQ226	(govt recds)
" [Gltn Canyon, MT]____	1.6100____call?	(govt recds)
" [Greenbas, NM]_____	1.6100____KID325	(govt recds)
" [Hallsrdg, OR]_____	1.6100____KCR834	(govt recds)
" [Hardnrdg, IN]_____	0.5300____KOQ212	(govt recds)

```
                "        [Hope, AK]__________   1.6100____KOQ221    (govt recds)
                "        [Hylt Canyon, MT]____  1.6100____call?     (govt recds)
                "        [Jacob L, AZ]________  1.6100____KGD50     (govt recds)
                "        [Kinzuapt, PA]_______  1.6100____KSG225    (govt recds)
                "        [Laguna, CA]_________  1.6100____KGB528    (govt recds)
                "        [Mark Twain, MO]_____  1.6100____KOQ213    (govt recds)
                "        [Mayhill, NM]________  1.6100____KID326    (govt recds)
                "        [Mdsnrvcn, MT]_______  1.6100____call?     (govt recds)
                "        [Mountnvw, AR]_______  0.5300____call?     (govt recds)
                "        [N Fork, ID]_________  1.6100____call?     (govt recds)
                "        [Naches, WA]_________  1.6100____call?     (govt recds)
                "        [No Bend, OR]________  1.6100____KOQ227    (govt recds)
                "        [Palmer Mtn, CA]_____  1.6100____KGD44     (govt recds)
                "        [Portage, AK]________  1.6100____KOQ222    (govt recds)
                "        [Reedsport, OR]______  1.6100____KOQ228    (govt recds)
                "        [Ruidoso, NM]________  1.6100____KGR403    (govt recds)
                "        [Sholow, AZ]_________  0.5300____KIF794    (govt recds)
                "        [Sldrcanyon, AZ]_____  0.5300____KGD48     (govt recds)
                "        [Stanley, ID]________  1.6100____call?     (govt recds)
                "        [Sunsetpt, AZ]_______  0.5300____KGR402    (govt recds)
                "        [Targh Pass, MT]_____  1.6100____call?     (govt recds)
                "        [Tmn Campgnd, MT]____  1.6100____call?     (govt recds)
                "        [Washington, WA]_____  0.5300____KOQ205    (govt recds)
                "        [Week, NM]__________   1.6100____KGR405    (govt recds)
                "        [Wnchsrhl, OR]_______  1.6100____KOQ229    (govt recds)
                "        [Yale, WA]__________   1.6100____KOQ206    (govt recds)
                "        [Ylwsn Valley, MT]___  1.6100____call?     (govt recds)
US: Air Force, TIS, 10w
                         [Kennedy Space Ctr,]_  1.6100____call?     (govt recds)
US: Army, TIS, 10w_____[Bridgeport, WA]_____   1.6100____call?     (govt recds)
                "        [White Sands Missil]_  0.5300____call?     (govt recds)
                "        [Wylie, TX]__________  0.5300____call?     (govt recds)
US: Coast Guard, TIS, 10w
                         [Kent Is, MD]________  1.6100____call?     (govt recds)
                "        [Washington, DC]_____  0.5300____call?     (govt recds)
US: FAA, TIS, 10w______[National Apt, VA]___   0.5300____call?     (govt recds)
US: Interior, TIS, 0.5w
                         [Sanibeli, FL]_______  1.6100____KIE664    (govt recds)
                "        [Sanibeli, FL]_______  1.6100____KIE665    (govt recds)
                "        [Sanibeli, FL]_______  1.6100____KIE666    (govt recds)
                "        [Sanibeli, FL]_______  1.6100____KIE667    (govt recds)
                "        [Sanibeli, FL]_______  1.6100____KIE668    (govt recds)
                "        [Sanibeli, FL]_______  1.6100____KIE669    (govt recds)
                "        [Sanibeli, FL]_______  1.6100____KIE670    (govt recds)
                "        [Sanibeli, FL]_______  1.6100____KIE671    (govt recds)
                "        [Sanibeli, FL]_______  1.6100____KIE672    (govt recds)
US: Interior, TIS, 10w
                         [Archrock, CA]_______  1.6100____KOP739    (govt recds)
                "        [Artistpt, WY]_______  1.6100____KOP713    (govt recds)
                "        [Ash Mtn, CA]________  0.5300____KPB748    (govt recds)
                "        [Atspntpt, WY]_______  1.6100____KOP714    (govt recds)
                "        [Barstow, CA]________  1.6100____KMC490    (govt recds)
                "        [Bass L, MI]_________  1.6100____KIE769    (govt recds)
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"       [Beaver Meadows, CO]_   1.6100____KAF713    (govt recds)
"       [Bisctbsn, WY]_______   1.6100____KOP716    (govt recds)
"       [Blackwoods, ME]_____   1.6100____KFB760    (govt recds)
"       [Bodie I, NC]________   1.6100____KPC711    (govt recds)
"       [Breenbrr, TN]_______   1.6100____KPB747    (govt recds)
"       [Bridge, WY]_________   1.6100____KOP722    (govt recds)
"       [Bryce, UT]__________   1.6100____KOP798    (govt recds)
"       [Bssmrbnd, WY]_______   1.6100____KOD454    (govt recds)
"       [Buckhollow, MO]_____   1.6100____KAC779    (govt recds)
"       [Buxton, NC]_________   1.6100____KPC713    (govt recds)
"       [Cache, OK]__________   1.6100____KKF645    (govt recds)
"       [Cadescove, TN]______   1.6100____KIE722    (govt recds)
"       [Cajonmtn, CA]_______   0.5300____KMC476    (govt recds)
"       [Callicon, NY]_______   1.6100____KBF783    (govt recds)
"       [Clgmnsdm, NC]_______   1.6100____KIE730    (govt recds)
"       [Cnyncampground, WY]_   1.6100____KOP720    (govt recds)
"       [Convoypt, FL]_______   0.5300____KID772    (govt recds)
"       [Cosby, TN]__________   1.6100____KIE732    (govt recds)
"       [Countrystr, MO]_____   1.6100____KAC776    (govt recds)
"       [Crscntcy, CA]_______   1.6100____KPB794    (govt recds)
"       [Csrbtlfd, MT]_______   1.6100____KID776    (govt recds)
"       [Deep Cr, NC]________   0.5300____KID771    (govt recds)
"       [Devlstower, WY]_____   1.6100____KOP735    (govt recds)
"       [Dolores, CO]________   1.6100____KID761    (govt recds)
"       [Dumntdns, CA]_______   1.6100____KMC487    (govt recds)
"       [Duneclmb, MI]_______   1.6100____KIE770    (govt recds)
"       [E Entrance, AZ]_____   1.6100____KOP738    (govt recds)
"       [E Portal, CO]_______   1.6100____KAF721    (govt recds)
"       [EEntrance, WY]______   1.6100____KOP708    (govt recds)
"       [Elk Cr, CO]_________   1.6100____KAF720    (govt recds)
"       [Elkmont, TN]________   1.6100____KIE731    (govt recds)
"       [Emithill, AZ]_______   1.6100____KID762    (govt recds)
"       [Essex, CA]__________   1.6100____KMC485    (govt recds)
"       [Fireclgy, WY]_______   1.6100____KOP723    (govt recds)
"       [Fireholl, WY]_______   1.6100____KOP712    (govt recds)
"       [Fllrvpss, CO]_______   0.5300____KAF712    (govt recds)
"       [Fntnflts, WY]_______   1.6100____KOP719    (govt recds)
"       [Frlycanyon, UT]_____   1.6100____KOJ777    (govt recds)
"       [Fshbrdg, WY]________   1.6100____KOP718    (govt recds)
"       [Ft Laramie, WY]_____   1.6100____KOC745    (govt recds)
"       [Gettysbrg, PA]______   1.6100____KID774    (govt recds)
"       [Glen Canyon, AZ]____   1.6100____KOJ778    (govt recds)
"       [Gr L, CO]___________   0.5300____KAF711    (govt recds)
"       [Grants, NM]_________   1.6100____KKF410    (govt recds)
"       [Grntvllg, WY]_______   1.6100____KOP721    (govt recds)
"       [Gudlpmtn, NM]_______   1.6100____KKF403    (govt recds)
"       [Hydnvalley, WY]_____   1.6100____KOP729    (govt recds)
"       [Implsndn, CA]_______   1.6100____KMC478    (govt recds)
"       [Indiancr, WY]_______   1.6100____KOP710    (govt recds)
"       [Johannesbrg, CA]____   1.6100____KMC489    (govt recds)
"       [Kanarville, UT]_____   1.6100____KOJ495    (govt recds)
"       [Kilauea, HI]________   1.6100____KWA712    (govt recds)
"       [Lackawxn, PA]_______   1.6100____KFB784    (govt recds)
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"       [Lamrvalley, WY]_____   1.6100____KOP725    (govt recds)
"       [Las Vegas, NV]______   1.6100____KOJ446    (govt recds)
"       [Lone Pine, CA]______   1.6100____KMC472    (govt recds)
"       [Longmire, WA]_______   1.6100____KOD767    (govt recds)
"       [Luray, VA]__________   1.6100____KIE736    (govt recds)
"       [Mabryml1, VA]_______   1.6100____KID773    (govt recds)
"       [Mammoth Cave, KY]___   1.6100____KIE765    (govt recds)
"       [Mammoth, WY]________   1.6100____KOP724    (govt recds)
"       [Manassas, VA]_______   0.5300____KFB786    (govt recds)
"       [Marblemnt, WA]______   1.6100____KOF788    (govt recds)
"       [Mdsnjnct, WY]_______   1.6100____KOP714    (govt recds)
"       [Mdwygysb, WY]_______   1.6100____KOP715    (govt recds)
"       [Medicinepk, OK]_____   1.6100____KKF646    (govt recds)
"       [Misqully, WA]_______   1.6100____KOD769    (govt recds)
"       [Moiese, MT]_________   1.6100____KOC631    (govt recds)
"       [Mosexhibit, WY]_____   1.6100____KOP727    (govt recds)
"       [Mtpisgah, NC]_______   0.5300____KIE768    (govt recds)
"       [Mtwshbrn, WY]_______   1.6100____KOP711    (govt recds)
"       [Mudvolcano, WY]_____   1.6100____KOP709    (govt recds)
"       [Narrows, OR]________   1.6100____KAC616    (govt recds)
"       [NEentrnc, MT]_______   1.6100____KOP709    (govt recds)
"       [NOentrnc, MT]_______   1.6100____KOP709    (govt recds)
"       [Nrrsgeyser, WY]_____   1.6100____KOP726    (govt recds)
"       [Oconalft, NC]_______   1.6100____KIE718    (govt recds)
"       [Ocracoke, NC]_______   1.6100____KPC712    (govt recds)
"       [Old Faithful, WY]___   1.6100____KOP713    (govt recds)
"       [Orick, CA]__________   1.6100____KPB796    (govt recds)
"       [Orr, MN]____________   1.6100____KAC791    (govt recds)
"       [Paxson, AK]_________   1.6100____KWA439    (govt recds)
"       [Paxson, AK]_________   1.6100____KWA441    (govt recds)
"       [Pine Is, FL]________   1.6100____KIE780    (govt recds)
"       [Platterv, MI]_______   1.6100____KIE778    (govt recds)
"       [Portage, AK]________   1.6100____KWA437    (govt recds)
"       [Prairie Cr, CA]_____   1.6100____KPB795    (govt recds)
"       [Promntry, UT]_______   0.5300____KOC774    (govt recds)
"       [Provincetown, MA]___   1.6100____KFB757    (govt recds)
"       [Prsmmngp, TX]_______   1.6100____KIP740    (govt recds)
"       [Pt Reyes, CA]_______   1.6100____KPB749    (govt recds)
"       [Ridgcrest, CA]______   1.6100____KMC471    (govt recds)
"       [Rioblanc, CO]_______   1.6100____KID760    (govt recds)
"       [Rndtngll, AK]_______   1.6100____KWA414    (govt recds)
"       [Roadsdbr, WY]_______   1.6100____KOP728    (govt recds)
"       [Salem, MO]__________   1.6100____KAC775    (govt recds)
"       [Sequoia, CA]________   1.6100____call?     (govt recds)
"       [Shoshone, CA]_______   1.6100____KMC488    (govt recds)
"       [Signal Peak, TX]____   1.6100____KIP742    (govt recds)
"       [Slana, AK]__________   1.6100____KWA413    (govt recds)
"       [Slime Creek, AK]____   1.6100____KWA438    (govt recds)
"       [SoEntrance, WY]_____   1.6100____KOP711    (govt recds)
"       [Sourdough, AK]______   1.6100____KWA436    (govt recds)
"       [South Rim, AZ]______   1.6100____KOP737    (govt recds)
"       [Sowllflt, MA]_______   1.6100____KFB758    (govt recds)
"       [Splitrock, WY]______   1.6100____KOP421    (govt recds)
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                "        [St Louis, MO]_______   0.5300____KID775    (govt recds)
                "        [Steinakr, UT]_______   1.6100____KOJ499    (govt recds)
                "        [Steinkr, UT]________   1.6100____KOJ494    (govt recds)
                "        [Stembtpt, WY]_______   1.6100____KOP717    (govt recds)
                "        [Sugarlands, TN]_____   1.6100____KIE723    (govt recds)
                "        [Swharbor, ME]_______   0.5300____KFB759    (govt recds)
                "        [Tahomwds, WA]_______   1.6100____KOD762    (govt recds)
                "        [Tremont, TN]________   1.6100____KIE724    (govt recds)
                "        [Turtland, FL]_______   1.6100____KIE710    (govt recds)
                "        [Twincrks, TN]_______   1.6100____KIE793    (govt recds)
                "        [Twrjnctn, WY]_______   1.6100____KOP712    (govt recds)
                "        [Vanburen, MO]_______   1.6100____KAC778    (govt recds)
                "        [Vidal, CA]__________   1.6100____KMC483    (govt recds)
                "        [Watchman, UT]_______   1.6100____KOJ761    (govt recds)
                "        [WEentrnc, MT]_______   1.6100____KOP710    (govt recds)
                "        [Wglacier, MT]_______   1.6100____KOE731    (govt recds)
                "        [White Sands, NM]____   1.6100____KOP743    (govt recds)
                "        [Whitescy, NM]_______   1.6100____KOP741    (govt recds)
                "        [Wilson, FL]_________   1.6100____KIE711    (govt recds)
                "        [Wmsprrnc, WY]_______   1.6100____KOP736    (govt recds)
                "        [Yucca Valley, CA]___   1.6100____KMC482    (govt recds)
                "        [Yuha, CA]___________   1.6100____KMC426    (govt recds)
US: Tennessee Valley Authority, TIS, 10w
                         [Norrisdam, TN]______   1.6100____KIE260    (govt recds)
US: Transportation, TIS, 10w
                         [Fairholm, WA]_______   1.6100____call?     (govt recds)
                "        [McLean, VA]_________   0.5300____call?     (govt recds)
                "        [McLean, VA]_________   1.6100____call?     (govt recds)
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================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From 8667436613850238381
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,96382b1c8008dbf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-10 05:23:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 11/08/85; site unccvax.unccvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!mcnc!unccvax!dsi
From: dsi@unccvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: FM & TV Broadcast Polarization
Message-ID: <415@unccvax.unccvax.UUCP>
Date: Fri, 10-Jan-86 08:23:30 EST
Article-I.D.: unccvax.415
Posted: Fri Jan 10 08:23:30 1986
Date-Received: Mon, 13-Jan-86 08:09:48 EST
References: <1340@brl-tgr.ARPA>
Organization: UNC-Charlotte
Lines: 71
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>
> Circular polarization gets some use in both the FM broadcast and
> TV broadcast services. Originally, both services had to use horizontal
> polarization, but in the 1960's the FCC authorized FM stations to
> use circular polarization. In 1977, the FCC authorized broadcast TV sta-
> tions to use right-hand circular polarization. Furthermore, the
> FCC allowed the TV stations to run the old ERP limit in both

FM radio stations were always allowed to use "circular polarisation" in a sense, being permitted "any power divider you want" and the same ERP in the horizontal and vertical planes (actually, the vertical plane couldn't be more than the horizontal). No one, (except idiots who buy antennas out of the back of "Radio World") but no one, would dare not use CP for FM. Note that if the power divider and antenna combination was a Hilbert transformer (in effect) - 90 degree lag between the H and V antennas - CP would be obtained.

Virtually all new builds for TV also use the RH circular polarisation, at VHF this is typically the CBR (tm) - cavity backed radiator type of antenna. Three (or six) of these are put on the tower face(s) and fed with equal power; the pattern circularity obtained is excellent. Thus, the trend to higher power VHF television transmitters...one disadvantage of the CBR antenna is that it has very little gain and is very expensive. In actual use, there is *no comparison* between the old Batwing antenna and a CBR installation at WFMY-TV (2) Greensboro, NC.

The CBR (and other CP antennas for VHF) have unbelieveably good VSWR characteristics, usually less than 1.1:1 over the entire low or high VHF band (!). A properly pruned CBR installation can support two or three TV stations in a market. The break even point is about 2.2 TV stations on a CBR installation (and about four FM stations on a "panel radiator" thingie which is similar to the CBR).

> I don't know of any stations that actually run the limits. The most
> powerful station that I know of is Channel 68 (WQTV, I believe) in
> Boston at 1.3 MW ERP.
>
There are more than a few UHF stations at 5 mw ERP:

WGGT Greensboro, NC (48) - 1800 feet and 5 mw
WNRW Winston Salem (45) - 1940 feet and 5 mw
New TV Belmont NC   (44) - 2000 feet and 5 mw

The most "powerful" TV station in the US (i.e. the one running the limits with the least antenna gain) is WTIC Hartford CT (62?) which has - count 'em - 5 Varian klystrons at 220 kw visual. They are also 5 mw ERP. I'm sure the guy who changes the tower lights can feel this, and birds flying by probably drop to the ground.

However, you guys in the civilized world (known also as Zone 1) are permitted the EIRP limits only to 500 feet, while we are permitted the

same ERP up to 2000 feet. Thus, the Boston station probably has more
than a 500 foot tower.

    I might add that ghost discrimination (the whole reason for circular
polarisation) is still about 9 - 13 dB improved with CP over regular
horizontal polarisation, even when the receiving antenna is horizontal
only. However, your mileage may vary at UHF. Millions of people with
wabbit ears like CP as well.

David Anthony
DataSpan, Inc.
> Some special TV transmitters, such as translators and boosters, have much
> lower ERP limits.
>
> Bill
> N1CPK

*** REPLACE THIS LINE WITH YOUR MESSAGE ***

From -3512730211252264983
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a937b2797e27f32
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-10 05:25:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site mhuxd.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxd!res1
From: res1@mhuxd.UUCP (STEALEY)
Newsgroups: net.ham-radio
Subject: Re: What kind of keys do you like?
Message-ID: <4060@mhuxd.UUCP>
Date: Fri, 10-Jan-86 08:25:20 EST
Article-I.D.: mhuxd.4060
Posted: Fri Jan 10 08:25:20 1986
Date-Received: Sat, 11-Jan-86 02:46:39 EST
References: <244@kvue.UUCP> <894300002@hpuslma.UUCP>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 6

I am also using the Hi-Mound key from Meisel Music, but I think it
is better than the Vibroplex which it replaced. Beautiful construction,
and much better price. Also it is a twin paddle, squeeze keyer, whereas
the old vibro keyer was not iambic. Vibroplex does make a n iambic
model now, however.

From 1239489586275346780
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2329025eb45bee5a
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1986-01-10 07:24:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site techsup
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!convex!techsup!mikey
From: mikey@techsup
Newsgroups: net.ham-radio
Subject: Re: Uniden/Bearcat 800XLT Scanner owner
Message-ID: <-27771442@techsup>
Date: Fri, 10-Jan-86 10:24:00 EST
Article-I.D.: techsup.-27771442
Posted: Fri Jan 10 10:24:00 1986
Date-Received: Fri, 17-Jan-86 01:29:46 EST
References: <731@ihu1h.UUCP>
Lines: 10
Nf-ID: #R:ihu1h.UUCP:731:techsup:-27771442:000:309
Nf-From: techsup!mikey   Jan 10 09:24:00 1986

Finally, a scanner that can get the weather sats at 136!!!! Now
someone needs to find out how well it locks and handles doppler shift,
and if the bandwidth is a:wide enough for a decent signal, or b: can be
easily modified or at least parellelled by another if strip!!!

mikey
trsvax!techsup!bbimg!mikey

From 898738934912901076
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,44dd121e8a35e63e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-12 08:00:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site kitty.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!hropus!riccb!ihopa!ihnp4!
cbosgd!ukma!psuvm.bitnet!psuvax1!burdvax!sdcrdcf!hplabs!qantel!lll-crg!gymble!
umcp-cs!seismo!rochester!rocksanne!sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.ham-radio
Subject: Re: Re: Mil Surplus
Message-ID: <700@kitty.UUCP>
Date: Sun, 12-Jan-86 11:00:09 EST
Article-I.D.: kitty.700
Posted: Sun Jan 12 11:00:09 1986
Date-Received: Sat, 18-Jan-86 07:13:45 EST
References: <> <925@nmtvax.UUCP>
Distribution: net
Organization: Recognition Research Corp., Clarence, NY
Lines: 15

> I have a BC-348-R Signal Corps military surplus receiver. I have been going

> crazy trying to find a schematic for it, or at the very least, what kind of
> power and where to apply it to get it working. Please don't let this noble
> rig go to waste.

        Have you tried Fair Radio Sales in Lima, Ohio? Hell, they still sell
ARC-5 Command Sets! If Fair Radio Sales doesn't have the data (they do sell
just manuals), no one does.

==> Larry Lippman @ Recognition Research Corp., Clarence, New York   <==
==> UUCP   {decvax|dual|rocksanne|rocksvax|watmath}!sunybcs!kitty!larry <==
==> VOICE   716/741-9185   {rice|shell}!baylor!/   <==
==> FAX   716/741-9635 {G1, G2, G3 modes}   duke!ethos!/   <==
==>   seismo!/   <==
==> "Have you hugged your cat today?"   ihnp4!/   <==

From -3807807162573801420
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de7f703d04d4e794,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-12 14:06:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2.fluke 9/24/84; site vax3.fluke.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!mhuxt!houxm!vax135!cornell!uw-
beaver!fluke!rad
From: rad@fluke.UUCP (Randy Davison)
Newsgroups: net.ham-radio
Subject: Need a dish
Message-ID: <1566@vax3.fluke.UUCP>
Date: Sun, 12-Jan-86 17:06:52 EST
Article-I.D.: vax3.1566
Posted: Sun Jan 12 17:06:52 1986
Date-Received: Tue, 14-Jan-86 05:19:56 EST
Reply-To: rad@fluke.UUCP (Randy Davison)
Organization: John Fluke Mfg. Co., Inc., Everett, WA
Lines: 18

I'm looking for a four or five foot dish for WX satellite work. Has
anyone on the net been down this road before and if so what suggestions
do you have?

Specifics: F/D = .4 to .6
            lighter weight preferred
            .5 inch peak to peak surface deviation max
            operating freq = 1.691 Ghz.
            no feed or mounting hardware required
            lowest possible cost (naturally- otherwise this would
               be easy!) < $200

Regards,
Randy Davison
K7VOE

John Fluke Mfg.
Seattle, WA.

From -1660570916534463389
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8895e5db452776b0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-12 20:40:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site techsup
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!drutx!ihnp4!inuxc!
pur-ee!uiucdcs!convex!techsup!kenb
From: kenb@techsup
Newsgroups: net.ham-radio
Subject: SP-600 manual?
Message-ID: <-27771441@techsup>
Date: Sun, 12-Jan-86 23:40:00 EST
Article-I.D.: techsup.-27771441
Posted: Sun Jan 12 23:40:00 1986
Date-Received: Fri, 17-Jan-86 06:49:53 EST
Lines: 15
Nf-ID: #N:techsup:-27771441:000:647
Nf-From: techsup!kenb   Jan 12 22:40:00 1986

Some years ago i was able to restore, by the seat of my pants, an old
Hammarlund SP-600 receiver. At that time the only documentation i could
find on the beast came from the public library in the form of some ancient
type of *photo-facts* the name of which i don't recall. Although this really
did help, it was generic in nature and not too close to the SP-600 i own.

I'm looking for a manual that may be closer to my receiver than the infor-
mation i've got. The model number is SP-600-JX-17, serial number 16825.
If any body can help or point me in the right direction i'd really
appreciate it.

thanks,
kenb
     UUCP: ihnp4!sys1!techsup!kenb

From -921357248063766953
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,42b76a2972ebc1a1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-13 11:54:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site lanl.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!
gatech!ut-sally!seismo!cmcl2!lanl!tl
From: tl@lanl.ARPA
Newsgroups: net.ham-radio

Subject: Used 2 mtr gear
Message-ID: <36491@lanl.ARPA>
Date: Mon, 13-Jan-86 14:54:52 EST
Article-I.D.: lanl.36491
Posted: Mon Jan 13 14:54:52 1986
Date-Received: Wed, 15-Jan-86 03:11:47 EST
Distribution: net
Organization: Los Alamos National Laboratory
Lines: 5

I am looking for a used 2 meter rig so that I can get packet.
Either a crystal or a synthesized radio is fine as long as I
can get on 145.01 MHz.
Thanks and 73, Terry Leach---WA5ZKP
*** REPLACE THIS LINE WITH YOUR MESSAGE ***

From -5283130671186180180
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a937b2797e27f32
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-13 17:28:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site fisher.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!fisher!djl
From: djl@fisher.UUCP (Dan Levin)
Newsgroups: net.ham-radio
Subject: Re: What kind of keys do you like?
Message-ID: <1358@fisher.UUCP>
Date: Mon, 13-Jan-86 20:28:40 EST
Article-I.D.: fisher.1358
Posted: Mon Jan 13 20:28:40 1986
Date-Received: Wed, 15-Jan-86 00:28:35 EST
References: <244@kvue.UUCP> <894300002@hpuslma.UUCP> <4060@mhuxd.UUCP>
Organization: Princeton University.Mathematics
Lines: 9

I'm not much of a CW type (just ask some NCCC guys :-), but I
love my Bencher. Can't say enough good things about it
performance wise, and it looks good too.

--
              ***dan

{allegra,astrovax,princeton}!fisher!djl
The misplaced (That car sure is rusty!) Californian

From 6964418744064225004
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c3b3eee522e22185,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-14 07:10:54 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!decwrl!dec-rhea!dec-4315!koning
From: koning@4315.DEC (Paul Koning -- LAS Engineering)
Newsgroups: net.ham-radio
Subject: Re: what kind of keyer do you like?
Message-ID: <445@decwrl.DEC.COM>
Date: Tue, 14-Jan-86 10:10:54 EST
Article-I.D.: decwrl.445
Posted: Tue Jan 14 10:10:54 1986
Date-Received: Thu, 16-Jan-86 04:45:26 EST
Sender: daemon@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 17

My favorite paddle was homemade (by my father PA0JKG). It was completely
free of backlash or play because it basically consisted of two paddles
hinged at the back by broad leaf springs. Maybe someday he or I will
write it up...

I once tried the Vibroplex paddle. Perhaps it was misadjusted, but it
felt like a piece of garbage. Loose bearings and generally unpleasant.
Considering their reputation, I was quite surprised; now I wouldn't
even consider one. In fact, any mechanism that needs adjustment to be
free from play isn't designed right. (The Bencher passes on that test
judging by the picture; I've never tried one.)

I seem to have lost my own paddle in the last move, but when I start
looking for one again I'll probably start with the homemade kind, and
only if I run into trouble with that would I consider buying one.

paul pa0pkg

From -910333486586877630
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4cb8313628dc58fb,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1622d3,4cb8313628dc58fb,start
X-Google-Attributes: gid1622d3,public
X-Google-ArrivalTime: 1986-01-14 11:40:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hounx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!hounx!sparks
From: sparks@hounx.UUCP (L.IFLAND)
Newsgroups: net.ham-radio,net.micro.apple
Subject: CW/BAUDOT (RTTY)/ASCII Program for APPLE II/e
Message-ID: <505@hounx.UUCP>
Date: Tue, 14-Jan-86 14:40:19 EST
Article-I.D.: hounx.505
Posted: Tue Jan 14 14:40:19 1986
Date-Received: Wed, 15-Jan-86 01:37:45 EST

Organization: AT&T Bell Labs, Holmdel NJ
Lines: 22
Xref: watmath net.ham-radio:3739 net.micro.apple:2459

A CW/RTTY/ASCII program, "HAM", has been developed for the APPLE II/e.
"HAM" may be used to receive CW/BAUDOT/ASCII without the use of a
Terminal Unit (TU) or inhance the features of any TU for both
Transmission and Reception. For the SWL, ham's transmit features are
inhibited. For the licensed amateur, the FCC Callsign is embeded.

"HAM" features;
* CW - 5-99 WPM, Auto- Speed & Character tracking, speed readout.
* BAUDOT & ASCII - 50 baud to 19.2 Kilobaud.
* Two sets of nine 256 bit programmable message buffers.
* A 1k type-ahead transmit buffer and a 4K recallable receive buffer.
* Multi-window display, top receive-center status-bottom transmit.
* Automatic word wrap-around on receive display window.
* Operator selection of either 40 or 80 column display (w/APPLE Board).
* Operator selection of window allocation on the CRT.
* Displayed clock for time-of-day or elapsed time.

"HAM" is available from TCI Communications Inc., 67 Clark Place,
Colonia, N.J. 07067 at $49.95 per copy. Please send check or money
order with photocopy of FCC Amateur license. SWL, receive only, programs
will be upgraded to full transmit & receive with presentation of copy of
FCC Amateur license for a $5.00 fee.

From 4400876667306841331
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b9696dc696af2b18,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-14 16:40:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Scanner survey: Bearcat
Message-ID: <737@ihu1h.UUCP>
Date: Tue, 14-Jan-86 19:40:02 EST
Article-I.D.: ihu1h.737
Posted: Tue Jan 14 19:40:02 1986
Date-Received: Fri, 17-Jan-86 02:08:27 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 87

x
Scanner Survey: Bearcat

Bob Parnass, AJ9S

800XLT: 40 channels in two banks. Covers 806-912 MHz, as well as of vhf, uhf, and aircraft bands. Receives 10 meter fm and all of 6 meters, as well as federal portions of vhf and uhf bands. Fewer birdies on vhf-lo band than other scanners. Scans and searches very fast. Clean, robust audio output. Extremely sensitive, but very prone to overload by strong signals when connected to outdoor antenna. Too much play (hysteresis) in squelch adjustment - can be improved by changing one resistor. Positive terminal in memory backup battery holder installed backwards in early units, allowing memory loss when scanner unplugged from AC outlet. Tunes in increments of 12.5 KHz on 800 MHz band, whereas cellular telephones are on 30 KHz channels.

BC350: 50 channels in 5 banks. Includes aircraft. Used to be Bearcat's top of the line, overpriced scanner but never very popular, now discontinued. Dual use keyboard and display allowed 8 text characters to be associated with each channel, a feature clumsily implemented, and awkard to use. Units plagued with various hardware problems including bad memory ICs and short life power transformers. Firmware bugs without cures. The BC300 is a much better scanner than the BC300, and at a lower price.

BC300: 50 channel top of the line scanner. Service Search feature contains 11 ROM banks of preprogrammed channels. Switching power supply failure noted in early units due to insufficient capacitance - component value was changed in newer units. Schematics show at least 100 components changed between earliest and later units. Preset squelch pot, mounted internally on circuit board, misadjusted in new units - adjustment usually required after burn-in period. Good sensitivity. Built in clock. I leave it on 24 hours a day. This is a favorite.

BC20/20: 40 channels. Reasonable number of features. Service Search for Marine and Aircraft. LED readout. Good scanner, but tinny audio.

BC250: 50 channel discontinued model. Rich in features, but lacks aircraft band and 144-146 MHz. Search and Store feature extremely useful for finding federal frequencies. Clock. High frequency of repair. Power transistors not heat sinked adequately, causing heat damage to surrounding components and ciruit board. Digital circuitry very sensitive to glitches caused by static and AC line spikes. Avoid 1978 or earlier vintage units. All BC250s use custom ICs (e.g., IC6, a divider chip, mfd. by Exar), which are now discontinued, so factory service is no longer available from Uniden.

BC260: Super heavy duty metal cabinetry and lighted controls, aimed at mobile use for firemen, police, etc. Few frills, only 16 channels, no aircraft, but generous coverage of federal bands omitted in the older Bearcat scanners. Good sensitivity. Lots of audio. Backlit keyboard allows operation in the dark, but the keyboards on some units require high pressure to operate. Brightness control for display and keyboard, but multiplexor circuitry for vacuum fluorescent display produces audible whine which may be annoying in a quiet room. Method of connecting an external speaker is awkward.

BC100: First programmable portable. Be prepared for at least one repair in the first year. Early units, with threaded antenna connector, have high frequency of repair, particularly LCD readout, keyboard, and battery holder. No battery backup. Poor case design in early units caused bat-tery to disconnect from radio, resetting microprocessor and clearing memories. No priority channel or aircraft band. Some people swear by the BC100, others swear at them.

BC101: First Bearcat synthesized unit. 16 channels, no priority. Frequency programmed in binary by setting toggle switches on front panel after looking up code in code book. No frequency readout. Uses custom IC for CPU, now discontinued, so factory authorized service is no longer available.

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==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5054509124130362773
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,126d2b752fa1f530,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-15 10:00:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-smoke.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!lll-crg!seismo!brl-tgr!brl-smoke!ron
From: ron@brl-smoke.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Request for Net Info
Message-ID: <606@brl-smoke.ARPA>
Date: Wed, 15-Jan-86 13:00:44 EST
Article-I.D.: brl-smok.606
Posted: Wed Jan 15 13:00:44 1986
Date-Received: Mon, 20-Jan-86 04:30:10 EST
References: <1610@brl-tgr.ARPA>

Organization: Ballistic Research Lab
Lines: 9

>
> I see occasional references to "Net.Audio" and "Net.Music"
> in message headers. I am involved in these areas and would
> be interested in such message traffic.
>
> Could anyone tell me how I might gain access to these nets?

These are USENET news groups. I can't help with net.audio but
net.music is distributed to ARPA land by INFO-MUSIC-REQUEST@HI-MULTICS.

From -6001102689894209875
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63ad2740edba682c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-15 11:11:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site npqc
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!convex!npqc!kward
From: kward@npqc
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <-1646813@npqc>
Date: Wed, 15-Jan-86 14:11:00 EST
Article-I.D.: npqc.-1646813
Posted: Wed Jan 15 14:11:00 1986
Date-Received: Tue, 21-Jan-86 07:08:02 EST
References: <1270@brl-tgr.ARPA>
Lines: 30
Nf-ID: #R:brl-tgr.ARPA:1270:npqc:-1646813:000:866
Nf-From: npqc!kward   Jan 15 13:11:00 1986

/* Written 7:11 am Jan 9, 1986 by ihu1h.UUC!parnass in npqc:net.ham-radio */

  > About a year ago, I queried the group about getting a schematic
  > for a Uniden CR2021 .... Can anyone help out?
  > Jim, wa1uou
  > <jberets@bbn-vax.arpa>

See if you can order a service manual for a Realistic DX400
from Radio Shack. It's a CR2021 clone.

/* End of text from npqc:net.ham-radio */

This service manual is available from Radio Shack, One of the better
ones too, I must say. It is 72 pages with fold out schematic, and
sells for $8.25. Part Number is MS-2000207, catalog# 20-207.

Parts orders or quotes: Radio Shack National Parts

900 E. Northside Dr.
Ft. Worth, TX 76102
(817) 870-5600
Attn: Customer Service Dept.

Hope this helps...

Keith Ward
trsvax!techsup!npqc!kward
Radio Shack National Parts #0048
(817) 870-5650

From 5539640466811506457
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,29be4123cdcacf4c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-15 13:18:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!clements@bbnccq.ARPA
From: clements@bbnccq.ARPA (Bob Clements)
Newsgroups: net.ham-radio
Subject: Keyer paddles
Message-ID: <1627@brl-tgr.ARPA>
Date: Wed, 15-Jan-86 16:18:48 EST
Article-I.D.: brl-tgr.1627
Posted: Wed Jan 15 16:18:48 1986
Date-Received: Fri, 17-Jan-86 06:38:50 EST
Sender: news@brl-tgr.ARPA
Lines: 22

To whomever was asking about keyer paddles:

Well, it has been a while since I pounded brass regularly. I still copy
it a lot (W1AW machine-sent bulletins) but don't send much. My top
speed was 25 WPM.

Back when I did use CW enough to want a good keyer paddle, I asked
K2KIR what he recommended - being a CW traffic hound. He suggested
one made by Brown Brothers (of St Louis, as I recall). I got one
and never regretted it. It is very solid, feels great, less filling,
no problems at all. It's iambic (though I learned on a keyer before
iambics were common, so I don't use it that way).

I haven't seen an ad for one in a long time, so I don't know whether
they are available any more or not.   If so, I recommend them.

/Rcc
(K1BC)

ARPA: clements@bbn
USENET: {ihnp4, decvax, linus, etc}!bbncca!clements
PACKET: K1BC @ K1BC

From 5587943685300516728
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ae07ae55121cbf85,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-15 16:08:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Scanner survey continued: Regency
Message-ID: <740@ihu1h.UUCP>
Date: Wed, 15-Jan-86 19:08:54 EST
Article-I.D.: ihu1h.740
Posted: Wed Jan 15 19:08:54 1986
Date-Received: Fri, 17-Jan-86 03:10:59 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 59

x

Scanner Survey: Regency

Bob Parnass, AJ9S

K500: Nice wood-like cabinet. Discontinued 40 channel model with every feature Regency could dream of in one scanner, except aircraft band. Idle tone bypass feature for mobile phone stations works about 50% of the time. Weather alert feature. Service Search in several banks. Search and Store facility not implemented as well as BC250, but better than none. Built in clock when radio off or in manual mode. Can be programmed out of band. Reasonable performance, but sensitivity could be better. Spring contacts on membrane keyboard may need soldering after prolonged use.

K100: Bare bones version of the K500. 10 channels, no priority feature. Same wood-like cabinet and reasonable performance as K500. Spring contacts on membrane keyboard may need soldering after prolonged use.

M400: 30 channel replacement for K500, but now discontinued. Service Search, but no aircraft. Easily programmable out of band. Built in clock when radio off or in manual mode. Backlighted keyboard good for night viewing and mobile use but generates RFI into nearby SW receivers. A favorite.

MX3000: Current, 30 channel replacement for M400, but basic features only. Nice lighted keyboard, but may cause RFI into nearby SW receivers. Easily programmable out of band, but no aircraft. All 30 channels are in a single bank, and lack of direct channel access make this model more difficult to operate. Good first scanner, and the most scanner for the money ($180 typical discount price).

M100: Discontinued 10 channel unit. Same as MX3000 except different color and fewer channels. Nice lighted keyboard, but may cause RFI into nearby SW receivers.

HX1000: Good, fairly rugged, 30 channel handheld synthesized unit. Generous out of band coverage but no AM aircraft coverage. Built by Azden. Very sensitive on UHF, but annoying audio hiss leaks through speaker when squelched. Belt clip chintzy, but can be directly replaced with better clip from Kenwood TR2600A. Like the MX3000, all 30 channels are in a single bank, and lack of direct channel access make this model more difficult to operate. Low discount price makes this best choice for programmable portable.

HX650/H604: 6 channel crystal portable. Likely made by Sanyo. Same as Fannon and Bearcat Thin Scan units, (except that Bearcat has 10.8 MHz IF frequency, and is harder to get crystals for), but scans faster. Small size and common crystals (available at Radio Shack), make this 1st choice for bare bones portable scanner.

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 2316354566204801605
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8ef31a73896ac975,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-16 15:36:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!dec-rhea!dec-mred!soomre
From: soomre@mred.DEC
Newsgroups: net.ham-radio
Subject: Yes, there is a World of Radio Program
Message-ID: <494@decwrl.DEC.COM>
Date: Thu, 16-Jan-86 18:36:36 EST
Article-I.D.: decwrl.494

Posted: Thu Jan 16 18:36:36 1986
Date-Received: Sat, 18-Jan-86 07:47:19 EST
Sender: kiefer@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 15

In reference to Will Martin's comments, I have missed Glenn Hauser's
"World of Radio" too. It is not as interesting as it used to be and he
does not give that many DX tips, but there are tid-bits of information.

I heard it the other night, Friday night (EST) Sat morning (UTC) at
0400 on 6185 khz. Aparently WRNO did have transmitter problems and
did not broadcast the program on the weekend on 1/4. WRNO seems to be
very sporatic as they are on and off the air.

I did not get a chance to listen Saturday night or Sunday morning, so
I don't know if the program was broadcast or not.

....
Ed Soomre N1BFF

From 4589807181123221239
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3e7a7c9eb9d68d33,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-16 19:26:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!dec-rhea!dec-regina!
kroth
From: kroth@regina.DEC (Philip J. Kroth)
Newsgroups: net.ham-radio
Subject: Are there any traffic handlers out there?
Message-ID: <504@decwrl.DEC.COM>
Date: Thu, 16-Jan-86 22:26:06 EST
Article-I.D.: decwrl.504
Posted: Thu Jan 16 22:26:06 1986
Date-Received: Sat, 18-Jan-86 08:00:48 EST
Sender: daemon@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 145

The following is a letter I put together for distribution at hamfests and club
meetings etc. I used to be the assistant net manager of a 2m traffic net and
used to do a lot of traffic handling "advertising."

I'm posting this letter because it seems there is a recent lack of interest in
traffic handling -- especially CW traffic handling. Fewer and fewer new people
are joining in. Is it computers...packet...??? All are worthwhile. Regardless
of the reason, it's still a real shame that more people aren't giving traffic

handling a try too.

New faces are welcome everywhere. There are CW, Phone, 2m FM, and RTTY nets (to name a few) to satisfy anyone's taste. All would love to have a few new faces.

Traffic handling sharpens radio communication skills and is excellent practice for emergencies. But most of all it's just plain fun!

Please take time to read the letter and let me know what you think. The letter talks about CW traffic handling but really applies to all modes in general. I have more information that I'd be happy to send to anyone who is interested. If you've never received a Radiogram, send me your address and phone number and I'll send you one. (a great way to get in touch with some local traffic handlers)

THE QUESTION:

Are you looking for something different in Amateur Radio? Maybe getting tired of the same, "standardized" QSO's: RST, name, QTH and WX? Or maybe the thrill of working DX isn't the same as it used to be.

THE ANSWER:

Give CW traffic handling a try! ! ! !
--

"Oh no! not CW! I don't even know if I can receive at five words per minute any more. And I've heard that those code nets run at about 40 words per minute -- I'll stick to VHF and HF phone..."

Does this sound like you? If it does you're missing out on one of the nicest and most enjoyable aspects of Amateur Radio. And believe it or not, EVERYONE starts out at five words per minute at one time or another.

A GREAT WAY TO START:

There are many "Slow Speed Nets" or "Novice Nets" which are specifically designed for the new comer to CW traffic

handling which are just waiting for you to check in. EVERY net which I have come in contact with always loves to have new people check in. And you won't be alone because there are many other amateurs just like you who are new to CW traffic handling. Slow Speed Nets are not exclusively for new comers either. Many seasoned CW traffic handlers check into the slow speed nets to act as an example to help the new comers and mostly because it is just plane fun! Getting to know these people can be very interesting and fun. All of the traffic handlers I know are glad to help with questions and advice. You may even find new friends right in your local area who share your new found interest.

For example, one such net (my personal favorite) is The Empire Slow Speed Net. ESS covers New York State and the surrounding area and meets at 3.590 Mhz at six O'clock Eastern Time. It is an independent net which means it is not formally affiliated with the ARRL sponsored National Traffic System but has close links with the NTS nets so messages can be handled to any US or Canadian destination.

As is transmitted each time the net begins: "EMPIRE SLOW SPEED NET FOR TRAFFIC AND TRAINING ALL STATIONS WELCOME." If you check in just once a month the net manager W2WSS in New York City will send you a newsletter which is PACKED with lots of interesting information about CW traffic handling and traffic handling in general. There is no commitment made by checking in and you can check in as often as you like. That's another nice thing about traffic handling; you can participate whenever it is convenient for you.

If you are still a little leery about checking in just listen to a few net sessions to see how it goes. That way you'll eliminate your anxiety and hopefully peak your curiosity. Listening or checking into a CW traffic net is probably the best way to increase your code speed too. Listening to code tapes can get boring because it's the same meaningless text over and over again. CW nets are live! No two net sessions are alike! This makes copying interesting and fun. Based on my own experience, I'm sure that you'll be amazed at how fast your speed picks up. BUT SPEED IS NOT IMPORTANT!!!

Don't be afraid to give it a try. The Net Control Station (the station which runs the net) will slow down to your speed and will repeat anything you miss. Believe me they don't mind slowing down. Rather they will be glad to see a new station checking in for the first time. Don't worry about making mistakes. Remember this is fun! Everyone has made each mistake at least once before they learned.

For more information I highly recommend reading a two page article from the December 1976 QST titled "Checking into

Slow-Speed Nets." The article gives a brief synopsis of how the nets are structured and how to check in. If you don't save old copies of QST the article is reprinted in the back of the ARRL's "Net Directory." The Net Directory is a listing of most all net frequencies and times in the US, Canada, and many parts of the world. They are available from the American Radio Relay League for $1.00 either at their booth at most hamfests or by mail from their headquarters (255 Main Street, Newington, CT., 06111). Consult the Net Directory to find the meeting time and frequency of a CW net in your area. Or ask around on a local repeater or at a club meeting for suggestions. There is a lot of help and information out there just for the asking.

I have put together a file with excerpts from "Checking into Slow-Speed Nets." Send me a mail message and I'll send it to you along with the answers (I'll do my best) to any questions you might have.

Hopefully I've managed to peak your interest. "The more the merrier" really holds true for traffic handling. Hope to hear you on the net soon.

Good luck and 73,

Philip KA2QIK/1

..{allegra|decvax}!decwrl!dec-rhea!dec-regina!kroth

From 622515043999724763
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b7687c56eea6b29e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-17 07:03:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!hao!noao!terak!mot!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio
Subject: Re: Re: calling party ID
Message-ID: <482@anasazi.UUCP>
Date: Fri, 17-Jan-86 10:03:46 EST
Article-I.D.: anasazi.482
Posted: Fri Jan 17 10:03:46 1986
Date-Received: Mon, 20-Jan-86 05:39:58 EST
References: <8601140621.AA12258@ucbvax.berkeley.edu>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 38

Summary:

In article <8601140621.AA12258@ucbvax.berkeley.edu> telecom@ucbvax.UUCP writes:
>> In Los Angeles, emergency calls to 911 show up with the caller's address
>> and phone number at a CRT. What kind of set up is used here?
>Systems and AT&T Technologies). One of the great benefits to be derived from
>standardization is that Enhanced 911 will eventually be available everywhere,
>with calls routed to the PROPER public safety agency for the address of the
>calling party; i.e., the telephone company data base will determine to which
>public service agency the call should be routed. Under these circumstances,
>a central office will no longer be an arbitrary boundary for the public safety
>agency answering 911 calls - which is only proper, since a given central office
>will often serve more than one political subdivision.
>
>==> Larry Lippman @ Recognition Research Corp., Clarence, New York   <==

An interesting aspect of this is related to mobile phones. What is the PROPER public safety agency for mobile phones? Enhanced 911 was recently installed in Phoenix, and we discovered that when we called it from our Ham Radio Autopatch system, the operators sometimes would not believe us because we reported incidents 20 miles from the "originating address"! With the increased sales of cellular phones, this problem will increase.

The solution used in Phoenix is to program those numbers into the system so that they show up as "mobile", and to route them to the county sherrif's office rather than the jurisdiction of the "originating address".

Another problem is that 911 operators often read back the number calling. Our autopatch numbers are secret to prevent people from dialing them and tying up the system.

Oh well...

--
John Moore (NJ7E/XE1HDO)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
{hao!noao|decvax|ihnp4|seismo}!terak!anasazi!john
terak!anasazi!john@SEISMO.CSS.GOV
(602) 952-8205 (day or evening)
5302 E. Lafayette Blvd, Phoenix, Az, 85018 (home address)

From 7394490082486843079
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d168c82c7e3fa0a5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-17 08:32:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site pedsgo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!hjuxa!petsd!pedsgd!
pedsgo!johnd
From: johnd@pedsgo.UUCP (J Decatur)
Newsgroups: net.ham-radio

Subject: Re: CQ 440 MHz
Message-ID: <148@pedsgo.UUCP>
Date: Fri, 17-Jan-86 11:32:25 EST
Article-I.D.: pedsgo.148
Posted: Fri Jan 17 11:32:25 1986
Date-Received: Sat, 18-Jan-86 08:20:40 EST
References: <13500003@hplsla.UUCP>
Organization: Perkin-Elmer DSG, Tinton Falls, NJ
Lines: 91

> Our amateur radio club is installing a 440 MHz repeater. We will be
> building our own computer-based controller, but want to buy the
> transmitter and receiver. Possible options are :
> Glenn Engel, NN7N (hplabs!hp-pcd!hplsla!glenne) 206-335-2066

Thought I'd post this for the net also,plus not sure abt email...

Glenn,
I have the names of some vendors i've looked into, you might like to yourself, and readup on the info:

GLB	GREGORY ELECTRONICS
1952 Clinton st.	249 rt 46
Buffalo NY 14206	Saddle Brook nj
(716-824-7936)	(201-489-9000)
(kits,boards,everything)	(good used commercial stuff)
Micro Control Specialties	Hamtronics
(div kendecom)	65 moul rd
23 ELM pkwy	Hilton ny 14468-9535 ?
Groveland ma 01834	(716-392-9430)
(617-372-3442)	(boards,kits)
(rpt's,boards,new)	
Advanced Computer Cntls	Yaesu
Cupertino ca.	Paramount ca.
(408-749-8830)	(213-633-4007)
(controller stuff)	(complete rpt, or less cntl's)
Spectrum	
(215-631-1770)	
(boards, cmplt rptr's)	

I suggest you call them , get All the info then decide, I am the Technical person on a machine w/ abt 150 members, and only qualify to answer about spectrum.(censored)Actually i think there receiver, and xmtr boards are ok, but OVERPRICED, as far as their power supplys, well i'd be happy to get more than a year before they checkout. not the best designed i've seen, my schematics are filled with changes They've made. Their autopatch boards are "old as dirt" logic, have to retune 567's when room heats in summer. I've said enough , you get the point.

I've just researched what your about to and i think i'm going to go with micro control, they were the only ones that sent me a schematic without asking for one, also asked me if i'd like names and numbers of others in my area using them, to ask what they thought of the stuff. I'm impressed with the receiver spec's, reads as the best on the market, i'm skeptical of most but this one looks GOOD, and I cant afford less than the best receiver. The transmitter seems well engineered also, their machines are the only ones that i know of that have a deviation, meter as well as basic's. and their simple machine is abt 1200. not bad considering what spectrum wants for NOTHING. quiet tmos transmitter transistors, and 7 helical resonators in the receiver seem like an ok basis to build on.

Yaesu has a nice no meter simple machine for about 899 (w/o dtmf,ider etc, as you want) but the receiver scares me, the specs look poor, ie: ".5 or better" ?? i cant take a chance on the better. hi hi and the selectivity was about -6db at 15khz i think(maybe 12) but the kendecom receiver was abt -105! not bad, for same khz.(im talkin two meters now but if they cant do well on 2, can 440 be better?)

Well good luck, im going to drive up to the boston area in about a Month to pick it up(i've ordered one), and i'll let you know what the shop looks like up there, if you like. I've been to spectrum MANY times and i'm not impressed, a few years ago they were ok, but since i think all have left, and the new folks dont impress me on the phone. I Grilled the guy at kendecom and he still had the answers i wanted.

Next duplexers, never heard of tx/rx systems but, i know celwave/ phelps-dodge are harder to tune, and need 6 cavities, compared to wacom, I have 641 wacoms, just added 150w final and their still holdin their own. hi hi Wacom only uses 4 cavities, and has pass band tuning on top and reject freq. rods on side. EASY! to tune... And if you have any problem Kit Parsons WILL spend the time on the phone you need, EXELLENT customer service, nice club discounts. They get my vote.

One more thing, the icom repeater, well it looks good in the pix but try buying it without THEIR controller, and why waste the money when you want yours in there? also after reading the net lately, think i'll skip icom for a while. Too many back 4-6 times till fixed stories. hihi

Good luck and if you remember, let me know how you make out.

....es best 73's
...de ka2qhd
...johnd

Greatly appreciate comments on kendecom as theres still time to cancel. HI HI

--
UUCP: {ucbvax,decvax,ihnp4}!vax135!petsd!pedsga!johnd --KA2QHD--
PACKET GATEWAY:.................. !mtunh!ky2d-2!ka2qhd

From -8508610679863060217
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,29be4123cdcacf4c

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-17 15:38:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 Unisoft-Cosmos; site kepler.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!qantel!ptsfa!well!micropro!kepler!mojo
From: mojo@kepler.UUCP (Morris Jones)
Newsgroups: net.ham-radio
Subject: Re: Keyer paddles
Message-ID: <449@kepler.UUCP>
Date: Fri, 17-Jan-86 18:38:15 EST
Article-I.D.: kepler.449
Posted: Fri Jan 17 18:38:15 1986
Date-Received: Mon, 20-Jan-86 04:21:35 EST
References: <1627@brl-tgr.ARPA>
Reply-To: mojo@kepler.UUCP (Morris Jones)
Organization: MicroPro Int'l Corp., San Rafael, CA
Lines: 20

In article <1627@brl-tgr.ARPA> clements@bbnccq.ARPA (Bob Clements) writes:
>Back when I did use CW enough to want a good keyer paddle, I asked
>K2KIR what he recommended - being a CW traffic hound. He suggested
>one made by Brown Brothers (of St Louis, as I recall).

I own both a Brown Brothers and a Bencher paddle. My usage was for
QRQ (well, 35 wpm at least) ragchewing, traffic handling, and contests,
and my preference is now the Bencher. It's my pride and joy.

But both are very find paddles, and I believe you'll be happy with
either. It's probably a little like buying a word processor.

AA4KB (formerly WB4YCV, WB6DJP, N6DE, opr. W6UE et al.)
(any former NTS associates of mine out there?)
--
Mojo
... Morris Jones, MicroPro Product Development
      {lll-crg,ptsfa}!micropro!kepler!mojo
 {ucbvax,decwrl}!dual!micropro!kepler!mojo
{hplabs,glacier}!well!micropro!kepler!mojo

From 5880831832411151689
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4104a911c14f705d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-18 06:46:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: aged Regency TMR and WHAMO-10 scanners
Message-ID: <743@ihu1h.UUCP>

Date: Sat, 18-Jan-86 09:46:21 EST
Article-I.D.: ihu1h.743
Posted: Sat Jan 18 09:46:21 1986
Date-Received: Tue, 21-Jan-86 00:53:46 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 30

x
Regency (continued)

TMR series: First generation crystal scanners. Come in all varieties of band coverage. Models with both UHF and VHF bands must use separate antennas for each band (disadvantage in mobile installations, but can be overcome by connecting two front ends via a capacitor). Easy to crystal: Radio Shack crystals work well. TMRs usually $2 and up ad ham-
fests, often in poor condition. Don't pay more than $50,
even if mint. Front ends must be tuned for selected por-
tions within the bands for best sensitivity. Wide IF selec-
tivity troublesome in urban/suburban areas. Primitive digi-
tal scanning circuitry may become confused at times, but
power off/on restores sanity. Not all that bad a deal if cheap. Replaced by Regency ACT units.

WHAMO-10: Regency's first synthesized scanner. Discontin-
ued long ago. Appearance more like a crystal scanner, with
a single LED per channel. User has to break off teeth on a metal 'comb' for each channel according to a code book. External frequency control unit DFS-5K optional. UHF VCO
reference oscillator drifts on some units. Soldered sheet metal shields around some circuitry make access to some com-
ponents difficult for servicing. Comb sockets prone to bad connections after moderate use.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 2072707048623075506
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a9ae187c35a0585,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-19 09:13:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: survey con't: old Regency TMR, WHAMO-10 scanners
Message-ID: <744@ihu1h.UUCP>
Date: Sun, 19-Jan-86 12:13:00 EST
Article-I.D.: ihu1h.744
Posted: Sun Jan 19 12:13:00 1986
Date-Received: Tue, 21-Jan-86 01:19:00 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 30

x
Regency (continued)

TMR series: First generation crystal scanners. Come in all varieties of band coverage. Models with both UHF and VHF bands must use separate antennas for each band (disadvantage in mobile installations, but can be overcome by connecting two front ends via a capacitor). Easy to crystal: Radio Shack crystals work well. TMRs usually $2 and up ad ham-fests, often in poor condition. Don't pay more than $50, even if mint. Front ends must be tuned for selected por-tions within the bands for best sensitivity. Wide IF selec-tivity troublesome in urban/suburban areas. Primitive digi-tal scanning circuitry may become confused at times, but power off/on restores sanity. Not all that bad a deal if cheap. Replaced by Regency ACT units.

WHAMO-10: Regency's first synthesized scanner. Discontin-ued long ago. Appearance more like a crystal scanner, with a single LED per channel. User has to break off teeth on a metal 'comb' for each channel according to a code book. External frequency control unit DFS-5K optional. UHF VCO reference oscillator drifts on some units. Soldered sheet metal shields around some circuitry make access to some com-ponents difficult for servicing. Comb sockets prone to bad connections after moderate use.

--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5764092954049332762
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,772ce1632c07614c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-20 06:33:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site abic.UUCP
Path: utzoo!decvax!cwruecmp!abic!acy
From: acy@abic.UUCP (Adnan Yaqub)
Newsgroups: net.ham-radio
Subject: Short Wave Radio Info. Needed
Message-ID: <721@abic.UUCP>
Date: Mon, 20-Jan-86 09:33:54 EST
Article-I.D.: abic.721
Posted: Mon Jan 20 09:33:54 1986
Date-Received: Mon, 20-Jan-86 22:40:59 EST
Distribution: na
Organization: Allen-Bradley Co., Highland Heights, OH 44143
Lines: 9

My wife and I are looking for a good short wave radio.
We were told by a friend that Sony has two good ones out, one
for around $300 and one for around $200. Does anyone have any
recommendations? Also, where can the best prices be found?

Adnan Yaqub @ Allen-Bradley Co.
...!decvax!abic!acy
...!allegra!pyramid!abic!acy

From -1041809096048797771
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e5c643b847231fa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-20 11:51:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site hplabs.UUCP
Path: utzoo!decvax!hplabs!faunt
From: faunt@hplabs.UUCP (Doug Faunt)
Newsgroups: net.ham-radio
Subject: Kantronics UTU or equivalent
Message-ID: <2010@hplabs.UUCP>
Date: Mon, 20-Jan-86 14:51:38 EST
Article-I.D.: hplabs.2010
Posted: Mon Jan 20 14:51:38 1986
Date-Received: Mon, 20-Jan-86 22:41:22 EST
Distribution: na
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 12

I'd like to purchase one of these, at as low a price as is reasonable.
I'm looking for a used one, or a pointer to a discount supplier.

I've seen them advertised for $169.00.
I want to copy rtty and CW, for casual SWLing, without using a
dedicated computer system. I'm willing to consider other approaches.

--
....!hplabs!faunt faunt@hplabs.ARPA 415-655-8604
HP is not responsible for anything I say here. In fact, what I say here
may have been generated by a noisy telephone line.

From -4375210880964503481
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e37a6a67ab09121,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-20 13:49:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: About those equipment surveys ....
Message-ID: <745@ihu1h.UUCP>
Date: Mon, 20-Jan-86 16:49:01 EST
Article-I.D.: ihu1h.745
Posted: Mon Jan 20 16:49:01 1986
Date-Received: Wed, 22-Jan-86 04:22:40 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 48

x
In regards to recent Scanner Survey and Owner's Report articles, I don't receive sample scanners from manufacturers for evaluation. As a hobbyist, the equipment I review is that which I've purchased or repaired for myself or others, and had an opportunity to evaluate "hands-on".

If I haven't had enough experience with a particular model to make anything more than superficial remarks, I'm timid about writing a review.

I would enjoy reading articles by owners of

- Drake DSR2, ITT Mackay Marine, or TMC GPR90 general coverage receivers,

- Regency MX7000/MX5000 or Z-series scanners,

- JIL SX400 scanners,

- Bearcat 50XL portable scanners,

- other scanner or shortwave receivers,

- scanner antennas.

- receiver accessories (descramblers, tape recorder interfaces, broadcast band rejection filters, Fox-Tango IF filters, etc.)

How does your equipment perform? If you've encountered any equipment failures, what parts were defective? Was it difficult to repair? Have you found a way to "trick" it into doing something new?

Is anyone still actively using those older, tuneable pub-lic service monitor receivers, like the Radio Shack PRO-2B, early Regency Monitoradios, or Lafayette PF series? I've a shelf full of these vintage radios and collect more every hamfest.

I hope you enjoy reading this stuff as much as I like writing it. Thanks for your support.

--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 9069751583633332655
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7d8a5e4922019804,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-20 14:02:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: more Scanner Survey: Radio Shack
Message-ID: <746@ihu1h.UUCP>
Date: Mon, 20-Jan-86 17:02:30 EST
Article-I.D.: ihu1h.746
Posted: Mon Jan 20 17:02:30 1986
Date-Received: Wed, 22-Jan-86 04:37:43 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 57

x

Scanner Survey: Radio Shack
(made by General Research Electronics of Tokyo)

Bob Parnass, AJ9S

PRO2001: Early, discontinued single bank 16 channel programmable. Reasonable coverage of the 3 traditional bands, minus aircraft band. LED digital display as well as an LED per channel. Mechanical lockout switch for each channel. Delay is either on or off for all channels at a time. High synthesizer noise level. Troublesome plated through holes on digital board in some units renders radio virtually unfixable. Could never get mine to work more than a few days in a row; always another bad connection. Some owners have no trouble.

PRO52: Discontinued 8 channel VHF-Lo/Hi base unit. No UHF band or provision for mobile operation. Good little scanner despite limited frequency coverage and Spartan lack of frills. Front mounted, vertical speaker always a win.

PRO2003: Radio Shack's top of line. 50 channels + 10 FM commercial broadcast band channels. Includes aircraft. Good frequency coverage and functionality, but at a high price. Poor human engineering: difficult to read keyboard makes the PRO2003 hard to operate unless in a well lit room. Keyboard label coloring improved on newer units. Rather slow scan rate and high price. Although there are provisions for 12VDC operation, the cabinet shape and lack of mounting bracket makes mobile operation impractical. Scan rate only 8 channels/sec vs. 15/sec in Regency and Bearcat. Causes RFI: Plastic case permits scanner to radiate signals into nearby receivers.

PRO30: 16 channel programmable portable with aircraft band. Good frequency coverage. Extra controls on top allow control of SCAN, MANUAL, and PRIORITY functions while worn on belt. Good belt clip. Low audio output. Plastic case prone to break at BNC antenna connector under severe use, vs. metal frame in Regency HX1000. High price, no discounts or sales yet. I had 6 or 7 PRO30s, having to return them several times during the 1 year warrantee, although other owners have had little or no trouble. Troubles included oscillation in IF stage, no UHF band reception, case broken around base of antenna connector, etc.

PRO24: Only 4 channels in this crystal controlled portable.
Covers the three basic bands, but no aircraft. Easy to
obtain batteries and crystals. Characteristic Radio Shack
squelch problem, fixable by changing one resistor. All-
plastic case larger than Bearcat Thin Scan and clones.

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 7876469665208514823
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eb4b10ba7c81b5da,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-20 19:26:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!whuxl!whuxlm!akgua!akguc!mtunh!
ky2d-2!kc2tj
From: kc2tj@ky2d-2.UUCP (John)
Newsgroups: net.ham-radio
Subject: high power abuses during contests
Message-ID: <101@ky2d-2.UUCP>
Date: Mon, 20-Jan-86 22:26:24 EST
Article-I.D.: ky2d-2.101
Posted: Mon Jan 20 22:26:24 1986
Date-Received: Thu, 23-Jan-86 08:23:28 EST
Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 6

During the last vhf contest there were a lot of 70 kc wide amps on the
air who seemed to feel they had a right to be that widebecause they were
running high power. i see nothing in the rule book that says this.
maybe an official observer in the area during a contest would help. i
would like to hear comments on this both pro and con.
73 john kc2tj marlboro.

From -3914896513957490265
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d2eafc2481bf175b,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,d2eafc2481bf175b,start
X-Google-Attributes: gid134694,public
X-Google-Thread: 126c94,d2eafc2481bf175b,start
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1986-01-20 21:51:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!mit-eddie!cybvax0!
frog!hydra!die

From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.analog,net.video,net.ham-radio
Subject: Re: Satellite Scrambling Rumor
Message-ID: <146@hydra.UUCP>
Date: Tue, 21-Jan-86 00:51:41 EST
Article-I.D.: hydra.146
Posted: Tue Jan 21 00:51:41 1986
Date-Received: Thu, 23-Jan-86 10:28:39 EST
References: <272@drutx.UUCP>
Reply-To: die@hydra.UUCP (David I. Emery)
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 166
Keywords: DES, digital audio, scrambling, VideoCipher II, B-MAC, MDS
Xref: watmath net.analog:639 net.video:1921 net.ham-radio:3776
Summary: DES is used

HBO is using a scrambling device developed by MAccom/Linkabit called the VideoCipher II. It basicly denies unauthorized access to HBO satellite feeds by digitally scrambling the audio using a DES generated key stream, and makes watching the video more difficult by inverting it and removing all synchronizing pulses.

The Picture

Recovering video from a Videocipher enciphered satellite transmission requires little more than a source of sync genlocked to the basic horizontal and vertical scanning rates of the HBO transmission. As the 3.58 mhz color burst is still present (though not at the same DC level), obtaining a timing reference based on locking to the color burst is still quite possible.

Once one has a source of timing (a clock slaved to the transmitter clock) recovering correct sync phase can be handled by hand (IE push a button or turn a knob until the picture is right) or automatically by looking for the digital data which is substituted for the sync.

Adding the sync to the picture and inverting the video requires some very simple analog cicuitry.

The job of generating sync from an oscillator slaved to the color burst can be easily handled by one of several sync generator IC's. The required circuitry to recover a picture from a VideoCipher II transmission is not excessively complex and might well have been built for a few dollars from Radio Schlock parts.

The Problem

This is all fine if all one wishes to see is silent movies. But most people want to hear the movie as well as see it. And the sound is transmitted under DES encryption. There is no published method of breaking DES. MACom estimates that it would take "large" computational resources "uneconomic to apply to the problem" to determine the keys

that are used that are changed tens of times a second.

The system encodes its audio (in a 14 bit format similar to but not identical to that used on CDs), authorization information, and some extra bit stream capacity that may in the future be used for delivery of data services directly to satellite equiped homes as a 4 level pulse amplitude modulated bit stream that occupies the time interval that the horizontal and vertical sync occupy in a standard TV picture.

In addition to the two stereo audio channels, this bit stream includes authorization information addressed to a specific decoder box that contains a 56 bit (DES remember) bit map authorizing the user to receive one or more of 56 different service packages. A particular show is transmitted with a similar bit map that identifies which service packages it belongs in.

The actual DES keys used to encipher the audio stream are transmitted under a higher level key every few frames of video. That key in turn is transmitted under a per-show key, and that key is transmitted under a per service key. And the per-service key is sent to the user under a per-user decoder box key and changed once a month or so.
So rather than have one fixed key that enciphers the whole bit stream for hours or days at a time, the actual keys that are used to encipher repetitive patterned data such as the sound are randomly chosen and frequently changed.

Macom keeps the keys secure by building the entire decrypting process into one large VLSI chip which never puts out a key on any of it's pins. So obtaining the keys requires microprobing the chip (which clever metalization may well make impossible). Interestingly, they recognized the problems that could be caused by theft of a list of decoder box keys, so each decoder box has a number of different individual keys burned into it so that if one list is lost, they can simply switch to another.

The Result

It seems inconceivable to me that anyone has broken an apparently well thought out DES based audio encryption system with $12 of Radio Shack parts. I have never heard any information that would suggest that HBO built in a back door method of recovering audio such as an analog modulated subcarrier (similar to the normal method of transmitting audio on a satellite) so I suspect that all the person involved did was recover a watchable picture without sound which isn't very hard to do and is clearly not worth $10000.

VideoCipher I

Originally MAcom developed the Videocipher I which was a substantially more complex and expensive device intended for use

only by cable companies. It used DES psuedo-random address sequences to read individual chunks of video (portions of a line) out of a digital frame store. When it became obvious that a device was needed that could be sold to home viewers for a reasonable amount of money and work well with poor downlink receivers and poor signals it became clear that the VideoCipher I was excessive.

The VideoCipher I has been revived, however, to encipher CBS backhauls from remote studios and sports events back to CBS headquarters. I understand that CBS feels that other networks were pirating news stories by watching CBS feeds. I have not heard whether they intend to encipher all the feeds to their stations, but I doubt very much if they will get away with denying rural areas access to CBS programming so they will no doubt keep one open.

B-MAC

The other satellite TV scrambling system currently being marketed aggressively is B-MAC sold by Scientific Atlanta which also uses DES encoded audio (or something similar to DES). It, however, also uses DES to dither (delay by psuedo-random amount) the video and does not transmit the video in a normal NTSC format (rather it transmits the luma and two color components as separate pulses at a substantially higher effective scan rate and uses CCD or digital line store devices to combine them back into a NTSC color picture). As a result, B-MAC encoded video is much much harder to recover a watchable picture from.

B-MAC is scheduled to be used to encode the Holiday Inn Hi-Net 6 channel Ku band movie service (one channel of which may be HBO). Scientific Atlanta would love to be able to sell their scrambling system to the C-band cable system signal providers but MAcom got a head start with HBO and is strenuously arguing that TVRO users don't want to have to buy two $300 descrambler boxes. However the fact that the video isn't very secure with the MAcom system has been an issue and that may be why there has been some publicity about the subject.

The MDS Loophole

HBO transmits unenciphered video on so called multipoint distribution systems (2150 mhz) in more than 300 different metropoliten areas throughout the country. The modulation used is standard vestigal sideband AM with FM sound. All that is required to pirate HBO from such signals is a downconverter than converts the 2.15 GHZ to channel 3. Such downconverters used to be quite widely advertised for "Ham-TV" because a radio amateur band is nearby (2304 mhz).

Reception of MDS signals for the purpose of illegally obtaining HBO service has been found to be a violation of the Communications Act of 1934 in a recent Supreme Court decision. And of course the infamous "Electronic Communications Privacy Act of 1986" which is moving through congress may make any reception whatsoever of unauthorized signals whether out of idle

curiosity or fraudulent intent a serious federal felony equivalent to the present crime of wiretapping.

It is however amusing to note that 3 different networks I watched on the night HBO started full time scrambling all showed pictures of MDS antennas along with regular satellite dishes. The voice over said nothing about MDS but the tape clearly showed pictures of MDS antennas on all the network stories I watched. I suspect this was a quite and clever comment by the technical folk who shot the tape about the MDS loophole, as I doubt there are many broadcast technicians who can't tell the difference between an MDS antenna and a satellite dish.

In any case it is probably true that nearly as many if not more people pirate HBO from MDS links with equipment that sold for as little as $59 as those who used $3000 home TVRO's principly to cheat HBO of it's monthly subscription fee.

David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.
uucp: decvax!frog!die

From -299527024114839423
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9032f4aa51058e9,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,9032f4aa51058e9,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 11946d,9032f4aa51058e9,start
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1986-01-21 08:37:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!genrad!panda!talcott!harvard!seismo!rochester!rocksanne!
sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.dcom,net.ham-radio,net.wanted
Subject: Info Needed on WECO Data Sets
Message-ID: <737@kitty.UUCP>
Date: Tue, 21-Jan-86 11:37:01 EST
Article-I.D.: kitty.737
Posted: Tue Jan 21 11:37:01 1986
Date-Received: Sat, 25-Jan-86 11:14:41 EST
Distribution: na
Organization: Recognition Research Corp., Clarence, NY
Lines: 27

Being a pack rat all my life who could never stand to see "usable" items scrapped or otherwise discarded, I have a rather formidable collection of WECO data sets; most, if not all of these data sets are now MD-ed. Some of these data sets still have potential value to me for dedicated line use within our

buildings (like 108's, 201's, and 202's), but I am having difficulty in getting SD's, CD's and BSP data from my "usual" sources because these data sets are now MD-ed - even though some are only 4-5 years old.

Can anyone be of assistance in furnishing this information, or telling me where to obtain it? Since these data sets are no longer manufactured and are no longer competitive with state-of-the-art items, I would think that the supporting information (SD's, etc.) would no longer be considered proprietary by AT&T - so I do not believe that I am asking anyone to furnish proprietary information.

If there is a proper source in AT&T where I can formally request such information, I would appreciate being advised of where to contact; I will pay a reasonable document reproduction fee.

I will furnish a more specific list of what information I require upon request.

Thanks for anyone's assistance.

==> Larry Lippman @ Recognition Research Corp., Clarence, New York <==
==> UUCP {decvax|dual|rocksanne|rocksvax|watmath}!sunybcs!kitty!larry <==
==> VOICE 716/741-9185 {rice|shell}!baylor!/ <==
==> FAX 716/741-9635 {G1, G2, G3 modes} duke!ethos!/ <==
==> seismo!/ <==
==> "Have you hugged your cat today?" ihnp4!/ <==

From -8290540570468808508
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7756958d4aa8c9da,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-21 11:50:20 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!wmartin@ALMSA-1.ARPA

From: wmartin@ALMSA-1.ARPA (Will Martin -- AMXAL-RI)

Newsgroups: net.ham-radio
Subject: Re: Yes, there is a World of Radio Program
Message-ID: <1796@brl-tgr.ARPA>
Date: Tue, 21-Jan-86 14:50:20 EST
Article-I.D.: brl-tgr.1796
Posted: Tue Jan 21 14:50:20 1986
Date-Received: Fri, 24-Jan-86 08:37:21 EST
Sender: news@brl-tgr.ARPA
Lines: 46

I can add a bit more on this; since WRNO was off the air due to continuing transmitter-tube problems on at least part of two weekends, on the weekend of 11-12 Jan, they broadcast three different World of Radio programs, one in each regularily-scheduled time slot, in order to catch up.

Unfortunately, the local-Saturday-evening (6:30 PM CST; 0030 GMT Sunday) broadcast on 7355 kHz is often unreadable here in St. Louis; either due to them transmitting on lower power at that time, or atmospherics and skip zones being bad for that frequency at that time on the path between New Orleans and St. Louis. [Other times, WRNO has boomed in on 7355; not so

lately.] The local-Friday-evening (10:30 PM CST; 0430 GMT Saturday) on 6185 kHz is not bad, but has been subject to much variation recently. The best is usually the Sunday-morning airing (8:00 AM CST; 1400 GMT Sunday) on 9715 kHz.

However, there is now another outlet -- World of Radio is also broadcast on KCBI Dallas; Fridays at 3:00 PM CST (2100 GMT), on 11790 kHz, when most working people would have to use a timer to tape it in their absence, and repeated on Sundays at 12:30 PM CST (1830 GMT) on 11925. [I may be wrong about this frequency, as I'm doing this from memory -- maybe 11905? It's whatever the regular frequency KCBI has been using before they switch to 11790 at 1900 GMT.] This last just began this week.

I've listened once to each KCBI broadcast -- the first Friday afternoon one on 27 Dec., when it came in great, and the first Sunday afternoon one on 19 Jan., when it was fairly poor, and only marginally readable.

(By the way, any propagation experts out there care to offer their opinions as to whether I have reasonable expectations or am expecting too much about these local US shortwave broadcasters? Being here in the heartland [St. Louis, MO], I have been expecting that I should get a good signal from any of them [WRNO, KCBI, and WHRI in Indiana, which is carrying Radio Earth now every evening at 0300 GMT on 7400 kHz] at any time of the day or night. This is not the case. Reception is often marginal, and I sometimes cannot tell if the station is off the air [like WRNO has been a lot recently] or if reception is just so poor that I can't make out any recognizable modulation.

Am I just too close to most of them, so that I am in their skip zone much of the time? Or are their antenna orientations putting nulls toward me? [That last might be quite likely for WHRI, which has a south-aimed antenna, while I am to their west.] Or is it just the wretched propagation we have been enduring lately?)

Will Martin
ARPA/MILNET: wmartin@almsa-1.ARPA USENET: seismo!brl-bmd!wmartin

From -9073639117504718923
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e5c643b847231fa
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-21 14:11:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!decvax!bellcore!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Re: Kantronics UTU or equivalent
Message-ID: <276@inuxi.UUCP>
Date: Tue, 21-Jan-86 17:11:49 EST
Article-I.D.: inuxi.276
Posted: Tue Jan 21 17:11:49 1986

Date-Received: Thu, 23-Jan-86 02:37:17 EST
References: <2010@hplabs.UUCP>
Distribution: na
Organization: AT&T Consumer Products, Indianapolis
Lines: 13

> I'd like to purchase one of these, at as low a price as is reasonable.
> I'm looking for a used one, or a pointer to a discount supplier.
> I've seen them advertised for $169.00.
> I want to copy rtty and CW, for casual SWLing, without using a
> dedicated computer system. I'm willing to consider other approaches.

I believe that there exists, and i think from Kantronics, a "SWL"
equivalent to the UTU, which has the transmit portions of the box
removed, and probably has not been beefed up from a RFI
susceptibility standpoint. So, if you NEVER plan to use the beast
for transmitting, you might consider this. I will try to find the
ad i saw for this.

From 2439233006588334693
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d168c82c7e3fa0a5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-21 22:32:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!akguc!
mtunh!ky2d-2!k2sk
From: k2sk@ky2d-2.UUCP (Bob)
Newsgroups: net.ham-radio
Subject: Re: CQ 440 MHz
Message-ID: <108@ky2d-2.UUCP>
Date: Wed, 22-Jan-86 01:32:12 EST
Article-I.D.: ky2d-2.108
Posted: Wed Jan 22 01:32:12 1986
Date-Received: Fri, 24-Jan-86 08:32:42 EST
References: <13500003@hplsla.UUCP>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 28

>
>
I have worked with UHF and VHF repeaters for about 10 years and have
had the pleasure of working with everything from top quality commercial
gear to the cheapest manufactured for ham use and homebrew as well as
many combinations of the above.
     I suggest that if your group can get hold of commercial quality
especially Motorola repeaters and accessories, that is the way
to go. They ain't cheap!
     If not, then unless you have four or five experienced electronic
and communications types with a room full of service monitors

and other commercial grade test equipment, the best thing to
do is to "write a check" for a system produced for amateur use.
The idea of building a state of the art system - or even just
the computer card for one - is no longer practical. Of course if
you just want to fool around and don't care how it works, then
you should please yourself. If on the other hand, you want a system
which you know will be up day after day and year after year, then I suggest you
follow the above. My group which includes the aforementioned experts and equipment
has built up a system which
we think is pretty great but it doesn't do half what some of
the new commercial systems in the back of QST or 73 magazine
now do. In addition it is a weekly maintennance job for three
or more men to keep it on the air. We do this because we think
it's fun but perhaps you would not. In brief, it is far easier
to raise a few thousand and put up a turnkey system than it
is to design, build, and maintain your own system. This is perhaps not what you
would wish (nor do I) but it is the truth.
As to the system you should choose, I suggest you check locally
to see what other groups are running and go look at the stuff
yourself. Lots of luck! Bob

From 5968040277638316856
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,d2eafc2481bf175b
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,d2eafc2481bf175b
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,d2eafc2481bf175b
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1986-01-22 07:06:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 11/08/85; site unccvax.unccvax.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!whuxl!whuxlm!akgua!mcnc!unccvax!dsi
From: dsi@unccvax.UUCP
Newsgroups: net.analog,net.video,net.ham-radio
Subject: Re: Satellite Scrambling Rumor
Message-ID: <429@unccvax.unccvax.UUCP>
Date: Wed, 22-Jan-86 10:06:31 EST
Article-I.D.: unccvax.429
Posted: Wed Jan 22 10:06:31 1986
Date-Received: Fri, 24-Jan-86 22:03:15 EST
References: <272@drutx.UUCP> <146@hydra.UUCP>
Distribution: net
Organization: UNC-Charlotte
Lines: 33
Xref: watmath net.analog:647 net.video:1933 net.ham-radio:3780

>
>   HBO is using a scrambling device developed by MAccom/Linkabit
> called the VideoCipher II.   It basicly denies unauthorized access to
> HBO satellite feeds by digitally scrambling the audio using a DES
> generated key stream, and makes watching the video more difficult by

> inverting it and removing all synchronizing pulses.

'Tis true... Our VideoCipher II just came in yesterday, and I might just add that it is a very sophisticated piece of equipment.

First, the VideoCipher II is available in two models for "consumer" use: one, which accepts raw (nondeephasized video) or composite video, and the other, which allows looping through the 70 mHz IF signal from the satellite receiver. The version I had was the "looped through" version; both the consumer/SMATV versions have an RF modulator for channel 3 or 4. I believe that a wireless remote is available.

However, the person who is selling me my AUTHORIZED FOR HBO VideoCipher box (no flames) had it at home preauthorized, working fine, but when we connected it to our antenna last night, it wouldn't work. The help menu wouldn't come up or *nuthin'*. The VideoCipher box does depend on the reception of a VideoCipher-encoded audio data stream before the functions on the front panel would work; it may be that the Sat-Tec receiver we were using was too "narrow" to recover the audio clock and data properly from the synchronizing interval.

That's where it was left, last night. We are dropping back to punt, and when I get the SA 6603 receiver on the dish (and verification that the box is authorized) I'll post observations about the VideoCipher box to the net.

David Anthony
DataSpan, Inc

From -5709257274759883560
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a2dba2fcef363a51,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-22 08:12:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site tekigm.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!pyramid!hplabs!
tektronix!tekig5!tekigm!alanr
From: alanr@tekigm.UUCP (Alan Rovner)
Newsgroups: net.ham-radio
Subject: Response to Adnan Yaqub
Message-ID: <656@tekigm.UUCP>
Date: Wed, 22-Jan-86 11:12:26 EST
Article-I.D.: tekigm.656
Posted: Wed Jan 22 11:12:26 1986
Date-Received: Sat, 25-Jan-86 07:43:56 EST
Distribution: net
Organization: Tektronix, Beaverton OR
Lines: 17

Adnan, the Sony receivers you were referring to are the ICF-2002 which sells for about $200 and the ICF-2010 which sells for about $279. I own

the 2002 and I'm very happy with it. It is very small and easily stuffed
in a briefcase or suitcase for travelling. I'm also happy with its
performance. It is quite sensitive even with the internal whip antenna
and really does well with an outdoor antenna. Of course being a small
portable radio it lacks features that a desk-top radio would have like
noise blankers, switchable if filters, etc. I don't know too much about
the 2010 other than it is the big brother to the 2002 and offers more
features. If I were going the spend the $200 for the 2002 I'd probably
just go the extra $79 or so for the nicer radio. (When I bought my 2002
the 2010 was just a sparkle in a Japanese designer's eye somewhere).
Good luck and I'm sure you'll enjoy either radio.

Al, WA2TMP
Tektronix, Inc.
Vancouver, WA

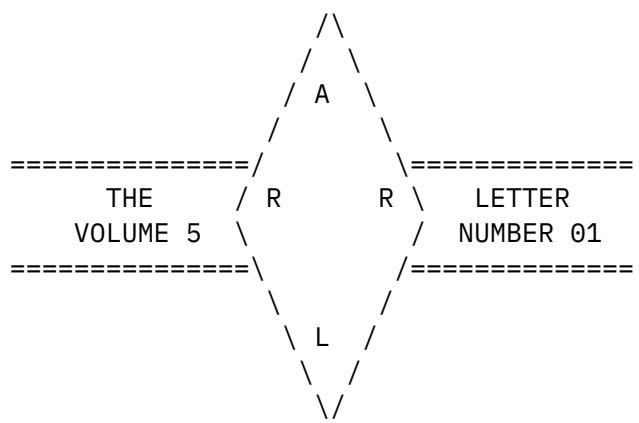
From 7035177589752211253
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b3973da1db714177,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-23 05:33:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: New Regency HX1500 scanner rumored
Message-ID: <747@ihu1h.UUCP>
Date: Thu, 23-Jan-86 08:33:02 EST
Article-I.D.: ihu1h.747
Posted: Thu Jan 23 08:33:02 1986
Date-Received: Fri, 24-Jan-86 21:39:15 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 16

x
     Rumor has it that Regency will announce the HX1500,
     another version of the HX1000 and HX1200 portable
     scanners.

     The most important new feature in the HX1500 will be
     that its 45 channels are subdivided into 3 banks of 15
     channels each, and each bank may be enabled or dis-
     abled.

     The HX1000 is being discontinued, and the HX1200 is
     just an HX1000 with the addition of commercial aircraft
     band, direct channel access, but no clock.
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6203791510084754263
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4c601fb2b3836dde,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-23 18:32:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL LETTER V5, NO 1
Message-ID: <277@inuxi.UUCP>
Date: Thu, 23-Jan-86 21:32:54 EST
Article-I.D.: inuxi.277
Posted: Thu Jan 23 21:32:54 1986
Date-Received: Fri, 24-Jan-86 22:24:33 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 398



January 02, 1986

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The Executive Committee of the ARRL Board of Directors met in Atlanta, Georgia, on December 14, 1985. Here are highlights; the full minutes will appear in QST:

The Committee considered an ARRL position regarding RM-5241, the petition by Donald Stoner, W6TNS, for the creation of a Public Digital Radio Service (PDRS) and reallocation of the 52-54 MHz band from the Amateur Service to the PDRS. Counsel was directed to file comments by the deadline of January 6, 1985, vigorously opposing the reallocation of 52-54 MHz. (Details of RM-5241 elsewhere this Letter.)

Pertaining to Radio Frequency Interference (RFI), this resolution was unanimously adopted:

> Whereas, RF susceptibility of the current generation of VCRs and other home electronic devices is a growing
>
> problem; and
>
> Whereas, the public is not aware that responsibility for RF susceptibility of VCRs and other home electronic devices lies with the manu facturers of such equipment rather than with Amateur Radio stations operating in the vicinity of these devices; and
>
> Whereas, technical solutions -- while being pursued through special committees of the American National Standards Institute (e.g., ANSI C-63) and by other routes -- will not have a favorable impact on equipment reaching consumers in the near term; now,
>
> Therefore, Counsel is instructed to prepare for filing, after review at the 1986 Annual Meeting of the Board, a petition requiring the labelling of home electronic equipment, with regard to its susceptibility to RF energy, the filing to emphasize that such labelling is no substitute for technical solu tions in the longer term.

The Executive Committee completed its review of Morse Code examination procedures as called for at Minute 66 of the 1985 Second Meeting (see page 57, September 1985 QST). The EC concluded that there was no immediate need to revise the Rules in Part 97. However, the Executive Committee recognized that consistency of standards in the examination program continues to be a desirable objective, and the President is requested to continue to pursue this with Commission personnel as appropriate, keeping the Morse as well as the written test in mind.

Amateur recruitment. To increase the number of amateurs licensed by FCC will require a cross-disciplinary coordinated effort, which is difficult if not impossible through a separate Development Office. Thus the Development Office is being closed, and other organizational changes will be made. (See "HQ Shifts Gears," this Letter.) The following elements of an amateur recruitment program are contemplated for 1986:

a) An assertive effort through radio clubs.

b) Newsstand publication.

c) Use of a professional public relations firm for such projects as the placement of articles in non-amateur publications for targeted groups.

d) Cooperation with youth groups and senior-citizen organizations.

e) Revised instructor guides.

f) "How to Become" information tailored to the targeted groups.

The International Amateur Radio Union Secretary, David Sumner, K1ZZ, presented a brief oral report on the IARU Administrative Council meeting in Melbourne, Australia, and Auckland, New Zealand, November 8, 9 and 11, 1985. It was made clear that the Council's discussion of a possible World Administra tive Radio Conference in the early 1990s (as has been postulated by International Telecommunication Union Secretary General Richard Butler) in no way implied IARU endorsement of such a WARC being held.

HEADQUARTERS SHIFTS GEARS TO MEET GROWTH CHALLENGE

For the year 1985, ARRL enjoyed an in crease in membership of approximately 15,000. While this is short of the ambi tious goal of a 25,000 increase this year, +it's by far the largest

membership increase since the CB-boom year of 1977, and quite likely the largest in the League's history in a year that did not see a similar in crease in the number of licensed amateurs.

The continuation of this success on the membership front will require more than a "rerun" of 1985 techniques. The reason for this is that we've yet to make any measurable progress on the recruitment front -- that's "recruitment" as in more radio amateurs. Figures for upgrading from one license class to another look promising, but the rate of first-time entry into Amateur Radio actually declined in the FCC fiscal year ending September 30, with similar results for October and November. More radio amateurs means a stronger Amateur Radio in government eyes.

ARRL's Executive Vice President has determined that the revised HQ organizational structure, adopted last year (see "HQ Reorganization" in the January 17, 1985 Letter), has not given the League the best means of tackling the recruitment task. Writes EVP David Sumner, K1ZZ: "The only effective way to deal with a challenge as large as Amateur Radio recruitment is to mobilize all the available resources, regardless of the department in which they may happen to reside. Assigning the respon sibility to a single office, with a relatively small staff, doesn't get the job done unless there is some mechanism for tapping into the resources of other departments. Accordingly, as we close out the year we have set the wheels in motion for a reorganizing of the development function, to focus our resources as effectively as possible on the recruitment challenge." How will HQ respond to this challenge?

The Development office is being phased out. Existing

personnel in Newington will continue to perform their functions (training, audio/visual, referrals of prospective hams to clubs and Elmers, etc.) but will be reassigned to a new Club Services Department in the Volunteer Resources Group.

The membership promotion function is reassigned to the Publications Group, and more specifically to the Circulation Department.

The function of providing support to the section-level and local Public Information Assistants and Public Information Officers will be assigned to the Club Services Department.

Coordination of the recruitment function will become a staff function in the office of the Executive Vice President, through the chairing of a multi-department Task Force on Recruitment. It will be the mission of the Task Force to develop a detailed recruitment plan, including specific task assignments to departments.

Representing the League to the national media also will be

done by the office of the Executive Vice President. Several personnel shifts are being made to complete the picture:

Joining the EVP's staff in mid-January as Senior Staff Advisor for Planning and Operations is Karl Muller, W3UBQ. Karl recently took early retirement after a 35-year career with Gulf Oil, and is relocating to Connecticut from Houston. His background in financial and customer service operations will add considerable depth to the staff.

Curt Holsopple, K9CH, will become Manager of the new Club Services Department, effective the first of the year.

Jim Clary, WB9IHH, Assistant Manager of the Volunteer Examiner Department, will become Manager of the department.

Watch this space for more news as ARRL tackles the challenge of the eighties. Hint: you're the most important part of it.

PUBLIC DIGITAL RADIO SERVICE WOULD GOBBLE HALF OF SIX-METER BAND

What has one watt, four letters and wants to eat two megahertz? Answer: the PDRS (Public Digital Radio Service) sought for in a Petition for Rulemaking (RM-5241), brought before FCC by Donald L. Stoner, W6TNS. Citing the rising popularity and falling prices of computers, and juxtaposing these with increasing costs for telephone service, Stoner proposes that the PDRS would permit the owners of personal computers to communicate by radio, first through Local Area Networks (LAN) and, beyond LANs, through a national packet radio network. Transmitter power would be limited to a maximum of one watt in a given user's "radio modem," with output power being adjusted automatically to the minimum needed for communication. There's one immediate hitch, from Amateur Radio's point of view. Writes the petitioner:

"A wideband digital channel can only be accommodated with the VHF band or higher frequencies. To keep the cost of equipment low, a band between 30 and 300 MHz is ideal. Some readers may feel that a service as described should be placed in the UHF or SHF range. This might be true if a suitable allocation within the 30-300 MHz band did not exist.

"However, within this frequency range there is a band, 2 MHz in width, which is virtually unoccupied and therefore unused. I refer to the spectrum between 52 and 54 MHz.

"Radio amateurs are permitted to operate on frequencies between 50 and 54 MHz (the six meter band). For a number of reasons, this band is 'underoccupied.' It is estimated that out of 400,000 radio amateurs in the United States, less than 1000 are active on the six meter band . . . "

The opinion of the petitioner is that most amateur operation is confined to the bottom two MHz of "Six" because of television interference; the proposed low power used by "radio modems" in the PDRS would obviate their causing TVI. Check an ARRL Repeater Directory lately? 52-54 MHz is where repeaters reside on six, and they're doing quite well, thanks.

Next Letter, we'll detail ARRL's response to RM-5241; the League's Executive Committee has already made the gist of its position known (see "EC Meeting," this Let ter). It's not the proposal for the service that's the bone of contention, understand -- it's just that Amateur Radio intends to go right on keeping that top two megahertz of six exclusively within the Amateur Radio realm.

ARRL FOUNDATION SCHOLARSHIPS AVAILABLE

The ARRL Foundation announces the availability of three scholarship awards for the 1986-87 school year. Based on high academic standing, financial need and dedi cation to public service through Amateur Radio, these awards are provided through the generosity of individual sponsors and donors:

The Perry F. Hadlock Memorial Scholar ship of $500 will be awarded to a student of electrical engineering. It is open to licensed radio amateurs of the General, or higher, class.

The Paul and Helen L. Grauer award of $500 will be given to a student of electronics, communications engi neering or related fields who resides in and attends an accredited college or university in the Midwest Division of the ARRL.

The You Have a Friend in Pennsylvania scholarship is available for the first time in the l986-87 academic year. It will be awarded to a League member who maintains academic excellence.

Further information and application forms for these awards may be obtained by writing to the ARRL Foundation Scholarships, 225 Main Street, Newington CT 06111.

COMMISSION UPHOLDS DENIAL OF PROPOSAL TO ESTABLISH AUXILIARY MONITORING SERVICE IN ALL RADIO SERVICES

In 1982, Congress amended the Communica tions Act to authorize the Commission to use volunteers in the Amateur and

Citizens Band Radio Services to monitor violations of the Communications Act and FCC rules. In the fall of 1984, a volunteer Amateur Auxiliary was established pursuant to an agreement with ARRL concerning the training and administration of the auxiliary. The pur pose of the Amateur Auxiliary is to foster wider knowledge of Commission rules, conduct monitoring of the Amateur Radio Service frequencies to encourage compliance with the rules and good operating practices, develop solutions to problems arising from the operation of amateur stations, and to under take specific projects as the need arises.

FCC has upheld a staff decision denying a proposal by John P. Weber, Jr., K4JW, Melbourne, Florida, to establish a volunteer auxiliary monitoring service in all radio services. Weber proposed an auxiliary monitoring service in all radio services involving volunteers working under direct FCC supervision. The Chief, Field Operations Bureau (FOB), denied the petition on the basis that Congress had only authorized the Commission to use volunteers in the Amateur and Citizens Band Radio Ser vices; that federal law precludes such voluntary and uncompensated service other than in these two services; that the Communications Act prohibits the intercep tion and disclosure of radio signals by volunteers in most other radio services; that establishment of an auxiliary for all radio services at once would be too broad and ambitious a project for for effective FCC oversight and supervision; and that since the Commission's regulatory emphasis in a number of services has concerned signal analysis, the expense of appropriate equip ment and necessary training may be prohibi tive.

As part of his application for review, Weber contended, among other matters, that under his proposal there was no need for an intermediate organization such as the ARRL, and that volunteers would be considered agents of the Commission and protected by federal law. He further contended that the FOB-ARRL agreement violated the procedural requirements of the Government in the Sunshine Act, could cause violations of federal and Florida laws concerning the interception and disclosure of oral communications, and had practical problems regarding reimbursement by the ARRL for certain volunteer monitoring

expenses, travel expenses, and participation by all interested amateurs. Weber asserted that the ARRL does not speak for the majority of amateurs, and that his proposal would result in a more effective volunteer organization for the benefit of the Commission.

The Commission found no merit in the further contentions raised by Weber in his application for review. It noted that the most efficient development of an amateur volunteer auxiliary is through large organi zations such as the ARRL, particularly when such organizations bring with them extensive experience with prior self-regulation ef forts and other volunteer experience. It

noted further that the Amateur Auxiliary is a Commission program to be administered, in large measure, by the ARRL and any other national or regional organization that has a similar type of agreement with FOB. It stated that the Amateur Auxiliary is still in its developmental stage and that FOB will be monitoring its effectiveness in accomplishing the Congressional intent in authorizing the volunteer service.

(K4JW became a Silent Key before FCC's denial was released -- Editor.)

YOU USE YOUR CALL, WE'LL USE OURS

In June of last year it came to the League's attention that a low-power TV station in Columbus, Ohio, was visually identi fying as W8BV. The real W8BV is Stuart M. Brooks of Portland, Michigan; the assigned callsign of the LPTV station is W08BV. It's a no-no for LPTV stations to omit the "leading zero" from their calls, as directed by Section 74.783(d) of the Rules:

> The channel number designator for Channels 3 through 9 will be incorpo rated in the call sign as a 2-digit number, i.e., 02, 03, . . . so as to avoid similarities with call signs assigned to amateur radio stations.

As late as November 4, 1985, the W8BV callsign was still being used by the LPTV station. However, a November 19 report by ARRL's Washington Area Coordinator brought the news that the LPTV had finally cleaned up its act -- with the new logo's zero looking more like an "O." QRA?

NEW CONTEST CERTIFICATES ON THE WAY

The ARRL Contest Branch has new contest certificates on the drawing board -- this has put our normal certificate mailings behind their usual schedule. A sneak peek over the necessary shoulder indicates the revised articles will be well worth a few more weeks' wait: 8-1/2 by 11 inches and horizontal format with screened map backgrounds. Stand by!

IT'S ALL OVER BUT THE QSLING

Results of the December 28-29 W1AW bash: 809 phone QSOs, 732 CW -- a total of 1541! We even enjoyed a little late-night "E" on 10. QSLs answered 100% -- let's have yours!

*eof

From 9139981339982320500
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,ed7ec4cdb0d9d5aa,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,ed7ec4cdb0d9d5aa,start
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1986-01-24 11:32:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 / ST 1.0; site saber.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!sun!saber!jc
From: jc@saber.UUCP (John Cincotta)
Newsgroups: net.analog,net.ham-radio
Subject: UA4968
Message-ID: <1918@saber.UUCP>
Date: Fri, 24-Jan-86 14:32:26 EST
Article-I.D.: saber.1918
Posted: Fri Jan 24 14:32:26 1986
Date-Received: Sun, 26-Jan-86 04:28:51 EST
Distribution: net
Organization: Saber Technology, San Jose, CA
Lines: 23
Xref: watmath net.analog:651 net.ham-radio:3783

A while back I found and baught a microwave diode??? of some type from a
used electronics store im Palo Alto Ca. and I was wondering if any one out
there can give some info on the type of diode it is and any other info on it.
it is a Microwace Associates MA4968. the test data that came with it is

C6 .429
Tl 10ns
Ts .09ns
Fc-6 400ghz
Vb 38v
the diode is in a package that is like a weding cake the bottom layer is
about .125 in in diameter and .010 thich gold plated. the next layer is glass
about .050 in dia and .050 tall. the top layer is .010 in dia and .050 tall.

the types of things that it could be used for would be appreacetd.

thanks in advance.

Name: John Cincotta
Mail: Saber Technology, 2381 Bering Drive, San Jose, California 95131
AT&T: 435-8600
UUCP: ...{decvax,ucbvax}!decwrl!saber!jc
     ...{amd,ihnp4,ittvax}!saber!jc

From -1804290375297466704
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,174af41061d784ae
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-18 23:31:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!ittatc!dcdwest!sdcsvax!

sdcrdcf!hplabs!qantel!lll-lcc!lll-crg!seismo!brl-adm!brl-smoke!smoke!
W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA (Keith Petersen)
Newsgroups: net.ham-radio
Subject: want ads on this net
Message-ID: <1910@brl-smoke.ARPA>
Date: Wed, 19-Mar-86 02:31:10 EST
Article-I.D.: brl-smok.1910
Posted: Wed Mar 19 02:31:10 1986
Date-Received: Sun, 23-Mar-86 00:59:23 EST
Sender: news@brl-smoke.ARPA
Lines: 6

The bottom line is: continued appearance of want ads on this net will
result in the severance of the Usenet<-->Arpanet gateway of
net.ham-radio<-->Info-Hams. I don't think anyone wants to see the
free flow of information between the two cease.

--Keith W8SDZ <Info-Hams-Request@SIMTEL20.ARPA>

From -2239346273870573010
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f7bf54bc3f590bd3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-19 06:10:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!ittatc!dcdwest!sdcsvax!sdcrdcf!hplabs!qantel!dual!lll-lcc!lll-
crg!seismo!rochester!bullwinkle!uw-beaver!ssc-vax!ssc-bee!maa
From: maa@ssc-bee.UUCP (Mark A Allyn)
Newsgroups: net.ham-radio
Subject: Re: the cactus net
Message-ID: <506@ssc-bee.UUCP>
Date: Wed, 19-Mar-86 09:10:03 EST
Article-I.D.: ssc-bee.506
Posted: Wed Mar 19 09:10:03 1986
Date-Received: Sat, 22-Mar-86 08:11:21 EST
References: <144@ky2d-2.UUCP>
Distribution: na
Organization: Boeing Aerospace Co., Seattle, WA
Lines: 20

> Has anyone on line ever heard of the cactus network?
> eaters linked? 73s......Dave n2aam

I have not heard of the cactus network but I HAVE heard of the DRONK
network when I was in San Diego, Ca. (1979-1981). The DRONK net was a
series of closed private repeaters (PL) on two meters and above which
were linked together like a private phone system and could be controled
via touch tone codes.

The network was very private. I met a couple of the people on it and they
were of the type that if anyone tried to get onto any of their repeaters

who did not belong to the group they would trace them down and beat them
up and I mean beat them up. They are a good group to stay away from; at
least back in '79. Hopefully things have changed by now.

If anyone has any more info about DRONK, maybee the net would appreciate it.

73
Mark A. Allyn WA1SEY
!uw-beaver!ssc-vax!ssc_bee!maa

From -7012414809802419221
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,df13ff1c8e356905,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-19 06:43:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!dec-rhea!dec-galaxy!
fisher
From: fisher@galaxy.DEC (Burns Fisher ZKO1-1/D42 DTN 381-1466)
Newsgroups: net.ham-radio
Subject: Old books
Message-ID: <1769@decwrl.DEC.COM>
Date: Wed, 19-Mar-86 09:43:14 EST
Article-I.D.: decwrl.1769
Posted: Wed Mar 19 09:43:14 1986
Date-Received: Sat, 22-Mar-86 03:07:30 EST
Sender: daemon@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 55

>In article <498@ssc-bee.UUCP>, maa@ssc-bee.UUCP (Mark A Allyn) writes:
>> Sometime in the 1950's or 1960's there was a novel written which had
> ham radio in it. It was written for a teen age to pre-teen age audiance.
>> Unfortunately I can't remember the title or author. I only remember that
>> one of the charactors was Randy Morrow who was interested in learning to
>> become a radio ham and another charactor was Chip Morton or it may have
>> be Morson??? Chip was allready a ham when the story began and he was a
>> bit unfriendly to Randy but opened up and help Randy get his
>> novice license as the story went on. A third charactor was Dave something
>> - - maybee Schefield - - who worked at a TV station.
>> If anyone out there remembers anything about that book, I would very much
>> appreciate it if they let me know!

>...
>   Speaking of nostalgia and ham radio literature, does anyone remember
>the "Carl and Jerry" episodes in "Popular Electronics" during the 50's and
>early 60's? I think one of the most amusing episodes [looking back with some
>hindsight] was when they "built" a transceiver which they hid in some bushes
>to deter some kids from smoking cigarettes (they talked over the transceiver
>to scare the kids).

Re the first part:

Are you thinking perhaps of The Hardy Boys book, THE SHORTWAVE MYSTERY? Those books have a character named Chet Morton. None of the rest of the description matches, however. In SHORTWAVE MYSTERY, I think that the Hardy Boys and Chet are already hams. They hear a call for help on their receiver which sends them of to Northern Canada for some reason which I can't remember.

Re Carl and Jerry:

I always loved those stories. I have two favorites:

1) They were tied up in a gas station by a baddie who wanted to kill the judge who sentenced him to jail (he happened to know said judge was coming to the station to get his car worked on). The phone was ripped out, but our heros managed to connect the speaker of a TV to the phone lines, dial by pulsing the wires, and got help.

2) They had some sort of bet about walking across a football field in a straight line. They found an underground conduit running across the field, hooked a little carrier-current xmitter to the power line, and managed to follow the conduit using a concealed receiver and antenna on the walkers foot.

Wow...lots more are coming back, but I won't bore you with them now. Thanks for reminding me of those great stories!

Now how about Mac's Electronics Shop in Electronics World: "Barney, knowing that he could take a break to listen to Mac's story, pretended to be interested ..."

Burns

...decwrl!rhea!star!fisher

From 8710291361868165550
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ca0ebd1ef86e80f2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-19 13:10:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site bambi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!petrus!magic!science!bambi!steve
From: steve@bambi.UUCP (Steve Miller)
Newsgroups: net.ham-radio
Subject: Re: want adds on this net
Message-ID: <335@bambi.UUCP>
Date: Wed, 19-Mar-86 16:10:35 EST
Article-I.D.: bambi.335
Posted: Wed Mar 19 16:10:35 1986
Date-Received: Fri, 21-Mar-86 05:45:59 EST
References: <142@ky2d-2.UUCP> <2c911fd1.46b9@apollo.uucp>
Organization: Bell Communications Research Inc., Morristown, NJ

Lines: 9

> > I would like to know if it is ok to post want add
> > for used amateur radio equipment on this net.

Oh boy! You will be getting every possible response to this
question, most of them religious in nature. Just beware of any
that make reference to something called "Net Policy," as these
will be science fiction.

     -Steve WA4LDA

From -1186955042221280365
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a0a021454dabfc1e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-20 12:21:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site genat.UUCP
Path: utzoo!utcs!mnetor!genat!george
From: george@genat.UUCP (George Gorsline)
Newsgroups: net.ham-radio
Subject: Re: Some interesting West Coast DX
Message-ID: <2602@genat.UUCP>
Date: Thu, 20-Mar-86 15:21:32 EST
Article-I.D.: genat.2602
Posted: Thu Mar 20 15:21:32 1986
Date-Received: Fri, 21-Mar-86 07:40:16 EST
References: <1699@brl-smoke.ARPA>
Reply-To: george@genat.UUCP (George Gorsline)
Organization: Genamation Inc. (Toronto Ontario, Canada)
Lines: 19
Summary:

>73--Jim, K6ZH
>
>P.S. Thanks to all of you who requested a copy of the "sunspots of
>the future" article--it'll be in the mail (and I mean U.S. Mail in
>this case) by the end of the week.
>-------
I tried to request a copy of your sunspots article but the mail was returned
somewhere down the line. If you could send a copy, I'd be grateful and would
forward it to LongSkip, the CanaDX (Canadian DX Assoc) newsletter, with 600
subscribers worldwide, with full credit of course. We enjoy your postings...
73,

--
     George Gorsline, Jr. VE3FIU / K8HI
     One of the VE3YDX gang... Y DX? Because it's there(~Y)!
               __... ...__ . ... _.. _..._
     Genamation, 351 Steelcase Rd. West, Markham Ontario L3R 3W1
     {allegra|linus|ihnp4|...}!utzoo!mnetor!genat!george

(416) 475-9434

From -778500576349833092
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f7bf54bc3f590bd3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-20 12:55:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!ittatc!dcdwest!sdcsvax!sdcrdcf!hplabs!qantel!dual!lll-lcc!lll-crg!seismo!ut-sally!im4u!oakhill!don
From: don@oakhill.UUCP (Don Weiss)
Newsgroups: net.ham-radio
Subject: Re: the cactus net
Message-ID: <666@oakhill.UUCP>
Date: Thu, 20-Mar-86 15:55:34 EST
Article-I.D.: oakhill.666
Posted: Thu Mar 20 15:55:34 1986
Date-Received: Sun, 23-Mar-86 11:15:09 EST
References: <144@ky2d-2.UUCP> <506@ssc-bee.UUCP>
Reply-To: don@oakhill.UUCP (Don Weiss)
Distribution: na
Organization: The Ixian Chipworks, Oak Hill, Texas
Lines: 26

Since I haven't seen any description of the Cactus system yet, I thought I'd tell y'all what I know about it.

The Cactus Intertie is a consortium of individuals and groups in California, Arizona, and New Mexico, who operate a large network of 440-MHz linked repeaters. Each site has a controller that is actuated by TouchTones [TM] and can be addressed from anywhere in the system.

The system has a linear topology, which stretches from central California (near Sacramento, I believe) through about 14 stations, to El Paso.

Each station has local access through a repeater (usually 440 MHz), and many stations have remote bases, most of which are 2 meters and some of which have remotely controllable beam antennas.

The effort and expense of building and maintaining the network have been so immense that participation is limited to those who can put up substantial time and funds; it follows that they generally run the local access channels in closed mode (i.e., CTCSS). I have not heard any evidence of the pugnacious attitude attributed to the other California system mentioned.

A friend of mine here in Austin helped to duplicate this system while living in Florida (The 'Gator' interconnect system) and is now spearheading similar efforts here in Texas (The 'Armadillo' interconnect system).

73 DE Don KB5PM

From -8400823029964139323
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d65d8e7293157cc8
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,d65d8e7293157cc8
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1986-03-20 15:13:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!ittatc!dcdwest!sdcsvax!sdcrdcf!hplabs!qantel!dual!lll-lcc!lll-crg!seismo!gatech!gitpyr!kludge
From: kludge@gitpyr.UUCP (Scott Dorsey)
Newsgroups: net.analog,net.ham-radio
Subject: Re: Telephone ring detector
Message-ID: <1575@gitpyr.UUCP>
Date: Thu, 20-Mar-86 18:13:22 EST
Article-I.D.: gitpyr.1575
Posted: Thu Mar 20 18:13:22 1986
Date-Received: Sun, 23-Mar-86 11:15:51 EST
References: <2032@orca.UUCP>
Reply-To: kludge@gitpyr.UUCP (Scott Dorsey)
Distribution: na
Organization: Georgia College Of Universal Knowledge
Lines: 27
Xref: dcdwest net.analog:714 net.ham-radio:3161

In article <2032@orca.UUCP> philb@orca.UUCP (Phil Biehl) writes:
>
>   I'm in the process of adding telephone capabilities (autopatch)
>   to the UHF ham repeater I am working on. I would like to be
>   able to detect the ringing current produced by an incoming
>   call. What I need is a CMOS compatible signal indicating that
>   ringing current is present on the drop. That is, a pulse for
>   every ring burst.

  My suggestion is one of the neon optoisolators on the market. Just
hook one end to the phone line and the other one to a 741 op amp. Or,
taping an NE-2 bulb to a CDS cell will probably work, although I wouldn't
bet on reliability. I know that HP makes some neon optoisolators, but
you can probably get them cheaper...

--

Disclaimer: Everything I say is probably a trademark of someone. But
            don't worry, I probably don't know what I'm talking about.

Scott Dorsey   " If value corrupts
kaptain_kludge   then absolute value corrupts absolutely"

ICS Programming Lab (Where old terminals go to die), Rich 110,
Georgia Institute of Technology, Box 36681, Atlanta, Georgia 30332
...!{akgua,allegra,amd,hplabs,ihnp4,seismo,ut-ngp}!gatech!gitpyr!kludge

From -7926552097719054710
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d7666050619107a8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-21 20:05:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Version 1.0 Netnews CMS/BITNET 5/19/85; site PSUVM.BITNET
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!ittatc!dcdwest!sdcsvax!
sdcrdcf!burdvax!psuvax1!psuvm.bitnet!j9n
From: J9N@PSUVM.BITNET
Newsgroups: net.ham-radio
Subject: rain gutter antenna
Message-ID: <4617J9N@PSUVM>
Date: Fri, 21-Mar-86 23:05:48 EST
Article-I.D.: PSUVM.4617J9N
Posted: Fri Mar 21 23:05:48 1986
Date-Received: Tue, 25-Mar-86 04:25:13 EST
Expires: Sat, 5-Apr-86 00:00:00 EST
Lines: 23

   Several years ago, when I was living on Staten Island, N.Y., I used
the rain gutter as an antenna. I ran a piece of #22 wire under the weather-
stripping of my window to a sheet metal screw on the downspout.
   I loaded it up through my Dentron Super Tuner, and it worked rather well
on 80 meter CW with minimal TVI. My only problem with it was one day and it
was raining very lightly; Moisture on the downspout and a nearby, grounded
metal rod formed a 'capacitor' which blew up (very loudly) when I hit the thing
with 100 watts. An excitable neighbor saw it happen (sparks and all) and
notified management. Naturally I disconnected the thing before anybody could
get there to inspect the thing......

  Any traffic handlers out there? Catch me on EPAEPTN (3.917, 6 P.M. EST)

                                        --Jeff N2BSS

 /* The only dangerous thing in this world
    is an open mouth and a closed mind   */

psuvm.bitnet!J9N
long live vm!

From -4348093178134043783
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2a75ebf243686adf
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-21 21:55:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!pyramid!pesnta!phri!

cmcl2!lanl!jp
From: jp@lanl.ARPA (James Potter)
Newsgroups: net.ham-radio
Subject: Re: Old 1960's novel with ham radio in it (query)
Message-ID: <799@lanl.ARPA>
Date: Sat, 22-Mar-86 00:55:11 EST
Article-I.D.: lanl.799
Posted: Sat Mar 22 00:55:11 1986
Date-Received: Tue, 25-Mar-86 05:17:34 EST
References: <498@ssc-bee.UUCP>
Reply-To: jp@a.UUCP (James Potter)
Distribution: net
Organization: Los Alamos National Laboratory
Lines: 18

The novels are:
"CQ ghost ship"
"SOS at midnight"
"DX brings danger"
all are by Walker A. Tompkins (K6ATX)
The hero is Tommy Rockford. There has been a fourth one recently
released according to an ad I just received.
The books are available from Ham Radio Magazine whose address I don't have
handy.
They are accurate (as reasonably as the stories allow) in their depiction
of ham radio. And are written for a young audience. Jr. High or early
H.S. probably is the best age group.   One of the books was made into a
TV movie, I believe, but I don't remember which one.

73
Jim, K9GXC

From 3220918104160912587
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,d65d8e7293157cc8
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,d65d8e7293157cc8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-22 07:32:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!ittatc!dcdwest!sdcsvax!sdcrdcf!hplabs!hao!seismo!rochester!
rocksanne!sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.analog,net.ham-radio
Subject: Re: Telephone ring detector
Message-ID: <898@kitty.UUCP>
Date: Sat, 22-Mar-86 10:32:48 EST
Article-I.D.: kitty.898
Posted: Sat Mar 22 10:32:48 1986
Date-Received: Mon, 24-Mar-86 21:23:49 EST

References: <2032@orca.UUCP>
Distribution: na
Organization: Recognition Research Corp., Clarence, NY
Lines: 27
Xref: dcdwest net.analog:716 net.ham-radio:3169
Summary: Simple ring detector circuit

In article <2032@orca.UUCP>, philb@orca.UUCP (Phil Biehl) writes:
>   I'm in the process of adding telephone capabilities (autopatch)
>   to the UHF ham repeater I am working on. I would like to be
>   able to detect the ringing current produced by an incoming
>   call. What I need is a CMOS compatible signal indicating that
>   ringing current is present on the drop. That is, a pulse for
>   every ring burst.
>   I would like to have as much isolation from the drop as possible
>   and have been considering optoisolators to connect the logic to
>   the line.

    A simple ring detector can be made from a GE H11AA1 optoisolator, which is a dual LED device which detects AC. Connect the LED input in series with a 3.9 K resistor and a 0.68 uF capacitor, and then across tip and ring of the telephone line. The optoisolator output is a transistor; overall sensitivity can be varied by using a resistor between the base and emitter. Some integration should also be done to minimize dialing transients from being detected; this can be done with a capacitor across the base and emitter. For CMOS use, the emitter can be at Vss to sink a logic input using the collector.

==> Larry Lippman @ Recognition Research Corp., Clarence, New York   <==
==> UUCP   {decvax|dual|rocksanne|rocksvax|watmath}!sunybcs!kitty!larry <==
==> VOICE   716/688-1231   {rice|shell}!baylor!/   <==
==> FAX   716/741-9635 {G1, G2, G3 modes}   duke!ethos!/   <==
==>   seismo!/   <==
==> "Have you hugged your cat today?"   ihnp4!/   <==

From -4380958700915177080
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11f2eb,320514a2c62b7309,start
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,60346a4a1eb3656
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-22 21:54:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!
rochester!rocksanne!sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.ham-radio,net.legal
Subject: Re: Cordless Phone tapped in New Jersey
Message-ID: <902@kitty.UUCP>
Date: Sun, 23-Mar-86 00:54:12 EST
Article-I.D.: kitty.902
Posted: Sun Mar 23 00:54:12 1986

Date-Received: Tue, 25-Mar-86 03:22:14 EST
References: <790@ihu1h.UUCP>
Distribution: net
Organization: Recognition Research Corp., Clarence, NY
Lines: 43
Xref: watmath net.ham-radio:3968 net.legal:3157
Summary: Similar case in NY State

In article <790@ihu1h.UUCP>, parnass@ihu1h.UUCP (Bob Parnass, AJ9S) writes:
> From the March 11, 1986 issue of the New York Times:
> Cordless Phones Raise
> An Eavesdropping Issue
> "TRENTON, March 10 - Cordless telephones are at the cen-
> ter of a debate in the New Jersey Division of Criminal
> Justice over whether current wiretap laws apply to the
> interception of conversations pulled out of the air."
> ...

There was a similar case in Olcott, NY (40 miles NE of Buffalo), about two years ago. It involved two neighbors who were feuding, one of whom was tape recording the cordless telephone calls of the other. A properly executed search warrant resulted in seizing the tapes and recording equipment, and a prosecution was commenced under the eavesdropping statues of the NY State Penal Law. After much todo, a trial by judge resulted in acquittal on all criminal charges.

While the judge plainly stated that he felt the eavesdropping was a "rotten thing to do", he could find no criminal violation of the NY State Penal Law.

The general legal reasoning behind the decision involved:

(1) The user of a cordless telephone operating on citizen's band frequencies has no reasonable expectation of privacy.

(2) The eavesdropping did not involve any physical act with respect to the "victim's" telephone line or premises.

(3) The eavesdropping consisted merely of using a radio receiver and tape recorder, with those acts in themselves not being criminal. The issue of "disclosure" to third parties of the communications was raised, but since such an act could POSSIBLY be a violation of the federal Communications Act of 1934 law, and the matter being tried was for the state law only, there could be no consideration of this issue.

==> Larry Lippman @ Recognition Research Corp., Clarence, New York <==
==> UUCP {decvax|dual|rocksanne|rocksvax|watmath}!sunybcs!kitty!larry <==
==> VOICE 716/688-1231 {rice|shell}!baylor!/ <==
==> FAX 716/741-9635 {G1, G2, G3 modes} duke!ethos!/ <==
==> seismo!/ <==
==> "Have you hugged your cat today?" ihnp4!/ <==

From -2713262717236845041
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1660c0,9d27d0cff76dcaec,start
X-Google-Attributes: gid1660c0,public
X-Google-Thread: 151e61,9d27d0cff76dcaec,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-27 06:22:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!
gatech!seismo!brl-adm!brl-smoke!wmartin
From: wmartin@brl-smoke.UUCP
Newsgroups: net.nlang.india,net.ham-radio
Subject: Shortwave radio scene in India
Message-ID: <2133@brl-smoke.ARPA>
Date: Thu, 27-Mar-86 09:22:23 EST
Article-I.D.: brl-smok.2133
Posted: Thu Mar 27 09:22:23 1986
Date-Received: Tue, 1-Apr-86 04:41:35 EST
Distribution: net
Organization: USAMC ALMSA, St. Louis, MO
Lines: 30
Xref: watmath net.nlang.india:1214 net.ham-radio:3991

The following blurb is from a description of the "Media Network" program (a program about radio and communications) that will be broadcast on Radio Nederland the first week in April. This description is copied from the April issue of "International Radio" magazine.

"India -- Video or Radio? Shortwave broadcasters know that India is a completely different market than other places in Asia. The audience is responsive and used to tuning the shortwave dial. Each year, one company, called PEICO, sells nearly 13 million radios. Still, we have received letters from listeners asking why the Indian receivers seem to lack the finish and technology of sets found in other parts of Asia, such as Singapore and Hong Kong. We talk to Philips for their reply. And can the Indian market expect PLL [Phase Lock Loop -WM] technology of new shortwave receivers soon? How much of a threat is the growing interest and importance of television? We also hear the views of some of our Indian listeners."

This program can be heard in North America during local Thursday evenings. The prime broadcast times are at 8:50 PM Central Standard Time on Thursday (which equates to 0230 GMT Friday) on 6165 and 9590 kHz, and repeated at 11:50 PM Central Standard Time (0550 GMT Friday) on 6165 and 9715 kHz. "Media Network" is a weekly feature program about radio and communications-related matters. I noticed this since I have long wondered about the Indian consumer electronic industry (something we never hear about in the US), and I thought that net.nlang.india readers that have shortwave radios might be interested in this broadcast. Since I was posting it anyway, I figured that net.ham-radio should get a copy on general principles... :-)

Regards, Will Martin

From -6929510487369553326
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9d27d0cff76dcaec
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1660c0,9d27d0cff76dcaec
X-Google-Attributes: gid1660c0,public
X-Google-ArrivalTime: 1986-03-27 06:35:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!
gatech!seismo!brl-adm!brl-smoke!wmartin
From: wmartin@brl-smoke.UUCP
Newsgroups: net.nlang.india,net.ham-radio
Subject: Re: Shortwave radio scene in India
Message-ID: <2134@brl-smoke.ARPA>
Date: Thu, 27-Mar-86 09:35:43 EST
Article-I.D.: brl-smok.2134
Posted: Thu Mar 27 09:35:43 1986
Date-Received: Tue, 1-Apr-86 04:41:55 EST
References: <2133@brl-smoke.ARPA>
Distribution: net
Organization: USAMC ALMSA, St. Louis, MO
Lines: 6
Xref: watmath net.nlang.india:1215 net.ham-radio:3992

Ooops! I just re-read that posting, and realized that, though I referred
to "the first week in April", I did not give a specific date! That
particular Media Network broadcast is scheduled for Thursday, April 3
(in the US -- that is Friday, April 4 in GMT terms). Sorry about that!

Will

From -3180067278446022138
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,48fcb4b10c34719d,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,48fcb4b10c34719d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-05-13 05:23:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!bellcore!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.analog
Subject: Some HBO freqs [repost]
Message-ID: <843@ihu1h.UUCP>
Date: Tue, 13-May-86 08:23:04 EDT
Article-I.D.: ihu1h.843
Posted: Tue May 13 08:23:04 1986
Date-Received: Wed, 14-May-86 17:42:32 EDT

Distribution: na
Organization: AT&T Bell Laboratories
Lines: 20
Xref: ihnp4 net.ham-radio:3853 net.analog:886

x
     From FCC records dated July 1, 1985:

3700.0000   E3019_____Home Box Office, Inc, 36000F9 emission, Scientific Atlan
                       ta 800 antenna, gain 43.5 dB, 404900N 0731434W
                       [Hauppauge, NY] (govt recds)

             E4063_____Home Box Office, Inc, 36000F9 emission, Scientific Atlan
                       ta 800 antenna, gain 52 dB, 404916N 0731534W
                       [Hauppauge, NY] (govt recds)

5925.0000   E4063_____Home Box Office, Inc, 36000F9 emission, Scientific Atlan
                       ta 800 antenna, gain 54.4 dB, 404916N 0731534W
                       [Hauppauge, NY] (govt recds)

--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 8241608758652154903
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,91eb14363bf0e7c7,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 15e263,91eb14363bf0e7c7,start
X-Google-Attributes: gid15e263,public
X-Google-Thread: 151e61,91eb14363bf0e7c7,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 129c11,91eb14363bf0e7c7,start
X-Google-Attributes: gid129c11,public
X-Google-ArrivalTime: 1986-05-18 18:08:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!bullwinkle!uw-beaver!ubc-vision!
ubc-cs!ravi
From: ravi@ubc-cs.UUCP (K Ravindran)
Newsgroups: net.ham-radio,net.ham-radio.packet,net.micro,net.micro.cpm
Subject: XEROX 820 for sale
Message-ID: <248@ubc-cs.UUCP>
Date: Sun, 18-May-86 21:08:45 EDT
Article-I.D.: ubc-cs.248
Posted: Sun May 18 21:08:45 1986
Date-Received: Tue, 20-May-86 07:42:21 EDT
Organization: UBC Department of Computer Science, Vancouver, B.C., Canada
Lines: 39
Xref: linus net.ham-radio:3540 net.ham-radio.packet:267 net.micro:13279
net.micro.cpm:5160

********** SALE **********

XEROX 820 single board computer for sale

Features:

- Z80 CPU
- 64K dynamic RAM
- Parallel ASCII keyboard interface (8 bits of parallel data and a key-pressed strobe)
- Floppy disk controller to interface with two Shugart 8" drives or two 5-1/4" drives
- Two independent RS-232 ports
- Real time clock
- 80 X 24 CRT dispaly (5X7 dot matrix) controller for use with an external video monitor (as a console output)
- System monitor (4K) with drive routines for CRT display, keyboard i/o, floppy disk control, and a reasonable command set

Price: US$80.00

Any one interested, send me an e-mail (ravi@cs.ubc.cdn OR ravi@cs.uucp)

From -955316591162952629
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 12f221,83d564a00b64dc2e,start
X-Google-Attributes: gid12f221,public
X-Google-Thread: 151e61,83d564a00b64dc2e,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,83d564a00b64dc2e,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1986-05-21 13:58:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!harvard!husc6!panda!genrad!decvax!bellcore!petrus!
sabre!zeta!epsilon!gamma!pyuxww!pyuxv!nvuxh!pmbs
From: pmbs@nvuxh.UUCP (P.BILODEAU)
Newsgroups: net.wanted,net.misc,net.ham-radio
Subject: Wanted: Manual/Information on Microwave Oven Repair
Message-ID: <239@nvuxh.UUCP>
Date: Wed, 21-May-86 16:58:37 EDT
Article-I.D.: nvuxh.239
Posted: Wed May 21 16:58:37 1986
Date-Received: Sat, 24-May-86 03:39:01 EDT
Organization: Bell Communications Research, Inc.

Lines: 11
Xref: linus net.wanted:8107 net.misc:8293 net.ham-radio:3550

Does anyone out there have any information or pointers to information
about the repair of Amana Microwave Ovens or Microwave Ovens in general??

I have one that is in need of repair and only know generalities about
their construction and operation/but learn fast.

Thanks for any/all help
Paul Bilodeau
201-758-5397

From 6763902632757283136
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,4aea2c5c824f936c,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,4aea2c5c824f936c,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13fc5c,4aea2c5c824f936c,start
X-Google-Attributes: gid13fc5c,public
X-Google-ArrivalTime: 1986-06-19 09:38:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!caip!topaz!harvard!
seismo!mcvax!cernvax!gamble
From: gamble@cernvax.UUCP (gamble)
Newsgroups: net.ham-radio,net.audio,net.research
Subject: early transistors
Message-ID: <338@cernvax.UUCP>
Date: Thu, 19-Jun-86 12:38:37 EDT
Article-I.D.: cernvax.338
Posted: Thu Jun 19 12:38:37 1986
Date-Received: Sat, 21-Jun-86 10:22:39 EDT
Organization: CERN, Geneva/Switzerland
Lines: 44
Xref: watmath net.ham-radio:4306 net.audio:8738 net.research:497

Hello,

My name is Andrew Wylie and I have the unusual hobby of collecting
information about, and specimens of, the very earliest semiconductor
devices, both transistors and diodes.
    This is an area of industrial archaeology which seems to have been
neglected, possibly because 1954 does not seem so long ago. However,
progress in the field has been very rapid (as we all know), with the
result of rapid obsolescence of many devices. Most early transistor
equipment was junked long ago, and so early transistor types are very
hard to find indeed.
    Why should anyone care about this ? Well, the history of semiconductors
is interesting, especially because of the truly enormous changes to
society which have resulted from the development of electronics. In

addition, in my opinion at least, the early devices are really wierd and wonderful. Modern type with standardized packaging and numbering are absolutely boring, but some of the early types have to be seen to be believed.
    I have quite a large collection of early European types already, but am still very keen to obtain

- point-contact transistors
- tetrode or other unorthodox transistor types
- early American material.

I will pay postage costs, and also a nominal price which depends on rarity. (You wont get rich this way). I would be very glad to hear (via e-mail or normal mail) from anyone who has early material to offer, and also from anyone who has an interest in the subject. I can supply a detailed "wanted list" to anyone who requests it.

Andrew Wylie
Groupe NSI
Uni II
Universite de Geneve
1211 GENEVE 4 (Switzerland)

to VMS/BITNET: to UNIX/EAN

BITNET: WYLIE@CGEUGE51 wylie%cui.unige.chunet@CERNVAX
ARPA: WYLIE%CGEUGE51.BITNET@WISCVM wylie%cui.unige.chunet@ubc.csnet
uucp: mcvax!cernvax!cui!wylie
X.400/ean: wylie@cui.unige.chunet

From -2296661649277300844
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,f2fb0909cb655d3f,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,f2fb0909cb655d3f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-07-07 06:46:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!cbatt!cbosgd!ihnp4!ihu1g!parnass
From: parnass@ihu1g.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.analog
Subject: Why can't my scanner scan faster?
Message-ID: <913@ihu1g.UUCP>
Date: Mon, 7-Jul-86 09:46:45 EDT
Article-I.D.: ihu1g.913
Posted: Mon Jul 7 09:46:45 1986
Date-Received: Thu, 10-Jul-86 01:57:31 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 75
Xref: watmath net.ham-radio:4392 net.analog:935

x

Why Can't My Scanner Scan Faster?

Bob Parnass, AJ9S

Scanner enthusiasts have tried to modify their radios to scan and search faster. Some modifications are successful, while others produce undesirable side effects.

Factors That Limit Scan Rate

There are limits to how fast radios can change frequency (scan or search) and still perform well without requiring modification of squelch circuitry. Most AM/FM scanners use the logic level output from a squelch circuit to determine whether a signal is present or absent. This signal is used for the purpose of stopping, or interrupting the scan operation. The ability of the common squelch circuit to detect the presence of a signal is dependent on at least 2 factors:

1. the strength of the signal

2. the duration of the signal

The first factor may be obvious to most readers, and is often specified as the "squelch sensitivity". It is the second factor that is important to our discussion. If a signal is present only for an instant, the squelch may not detect it, even if the signal is strong. In general, the faster the scan rate, the less time the squelch circuit has to detect the signal, and the stronger it must be in order to stop the scan.

In practical terms, the squelch circuit time constant imposes a limit on how fast a given radio can scan and still be able to stop on signals of weak or moderate strength.

Another limit is imposed by phase lock loop synthesizer circuits, which require time to "lock up" on a frequency.

Circuits That Determine Scan Rate

Most crystal controlled scanners contain a simple oscillator (also referred to as a "clock") whose sole function is to force the radio to switch frequencies. Speeding up the scan rate in this type of scanner is easy, usually just a matter of changing a resistor or capacitor in the clock circuit.

Modern programmable scanners employ microprocessors to control scanning, as well as other functions, like key-board decoding, frequency limits checking, timing scan delay, priority channel sampling, etc. The scan rate in these sophisticated scanners is determined within the microprocessor firmware.

Well intentioned hobbyists have attempted to speed up these programmable radios by altering the speed at which the microprocessor executes its internal instruc-tions. Not only does this increase the scan rate, but it can have several undesirable effects, like causing loss of memory, increasing the power consumption and temperature of the microprocessor chip, etc.

--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1g!parnass - (312)979-5414

From 1918260168440275793
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11f2eb,5be69a60a000a41,start
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 134694,5be69a60a000a41,start
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,5be69a60a000a41,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 123782,5be69a60a000a41,start
X-Google-Attributes: gid123782,public
X-Google-ArrivalTime: 1986-08-14 23:20:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!lll-crg!lll-lcc!well!tenney
From: tenney@well.UUCP (Glenn S. Tenney)
Newsgroups: net.ham-radio,net.legal,net.video,net.mail
Subject: S.2575 Elec. Comm. Privacy Act text available
Message-ID: <1632@well.UUCP>
Date: Fri, 15-Aug-86 02:20:48 EDT
Article-I.D.: well.1632
Posted: Fri Aug 15 02:20:48 1986
Date-Received: Fri, 15-Aug-86 06:38:25 EDT
Reply-To: tenney@well.UUCP (Glenn S. Tenney)

Organization: Whole Earth Lectronic Link, Sausalito CA
Lines: 54
Summary: Electronic Communications Privacy Act text available
Xref: mnetor net.ham-radio:2050 net.legal:3221 net.video:1933 net.mail:1018

The Electronic Communications Privacy Act of 1986, which has passed the
House, now is a bill in the Senate (S.2575). This one Act affects every
usenet, bitnet, bbs, shortwave listener, TV viewer, etc. So that you
can see what is being proposed, I have keyed it in fairly quickly.
There may be some errors, so please do NOT consider this as the
official bill.

Send email to me if you REALLY want me to send you a copy of this 60K
file. If I get enough requests, it might end up being posted to some
newsgroup, but it is huge!

If you want your own official copy, send your request to:
  Senate Document Room
  Hart Senate Office Building, B 004
  Washington, D.C. 20510-7016

-- Glenn Tenney

UUCP: {hplabs,glacier,lll-crg,ihnp4!ptsfa}!well!tenney
ARPA: well!tenney@LLL-CRG.ARPA

Newsgroups: net.ham-radio,net.legal,net.video,net.mail,net.announce
Subject: S.2575 Elec. Comm. Privacy Act text available
Summary: Electronic Communications Privacy Act text available
Expires:
Sender:
Reply-To: tenney@well.UUCP (Glenn S. Tenney)
Followup-To:
Distribution:
Organization: Whole Earth Lectronic Link, Sausalito CA
Keywords:

The Electronic Communications Privacy Act of 1986, which has passed the
House, now is a bill in the Senate (S.2575). This one Act affects every
usenet, bitnet, bbs, shortwave listener, TV viewer, etc. So that you
can see what is being proposed, I have keyed it in fairly quickly.
There may be some errors, so please do NOT consider this as the
official bill.

Send email to me if you REALLY want me to send you a copy of this 60K
file. If I get enough requests, it might end up being posted to some
newsgroup, but it is huge!

If you want your own official copy, send your request to:
  Senate Document Room
  Hart Senate Office Building, B 004
  Washington, D.C. 20510-7016

-- Glenn Tenney

UUCP: {hplabs,glacier,lll-crg,ihnp4!ptsfa}!well!tenney
ARPA: well!tenney@LLL-CRG.ARPA

From 4380511771431452588
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11f2eb,5be69a60a000a41
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,5be69a60a000a41
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1611e0,1c205ef07a507a72,start
X-Google-Attributes: gid1611e0,public
X-Google-Thread: 123782,5be69a60a000a41
X-Google-Attributes: gid123782,public
X-Google-ArrivalTime: 1986-08-18 00:50:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!caip!lll-crg!hoptoad!gnu
From: gnu@hoptoad.uucp (John Gilmore)
Newsgroups: net.mail,net.news.adm,net.legal,net.ham-radio
Subject: Congress is now debating the future of Usenet
Message-ID: <1013@hoptoad.uucp>
Date: Mon, 18-Aug-86 03:50:52 EDT
Article-I.D.: hoptoad.1013
Posted: Mon Aug 18 03:50:52 1986
Date-Received: Tue, 19-Aug-86 03:53:51 EDT
References: <1632@well.UUCP>
Followup-To: net.mail
Organization: Nebula Consultants in San Francisco
Lines: 45
Xref: watmath net.mail:1792 net.news.adm:906 net.legal:4762 net.ham-radio:4566

Many people probably missed lll-crg!well!tenney's offer to email a copy of
the Electronic Communications Privacy Act.

Listen up! This is no joke!

It appears to put legal liability on Usenet hosts which forward mail or
news for other hosts, and could alter or destroy the current structure
of Usenet (and/or Stargate). It was written by people who DON'T UNDERSTAND
EMAIL and networking, and was lobbied for by the commercial email companies
(telemail, compuserve, etc).

Read <1632@well.UUCP> (vnews/readnews users type 'p').
Post discussion to net.mail (keep it out of the other groups).

This bill, S.2575, is now pending in the Senate Judiciary Committee. It
purports to extend constitutional protection against unreasonable
search to electronic storage. However, it also does many other
things. It loosens the existing wiretap authorization laws and also

allows wiretaps and "tracking devices" (bugs) to be placed on people
for up to 48 hours without a court order. It also makes it illegal to
tune in cellular phone calls on your TV (channels 80-83). And it makes
you legally responsible for the carriage of email unless you run a "public
access" system.

Note that the current version of the bill (introduced last week with
no debate) may be better or worse than the above; my copy has not arrived
yet.

To get an up to date, official copy of the bill, contact the staff
below. If you object to it, tell them why, and tell them that you want
action on the bill delayed for further review (e.g. until your views
can be heard in written comments). Tell your home state Senators and
Congressmen the same thing.

Congressional staff:
     Ann Harkin, John Podesta   202 224 4242
     Steve Metalitz, Ken Mannella   202 224 5617
     Judiciary Committee   202 224 5225
ACLU:
     Jerry Berman, technology/privacy 202 544 1681

Hit them now on it, before they get back to session and try to pass it!
--
John Gilmore {sun,ptsfa,lll-crg,ihnp4}!hoptoad!gnu   jgilmore@lll-crg.arpa
              May the Source be with you!

From 4930089680787038195
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1579f2,d03251f60f3b9b47,start
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 11f2eb,5be69a60a000a41
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,5be69a60a000a41
X-Google-Attributes: gid151e61,public
X-Google-Thread: 123782,5be69a60a000a41
X-Google-Attributes: gid123782,public
X-Google-Thread: 1197bb,d03251f60f3b9b47,start
X-Google-Attributes: gid1197bb,public
X-Google-ArrivalTime: 1986-08-20 23:21:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!lll-crg!lll-lcc!well!tenney
From: tenney@well.UUCP (Glenn S. Tenney)
Newsgroups: net.mail,net.ham-radio,net.legal,net.crypt,net.politics
Subject: S.2575 Elec Comm Priv Act text on net.sources
Message-ID: <1661@well.UUCP>
Date: Thu, 21-Aug-86 02:21:29 EDT
Article-I.D.: well.1661
Posted: Thu Aug 21 02:21:29 1986
Date-Received: Thu, 21-Aug-86 21:02:03 EDT
References: <1632@well.UUCP> <1013@hoptoad.uucp> <1170@utastro.UUCP>

Reply-To: tenney@well.UUCP (Glenn S. Tenney)
Organization: Whole Earth Lectronic Link, Sausalito CA
Lines: 19
Keywords: Electronic Communications Privacy Act of 1986
Summary: text prior to 12 Aug '86 available
Xref: mnetor net.mail:1036 net.ham-radio:2128 net.legal:3319 net.crypt:554
net.politics:9292

(What is a line eater?)

Due to the overwhelming response, I have posted the complete text of
the Electronic Communications Privacy Act in net.sources. Although
there have been some changes 12 August 1986, I think everyone should
try to wade through it (until someone posts a good summary) since it
could affect ALL of us. Be careful, because just reading it you might
think "Wow, this is good for us". You'll have to read it again more
carefully to see that the text EXPLICITLY makes it illegal to receive
scrambled or encrypted signals, or signals carried on a subcarrier, EVEN
IF it is otherwise readily accessible to the general public --- eg.
VideoText or closed captioning!!!!!!

-- Glenn Tenney
UUCP: {hplabs,glacier,lll-crg,ihnp4!ptsfa}!well!tenney
ARPA: well!tenney@LLL-CRG.ARPA   Delphi and MCI Mail: TENNEY
As Alphonso Bodoya would say... (tnx boulton)
Disclaimers? DISCLAIMERS!? I don' gotta show you no stinking DISCLAIMERS!

From 3728118345342161110
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1579f2,d03251f60f3b9b47
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 11f2eb,5be69a60a000a41
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,5be69a60a000a41
X-Google-Attributes: gid151e61,public
X-Google-Thread: 123782,5be69a60a000a41
X-Google-Attributes: gid123782,public
X-Google-Thread: 1197bb,d03251f60f3b9b47
X-Google-Attributes: gid1197bb,public
X-Google-ArrivalTime: 1986-08-26 01:12:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!brl-adm!brl-smoke!bogstad
From: bogstad@brl-smoke.ARPA (William Bogstad)
Newsgroups: net.mail,net.ham-radio,net.legal,net.crypt,net.politics
Subject: Re: S.2575 Elec Comm Priv Act text on net.sources
Message-ID: <3313@brl-smoke.ARPA>
Date: Tue, 26-Aug-86 04:12:12 EDT
Article-I.D.: brl-smok.3313
Posted: Tue Aug 26 04:12:12 1986
Date-Received: Wed, 27-Aug-86 20:50:56 EDT
References: <1632@well.UUCP> <1013@hoptoad.uucp> <1170@utastro.UUCP>

<1661@well.UUCP>
Reply-To: bogstad@brl.arpa (William Bogstad (JHU|mike) <bogstad>)
Organization: Ballistic Research Lab (BRL), APG, MD.
Lines: 27
Keywords: Electronic Communications Privacy Act of 1986
Summary: August 12th version posted
Xref: mnetor net.mail:1063 net.ham-radio:2137 net.legal:3380 net.crypt:561
net.politics:9364

In article <1661@well.UUCP> tenney@well.UUCP (Glenn S. Tenney) writes:
>(What is a line eater?)
>
>Due to the overwhelming response, I have posted the complete text of
>the Electronic Communications Privacy Act in net.sources. Although
>there have been some changes 12 August 1986, I think everyone should
>try to wade through it (until someone posts a good summary) since it
>could affect ALL of us. Be careful, because just reading it you might
>think "Wow, this is good for us". You'll have to read it again more
>carefully to see that the text EXPLICITLY makes it illegal to receive
>scrambled or encrypted signals, or signals carried on a subcarrier, EVEN
>IF it is otherwise readily accessible to the general public --- eg.
>VideoText or closed captioning!!!!!!

     First, I would like to thank Glenn for keying in the original
Senate Bill 2575. I recently received a copy of the changes made
on August 12th and have merged them into the original posted by Glenn.
The uuencoded, compressed, context difference file of these changes
have been posted to net.sources. The only major changes have to do
with video and satellite transmissions. It looks like HBO, Showtime,
etc. have gotten involved in lobbying on this legislation. Also,
Captain Midnight? would be in real trouble if he interferred with HBO's
signal again. (Grep for video and also look at the very end.)

                  Bill Bogstad
                  bogstad@hopkins-eecs-bravo.arpa
                  bogstad@brl-smoke.arpa

From 5653546382134654587
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1579f2,b0db665e0081687d,start
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 151e61,5be69a60a000a41
X-Google-Attributes: gid151e61,public
X-Google-Thread: 123782,5be69a60a000a41
X-Google-Attributes: gid123782,public
X-Google-ArrivalTime: 1986-08-28 00:40:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!lll-crg!hoptoad!gnu
From: gnu@hoptoad.uucp (John Gilmore)
Newsgroups: net.mail,net.crypt,net.ham-radio
Subject: Should encrypted radio be legally protected?
Message-ID: <1044@hoptoad.uucp>

Date: Thu, 28-Aug-86 03:40:22 EDT
Article-I.D.: hoptoad.1044
Posted: Thu Aug 28 03:40:22 1986
Date-Received: Thu, 28-Aug-86 21:31:46 EDT
References: <1632@well.UUCP> <1013@hoptoad.uucp> <1170@utastro.UUCP> <3230@brl-smoke.ARPA>
Followup-To: net.mail
Organization: Nebula Consultants in San Francisco
Lines: 34
Xref: mnetor net.mail:1067 net.crypt:562 net.ham-radio:2169

[Followups have been redirected to net.mail where general discussion
of the Electronic Communications Privacy Act is in progress.]

In article <3230@brl-smoke.ARPA>, William Bogstad writes:
>   In my opinion, a better law would be to protect
> scrambled/encrypted conversations on the radio waves and leave
> unprotected messages legally unprotected. This might encourage the
> vendors to provide systems with real security and would put the law more
> in step with the protection you can expect to actually have if someone
> tries to break the law anyway.

I believe that law should generally follow reality. Throwing a signal
into the airwaves is equivalent to painting it on a wall. Anybody can
come by and look at it (in reality) and some of them might be able to
make some sense of it. If your business requires painting private
information on public walls, you'd better be *sure* your encryption is
good. A law that says "any old encryption will do" does NOT encourage
vendors to provide systems with real security -- if somebody breaks it,
and they find out, they can always tie the guy up with lawyers. On the
other hand, having no legal protection for any radio signals (e.g. if
you can decrypt it, it's yours) provides a STRONG incentive for vendors
to provide real, live, secure, working encryption. If somebody breaks
the encryption, their data becomes public and they have to invent a new
scheme, which costs money. Better for them to do it right the first time.

Reminds me of the old gun control motto: If decryption is outlawed,
only outlaws will have your data. (If decryption was legal, NOBODY
would have your data, assuming you do it right.)

Protecting "encrypted" signals would make it illegal to receive a
radio transmission that had been run through "rot13"...
--
John Gilmore {sun,ptsfa,lll-crg,ihnp4}!hoptoad!gnu   jgilmore@lll-crg.arpa
              May the Source be with you!

From -6466758341438047316
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1579f2,d03251f60f3b9b47
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 123782,5be69a60a000a41
X-Google-Attributes: gid123782,public

X-Google-Thread: 151e61,5be69a60a000a41
X-Google-Attributes: gid151e61,public
X-Google-Thread: 161e78,4f0eae63aaf209ae,start
X-Google-Attributes: gid161e78,public
X-Google-Thread: 11f2eb,5be69a60a000a41
X-Google-Attributes: gid11f2eb,public
X-Google-ArrivalTime: 1986-08-28 09:45:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!lll-crg!nike!ucbcad!ucbvax!hplabs!oliveb!epimass!jbuck
From: jbuck@epimass.UUCP (Joe Buck)
Newsgroups: net.mail,net.ham-radio,net.legal,net.crypt,net.sources.d
Subject: Re: S.2575 Elec Comm Priv Act text on net.sources
Message-ID: <425@epimass.UUCP>
Date: Thu, 28-Aug-86 12:45:28 EDT
Article-I.D.: epimass.425
Posted: Thu Aug 28 12:45:28 1986
Date-Received: Fri, 29-Aug-86 05:36:24 EDT
References: <1632@well.UUCP> <1013@hoptoad.uucp> <1170@utastro.UUCP>
<1661@well.UUCP> <3313@brl-smoke.ARPA>
Reply-To: jbuck@epimass.UUCP (Joe Buck)
Followup-To: net.sources.d
Organization: Entropic Processing, Inc., Cupertino, CA
Lines: 35
Keywords: Electronic Communications Privacy Act of 1986
Xref: mnetor net.mail:1071 net.ham-radio:2179 net.legal:3400 net.crypt:563
net.sources.d:468

In article <3313@brl-smoke.ARPA> bogstad@brl.arpa (William Bogstad (JHU|mike)
<bogstad>) writes:
>   First, I would like to thank Glenn for keying in the original
>Senate Bill 2575. I recently received a copy of the changes made
>on August 12th and have merged them into the original posted by Glenn.
>The uuencoded, compressed, context difference file of these changes
>have been posted to net.sources.

It seems appropriate that I read this announcement in net.crypt.
Pardon the volume, but PLEASE DO NOT POST COMPRESSED AND UUENCODED
TEXT. First, doing uuencode causes a 4/3 expansion, so you've
already thrown away most of the advantage of compress. Second,
most sites already compress all news before sending it over a phone
line. Compressing text twice often leads to EXPANSION. Third, many
sites on the net don't have uuencode/decode, though public-domain
versions are available. These people will all post articles to
net.sources (the wrong group) asking for uuencode. Fourth, it
prevents people from using their favorite news interface to read
the text. Fifth, a lot of new users will write and post asking
"what's this gibberish? what's uuencode? what's compress?" Several
already have.

uuencode should only be used for binary files.

I don't intend to flame anyone because the intention was good. But
it increases, rather than decreases, phone costs. If on the other

hand, you read this and still do it, I hope you have an asbestos
suit.

Followups have been directed to net.sources.d. Sorry for the wide
distribution, but I was afraid I'd miss someone who'd do the same
thing again when the bill is revised.

--
- Joe Buck   {ihnp4!pesnta,oliveb,nsc!csi}!epimass!jbuck
  Entropic Processing, Inc., Cupertino, California

From -4563097096514885955
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1579f2,d03251f60f3b9b47
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 1197bb,d03251f60f3b9b47
X-Google-Attributes: gid1197bb,public
X-Google-Thread: 123782,5be69a60a000a41
X-Google-Attributes: gid123782,public
X-Google-Thread: 11f2eb,5be69a60a000a41
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,5be69a60a000a41
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-08-28 21:50:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!lll-crg!lll-lcc!well!tenney
From: tenney@well.UUCP (Glenn S. Tenney)
Newsgroups: net.mail,net.ham-radio,net.legal,net.crypt,net.politics
Subject: Re: S.2575 Elec Comm Priv Act text on net.sources
Message-ID: <1690@well.UUCP>
Date: Fri, 29-Aug-86 00:50:52 EDT
Article-I.D.: well.1690
Posted: Fri Aug 29 00:50:52 1986
Date-Received: Fri, 29-Aug-86 18:55:33 EDT
References: <1632@well.UUCP> <1013@hoptoad.uucp> <1170@utastro.UUCP>
<1661@well.UUCP> <3313@brl-smoke.ARPA>
Reply-To: tenney@well.UUCP (Glenn S. Tenney)
Organization: Whole Earth Lectronic Link, Sausalito CA
Lines: 1
Keywords: Electronic Communications Privacy Act of 1986
Summary: discussion in net.mail
Xref: mnetor net.mail:1075 net.ham-radio:2181 net.legal:3407 net.crypt:564
net.politics:9414

There is a lot of discussion going on in net.mail on this subject.

From -2896844694260476094
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cac3edd53a17c28e,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13544e,cac3edd53a17c28e,start

X-Google-Attributes: gid13544e,public
X-Google-ArrivalTime: 1986-09-02 20:24:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!uwvax!caseus!dan
From: dan@caseus.UUCP (Daniel M. Frank)
Newsgroups: net.ham-radio,net.unix
Subject: S.2575 comments
Message-ID: <2656@rsch.wisc.edu>
Date: Tue, 2-Sep-86 23:24:56 EDT
Article-I.D.: rsch.2656
Posted: Tue Sep 2 23:24:56 1986
Date-Received: Wed, 3-Sep-86 02:13:31 EDT
Sender: news@rsch.wisc.edu
Reply-To: dan@caseus.WISC.EDU (Daniel M. Frank)
Organization: University of Wisconsin
Lines: 68
Keywords: naive
Xref: mnetor net.ham-radio:2202 net.unix:5346

I've had a look through the updated version of the Senate bill, and have a couple comments. I am not an attorney or legislator, and I do not have a copy of Title 18 to amend, so these may not be very informed observations:

First, I was surprised at how mild much of the bill appears to be, considering the cries of outrage that accompanied its posting. It's got some stupidity (I'll get to that), but much of the bill seems to be directed at updating existing communications and wiretapping law to reflect the existence of electronic media. Most of its poor ideas seem to stem from ignorance rather than real malicious intent.

I see two serious difficulties with the bill. First, and of most concern to usenet and BBS operators, is the complete failure to recognize the distinction between public, ad hoc, voluntary message services such as usenet, and for-profit electronic mail carriers. It has been pointed out already that the legal burdens placed upon a usenet site to maintain the privacy and security of communications is onerous. The bill may open a site operator up to criminal and civil action in the case that some user feels he has been damaged; you would have to consult an attorney to be sure.

More interesting to me is that a government agency can obtain an order requiring you to make copies of all mail coming through your site to a particular individual. Since, to my knowledge, software to do this is not commonly available, this may entail substantial expense, for which you may or may not be able to be reimbursed.

The second problem is, of course, the bill's simplemindedness with regard to radio technology. While seeming to exclude from penalties the interception of clear channel communications in the land mobile services, it then forbids interception of clear channel transmissions by common carriers. Excuse me, but doesn't that mean almost everyone in the commercial communications business? In addition, such things

as the interception of data on subcarriers is forbidden! Thus, if you have an SCA decoder, which anyone with $6.95, a Radio Shack, and a copy of Popular Electronics can build, you are a criminal if you intercept, for example, a reading service for the blind. I think it may also be illegal to pick up closed captioning without some sort of authorization, but it's not entirely clear.

   By the way, there is some fascinating language forbidding interception of signals "transmitted using modulation techniques whose essential parameters have been withheld from the public with the intention of preserving the privacy of such communication". Hmmm. To my knowledge, the owners of patents on such techniques (clearly they mean video scrambling here) have, by filing such patents, made such modulation techniques accessible to the public; they have not "withheld" them. Also, the bill does not specify who must have done the withholding, or what constitutes an "essential parameter". Barring a stupid judge (oh well), is this enforceable?

   Anyway, this is just an amateur analysis, but I though it might stimulate some discussion which, aside from the hand-wringing, has been absent. Also, some of these points (please check with someone more legally adept than myself), might form the focus of a letter to a senator. I think the point about reading services on SCA subcarriers and closed captioning might get someone's attention, whether or not they're bogus.

Dan Frank

Q: What's the difference between an Apple MacIntosh and an Etch-A-Sketch?

A: You don't have to shake the Mac to clear the screen.

From -374168251719075616
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,77ed1c7084b64d29,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12f221,77ed1c7084b64d29,start
X-Google-Attributes: gid12f221,public
X-Google-Thread: 10cb58,77ed1c7084b64d29,start
X-Google-Attributes: gid10cb58,public
X-Google-Thread: 126c94,77ed1c7084b64d29,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 15c702,77ed1c7084b64d29,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 15a57c,77ed1c7084b64d29,start
X-Google-Attributes: gid15a57c,public
X-Google-ArrivalTime: 1986-09-03 13:05:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!caip!princeton!allegra!ulysses!bellcore!whuxcc!lcuxlm!

whuxl!houxm!homxc!gv
From: gv@homxc.UUCP (A.VANNUCCI)
Newsgroups: na.forsale,net.audio,net.ham-radio,net.analog,net.misc,net.movies
Subject: Do you own a PAL video recorder
Message-ID: <1631@homxc.UUCP>
Date: Wed, 3-Sep-86 16:05:12 EDT
Article-I.D.: homxc.1631
Posted: Wed Sep 3 16:05:12 1986
Date-Received: Thu, 4-Sep-86 21:17:27 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 23
Xref: mnetor na.forsale:679 net.audio:2438 net.ham-radio:2208 net.analog:852
net.misc:2637 net.movies:4677

Subject: Do you own a PAL video recorder ?
Newsgroups: att.general,att.ham-radio,att.wanted,btl.general
Distribution: nj

   I own a betamax PAL video recorder. I also have a large number of
PAL tapes that need editing, for which you need two VTR's.

   If you live sufficiently close to me and you are willing, I would
like to borrow your PAL recorder for a weekend to do the editing.
I will reciprocate in kind (i.e. you can borrow my PAL recorder for
a weekend to do your editing).

   Thank you,
         Giovanni Vannucci
         AT&T Bell Laboratories   HOH R-207
         Holmdel, NJ 07733
         hou2e!gv

 P.S. for readers who are wondering what PAL is, it is the color
television system in use in a good part of western Europe. It is
incompatible with the NTSC system in use in the USA, so that a
video recorder purchased in the US cannot play tapes recorded in
Europe.

From 2401945932371812902
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13544e,cac3edd53a17c28e
X-Google-Attributes: gid13544e,public
X-Google-Thread: 151e61,cac3edd53a17c28e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-09-03 21:58:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!ll-xn!mit-amt!mit-eddie!barmar
From: barmar@mit-eddie.MIT.EDU (Barry Margolin)
Newsgroups: net.ham-radio,net.unix
Subject: Re: S.2575 comments
Message-ID: <3111@mit-eddie.MIT.EDU>
Date: Thu, 4-Sep-86 00:58:20 EDT

Article-I.D.: mit-eddi.3111
Posted: Thu Sep 4 00:58:20 1986
Date-Received: Thu, 4-Sep-86 20:12:28 EDT
References: <2656@rsch.wisc.edu>
Reply-To: barmar@mit-eddie.UUCP (Barry Margolin)
Organization: MIT, EE/CS Computer Facilities, Cambridge, MA
Lines: 21
Keywords: naive
Xref: mnetor net.ham-radio:2207 net.unix:5365

In article <2656@rsch.wisc.edu> dan@caseus.WISC.EDU (Daniel M. Frank) writes:
>   By the way, there is some fascinating language forbidding interception
>of signals "transmitted using modulation techniques whose essential
>parameters have been withheld from the public with the intention of
>preserving the privacy of such communication". Hmmm. To my knowledge,
>the owners of patents on such techniques (clearly they mean video
>scrambling here) have, by filing such patents, made such modulation
>techniques accessible to the public; they have not "withheld" them.

The quote you provided doesn't say anything about the techniques, it
says parameters. Thus, if a signal has been encrypted, the "essential
parameters" refers to the decryption key, which is normally withheld
from the public, even though the encryption device has been patented.

On the other hand, maybe they aren't talking about patented scrambling
techniques, but are saying that broadcasters must use proprietary
scrambling devices in order to be protected.
--
    Barry Margolin
    ARPA: barmar@MIT-Multics
    UUCP: ..!genrad!mit-eddie!barmar

From 7022881674094675119
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1579f2,76179bde66fc2a0c,start
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 11f2eb,76179bde66fc2a0c,start
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 134694,76179bde66fc2a0c,start
X-Google-Attributes: gid134694,public
X-Google-Thread: 123782,76179bde66fc2a0c,start
X-Google-Attributes: gid123782,public
X-Google-Thread: 151e61,76179bde66fc2a0c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-09-06 13:37:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!think!mit-eddie!cybvax0!frog!die
From: die@frog.UUCP (Dave Emery, Software)
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal
Subject: Some comments on the Electronic Communications Privacy Act (long)
Message-ID: <1031@frog.UUCP>
Date: Sat, 6-Sep-86 16:37:21 EDT

Article-I.D.: frog.1031
Posted: Sat Sep 6 16:37:21 1986
Date-Received: Sun, 7-Sep-86 05:58:03 EDT
Reply-To: die@frog.UUCP (David I. Emery)
Distribution: net
Organization: Superfrog Heaven [CRDS, Framingham MA]
Lines: 284
Keywords: Severe, Jail, Fines, Scrambled, Encrypted, Pay TV
Xref: mnetor net.ham-radio:2220 net.video:2161 net.crypt:567 net.mail:1102
net.legal:3473

First reaction

Perhaps the strongest impression on seeing the text of the privacy act is how incredibly draconian the penalties are considering the ease with which radio communications can be intercepted and the fact that such interception isn't currently a crime.

The crimes

The act provides that intentionally intercepting the contents of a radio or electromagnetic communication "not readily available to the general public" is legally the same crime as wiretapping or bugging and carries the same penalties with certain few exceptions.

The bill provides a year in jail and/or a $10,000 fine for merely intentionally listening to ("acquiring the contents of") a radio communication on certain frequencies (those used by radio and TV remote pickup and studio transmitter links), sent over facilities provided by a common carrier (such as a communications satellite) or on a subcarrier or other subsidiary signal (such as Teletext, vertical blanking interval signals + SCA). This 'reduced' penalty only applies if the interception is not for commercial purposes or private gain or in violation of any contract and is the first offense.

The full penalty of five years in jail and a $250,000 fine applies if the interception is for commercial purposes or private gain or is a second or subsequent offense.

And perhaps the most incredible of all - five years in jail and a $250,000 fine for intercepting and acquiring the contents of (ie descrambling) any radio communication that is "scrambled or encrypted" (such as pay tv stations or scrambled satellite TV). This applies even if this is a first offense, and is not for private gain or commercial purposes. There is no requirement that the scrambling or encryption be secure or difficult to break, absolutely any kind qualifies.

And in a very nasty section, not only is it a crime for which one can get thrown in the pokey for a year to intercept a common-carrier signal or other private signals but it is a crime to intercept any signal whose "essential modulation parameters have been witheld from the general public" in order to protect privacy. This means that if one finds an odd signal and demodulates it, one may have committed a serious crime

even if one had no knowlage that the signal was modulated that way for the purpose of preserving privacy and knew (from the frequency or other information) that it was not a common carrier signal or other otherwise private signal.

Further the bill provides for civil damages for anyone whose radio communication, "not readily accessible to the general public", is intercepted or used. This provision allows for a suite to recover all profits or gains from the use of the communication, court costs, and punitive damages of the greater of $10,000 or $100 a day for every day the radio communication was intercepted. Though I am not a lawyer (just a humble engineer) it appears to me to be possible to mount such a law suite even if there was no criminal prosecution for the violation. (That is to say if the local pay TV or cable company (this applies to wire communications too) decides to take you to court for descrambling their pay signals they can do so and collect $10,000 damages even if the local US attorney doesn't want to prosecute you on the felony interception charges.)

The exceptions

There are bizzare exceptions made for cellular telephone calls (6 months and $500) and non-scrambled or encrypted private satellite video (only $500 !!), and complete exemptions for cordless telephones and tone only pagers (???!!!).

The things that are legal

Certain things are explicitly legal to receive including anything on ham, CB, and general mobile radio service frequencies, a distress signal from an aircraft, vessel or person (not car or truck), transmissions from a marine or aeronautical communication system, and police, fire, civil defense, government, and law enforcement transmissions that are readily accessible to the general public.

Naturally one can legally receive any transmission specifically intended for the general public such as radio and TV broadcasts (but not any subcarriers or subsidiary services riding on broadcast signals unless they are also specifically intended for the use of the general public). And one can legally receive unscrambled and unencrypted satellite transmissions of programs intended to be broadcast (network TV feeds and radio feeds). I believe that the underlying law already allows reception of cable tv feeds (Satellite Viewing Rights Act) that are not scrambled or encrypted under certain conditions.

An editorial note

To me, the radio part of the Electronic Communications Privacy Act seems to have little or nothing to do with privacy of radio communications. It seems to really be a bill designed to protect the economic interests of certain people who transmit pay tv signals, stock market data, cable TV programming and other signals that have recently become targets of widespread piracy. Unfortunately,

the way the law is written it makes no difference whether or not there is an intent to steal a service, it is a felony to merely peek to see what is there.

If there is an intent to protect privacy, it is not to mandate real security or provide encouragements to carriers to provide it, (the bill carefully avoids making carriers liable for the disclosure of radio communications transmitted over radio systems foolishly designed so they can be easily intercepted (like cellular telephones)) but to make sure that it is in fact a crime to intercept almost any conceivably private communication. The actual purpose of this is more to get providers of communications services off the hook if customers sue them because their communications were intercepted then to provide security as it is normally a valid defense against charges of negligence to demonstrate that the act in question is a serious crime.

The saddest part is that the bill does nothing to encourage the use of the only technology that can provide real radio security - encryption with a secure cipher. It actually stifles that effort by giving complete legal protection to any cipher or other security technique no matter how feeble, and by protecting even many completely open signals with harsh penalties.

Post Script

The rest of the act is basicly anti-hacker. I am on the side of the angels on most of the rest of the bill's provisions, as I do think that there is a fundemental difference between listening to a radio communication and breaking into a computer system and accessing private information contained therein (or exceeding ones authorization to use the system). Radio is all around us, and is by its very nature a publicly accessible medium - while wire (fiber and cable) communications and computer systems are legitimately private spaces.

Some sleepers in the bill - very technical

The most obvious sleeper is the use of the key (and very ambiguous) phrase "readily accessible to the general public". Though the bill defines that concept as it pertains to radio (and thus precludes use of the extremely logical and common sense argument that almost any radio signal is readily accessible to the general public), the phrase is made for judges to add interpretations to.

Almost any signal which is on a secret frequency, or has not been widely publicized, or seems from its contents like it ought to be secret, or is not publically admitted to by its owning agency, or which requires special equipment to receive could be excluded on the grounds it wasn't readily accessible to the general public. I am sure that the argument will soon be made that any signal on a non-published or secret frequency is not readily accessible to the general public just by virtue of the fact that the frequency information is not made readily available to the general public.

Ready Access

The bill leaves hanging questions about signals that are only receivable in certain limited places (such as highly directional signals, very low power signals, or signals on frequencies that don't propagate well) Is it illegal to receive them even if one happens to live near the transmitter ? Suppose one builds a large antenna ? What sort of difficulty does one have to go to to exceed the limits of "ready access" ? And what is the "general public" in this context anyway ? Does being a technically knowlageable engineer or other specialist disqualify one from membership in the "general public" the bill refers to ?

Banned Frequencies

The bill for the first time forbids receiving and "acquiring the contents of" any communication on certain frequencies allocated to broadcast remote pickup and auxiliary services regardless of whether the intercepted signal is in fact a signal used by a broadcast station. This concept of a "banned frequency" might prevent one from receiving ANY radio signal of unknown origen on some frequencies if the bill is strictly interpreted. In many ways that is a much harsher restriction than forbidding the "acquistion of the contents of" a signal transmitted by certain specific groups.

This establishes a nasty precedent that might have impact on electronic instrumentation, EMC/Tempest, and rf equipment engineering, test, and repair. It also could be used to convict someone for simply possessing a receiver turned on and tuned to such a channel since it could be argued that receiving any signal that came in (presumably including cosmic noise and the thermal background hiss) was illegal unless one could establish that one was an authorized recipient of some lawful transmission on these channels. And it would make establishing intent easier, since there could be no legal purpose for someone not authorized to receive such signals to possess a receiver for those frequencies.

Common Carriers

The bill defines as private any signals "transmitted over a communication system provided by a common carrier". This would seem to include situations where the common carrier provides radios, transmitter sites or other facilities to radio communications systems that do not operate on common carrier frequencies. This makes determining whether a particular communication is private and illegal to listen to much more complicated. (An example is the White House Nationwide (Echo Foxtrot) radio system used to provide a very unsecure radio telephone connection to Air Force One - this system is supposed to have been provided by AT&T in whole or in part and uses AT&T sites but uses federal frequencies for the radio links)

It is also very unclear what the bill means by "transmitted over". Does this mean transmitted by a transmitter provided by a common carrier ? Or does it mean that if the signal at some point in its path between original sender and ultimate recipiant goes over a communication link provided

by a common carrier it is illegal to receive it ? Suppose it is transmitted by a privately provided transmitter in communication with a common carrier system (such as a cellular phone owned by a subscriber and not purchased from a common carrier) ?. How about an otherwise legal-to-receive radio signal that happened to go over telephone lines or other common-carrier provided facilities between the control point and the transmitter (a very common case in mobile radio systems) ? How about signals from a privately owned satellite uplink ?

Subcarriers

Another bit of legal language that could be sticky is "subcarrier or other signal subsidiary to a radio transmission". At first glance this seems to mean SCA signals on FM radio broadcasts. But depending on how subcarrier is interpreted it could mean virtually any modulation more complex than simple direct AM or FM. Is a FDM-SSB voice channel a subcarrier ? (One could argue no, it is not further modulated - it is merely shifted in frequency - unlike an FM subcarrier which is itself a modulated carrier.) Is a pcm subchannel on a tdm multiplexed signal a subcarrier ? What is meant by "subsidiary to" ?

Many digital signals transmitted over analog paths (such as the AFSK used in 2 meter ham packet radio) use modems which modulate an audio frequency carrier. When transmitted over a radio channel, these audio signals become subcarriers. Does the bill mean to preclude reception of any digital transmission except direct FSK, PSK or PAM of a carrier ? (Reception of 2 meter packet is otherwise explicitly allowed so this is not an issue for hams). What about those military multiplex HF RTTY transmissions that some people copy news wires or weather information from ? Are the individual channels subcarriers or separate 85hz shift FSK signals that happen to be transmitted from a common transmitter ?

Scrambling

Another problem area lies with the definition of "scrambled". To lawmakers this probably means what one sees on a pay cable channel one doesn't subscribe to. But what constitutes scrambling ? What parameters of a signal have to be changed for it to be scrambled ? Is merely inverting the usual video polarity (as some satellite services do) scrambling ? What is enough alteration to put one in jail ?

And what constitutes scrambling for other sorts of radio signals ? Does it have to be effective ? or is it merely enough to alter some parameter of the signal with the intent of making harder to receive on some kind of receiver. Suppose your receiver can receive the signal anyway, is it still illegal ?

Another problem with the term "scrambling" is that it has a technical meaning different from its common usage meaning. All modern digital radio transmission systems (and almost all modems > 300 bps) permutate the data transmitted with a digital pattern to ensure that the modulated signal contains plenty of 0-1 and 1-0 transitions (for maintaining clock

synchronism between transmitter and receiver) and to guarantee that the same data does not always result in the same modulated signal in case some particular pattern in the data produces a worse case analog signal (this ensures that if the transmission is retried, it probably will work the second time). This technique has been called (since its inception) "scrambling". If it is illegal to intercept a radio signal that has been scrambled for this purpose (and the bill does not say "scrambled or encrypted to protect the privacy of" it will be illegal to intercept almost any properly designed digital radio transmission or radio transmission of a modem signal carrying data at greater than 300 bps (except 202 FSK).

Note to Phil Karn

I don't have my table of FCC frequency allocations handy but isn't 39.17 mhz (the frequency on which the preacher hears God) a broadcast remote pickup frequency ? Perhaps Phil Karn's theory that the fundementalists are the force behind this bill because of the debunking of that phoney TV evangelist on the Johnny Carson show is real !!

David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.
uucp: decvax!frog!die

--
David I. Emery Charles River Data Systems
983 Concord St., Framingham, MA 01701 (617) 626-1102 uucp: decvax!frog!die

From -6725544340187682657
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1579f2,76179bde66fc2a0c
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 11f2eb,76179bde66fc2a0c
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 134694,76179bde66fc2a0c
X-Google-Attributes: gid134694,public
X-Google-Thread: 123782,76179bde66fc2a0c
X-Google-Attributes: gid123782,public
X-Google-Thread: 151e61,76179bde66fc2a0c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-09-07 04:15:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!caip!nike!ucbcad!ucbvax!ernie.Berkeley.EDU!tedrick
From: tedrick@ernie.Berkeley.EDU (Tom Tedrick)
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal
Subject: Re: Some comments on the Electronic Communications Privacy Act
Message-ID: <15591@ucbvax.BERKELEY.EDU>
Date: Sun, 7-Sep-86 07:15:08 EDT

Article-I.D.: ucbvax.15591
Posted: Sun Sep 7 07:15:08 1986
Date-Received: Sun, 7-Sep-86 20:10:46 EDT
References: <1031@frog.UUCP>
Sender: usenet@ucbvax.BERKELEY.EDU
Reply-To: tedrick@ernie.Berkeley.EDU.UUCP (Tom Tedrick)
Distribution: net
Organization: University of California, Berkeley
Lines: 13
Keywords: Severe, Jail, Fines, Scrambled, Encrypted, Pay TV
Xref: mnetor net.ham-radio:2221 net.video:2162 net.crypt:568 net.mail:1104
net.legal:3475

Sigh. Once again we see an example of an incredibly stupid law
being proposed. Is there any chance that this monstrosity will
pass?

Rather than fine someone for intercepting signals, they should
fine the sender for being too stupid to use a secure encryption
scheme and reward the "pirate" for revealing the insecurity in
the system.

If we can't keep our systems secure from our budding hackers, what
are we going to do when the Soviets decide to disrupt our communications
prior to launching a first strike? I say we owe the hackers our deepest
gratitude for revealing our stupidity before it is too late.

From -2980169934953747888
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11f2eb,76179bde66fc2a0c
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 1579f2,76179bde66fc2a0c
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 151e61,76179bde66fc2a0c
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,76179bde66fc2a0c
X-Google-Attributes: gid134694,public
X-Google-Thread: 123782,76179bde66fc2a0c
X-Google-Attributes: gid123782,public
X-Google-ArrivalTime: 1986-09-08 14:48:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!husc6!uwvax!caip!clyde!burl!ulysses!mhuxr!mhuxt!mhuxv!
mhuxo!gjphw
From: gjphw@mhuxo.UUCP (WYANT)
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal
Subject: Re: Some comments on the Electronic Communications Privacy Act
Message-ID: <1240@mhuxo.UUCP>
Date: Mon, 8-Sep-86 17:48:11 EDT
Article-I.D.: mhuxo.1240
Posted: Mon Sep 8 17:48:11 1986
Date-Received: Tue, 9-Sep-86 06:23:53 EDT
References: <1031@frog.UUCP> <15591@ucbvax.BERKELEY.EDU>

Organization: AT&T Bell Laboratories, Murray Hill
Lines: 34
Xref: mnetor net.ham-radio:2222 net.video:2169 net.crypt:569 net.mail:1122
net.legal:3493

> Once again we see an example of an incredibly stupid law
> being proposed. Is there any chance that this monstrosity will
> pass?
>

While I agree that the proposed law is a change in the way the airwaves have been treated in the U.S. (anyone can try to receive anything, only transmissions are regulated), restrictions on reception are common in many other countries. Despite the difficulty of enforcing restrictions on receptions, many governments have chosen to pursue this route in an attempt to protect themselves or major commercial interests.

There is more to restriction on reception proposals than merely seeking to protect commercial interests. If the responsibility for ensuring secure communications were lodged solely with the system operator, it would be quite reasonable for the operators to pursue the use of digital encryption. This is likely to lead to the introduction of some very nice encoding/decoding boxes to the general public. According the the government, the general public includes terrorists, subversives, common criminals (as opposed to uncommon criminals), and hackers (!). The law enforcement and intelligence agencies would not like these unsavory characters to gain ready access to a means of communication that could not easily be tapped. Some of the encryption schemes can not even be broken by the National Security Agency.

In an effort to avoid handing any more advantages to criminals (e.g., communications secure from monitoring by law enforcement people), the government has evidently decided to restrict selected public freedoms. We must decide which of the various conflicting rights take precedence in the arena of communications. It is not an easy decision to make.

Patrick Wyant
AT&T Bell Laboratories
Naperville, IL
*!ihnp4!{mhuxo,ihwld}!gjphw

From 5335093074415231856
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1579f2,76179bde66fc2a0c
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 151e61,76179bde66fc2a0c
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11f2eb,76179bde66fc2a0c
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 134694,76179bde66fc2a0c
X-Google-Attributes: gid134694,public
X-Google-Thread: 123782,76179bde66fc2a0c
X-Google-Attributes: gid123782,public

X-Google-ArrivalTime: 1986-09-09 10:00:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!whuxcc!lcuxlm!whuxl!houxm!ihnp4!
ihwpt!knudsen
From: knudsen@ihwpt.UUCP (mike knudsen)
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal
Subject: Re: Some comments on the Electronic Communications Privacy Act
Message-ID: <1090@ihwpt.UUCP>
Date: Tue, 9-Sep-86 13:00:23 EDT
Article-I.D.: ihwpt.1090
Posted: Tue Sep 9 13:00:23 1986
Date-Received: Wed, 10-Sep-86 06:46:28 EDT
References: <1031@frog.UUCP> <15591@ucbvax.BERKELEY.EDU> <1240@mhuxo.UUCP>
Organization: AT&T Bell Laboratories
Lines: 51
Xref: watmath net.ham-radio:4672 net.video:3243 net.crypt:865 net.mail:1896
net.legal:4988

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> criminals), and hackers (!). The law enforcement and intelligence agencies
> would not like these unsavory characters to gain ready access to a means of
> communication that could not easily be tapped. Some of the encryption schemes
> can not even be broken by the National Security Agency.
>
>   In an effort to avoid handing any more advantages to criminals (e.g.,
> communications secure from monitoring by law enforcement people), the
> government has evidently decided to restrict selected public freedoms. We
> must decide which of the various conflicting rights take precedence in the
> arena of communications. It is not an easy decision to make.
>
>   Patrick Wyant
>
This makes sense. However, it is contrary to a decision recently
made by the Federal govt, incouding the NSA. Federal contracts
have been let to three companies to build digitally encrypted telephones
for use over the regular switched public phone network.
Initially intended for Federal agents and companies with govt contracts,
these phone sets are expected to ultimately be sold to any US
citizen willing to pay (about $2000) for them.

The intent is to stop the Russians from monitoring our phone calls,
as alluded to earlier. The NSA has stated that it realizes that
the Mafia et al will surely take advantage of these phones to
thwart the FBI et al, but that this **is a price we are willing
to pay** to stop the hemmorhage of foreign and industrial
espionage currently occuring on our telephone system.

(On the other hand, there is the case of the college prof
who was told by the NSA not to divulge his great new encryption
technique, because the NSA didn't know how to break it.)

Do you get the idea the Feds' left and right hands don't know
what each other is doing?? Why am I surprised?? :-(
--
Mike J Knudsen / \   ...ihnp4!ihwpt!knudsen
              / NO \
Bell Labs   / BABY \   (312)-979-4132 (work)
 (AT & T)   /ON BOARD\
            \GO AHEAD/   BORED SAILORS
IH 6D-319   \ & HIT/   go BOARDSAILING.
x4132   \ ME /
               \ /
Bell Labs pays \/   me for my thoughts; my opinions are all mine!

From 76691141649815775
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1579f2,76179bde66fc2a0c
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 123782,76179bde66fc2a0c
X-Google-Attributes: gid123782,public
X-Google-Thread: 11f2eb,76179bde66fc2a0c
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,76179bde66fc2a0c
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,76179bde66fc2a0c
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1986-09-11 00:25:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!think!mit-eddie!cybvax0!frog!die
From: die@frog.UUCP (Dave Emery, Software)
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal
Subject: Re: Some comments on the Electronic Communications Privacy Act
Message-ID: <1035@frog.UUCP>
Date: Thu, 11-Sep-86 03:25:52 EDT
Article-I.D.: frog.1035
Posted: Thu Sep 11 03:25:52 1986
Date-Received: Fri, 12-Sep-86 07:02:41 EDT
References: <1031@frog.UUCP> <15591@ucbvax.BERKELEY.EDU> <1240@mhuxo.UUCP>
Reply-To: die@frog.UUCP (David I. Emery)
Organization: Superfrog Heaven [CRDS, Framingham MA]
Lines: 103
Keywords: DES RSA LPC cheap simple too late
Summary: Shortsighted
Xref: mnetor net.ham-radio:2234 net.video:2194 net.crypt:575 net.mail:1153
net.legal:3518

     Patrick Wyant writes :

>   There is more to restriction on reception proposals than merely seeking to
>protect commercial interests. If the responsibility for ensuring secure
>communications were lodged solely with the system operator, it would be quite
>reasonable for the operators to pursue the use of digital encryption. This is
>likely to lead to the introduction of some very nice encoding/decoding boxes
>to the general public. According the the government, the general public
>includes terrorists, subversives, common criminals (as opposed to uncommon
>criminals), and hackers (!). The law enforcement and intelligence agencies
>would not like these unsavory characters to gain ready access to a means of
>communication that could not easily be tapped. Some of the encryption schemes
>can not even be broken by the National Security Agency.

Criminalizing radio reception in the hopes that providers of communications services will not provide their customers with a truly secure service is only a short term solution that at most buys a few years. The basic technology of end to end secure telephony is here now, and is getting cheaper and cheaper every year. It will not be too many years before the cost is low enough so some enterprising folks will mass market secure telephones. (I have dreamed for years of doing this when I finally find myself and get rich). As for data communications, the technology for effectively encoding digital data has been around for years, and anyone with something to hide would have to be stupid not to use the available tools such as the plethora of RSA/DES encryption programs for the PC family.

It seems very likely if the federal government continues to follow it's current anti-privacy policy there will have to be a follow on act to the Electronic Communications Privacy Act making the possession or use of effective cryptographic technology illegal. In fact use of ciphers or codes over public communications facilities IS illegal in some countries. Simply relying on market forces to keep effective ciphers out of the public hands will not be enough.

Unfortunately, this policy of dangerous openness and harsh civil and legal penalties for exploiting it leaves most of our communications terribly vulnerable to any serious criminal or spy clever enough to quietly intercept and exploit them. There will be no certainty that someone (in addition to the NSA, FBI, CIA or other such friendly agencies with long histories of law abiding and ethical behavior) isn't listening. If the law is effectively enforced (with well-publicized arrests of comparatively innocent listeners and long jail terms) most casual radio hobbiests and technically clever hacker types will be careful of what they publically admit to doing; and sadly some of the more law-abiding sorts (myself included) will probably give up what was a very innocent and non-criminal hobby that helped sharpen and develop our technical talents. It is hardly clear, however, that this group of people constitutes much of a threat to anyone.

But the federal policy will be very much to the advantage of anyone who wishes to exploit communications and who is willing to take the risk of penalties under the law. A great deal of what might have been securely locked away beneath ciphers generated by $15 chips that produce keys only breakable with very large scale systems will be happily out there in the open for anyone with even simple equipment to intercept if they dare.

This brave new world will be a field day for pirates, common criminals, sleazy characters and spies. And even more so if the public is denied access to secure communications technology so they can't protect themselves even if they want to.

And I am particularly frightened of certain implications. The new law will only be effective in curbing the use of secure communications technology if it is enforced effectively enough so that users of communications systems are given the illusion that what they are sending is private by virtue of the stiff enforcement of the legal ban on interception. If the law is ignored as much as section 705 of the communications act has been (the current privacy provision) nobody with any sense will believe that it protects their privacy and there will continue to be public pressure for encryption. So the government will have to aggressively and publicaly prosecute listeners, and pressure judges into giving them harsh sentences. This necessarily implies that some innocent people are going to be badly hurt, and I am afraid that hams, SWLs and particularly the technically sophisticated engineering professionals who dabble as an innocent hobby in such projects as trying to break satellite scrambling schemes are going to be made examples of and thrown in jail.

Radio regulation enforcement has not been draconian to date, the idiot ("Captain Midnight") who abused his position as an uplink operator to jam HBO only got probation and a moderate fine. It is pretty hard to see judges handing out 5 year sentences and $250,000 fines for such passive acts as descrambling some Canadian satellite feed or a soft core pornographic movie. It is even harder to see a judge throwing the book at some poor fellow who buys a scanner and listens to a mobile phone conversation. And yet the only way the Privacy Act is going to be beleived is by very stiff sentences - if there aren't such sentences the public won't feel secure. It isn't even clear that the required police/FBI manpower, prosecuters, and cooperative judges will ever come together to give the act teeth (although it is quite possible that the authors of the bill expect the civil penalties with lesser standards of proof to be the main deterents).

In addition to stiff sentences for merely listening and further legislation forbidding use of secure ciphers, I think that the federal policy will not be seen as credible by the general public unless there are curbs on sales and possession of interception equipment. This no doubt means that such things as scanners, TVRO's, Hf-SSB receivers (connected to a TVRO a HF-SSB receiver can intercept a remarkable collection of private microwave and satellite communications), and other radio receiving devices will become illegal.

--
David I. Emery Charles River Data Systems
983 Concord St., Framingham, MA 01701 (617) 626-1102 uucp: decvax!frog!die

From 5167876304829290301
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11f2eb,76179bde66fc2a0c

X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,76179bde66fc2a0c
X-Google-Attributes: gid151e61,public
X-Google-Thread: 123782,76179bde66fc2a0c
X-Google-Attributes: gid123782,public
X-Google-Thread: 1579f2,76179bde66fc2a0c
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 134694,76179bde66fc2a0c
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1986-09-11 11:32:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!uwvax!husc6!panda!genrad!decvax!decwrl!amdcad!amdimage!
prls!philabs!linus!raybed2!applicon!hdsvx1!soma!rice!titan!scorpion
From: scorpion@titan.UUCP
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal
Subject: Re: Some comments on the Electronic Communications Privacy Act (long)
Message-ID: <228@dione.rice.EDU>
Date: Thu, 11-Sep-86 14:32:52 EDT
Article-I.D.: dione.228
Posted: Thu Sep 11 14:32:52 1986
Date-Received: Wed, 17-Sep-86 06:10:50 EDT
References: <1031@frog.UUCP>
Sender: root@rice.EDU
Reply-To: scorpion@titan.UUCP (Vernon Lee)
Followup-To: net.legal
Distribution: net
Organization: Rice University, Houston
Lines: 8
Xref: mnetor net.ham-radio:2262 net.video:2214 net.crypt:581 net.mail:1188
net.legal:3582

What is the status of this dread bill?
Also, what is a "law suite"?

scorpion

I don't have opinions.
"Husbandry would be most efficacious" - Mr. Spock (in "The Apple").

From -5735357507247391839
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,76179bde66fc2a0c
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,76179bde66fc2a0c
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11f2eb,76179bde66fc2a0c
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 1579f2,76179bde66fc2a0c
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 123782,76179bde66fc2a0c
X-Google-Attributes: gid123782,public

X-Google-ArrivalTime: 1986-09-11 11:33:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!ut-sally!ut-ngp!werner
From: werner@ut-ngp.UUCP (Werner Uhrig)
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal
Subject: Re: Some comments on the Electronic Communications Privacy Act
Message-ID: <3963@ut-ngp.UUCP>
Date: Thu, 11-Sep-86 14:33:22 EDT
Article-I.D.: ut-ngp.3963
Posted: Thu Sep 11 14:33:22 1986
Date-Received: Thu, 11-Sep-86 21:37:11 EDT
References: <1031@frog.UUCP> <15591@ucbvax.BERKELEY.EDU> <1240@mhuxo.UUCP>
<301@petrus.UUCP>
Organization: UTexas Computation Center, Austin, Texas
Lines: 17
Summary: making things easier for spooks ...
Xref: mnetor net.ham-radio:2232 net.video:2191 net.crypt:574 net.mail:1143
net.legal:3509

In article <301@petrus.UUCP>, karn@petrus.UUCP (Phil R. Karn) writes:
> I think Mike and Joe miss the point. The idea of the act is to make it
> easier for OUR spooks (the NSA) to monitor the communications of naive
> American civilians by giving them a false sense of security.

I had long suspected it: Encoded communications contain a certain "signature"
which makes them easy to identify in the MASS of communications. Either
it can be detected by the pure randomness of the bits, or, maybe, the crypto
device has a little "innocuous" commercial in the header of each message;
something like: "Safe communications - another service of <your favorite
3-letter company goes here>"

It is thus easy for the spook to identify the messages worth paying ATTention
to .... and, of course, having the decoder helps ...(-:

     ---Werner "The best encryption is a low signal-to-noise ratio.
                that's why I often mumble senselessly..."

From 7714039699871009230
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,6bba9056acb24938,start
X-Google-Attributes: gid134694,public
X-Google-Thread: 1579f2,6bba9056acb24938,start
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 11f2eb,6bba9056acb24938,start
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,6bba9056acb24938,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-09-13 14:03:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!think!husc6!endor!pm
From: pm@endor.harvard.edu (Paul Mazzarelli)
Newsgroups: net.ham-radio,net.video,net.crypt,net.legal

Subject: Electronic Communications Privacy Act Considered Ridiculous
Message-ID: <220@husc6.HARVARD.EDU>
Date: Sat, 13-Sep-86 17:03:57 EDT
Article-I.D.: husc6.220
Posted: Sat Sep 13 17:03:57 1986
Date-Received: Sat, 13-Sep-86 21:17:44 EDT
Sender: news@husc6.HARVARD.EDU
Reply-To: pm@endor.UUCP (Paul Mazzarelli)
Distribution: net
Organization: Harvard University
Lines: 299
Keywords: Communications, Encryption, Ham, Security, Liberty
Xref: mnetor net.ham-radio:2243 net.video:2204 net.crypt:577 net.legal:3543

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The following is from the September 1986 issue of MONITORING TIMES (Published by Grove Enterprises, Inc. P.O. Box 98, Brasstown, North Carolina 28902).

This first item is excerpted from a letter by Robert Horvitz, Government Affairs Liason for The Association of North American Radio Clubs (ANARC) regarding the Communications Act:

ANARC has called for hearings to discuss the radio provisions of the bill and to examine alternatives. We've circulated a list of amendments that would alleviate most of our concerns. We support the general goal of the bill, but believe that privacy of wireless communications can best be assured through technology, not by making criminals out of law-abiding radio users.

Senate staffers acknowledge that our amendments have merit, and hearings might be useful, but they're not convinced that many people share our concerns. This is a political process, and SENATORS ARE NOT GETTING MUCH MAIL PROTESTING THE BILL'S TREATMENT OF RADIO.

YOUR SENATOR MUST HEAR FROM YOU.

CALL, TELEGRAPH, OR SEND A MAILGRAM to your Senator and the Members of the Senate Judiciary and Commerce Commitees as soon as you get this. Express your views. Ask for hearings and more time to assess the bill's consequences. Say whatever you think. But SAY IT NOW!

Otherwise, you could soon be exposed to Federal criminal and civil liabilities merely by using a scanner.

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(All emphasis in the above is the author's.)

The following is a sample letter to your Senators from the same issue of Monitoring Times; since they want this passed around to as many people as possible, they won't mind it being posted in its entirety here:

Senator----------
----------Office Building
Washington, D.C. 20510

Dear Senator----------:

I am writing to vigorously protest the passage of Senate Bill 2575, the Electronic Communications Privacy Act of 1986. As written, substantive portions of the bill are illogical; worse, they reflect considerable ignorance of the laws of physics and the realities of the consumer marketplace.

The mobile telephone industry has convinced Congress, and is now working on the Senate, that cellular mobile telephone calls are inherently private. They are not. As with other forms of mobile radio they are--and always have been--readily accessible to casual monitoring with widely manufactured consumer entertainment radios and even television sets.

In an apparent effort to boost a lagging marketing program, the cellular telephone industry's powerful Washington lobby is obviously attempting to legislate legitimacy to the invalid claim that cellular mobile telephones are inherently private.

At the present time there are, according to independent estimates, some 7 million scanners and 19 million shortwave radios capable of receiving frequencies which would be outlawed by the pending legislation. Many of these frequencies are assigned on a shared basis.

Clearly, it is not only impossible to avoid encountering them, it is necessary in order to determine their sources in cases of interference, frequency studies for license applications, and other legitimate needs of access to a public resource.

All other users of the radio spectrum are made aware that, by its very nature of penetration of private dwellings, radio signals may be monitored by anyone who wishes to tune them in. Only the mobile telephone industry expects a law to be granted in their interest to forbid Americans from fully utilizing pre-existing radio and television equipment manufactured under present law and purchased by them in good faith.

Inexpensive devices exist which can be added to any communications equipment to encrypt their transmissions, making casual interception impossible. The mobile telephone industry is well aware of this, but would sooner have the burden of non-interception placed on the American public rather than pay the minor up-front cost of adequately designing their own equipment.

Adequate law presently exists prohibiting the intrusion of uninvited listeners into private communications and the subsequent use of the information so obtained (the Communications Act of 1934, section 705 as recently amended); superseding this workable regulation with a bad law that is totally unenforceable and illogical in its basic tenets makes a mockery of the judicial system.

In conclusion, I am in favor of protecting the right of privacy of the individual when such a right has a reasonable expectation. I am

opposed to any legislation motivated entirely by corporate profit and which, by its self-serving interest, is unreasonable and unenforceable.

Please consider the testimony of so many well-informed individuals to bring correct perspective to the hearings on this subject in spite of the highly financed special interests' attempts to obscure the facts.

Sincerely,

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(End of sample letter. List of Senators, addresses and Washington phone numbers follows. Much thanks to Chris Tucker of North Kingstown, Rhode Island, for having the patience to type this into his Commodore.)

Hart=Hart Senate Office Building
Dirksen=Dirksen Senate Office Building
Russell=Russell Senate Office Building

Address your letter to:
The Honorable (Senator's Name)
(Number and office building name)
Washington, D.C. 20510

Name	Office	Bldg	Phone
James Abdnor(R-SD)	SH-309	Hart	224-2321
Mark Andrews(R-ND)	SH-724	Hart	224-2043
William L. Armstrong(R-CO)	SH-258	Hart	224-5941
Max Baucus(D-MT)	SH-706	Hart	224-2651
Loyd D. Bentsen(D-TX)	SH-703	Hart	224-5922
Joseph R. Biden, Jr.(D-DE)	SR-453	Russell	224-5042
Jeff Bingaman(D-NM)	SH-502	Hart	224-5521
David L. Boren(D-OK)	SR-453	Russell	224-4721
Rudy Boschwitz(R-NM)	SH-506	Hart	224-5641
Bill Bradley(D-NJ)	SH-731	Hart	224-3224
Dale Bumpers(D-AR)	SD-229	Dirksen	224-4843
Qentin N. Burdick(D-ND)	SH-511	Hart	224-2551
Robert C. Byrd(D-WV)	SH-311	Hart	224-3951
John H. Chafee(R-RI)	SD-567	Dirksen	224-2921
Lawton Chiles(D-FL)	SR-250	Russell	224-5274
Thad Cochran(R-MS)	SR-326	Russell	224-5054
William S. Cohen(R-ME)	SH-322	Hart	224-2523
Alan Cranston(D-CA)	SH-112	Hart	224-3553
Alfonse D'Amato(R-NY)	SH-520	Hart	224-6542
John C. Danforth(R-MO)	SR-497	Russell	224-6154
Dennis DeConcini(D-AZ)	SH-328	Hart	224-4521
Jeremiah A. Denton(R-AL)	SH-516	Hart	224-5744
Alan J. Dixon(D-IL)	SH-316	Hart	224-2854
Christopher J. Dodd(D-CT)	SH-324	Hart	224-2823

Robert Dole(R-KS)	SH-141	Hart	224-6521
Pete V. Domenici(R-NM)	SD-434	Dirksen	224-6621
David Durenberger(R-MN)	SR-154	Russell	224-3244
Thomas F. Eagleton(D-MO)	SD-197	Dirksen	224-5721
Daniel J. Evens(R-WA)	SH-702	Hart	224-3441
J. James Exon(D-NB)	SH-330	Hart	224-4224
Wendall H. Ford(D-KY)	SR-173A	Russell	224-4343
Jake Garn(R-UT)	SD-505	Dirksen	224-5444
Barry Goldwater(R-AZ)	SR-363	Russell	224-2235
Albert Gore, Jr.(D-TN)	SR-393	Russell	224-4944
Slade Gorton(R-WA)	SH-513	Hart	224-2621
Phil Gramm(R-TX)	SR-370	Russell	224-2934
Charles E. Grassley(R-IA)	SH-135	Hart	224-3744
Tom Harkin(D-IA)	SH-317	Hart	224-3254
Gary Hart(D-CO)	SR-237	Russell	224-5852
Orrin G. Hatch(R-UT)	SR-135	Russell	224-5251
Mark O. Hatfield(R-OR)	SH-711	Hart	224-3753
Paula Hawkins(R-FL)	SH-313	Hart	224-3041
Chic Hecht(R-NV)	SH-302	Hart	224-6244
Howell T. Heflin(D-AL)	SH-728	Hart	224-4124
John Heinz(R-PA)	SR-277	Russell	224-6324
Jesse Helms(R-NC)	SD-403	Dirksen	224-6342
Ernest F. Hollings(D-SC)	SR-125	Russell	224-6121
Daniel K. Inouye(D-HI)	SH-722	Hart	224-3934
J. Bennett Johnston(D-LA)	SH-136	Hart	224-5824
Nancy Landon Kassebaum(R-KS)	SR-302	Russell	224-4774
Robert W. Kasten, Jr.(R-WI)	SH-110	Hart	224-5323
Edward M. Kennedy(D-MA)	SR-113	Russell	224-4543
John F. Kerry(D-MA)	SR-362	Russell	224-2742
Frank R. Lautenberg(D-NJ)	SH-717	Hart	224-4744
Paul Laxalt(R-NV)	SR-323A	Russell	224-3542
Patrick J. Leahy(D-VT)	SR-433	Russell	224-4242
Carl Levin(D-MI)	SR-459	Russell	224-6221
Russel B. Long(D-LA)	SR-225	Russell	224-4623
Richard G. Lugar(R-IN)	SH-306	Hart	224-4814
James A. McClure(R-ID)	SD-361	Dirksen	224-2752
Mitch McConnell(R-KY)	SR-120	Russell	224-2541
Charles Mathias, Jr.(R-MD)	SR-387	Russell	224-4654
Spark M. Matsunaga(D-HI)	SH-109	Hart	224-6361
Mack Mattingly(R-GA)	SH-320	Hart	224-3643
John Melcher(D-MT)	SH-730	Hart	224-2644
Howard M. Metzenbaum(D-OH)	SR-140	Russell	224-3215
George J. Mitchell(D-ME)	SR-176	Russell	224-5344
Daniel P. Moynihan(D-NY)	SR-464	Russell	224-4451
Frank H. Murkowski(R-AK)	SH-709	Hart	224-6665
Don Nickles(R-OK)	SH-713	Hart	224-5754
Sam Nunn(D-GA)	SD-303	Dirksen	224-3521
Bob Packwood(R-OR)	SR-259	Russell	224-5244
Claiborne Pell(D-RI)	SR-335	Russell	224-4642
Larry Pressler(R-SD)	SR-407A	Russell	224-5842
William Proxmire(D-WI)	SD-530	Dirksen	224-5653
David Pryor(D-AR)	SR-264	Russell	224-2353
Dan Quayle(R-IN)	SH-524	Hart	224-5623

Donal W. Riegle, Jr.(D-MI)	SD-105	Dirksen	224-4822
John D. Rockefeller(D-WV)	SD-241	Dirksen	224-6472
William V. Roth, Jr.(R-DE)	SH-104	Hart	224-2441
Warren B. Rudman(R-NH)	SH-530	Hart	224-3324
Paul S. Sarbanes(D-MD)	SD-232	Dirksen	224-4524
Jim Sasser(D-TN)	SR-298	Russell	224-3344
Paul Simon(D-IL)	SD-462	Dirksen	224-2152
Alan K. Simpson(R-WY)	SD-261	Dirksen	224-3424
Arlen Specter(R-PA)	SH-331	Hart	224-4254
Robert T. Stafford(R-VT)	SH-133	Hart	224-5141
John C. Stennis(D-MS)	SR-205	Russell	224-6253
Ted Stevens(R-AK)	SH-522	Hart	224-3004
Steven D. Symms(R-IN)	SH-509	Hart	224-6142
Strom Thurmond(R-SC)	SR-218	Russell	224-5972
Paul Trible(R-VA)	SH-517	Hart	224-4024
Malcolm Wallop(R-WY)	SR-206	Russell	224-6441
John W. Warner(R-VA)	SR-421	Russell	224-2023
Lowell P. Weicker,Jr.(R-CT)	SH-303	Hart	224-4041
Pete Wilson(R-CA)	SH-720	Hart	224-3841
Edward Zorinsky(D-NB)	SR-443	Russell	224-6551

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The following is from an editorial by Bob Grove in the above-mentioned issue of Monitoring Times. He raises an interesting point concerning Government priorities when it comes to the 'electronic privacy' of American citizens:

In spite of vigorous protests by National Security Agency, Central Intelligence Agency, and the Federal Bureau of Investigation, 350-foot high Mount Alto in Washington, D.C., was turned over to the Soviets for their construction of an elaborate radio interception installation aimed at the White House and other prime sensitive targets in the nations's capitol.

Another question of mental competence arose when high ground was given to the Soviets for a similar facility erected as a 19 story building in Riverdale (The Bronx), New York.

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Mind you, being diplomats, the Soviets in D.C. and The Bronx are protected from persecution under diplomatic immunity.

Two common integrated circuits were demonstrated before a House committee that would easily provide a very secure level of encryption. One IC cost $2.00, and the other cost $20.00. "Far too costly"? Who is the cellular phone industry trying to fool? This Act would prohibit the "interception of signals not usually accessible by the general public." To wit, the 800 MHz portion of the electromagnetic spectrum used by cellular phones (also used by channels 80 through 83 on the UHF dial). What really gets

me is that the ACLU is pushing the bill because they don't want police to be able to intercept private phone calls or some such nonsense. Unless the police are really after someone, they are not going to go chasing a low-level signal around a city to prosecute someone; phone tapping is much easier. And unless cellular phone calls are encrypted, they will not be secure, period. I would never think of purchasing a cellular phone knowing this; if I am going to buy a $2,000 phone, I want a $20 chip in it that will really guarantee me a secure circuit. (I don't remember what the chips were--anyone know?)

The Justice Department has already stated that it will not enforce this Act should it become law--how would they be able to? Someone would have to do something really blatant to be prosecuted. The way to secure information that the public has ready access to (and let's face it, anybody can tune a TV in to channels 80 through 83) is to encrypt it, not to tell people they can't monitor certain channels and expect them not to.

I have a ten year-old HRO receiver that tunes from DC to 30 MHz; since HRO is a well-known name in amateur radio, I doubt that I am the only person with one. I have built several block converters that work quite well with this radio, extending its tuning range in to the UHF band. This is not to mention equipment from Regency. If, in turning dials, I come across a conversation on a "secure" frequency, I would be breaking the law. If any transmission is too sensitive for the general public, then it should be secured by encryption; it's cheap enough now, and building receiving equipment is just too easy.

--Paul Mazzarelli
pm@harvard.HARVARD.EDU

Disclaimer: I have no connection with Monitoring Times.

The Electronic Communications Privacy Act--It's not just a bad idea, it's about to become the Law.

When radios are outlawed, only outlaws will have radios.

"Gentlemen, we must all hang together, or, most assuredly, we shall all hang separately!" --Benjamin Franklin

Paul Mazzarelli pm@harvard
121 Science Center
Harvard University Home:
1 Oxford Street 6 Crescent Street
Cambridge, MA 02138 Somerville, MA 02145
495-1273 623-0963

From 7674777362808369379
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11f2eb,76179bde66fc2a0c

X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 134694,76179bde66fc2a0c
X-Google-Attributes: gid134694,public
X-Google-Thread: 1579f2,76179bde66fc2a0c
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 151e61,76179bde66fc2a0c
X-Google-Attributes: gid151e61,public
X-Google-Thread: 123782,76179bde66fc2a0c
X-Google-Attributes: gid123782,public
X-Google-ArrivalTime: 1986-09-14 01:42:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!lll-crg!lll-lcc!styx!twg-ap!amdahl!hplabs!ucbvax!jade!
topaz!newton2
From: newton2@topaz.berkeley.edu
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal
Subject: Re: Some comments on the Electronic Communications Privacy Act
Message-ID: <1269@jade.BERKELEY.EDU>
Date: Sun, 14-Sep-86 04:42:25 EDT
Article-I.D.: jade.1269
Posted: Sun Sep 14 04:42:25 1986
Date-Received: Mon, 15-Sep-86 02:26:41 EDT
References: <1031@frog.UUCP> <15591@ucbvax.BERKELEY.EDU> <1240@mhuxo.UUCP>
<1090@ihwpt.UUCP>
Sender: usenet@jade.BERKELEY.EDU
Reply-To: newton2@topaz.berkeley.edu.UUCP ()
Organization: University of California, Berkeley
Lines: 15
Keywords: STU-III
Xref: mnetor net.ham-radio:2257 net.video:2209 net.crypt:578 net.mail:1173
net.legal:3557

The low-cost secure voice terminals (STU-III) contracted for by NSA via
ATT, Motorola, RCA et al. will not pose a problem for NSA. Who do you
suppose will manage the keys for the new secure phones?

Unfortunately, given the porosity of NSA, one can expect the ultimate
result will be a substantial net loss for true security of U.S. interests:
bureaucrats will spend billions and will become assured of the security of
the techno-glossy new system- *everyone* will be required to use it,
with the greatest urgency of use reserved for the most truly valuable
info. Ivan will pay a GTE clerk enough to cover his short positions on
the day the stock market falls 100 points and he'll hand over the key list.

It's happened before, according to my newspaper.

Doug Maisel

From 8831944162937830855
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11f2eb,76179bde66fc2a0c
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,76179bde66fc2a0c

X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,76179bde66fc2a0c
X-Google-Attributes: gid134694,public
X-Google-Thread: 1579f2,76179bde66fc2a0c
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 123782,76179bde66fc2a0c
X-Google-Attributes: gid123782,public
X-Google-ArrivalTime: 1986-09-14 01:45:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!lll-crg!lll-lcc!styx!twg-ap!amdahl!hplabs!ucbvax!jade!
topaz!newton2
From: newton2@topaz.berkeley.edu
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal
Subject: Re: Some comments on the Electronic Communications Privacy Act
Message-ID: <1270@jade.BERKELEY.EDU>
Date: Sun, 14-Sep-86 04:45:41 EDT
Article-I.D.: jade.1270
Posted: Sun Sep 14 04:45:41 1986
Date-Received: Mon, 15-Sep-86 02:27:29 EDT
References: <1031@frog.UUCP> <15591@ucbvax.BERKELEY.EDU> <1240@mhuxo.UUCP>
<1090@ihwpt.UUCP>
Sender: usenet@jade.BERKELEY.EDU
Reply-To: newton2@topaz.berkeley.edu.UUCP ()
Organization: University of California, Berkeley
Lines: 5
Keywords: whoops...
Xref: mnetor net.ham-radio:2258 net.video:2210 net.crypt:579 net.mail:1174
net.legal:3558

Er, in my smart aleck posting about the possible subversion of NSA-knows
best crypto schemes (I advocate autonomous key generators), make
that "on a day the market *rises* 100 points etc. etc."

Doug Maisel

From -8584827491182577111
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,d553fa7a66a621bc,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 15f443,d553fa7a66a621bc,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 151e61,d553fa7a66a621bc,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,d553fa7a66a621bc,start
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1986-09-17 15:06:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!rochester!kodak!ornitz
From: ornitz@kodak.UUCP (barry ornitz)
Newsgroups: net.analog,net.ham-radio,net.ham-radio.packet,net.wanted
Subject: Need manual for Telonic sweep generator
Message-ID: <570@kodak.UUCP>

Date: Wed, 17-Sep-86 18:06:31 EDT
Article-I.D.: kodak.570
Posted: Wed Sep 17 18:06:31 1986
Date-Received: Fri, 19-Sep-86 22:19:40 EDT
Reply-To: ornitz@kodak.UUCP (barry ornitz)
Distribution: world
Organization: Eastman Kodak Co, Rochester, NY
Lines: 34
Keywords: manuals/schematics, Telonic SPI-64, SG-599/DRA-6
Xref: mnetor net.analog:859 net.ham-radio:2263 net.ham-radio.packet:336
net.wanted:3878

Appropriate garbage for the line-eater.....

Pardon the posting to the net, but I have exhausted all my other known sources for this information. Perhaps the association with ARPANET will lead to success.

I am in need of operations/maintenance manuals and schematics for an older Telonic sweep generator which I purchased on the surplus market a year ago. This generator was a commercial unit which was purchased by the USAF. The commercial designation was Telonic SPI-64 and the USAF designation was SG-599/DRA-6. It was made by Telonic when they were still in Beech Grove (now known for Wavetek). Telonic says that their records are sketchy for the days before the move to sunny California and that they have no information on the unit. One engineer claimed to have worked on it in his early days, however. USAF informed me that this model was removed from service about ten years ago and that they had never purchased enough of them to issue a Federal manual - the manuals supplied with the units were all that they ever purchased. I have checked with companies who deal in used test equipment, military manual suppliers, etc. with no luck.

I would be very grateful to either buy or borrow a manual from anyone on the net. If either of these numbers rings a bell with you, however faint, please look through your bookcases, closets, storerooms or what have you to see if you might have the last remaining copy in existence. Restoring older pieces of test equipment for functional use is a hobby of mine (i.e. GR, HP, Tek, Collins, etc.) and this generator is too fine a piece to be relegated to the "junque heape." Thanks for your help. 73!

Barry L. Ornitz WA4VZQ
Eastman Chem. Div. Research
Kingsport, TN 37662

Phone: Work 615/229-4904, Home 615/288-7803.

From 3037052117661368913
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,76179bde66fc2a0c
X-Google-Attributes: gid134694,public
X-Google-Thread: 123782,76179bde66fc2a0c

X-Google-Attributes: gid123782,public
X-Google-Thread: 1579f2,76179bde66fc2a0c
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 11f2eb,76179bde66fc2a0c
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,76179bde66fc2a0c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-09-19 08:00:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!caip!sri-spam!nike!ucbcad!ucbvax!sdcsvax!noscvax!trout!
rupp
From: rupp@trout.UUCP (William L. Rupp)
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal
Subject: Re: Some comments on the Electronic Communications Privacy Act
Message-ID: <315@trout.UUCP>
Date: Fri, 19-Sep-86 11:00:49 EDT
Article-I.D.: trout.315
Posted: Fri Sep 19 11:00:49 1986
Date-Received: Sat, 20-Sep-86 20:43:13 EDT
References: <1031@frog.UUCP> <15591@ucbvax.BERKELEY.EDU> <1240@mhuxo.UUCP>
<1035@frog.UUCP>
Reply-To: rupp@trout.UUCP (William L. Rupp)
Organization: Computer Sciences Corp, San Diego
Lines: 3
Keywords: DES RSA LPC cheap simple too late
Xref: mnetor net.ham-radio:2265 net.video:2223 net.crypt:590 net.mail:1203
net.legal:3616

I think I have missed something in this discussion of communications privacy.
Has there been a proposal in Congress to ban transmission encryption, or is
that eventuality merely a supposition on the part of some net.crypt posters?

From 324636761826786737
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,76179bde66fc2a0c
X-Google-Attributes: gid134694,public
X-Google-Thread: 1579f2,76179bde66fc2a0c
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 151e61,76179bde66fc2a0c
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11f2eb,76179bde66fc2a0c
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: f824f,4878441612bde7fb,start
X-Google-Attributes: gidf824f,public
X-Google-Thread: 123782,76179bde66fc2a0c
X-Google-Attributes: gid123782,public
X-Google-ArrivalTime: 1986-09-19 13:12:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site hoptoad.uucp
Path: utzoo!hoptoad!gnu
From: gnu@hoptoad.uucp (John Gilmore)
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal,ba.general

Subject: Electronic Communications Privacy Act passed Judiciary
Message-ID: <1101@hoptoad.uucp>
Date: Fri, 19-Sep-86 16:12:46 EDT
Article-I.D.: hoptoad.1101
Posted: Fri Sep 19 16:12:46 1986
Date-Received: Fri, 19-Sep-86 16:54:16 EDT
References: <1031@frog.UUCP> <228@dione.rice.EDU>
Organization: Nebula Consultants in San Francisco
Lines: 201
Summary: THEY'RE ABOUT TO MAKE IT THE LAW -- SEND TELEGRAMS NOW!

In article <228@dione.rice.EDU>, scorpion@titan.UUCP writes:
> What is the status of this dread bill?

Sad to say, the Senate Judiciary Committee passed the bill on to the full Senate. The Senate is trying madly to pass everything in sight before they recess, so there will be a lot of pressure to get it passed next week.

NOW IS THE TIME to pick up the phone and call Western Union. Tell them you want to send a telegram to your Congressmen. They have a special cheap rate for this. A list of all the Senators is at the bottom of this message. Identify the bill by name and/or number (S.2575), state that you are opposed, e.g.:

"I strongly oppose passage of S.2575, the Electronic Communicaions Privacy Act."

then give them a reason to believe you and a reason to delay or kill the bill. E.g.

"I have been using electronic mail for XX years and I believe this bill will make things worse than they are now. We will do better by creating our own security via encryption, rather than having the government step in."

"I have been a ham for XX years and I believe that the radio provisions provide an intolerable burden on citizens' rights in order to make life easier for a few companies, who should be using secure encryption."

"I believe this bill reduces civil liberties while claiming to increase them. Its definitions are sufficiently vague that I cannot determine what data in my computer system is protected by the bill or even if it applies to my system."

"The bill makes it illegal to intercept data 'not readily available to the general public' but this is not defined. I believe that any data that is transmitted through my house is readily available to me, but I'm sure the courts will not see it that way. Much of the bill hinges on the definition of what is public and until it is very clearly defined, the act is harmful and should not be passed."

"The act lightly reverses 50 years of doctrine around radio reception. I believe that this reversal is unsound. The proposed restrictions on public

ownership of radio receivers are a threat to liberty."

"My company builds equipment that comes under this law. I believe it would make it harder for our customers to communicate with each other due to the possible criminal and civil penalties it places on such communication."

"I believe this bill would allow a court to define my computer as a 'surreptitious interception device', since it can be used to decrypt encrypted material, and confiscate it. This is insane."

"I believe that reasonable and cheap means of encryption exist which could be employed by the cellular, satellite TV, and other industries, which would provide them true security rather than the legal sham security provided by the bill. The sham security comes at a cost in civil rights and in government interference in private life, which I feel is intolerable."

etc, etc, etc.

Here's a recent excerpt on the bill from Robert Horvitz (hoptoad!well!rh) who has been lobbying against the bill on Capitol Hill and reporting on it on the Well:

Item: 171 R 12 - ECPA Update Continued
Date: Wed, Sep 17, 1986 (18:01)
From: rh (Robert Horvitz)

> Continuing discussion with the drafters of the bill reveals that COMPUTERS may, under certain circumstances, qualify as "surreptitious interception" devices - if they are designed or configured for the specific purpose of decryption. Language spelling out what devices, or what capabilities, would be banned hasn't been adopted yet, but my understanding is that software does not in itself constitute a "device," so the ban would be primarily aimed at hardware, particularly dedicated hardware, as opposed to general purpose devices. The most likely outcome is that the bill will rushed into law without clarification on this point, and a court will have to decide what computers are legal to own, manufacture, etc.

Here is the list of Senators, copied from an earlier posting so it's right here and you have no excuse to not call now! Save a copy of this message and you can 'grep' for your 2-letter state abbreviation (eg. "CA").

> (List of Senators, addresses and Washington
> phone numbers follows. Much thanks to Chris Tucker of North Kingstown, Rhode Island, for having the patience to type this into his Commodore.)
>
> Hart=Hart Senate Office Building
> Dirksen=Dirksen Senate Office Building
> Russell=Russell Senate Office Building
>
> Address your telegram to:
> The Honorable (Senator's Name)

(Number and office building name)
Washington, D.C. 20510

Name	Office	Bldg	Phone (area code 202)
James Abdnor(R-SD)	SH-309	Hart	224-2321
Mark Andrews(R-ND)	SH-724	Hart	224-2043
William L. Armstrong(R-CO)	SH-258	Hart	224-5941
Max Baucus(D-MT)	SH-706	Hart	224-2651
Loyd D. Bentsen(D-TX)	SH-703	Hart	224-5922
Joseph R. Biden, Jr.(D-DE)	SR-453	Russell	224-5042
Jeff Bingaman(D-NM)	SH-502	Hart	224-5521
David L. Boren(D-OK)	SR-453	Russell	224-4721
Rudy Boschwitz(R-NM)	SH-506	Hart	224-5641
Bill Bradley(D-NJ)	SH-731	Hart	224-3224
Dale Bumpers(D-AR)	SD-229	Dirksen	224-4843
Qentin N. Burdick(D-ND)	SH-511	Hart	224-2551
Robert C. Byrd(D-WV)	SH-311	Hart	224-3951
John H. Chafee(R-RI)	SD-567	Dirksen	224-2921
Lawton Chiles(D-FL)	SR-250	Russell	224-5274
Thad Cochran(R-MS)	SR-326	Russell	224-5054
William S. Cohen(R-ME)	SH-322	Hart	224-2523
Alan Cranston(D-CA)	SH-112	Hart	224-3553
Alfonse D'Amato(R-NY)	SH-520	Hart	224-6542
John C. Danforth(R-MO)	SR-497	Russell	224-6154
Dennis DeConcini(D-AZ)	SH-328	Hart	224-4521
Jeremiah A. Denton(R-AL)	SH-516	Hart	224-5744
Alan J. Dixon(D-IL)	SH-316	Hart	224-2854
Christopher J. Dodd(D-CT)	SH-324	Hart	224-2823
Robert Dole(R-KS)	SH-141	Hart	224-6521
Pete V. Domenici(R-NM)	SD-434	Dirksen	224-6621
David Durenberger(R-MN)	SR-154	Russell	224-3244
Thomas F. Eagleton(D-MO)	SD-197	Dirksen	224-5721
Daniel J. Evens(R-WA)	SH-702	Hart	224-3441
J. James Exon(D-NB)	SH-330	Hart	224-4224
Wendall H. Ford(D-KY)	SR-173A	Russell	224-4343
Jake Garn(R-UT)	SD-505	Dirksen	224-5444
Barry Goldwater(R-AZ)	SR-363	Russell	224-2235
Albert Gore, Jr.(D-TN)	SR-393	Russell	224-4944
Slade Gorton(R-WA)	SH-513	Hart	224-2621
Phil Gramm(R-TX)	SR-370	Russell	224-2934
Charles E. Grassley(R-IA)	SH-135	Hart	224-3744
Tom Harkin(D-IA)	SH-317	Hart	224-3254
Gary Hart(D-CO)	SR-237	Russell	224-5852
Orrin G. Hatch(R-UT)	SR-135	Russell	224-5251
Mark O. Hatfield(R-OR)	SH-711	Hart	224-3753
Paula Hawkins(R-FL)	SH-313	Hart	224-3041
Chic Hecht(R-NV)	SH-302	Hart	224-6244
Howell T. Heflin(D-AL)	SH-728	Hart	224-4124
John Heinz(R-PA)	SR-277	Russell	224-6324
Jesse Helms(R-NC)	SD-403	Dirksen	224-6342
Ernest F. Hollings(D-SC)	SR-125	Russell	224-6121
Daniel K. Inouye(D-HI)	SH-722	Hart	224-3934

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J. Bennett Johnston(D-LA)   SH-136  Hart    224-5824
Nancy Landon Kassebaum(R-KS)SR-302  Russell 224-4774
Robert W. Kasten, Jr.(R-WI) SH-110  Hart    224-5323
Edward M. Kennedy(D-MA)     SR-113  Russell 224-4543
John F. Kerry(D-MA)         SR-362  Russell 224-2742
Frank R. Lautenberg(D-NJ)   SH-717  Hart    224-4744
Paul Laxalt(R-NV)           SR-323A Russell 224-3542
Patrick J. Leahy(D-VT)      SR-433  Russell 224-4242
Carl Levin(D-MI)            SR-459  Russell 224-6221
Russel B. Long(D-LA)        SR-225  Russell 224-4623
Richard G. Lugar(R-IN)      SH-306  Hart    224-4814
James A. McClure(R-ID)      SD-361  Dirksen 224-2752
Mitch McConnell(R-KY)       SR-120  Russell 224-2541
Charles Mathias, Jr.(R-MD)  SR-387  Russell 224-4654
Spark M. Matsunaga(D-HI)    SH-109  Hart    224-6361
Mack Mattingly(R-GA)        SH-320  Hart    224-3643
John Melcher(D-MT)          SH-730  Hart    224-2644
Howard M. Metzenbaum(D-OH)  SR-140  Russell 224-3215
George J. Mitchell(D-ME)    SR-176  Russell 224-5344
Daniel P. Moynihan(D-NY)    SR-464  Russell 224-4451
Frank H. Murkowski(R-AK)    SH-709  Hart    224-6665
Don Nickles(R-OK)           SH-713  Hart    224-5754
Sam Nunn(D-GA)              SD-303  Dirksen 224-3521
Bob Packwood(R-OR)          SR-259  Russell 224-5244
Claiborne Pell(D-RI)        SR-335  Russell 224-4642
Larry Pressler(R-SD)        SR-407A Russell 224-5842
William Proxmire(D-WI)      SD-530  Dirksen 224-5653
David Pryor(D-AR)           SR-264  Russell 224-2353
Dan Quayle(R-IN)            SH-524  Hart    224-5623
Donal W. Riegle, Jr.(D-MI)  SD-105  Dirksen 224-4822
John D. Rockefeller(D-WV)   SD-241  Dirksen 224-6472
William V. Roth, Jr.(R-DE)  SH-104  Hart    224-2441
Warren B. Rudman(R-NH)      SH-530  Hart    224-3324
Paul S. Sarbanes(D-MD)      SD-232  Dirksen 224-4524
Jim Sasser(D-TN)            SR-298  Russell 224-3344
Paul Simon(D-IL)            SD-462  Dirksen 224-2152
Alan K. Simpson(R-WY)       SD-261  Dirksen 224-3424
Arlen Specter(R-PA)         SH-331  Hart    224-4254
Robert T. Stafford(R-VT)    SH-133  Hart    224-5141
John C. Stennis(D-MS)       SR-205  Russell 224-6253
Ted Stevens(R-AK)           SH-522  Hart    224-3004
Steven D. Symms(R-IN)       SH-509  Hart    224-6142
Strom Thurmond(R-SC)        SR-218  Russell 224-5972
Paul Trible(R-VA)           SH-517  Hart    224-4024
Malcolm Wallop(R-WY)        SR-206  Russell 224-6441
John W. Warner(R-VA)        SR-421  Russell 224-2023
Lowell P. Weicker,Jr.(R-CT) SH-303  Hart    224-4041
Pete Wilson(R-CA)           SH-720  Hart    224-3841
Edward Zorinsky(D-NB)       SR-443  Russell 224-6551
```

--
John Gilmore {sun,ptsfa,lll-crg,ihnp4}!hoptoad!gnu   jgilmore@lll-crg.arpa
              May the Source be with you!

From -1616095742433570349
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,db632240d2cfc82c,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 119e22,db632240d2cfc82c,start
X-Google-Attributes: gid119e22,public
X-Google-Thread: 11906e,db632240d2cfc82c,start
X-Google-Attributes: gid11906e,public
X-Google-Thread: 12eaa7,db632240d2cfc82c,start
X-Google-Attributes: gid12eaa7,public
X-Google-Thread: 15c7fc,db632240d2cfc82c,start
X-Google-Attributes: gid15c7fc,public
X-Google-Thread: 15f443,db632240d2cfc82c,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 104158,db632240d2cfc82c,start
X-Google-Attributes: gid104158,public
X-Google-Thread: 1520b8,db632240d2cfc82c,start
X-Google-Attributes: gid1520b8,public
X-Google-ArrivalTime: 1986-09-20 16:12:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!lll-crg!lll-lcc!qantel!hplabs!ucbvax!jade!iris!michael
From: michael@iris.berkeley.edu (Tom Slone [(415)486-5954])
Newsgroups: net.wanted,net.jobs,net.micro.trs-80,net.ham-
radio,net.auto.tech,net.database,net.travel,talk.politics.misc
Subject: Technical Travel to Nicaragua, Update #4
Message-ID: <1315@jade.BERKELEY.EDU>
Date: Sat, 20-Sep-86 19:12:32 EDT
Article-I.D.: jade.1315
Posted: Sat Sep 20 19:12:32 1986
Date-Received: Sun, 21-Sep-86 22:03:09 EDT
Sender: usenet@jade.BERKELEY.EDU
Reply-To: michael@iris.berkeley.edu (Tom Slone [(415)486-5954])
Followup-To: talk.politics.misc,net.jobs.d
Organization: tecNICA
Lines: 45
Xref: mnetor net.wanted:3901 net.jobs:1690 net.micro.trs-80:528 net.ham-radio:2266
net.auto.tech:1509 net.database:405 net.travel:1868 talk.politics.misc:208

(For follow-up, please read disclaimer at the bottom of this message first.)

tecNICA is an organization which provides technical expertise to the country of Nicaragua. Typically, a volunteer will pay her/his own airfare to Nicaragua, work for 2 weeks at a host agency in Managua and be given room and board by the agency at a residential inn (or hospedaje). Tours of the countryside are arranged for weekends and talks with officials and opposition leaders are often arranged for evenings. Computer specialists, mechanics, economists, agronomomists, telephone experts and other technicians have all made valuable contributions to the Nicaraguan government under the auspices of tecNICA. Current priority needs are:

Computer systems: UNIX, Kaypro, LANs, Monroe, Sharp SR80, Sanyo MBC550, TRS 80,

Tandy 1000
Computer programs: Condor, database design, Proplan, RATS, TSP, digital telex,
IBM DBMS, Lotus 123, Multiplan, Wordperfect
Engineers: hydrology, electronic composition, soil, telecommunications,
automotive, HVAC, mechanical, radio packet systems
Other: economics

If you have other technical skills, chances are, you could make a valuable contribution to Nicaraguan society. I worked as a computer programmer (for the Ministry of Health and for the telecommunications center) in Managua in the Spring of 1985 and not only found that I was greatly appreciated, but found the trip to be a great cross-cultural experience, kind of like a mini-Peace Corps.

If you have questions, you may address them to me or you may contact tecNICA itself by calling:

Berkeley -- (415)848-0292, 2727 College Ave., Berkeley, CA 94705
New York -- (212)427-0634
Boston -- (617)782-0510
Seattle -- (206)321-1367
Chicago -- (312)524-0198
Los Angeles (213)394-1183

tecNICA is in the process for applying for tax-free status, until then tax free contributions may be made out to: "tecNICA/Capp Street Foundation."

Disclaimer: If you wish to make follow-ups to this article, please do so to the follow-up groups listed in the message header, not to the groups of the original posting. I am not responsible for other people's diatribes.

michael@ucbiris.berkeley.edu michael%ucbiris@berkeley.arpa
{bellcore|cbosgd|decvax|hplabs|ihnp4| \
nbires|sdcsvax|tektronix|ulysses}!ucbvax!ucbiris!michael

From -2328596548739141940
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,76179bde66fc2a0c
X-Google-Attributes: gid134694,public
X-Google-Thread: 1579f2,76179bde66fc2a0c
X-Google-Attributes: gid1579f2,public
X-Google-Thread: 123782,76179bde66fc2a0c
X-Google-Attributes: gid123782,public
X-Google-Thread: 11f2eb,76179bde66fc2a0c
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,76179bde66fc2a0c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-09-21 22:12:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!lll-crg!nike!think!mit-eddie!cybvax0!frog!die
From: die@frog.UUCP (Dave Emery, Software)
Newsgroups: net.ham-radio,net.video,net.crypt,net.mail,net.legal
Subject: Re: Some comments on the Electronic Communications Privacy Act
Message-ID: <1050@frog.UUCP>

Date: Mon, 22-Sep-86 01:12:44 EDT
Article-I.D.: frog.1050
Posted: Mon Sep 22 01:12:44 1986
Date-Received: Mon, 22-Sep-86 07:53:51 EDT
References: <1031@frog.UUCP> <15591@ucbvax.BERKELEY.EDU> <1240@mhuxo.UUCP>
<1035@frog.UUCP> <315@trout.UUCP>
Reply-To: die@frog.UUCP (David I. Emery)
Organization: Superfrog Heaven [CRDS, Framingham MA]
Lines: 56
Keywords: DES RSA LPC VLSI very cheap and simple laws too late
Summary: Not yet, but maybe soon
Xref: mnetor net.ham-radio:2267 net.video:2225 net.crypt:594 net.mail:1206
net.legal:3641

In article <315@trout.UUCP> rupp@trout.UUCP (William L. Rupp) writes:
>I think I have missed something in this discussion of communications privacy.
>Has there been a proposal in Congress to ban transmission encryption, or is
>that eventuality merely a supposition on the part of some net.crypt posters?
>

There hasn't yet been such a bill, but as a number of posters have pointed out, apparently one of the major forces behind the movement to pass the Electronic Communications Privacy Act is a group of law enforcement and intelligence agencies who are reputed to fear that widespread use of secure and effective encryption will deny them important sources of intelligence. (eg terrorists, organised crime, drug dealers, hackers, and other such bad guys will start using secure crypto communications if they are made widely available)

It is assumed that the agencies are backing the bill because it provides legal protection for unencrypted common carrier communications, and for any other communication encrypted in any manner (or even transmitted using complex or unusual modulation). It is presumed that they feel that the existance of a strong law with stiff penalties and the possibility of civil as well as criminal action (with lower standards of proof and no prosecutorial discression) will be seen by the communications service buying public as an adaquate answer to the security problem, and the movement toward use of really effective encryption will slow down or stop as a result.

I personally suspect that the large common carriers (who have also backed the bill) would very much not like to spend billions of dollars securing their transmissions (particularly the wide open microwave radio and satellite links that represent the lowest-cost-to-provide long distance interconnections). If the bill passes the carriers will have a legal defense against lawsuits by subscribers whose communications have been intercepted from these links, if there isn't such a law someone might someday successfully sue a carrier for a large amount of money for not taking adaquate precautions to ensure his privacy. And a court ruling that the mostly open transmissions currently used are not adaquately secure could be devastating to carriers with limited investments in such more secure technologies as coaxial cable and optical fibers.

Thus the intelligence agencies are hoping that shielded

from liability for providing privacy the carriers will not
install encryption and provide secure service as rapidly since the major
reasons for them to do so (fear of lawsuits and public pressure) will have
been at least partially neutralized. And they hope that the
public, provided with a new and powerful defense against those
who intercept its communications (the civil penalties) will not
press as hard for technology that provides real security (even
from the intelligence agencies themselves).

     I speculate that this attempt to slow the spread of encryption
by providing legal tools to wronged parties and protection to carriers
from suits will not be enough to prevent its use from becoming widespread,
and that the intelligence agencies will have to pressure for restrictions
on the use of encryption. And perhaps there are fools enough in congress
for such a law to pass too..
--
          David I. Emery   Charles River Data Systems
983 Concord St., Framingham, MA 01701 (617) 626-1102 uucp: decvax!frog!die

From 2175236096824986045
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,a8d275f4a73fd98e,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,a8d275f4a73fd98e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-10-10 11:54:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!cmcl2!husc6!rutgers!princeton!allegra!ulysses!bellcore!
petrus!magic!science!bambi!steve
From: steve@bambi.UUCP (Steve Miller)
Newsgroups: net.analog,net.ham-radio
Subject: I need an FSK decoder
Message-ID: <550@bambi.UUCP>
Date: Fri, 10-Oct-86 14:54:46 EDT
Article-I.D.: bambi.550
Posted: Fri Oct 10 14:54:46 1986
Date-Received: Sat, 11-Oct-86 20:48:25 EDT
Distribution: net
Organization: The Fantasy Factory
Lines: 8
Xref: mnetor net.analog:870 net.ham-radio:2360

I'm looking for a device that will perform Frequency Shift Keying
decoding, with input frequencies of 1500 Hz (mark) and 2300 Hz (space),
at a faily rapid rate (300 baud or better). Also, I would like to
find a device that will convert frequency to voltage, continuously,
over the same range.

I could sure use some help. Thanks, Steve Miller WA4LDA
                                    ihnp4!bellcore!bambi!steve

From 5276882156196839454
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,a8d275f4a73fd98e
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,a8d275f4a73fd98e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-10-11 08:21:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!cmcl2!husc6!panda!genrad!decvax!decwrl!amdcad!amd!
intelca!qantel!ptsfa!nonvon!apn
From: apn@nonvon.UUCP
Newsgroups: net.analog,net.ham-radio
Subject: Re: I need an FSK decoder
Message-ID: <121@nonvon.UUCP>
Date: Sat, 11-Oct-86 11:21:23 EDT
Article-I.D.: nonvon.121
Posted: Sat Oct 11 11:21:23 1986
Date-Received: Sun, 12-Oct-86 02:09:25 EDT
References: <550@bambi.UUCP>
Distribution: net
Organization: Nonvon Systems Computer Research Group
Lines: 27
Summary: FSK, decoder, slow
Xref: mnetor net.analog:871 net.ham-radio:2361

In article <550@bambi.UUCP>, steve@bambi.UUCP (Steve Miller) writes:
> I'm looking for a device that will perform Frequency Shift Keying
> decoding, with input frequencies of 1500 Hz (mark) and 2300 Hz (space),
> at a faily rapid rate (300 baud or better). Also, I would like to
> find a device that will convert frequency to voltage, continuously,
> over the same range.
>
> I could sure use some help. Thanks, Steve Miller WA4LDA
>   ihnp4!bellcore!bambi!steve

I suggest you contact EXAR. They manufacture several IC's that are usefull building blocks in such circuits. i.e. FSK modulators, decoders, modem filters.... If you're around the 408 area code, I think their distributors are "Bell Industries" @408 734 8570. Also another company... Silicon Systems makes some parts in like this. Of course, you could always get a standard PLL and start from there. BTW, the EXAR people have several data books that have tons of MODEM and PLL circuits.

Hope this helps...

-apn

uucp: ihnp4!ptsfa!nonvon!apn

From 7137998477530448652
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a8d275f4a73fd98e
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,a8d275f4a73fd98e
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1986-10-11 20:22:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!mnetor!seismo!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.analog,net.ham-radio
Subject: Re: I need an FSK decoder
Message-ID: <1334@kitty.UUCP>
Date: Sat, 11-Oct-86 23:22:27 EDT
Article-I.D.: kitty.1334
Posted: Sat Oct 11 23:22:27 1986
Date-Received: Sun, 12-Oct-86 03:25:56 EDT
References: <550@bambi.UUCP>
Distribution: net
Organization: Recognition Research Corp., Clarence, NY
Lines: 35
Summary: Two possible techniques...
Xref: mnetor net.analog:872 net.ham-radio:2362

In article <550@bambi.UUCP>, steve@bambi.UUCP (Steve Miller) writes:
> I'm looking for a device that will perform Frequency Shift Keying
> decoding, with input frequencies of 1500 Hz (mark) and 2300 Hz (space),
> at a faily rapid rate (300 baud or better). Also, I would like to

Since those frequencies are neither Bell nor CCITT V.2X, I can't direct you to an integrated modem chip. The frequencies sound like radioteletype with an 800 Hz shift - but I don't know of any integrated FSK converter chips for that application.

So, you can take two approaches:

1. Use an phase-locked loop, either a LM565 or LM567. Check National Semiconductor Application Note AN-46 for design details and examples.

2. Use a switched-capacitor filter in a narrow bandpass configuration for each frequency, with a simple op amp AC level detector at the filter output. This is a more state-of-the-art method; while more complex in design than a PLL, these filter-based FSK detectors are far superior to a PLL. Consider the National Semiconductor MF-10 as a starting point, and get a copy of the National "Switched-Capacitor Filter Handbook" for design details.

> Also, I would like to
> find a device that will convert frequency to voltage, continuously,
> over the same range.

Consider the National Semiconductor LM2907, which is a building

block circuit providing F/V conversion for tachometer and other applications.

==> Larry Lippman @ Recognition Research Corp., Clarence, New York
==> UUCP: {allegra|decvax|rocksanne|rocksvax|watmath}!sunybcs!kitty!larry
==> VOICE: 716/688-1231   {hplabs|ihnp4|seismo|utzoo}!/
==> FAX: 716/741-9635 {G1,G2,G3}   "Have you hugged your cat today?"

From -3436007646839975225
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5363439c0c111cea,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1038e3,5363439c0c111cea,start
X-Google-Attributes: gid1038e3,public
X-Google-Thread: 11946d,5363439c0c111cea,start
X-Google-Attributes: gid11946d,public
X-Google-Thread: 134694,5363439c0c111cea,start
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1986-10-24 19:09:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!rutgers!caip!think!husc6!harvard!spdcc!k1bc!k1bc
From: k1bc@k1bc.UUCP (Bob Clements)
Newsgroups: net.ham-radio,net.dcom,net.video,misc.legal
Subject: ECPA signed into law
Message-ID: <3.UUL1.1#152@k1bc.UUCP>
Date: Fri, 24-Oct-86 22:09:03 EDT
Article-I.D.: k1bc.3.UUL1.1#152
Posted: Fri Oct 24 22:09:03 1986
Date-Received: Sat, 25-Oct-86 07:13:05 EDT
Organization: Bob Clements, K1BC
Lines: 11
Xref: watmath net.ham-radio:4887 net.dcom:2178 net.video:3534 misc.legal:108

Hr ARRL Bulletin Nr 84 From ARRL Headquarters
Newington CT October 24, 1986, Edited by K1BC
To All Radio Amateurs BT

The Electronic Communication Privacy Act of 1986, most recently known as HR 4952, was signed into law by President Reagan on October 2. It now is known as Public Law 99-508. Meanwhile, the Senate report number 541 which explains the bill is at the printer. Requests for copies may be filed through the offices of senators and representatives. Additional information will be in the January issue of QST. AR

From -4913164514231858512
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d541f18c37804e15,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 10b271,d541f18c37804e15,start
X-Google-Attributes: gid10b271,public

X-Google-ArrivalTime: 1986-10-24 19:56:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!rutgers!seismo!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.ham-radio,sci.physics
Subject: Re: X-rays
Message-ID: <1377@kitty.UUCP>
Date: Fri, 24-Oct-86 22:56:34 EDT
Article-I.D.: kitty.1377
Posted: Fri Oct 24 22:56:34 1986
Date-Received: Sat, 25-Oct-86 07:15:37 EDT
References: <1724@iuvax.UUCP>
Organization: Recognition Research Corp., Clarence, NY
Lines: 60
Xref: watmath net.ham-radio:4888 sci.physics:50
Summary: Radiation safety...

In article <1724@iuvax.UUCP>, reid@gold.bacs.indiana.edu writes:
> I bought a British-made "Betalight Torch" tritium lamp at a hamfest.
> ...
> It has a 22-mm-diameter light-emitting area. The light intensity
> is roughly equivalent to that of the lightbulb inside an elec-
> tronic wristwatch.
>
> It's a neat gadget but how dangerous is it? The low-energy (18.6
> KeV) beta particles cannot penetrate the glass tube, however,
> soft X-rays are emitted as they are absorbed. A physicist friend
> measured 40 counts per second of 12-KeV X-rays coming from the
> device, using a detector which completely enveloped it.

While I don't work with radiation measurement on a regular basis, I'll take a stab at giving you an answer.

Tritium, being a radioactive isotope of hydrogen, is a beta emitter. The inherent beta energy of tritium (0.0186 MeV, as you pointed out) is quite small. It takes at least 0.070 MeV of beta energy to penetrate the skin.

X-rays are produced by an effect called "bremsstrahlung" (don't ask; it's a German word, but that's the proper term), which occurs when a high velocity charged particle (usually electron, but also beta particle) strikes a target and is slowed down. In this case, the target is the glass tube.

Since I don't know the thickness and total surface area of the glass tube, I can't accurately calculate the activity and quantity of tritium contained therein. However, I can make a few assumptions:

1. In general, less than 1% of all beta radiation is converted to x-rays by means of bremsstrahlung. I will assume that the glass is not THAT thick so that all x-rays emitted will pass through and be measured by your physicist friend's detector.

2. I will assume the tritium source is emanating (40)(100)= 4,000 cps of beta radiation. Activity is measured in Curies (Becquerels, for you SI fans). (4,000)/(3.7*10**10)= 0.11 uCi. That ain't much. Say, even 10 times that figure (I doubt it's more than that) - or about 1.1 uCi. That still ain't

much, and is less radioactivity than the americium in a home smoke detector.

3. Assuming, worst case, that you have 1.1 uCi of tritium, and you were somehow able to ingest it all (you can't get any worse than this!), the "CRC Handbook of Radioactive Nuclides" says that you will receive a total body dose of (1.1)(0.00013)= 0.00014 rems. The NRC says that the natural background radiation dose for the U.S. is something like 0.1 rem/year. So, in comparison, your tritium lamp shouldn't pose much hazard - even if I were incorrect by two orders of magnitude!

Tritium has a half-life of about 12.6 years, and I would guess that for this lamp to be sold as "surplus", its age is probably approaching that half-life period.

I have two points of caution: (1) Just because it appears that the quantity of tritium contained in the lamp is miniscule, doesn't mean you should do something DUMB with it - like break open the tube, allow children to play with it, or keep it in your pants pocket :-); and (2) my calculations are all based upon the disintegration rate which your physicist friend claims to have measured, so if his measurement is wrong, then so are my calculations!

==> Larry Lippman @ Recognition Research Corp., Clarence, New York
==> UUCP: {allegra|decvax|rocksanne|rocksvax|watmath}!sunybcs!kitty!larry
==> VOICE: 716/688-1231   {hplabs|ihnp4|seismo|utzoo}!/
==> FAX: 716/741-9635 {G1,G2,G3}   "Have you hugged your cat today?"

From -4762398645148675951
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: fb802,4542622fd8f2420a,start
X-Google-Attributes: gidfb802,public
X-Google-Thread: 151e61,4542622fd8f2420a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-11-21 14:30:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!rutgers!sri-unix!hplabs!cae780!tektronix!uw-beaver!
fluke!ssc-vax!bcsaic!douglas
From: douglas@bcsaic.UUCP
Newsgroups: net.ham-radio,comp.sys.mac
Subject: Software for Transmitted Wire Services
Message-ID: <795@bcsaic.UUCP>
Date: Fri, 21-Nov-86 17:30:28 EST
Article-I.D.: bcsaic.795
Posted: Fri Nov 21 17:30:28 1986
Date-Received: Sun, 23-Nov-86 04:24:36 EST
Distribution: net
Organization: Boeing Computer Services AI Center, Seattle
Lines: 28
Xref: watmath net.ham-radio:5063 comp.sys.mac:169

I have a couple of questions that I'd like answered for a friend of mine who's not on the net.

1. Is there any software available for the Macintosh for decoding transmitted wire services (such as AP, Reuters)? If so, what is the name of the software and where can he get more information? Are there special hardware requirements?

2. In the absense of Mac software for decoding, does anybody know of software houses that have written non-Mac software whom he could contact about possible Mac versions?

3. Is there public domain software of this sort available for any machines?

Please send me mail as I generally don't read this newsgroup. I'll summarize if there is interest...

------------ Thanks in advance!! -----------

--

** MY VIEWS MAY NOT BE IDENTICAL TO THOSE OF THE BOEING COMPANY **

Doug Schuler (206) 865-3228
[allegra,ihnp4,decvax]uw-beaver!uw-june!bcsaic!douglas
douglas@boeing.com

From 722674771030726536
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: fb13e,4068592c4ccfe997,start
X-Google-Attributes: gidfb13e,public
X-Google-Thread: ffc99,4068592c4ccfe997,start
X-Google-Attributes: gidffc99,public
X-Google-Thread: 151e61,4068592c4ccfe997,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1695ea,4068592c4ccfe997,start
X-Google-Attributes: gid1695ea,public
From: write2me@inside.net (James)
Subject: HAM TEST PRACTICE SOFTWARE FOR ELEMENT 2 & 3A WANTED!!
Date: 1998/04/09
Message-ID: <6gjfn7$pr6$5@nnrp2.snfc21.pbi.net>#1/1
X-Deja-AN: 342546031
Content-Type: Text/Plain; charset=US-ASCII
Organization: Pacific Bell Internet Services
Mime-Version: 1.0
Newsgroups: linux.act.hams,linux.dev.hams,man.ham-radio,net.ham-radio

WANTED: HAM TEST PRACTICE SOFTWARE FOR ELEMENT 2 & 3A

I'm looking for the latest HAM test practice software for

written Element 2 and written element 3A. I have the 4.1
version but it's now outdated since 1994.

If someone could send a copy to me I would appreciate it.

My email address is:

barretta@mci2000.com

Thanks

James
barretta@mci2000.com

From -2873910001718433358
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4cb8313628dc58fb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-24 14:28:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site techsup
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!pur-ee!uiucdcs!
convex!techsup!mikey
From: mikey@techsup
Newsgroups: net.ham-radio
Subject: Re: CW/BAUDOT (RTTY)/ASCII Program for
Message-ID: <-27771440@techsup>
Date: Fri, 24-Jan-86 17:28:00 EST
Article-I.D.: techsup.-27771440
Posted: Fri Jan 24 17:28:00 1986
Date-Received: Tue, 28-Jan-86 05:51:20 EST
References: <505@hounx.UUCP>
Lines: 12
Nf-ID: #R:hounx.UUCP:505:techsup:-27771440:000:308
Nf-From: techsup!mikey   Jan 24 16:28:00 1986

> It is my understanding that commercial advertising messages should not be put
>on the ARPANET.

It's my understanding that it's in poor taste to advertise on ANY net! Is
the guy that starving that he can't afford an AD? Or maybe the product
is SO BAD.....

mikey
trsvax!techsup!bbimg!mikey

From -6783196644516322606
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d2eafc2481bf175b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-24 14:30:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site techsup
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!pur-ee!uiucdcs!
convex!techsup!mikey
From: mikey@techsup
Newsgroups: net.ham-radio
Subject: Re: Satellite Scrambling Rumor
Message-ID: <-27771439@techsup>
Date: Fri, 24-Jan-86 17:30:00 EST
Article-I.D.: techsup.-27771439
Posted: Fri Jan 24 17:30:00 1986
Date-Received: Tue, 28-Jan-86 05:51:57 EST
References: <273@drutx.UUCP>
Lines: 6
Nf-ID: #R:drutx.UUCP:273:techsup:-27771439:000:153
Nf-From: techsup!mikey   Jan 24 16:30:00 1986

  The video portion is easy to bust, the sound is the problem.
At least, that's what I've been told, I wouldn't know from personal
experience!

mikey

From -2414932089404177166
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ad8c8510e9e5c9f3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-25 21:41:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!clements@bbnccq.ARPA
From: clements@bbnccq.ARPA (Bob Clements)
Newsgroups: net.ham-radio
Subject: FCC & Automatic control (long but important)
Message-ID: <1999@brl-tgr.ARPA>
Date: Sun, 26-Jan-86 00:41:02 EST
Article-I.D.: brl-tgr.1999
Posted: Sun Jan 26 00:41:02 1986
Date-Received: Thu, 30-Jan-86 01:10:37 EST
Sender: news@brl-tgr.ARPA
Lines: 256

                Before the   PR
        Federal Communications Commission   FCC 86-18

Washington DC 20554 36413

In the Matter of)
)
Amendment of Part 97 of the) PR Docket No. 85-105
Commission's Rules to permit)
automatic control of amateur) RM-4879
radio stations.)

REPORT AND ORDER

Adopted: January 13, 1986; Released: January 16, 1986

By the Commission:

1. On April 5, 1985, the Commission adopted a Notice of Proposed Rule Making (50 F.R. 15196; April 17, 1985) to permit any amateur station to be under automatic control provided that operation was on frequencies above 29.5 MHz and that no third-party traffic was transmitted. This was an expansion of the proposal requested by The American Radio Relay League, Inc. (ARRL), who had requested automatic control only for stations transmitting digital communications while operating on frequencies above 30 MHz. Nineteen comments and one reply comment were filed in this proceeding. (1)

2. Our Notice of Proposed Rule Making in this proceeding, _supra_, particularly invited amateur radio operators experienced in automatic control to submit comments on the practicality of expanding automatic control to encompass all amateur operations, not just digital communications. Such comments were not forthcoming. Because of the lack of user support, we will adopt only the ARRL's recommendation to limit automatic control to digital communications on very high frequencies (VHF) and above. (We select 50 MHz rather than 30 MHz, as the petitioner requests, because there are no amateur frequencies between 29.7 and 50 MHz).

---

(1) Comments filed by the American Radio Relay League, Inc., (ARRL), Robert C. Clements, Jess de la Cuesta and Joseph Anthony Wolos were filed late. Consideration of the viewpoints expressed in those comments will aid in the resolution of this proceeding. Therefore, we accept them.

---

3. In the Notice, _supra_, we reminded amateur operators that the current rules require the presence of the control operator at the station control point whenever third-party traffic is being transmitted. We emphasized that the proposed amendments would still prohibit automatic control of the station when it is transmitting third-party traffic. Some commenters were confused about unsupervised third-party traffic.

For example, repeater stations are already permitted to be operated under automatic control. However, as with any amateur station, when they are transmitting third-party traffic, the control operator must be present at the control point monitoring and supervising the transmissions.

4. Many of the commenters request that high-speed digital operating modes, such as packet-switching, bulletin boards, computer based message systems and electronic mailboxes be exempt from the requirement that the control operator supervise third-party traffic. They believe that the third-party rules as applied to such high-speed digital communications are impracticable and would, in effect, nullify the advantages of automatic control. To acquiesce in that request would be inconsistent with other types of amateur operation. Third-party traffic is radio communications on behalf of anyone other than the control operator.(2) Neither the speed at which the message is transmitted nor the emission mode (voice, telegraphy, digital etc.) changes its character. This was pointed out in our letter of October 19, 1978, to Richard L. Baldwin, then General Manager of the ARRL.(3) In that letter, we reiterated that unsupervised third-party traffic by amateur stations is not permitted.

5. Some comments suggest that the third-party traffic rules be amended so that they would be applicable only at the time the third-party traffic is first introduced into the amateur communications system. However, screening the message content at its introduction does not change the character of the traffic. It is still third-party traffic which must be closely regulated in the non-common carrier Amateur service. Otherwise, amateur facilities and frequencies would be open to non-amateurs and could eclipse other amateur uses. Moreover, we are also concerned about the final destination of the message. We do not want to give our approbation to a mechanism which could be used to circumvent the international Radio Regulations which forbid exchange of amateur third-party traffic between countries who are not parties to agreements permitting such traffic.

---

(2) Section 97.3(v).
(3) FCC 78-742; 70 F.C.C. 2d 1303. See also News Release No. 2028, October 25, 1978.

International third-party radio communications are prohibited by Section 97.114 of the amateur rules and Article 32, number 2733 of the International Radio Regulations (Geneva, 1979), except where arrangements have been made between the two countries involved, Article 32, number 2734.

6. Some commenters suggest that MF and HF frequencies between 1.8 and 29.5 MHz be added to the frequencies available for automatic control or that automatic control be extended at least to all digital communications below 29.5 MHz on a regular basis or by temporary special authority (STA). They state that coast-to-coast coverage for

point-to-point message handling would be accommodated by including MF and HF frequencies. Because of the possibility of congestion on the MF and HF frequencies, we do not believe that it would be advisable to permit automatic control on those frequencies.

7. Robert C. Clements is under the impression that we inserted a clarification into the proposed Section 97.79 (b) that the station licensee is presumed to be the control operator of the station, unless there is documentation to the contrary. However, this is essentially the same as the present wording of Section 97.79(b). The words "at all times" will be deleted from this rule in order to be consistent with the revised wording of Section 97.3(m)(3).

8. For the reasons given herein, we amend our rules to permit automatic control only for digital communications on amateur frequencies 50 MHz and above. Further, we affirm our present rule that requires the control operator to be present at the control point whenever the station is engaging in third-party traffic.

9. IT IS ORDERED, That Part 97 is amended as set forth in the Appendix hereto. This action is taken pursuant to the authority contained in Sections 4 (i) and 303 (r) of the Communications Act of 1934, as amended.

10. IT IS FURTHER ORDERED, That these rule amendments shall become effective, March 14, 1986.

11. IT IS FURTHER ORDERED, That the Secretary shall cause a copy of this Report and Order to be published in the Federal Register.

12. IT IS FURTHER ORDERED, That this proceeding is terminated.

---

13. Information in this matter may be obtained by contacting Maurice J. DePont, (202) 632-4964. Private Radio Bureau, Federal Communications Commission, Washington, D.C. 20554.

FEDERAL COMMUNICATIONS COMMISSION

William J. Tricarico
Secretary

Attachment: Appendix

APPENDIX

Part 97 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended, as follows:

1. The authority citation for Part 97 continues to read as follows:

Authority citation: 48 Stat. 1066, 1082, as amended;
47 U.S.C. 154, 303.

2. Section 97.3 (m) (3) is amended to read:

Sec 97.3 Definitions.

* * * *

(m) * * *

(1) * * *

(2) * * *

(3) _Automatic control_ means the use of devices and procedures for control without the control operator being present at the control point when the station is transmitting.

3. Section 97.79 (b) is amended to read:

Sec 97.79 Control operator requirements.

* * * *

(b) Every amateur radio station, when transmitting, must have a control operator. The control operator must be present at the control point of the station, except when the station is transmitting under automatic control. The control operator must be a licensed amateur radio operator or permittee designated by the station licensee. The control operator and the station licensee are both responsible for the proper operation of the station. For purposes of enforcement of the rules of this part, the FCC will presume that the station licensee is the control operator of the station, unless documentation to the contrary exists.

---

4. Section 97.69 is amended by adding a new paragraph (d), as follows:

Sec. 97.69 Digital communications.

* * * *

(d) An amateur station may be under automatic control when transmitting digital communications on frequencies 50 MHz and above.

5. A new section 97.80 is added, as follows:

Sec. 97.80 Operation under automatic control.

(a) When under automatic control, devices must be installed and procedures must be implemented which will ensure compliance with the rules when the control operator is not present at the control point of the amateur station.

(b) No amateur station may be operated under automatic control while transmitting third-party traffic.

(c) Automatic control of an amateur station must cease upon notification by the Engineer-in-Charge of a Commission field office that the station is transmitting improperly or causing harmful interference to other stations. Automatic operation must not be resumed without prior approval of the Engineer-in-Charge.

6. Section 97.114 is amended by adding a new subparagraph (4) to paragraph (b) as follows:

Sec. 97.114 Third-party traffic.

* * * *

(b) * * *

(4) Third-party traffic from an amateur station under automatic control.

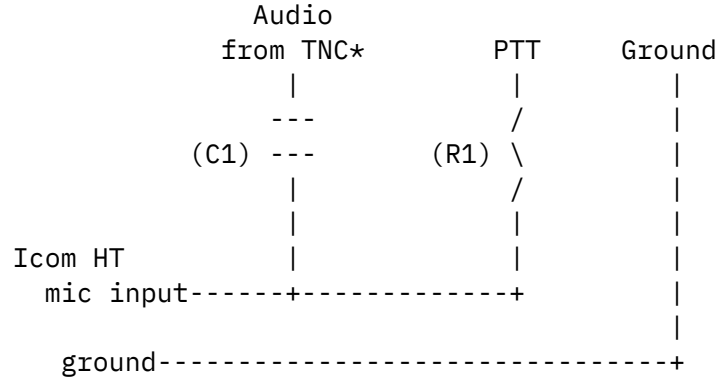
* * * *

[The above copy retyped for distribution by Bob Clements, K1BC, from the FCC text as obtained from ARRL. 25 January 1986.]

From 246916693130296345
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,5d8c0daea2d4c883,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,5d8c0daea2d4c883,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-26 11:08:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!akguc!

mtunh!ky2d-2!ka2ugq
From: ka2ugq@ky2d-2.UUCP (Tom)
Newsgroups: net.ham-radio,net.ham-radio.packet
Subject: Correction to Icom HT to TNC schematic
Message-ID: <118@ky2d-2.UUCP>
Date: Sun, 26-Jan-86 14:08:20 EST
Article-I.D.: ky2d-2.118
Posted: Sun Jan 26 14:08:20 1986
Date-Received: Tue, 28-Jan-86 06:29:55 EST
Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 31
Xref: watmath net.ham-radio:3790 net.ham-radio.packet:215

I made a big mistake in the previously-posted schematic of
the connection between an Icom IC-2A, 2AT, or 02AT and a
packet radio TNC, RTTY afsk unit, or another microphone.
The resistor and capacitor were backwards. The correct
schematic follows:



C1 - 0.47 uf capacitor
R1 - 25K resistor

* TNC or RTTY afsk or another microphone or whatever you are
  interfacing to your Icom HT.

-Tom KA2UGQ

  uucp: ..!ihnp4!bellcore!mtunh!ky2d-2!ka2ugq
    or: ..!ihnp4!bellcore!ka9q!tom
packet: KA2UGQ @ WA2SNA-1
  bomb: 40 41 N, 74 25 W
 2m FM: 145.750 MHz (local simplex)

From 930040191083338423
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a09261b090101c9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-27 12:18:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84; site mb2c.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!mb2c!gbr
From: gbr@mb2c.UUCP (Jerry Ruhno)
Newsgroups: net.ham-radio
Subject: Radio Earth
Message-ID: <450@mb2c.UUCP>
Date: Mon, 27-Jan-86 15:18:05 EST
Article-I.D.: mb2c.450
Posted: Mon Jan 27 15:18:05 1986
Date-Received: Tue, 28-Jan-86 05:54:22 EST
Distribution: net
Organization: Michigan Bell, Southfield, MI
Lines: 7

What has happened to Radio Earth on KCBI. I haven't been listening to
shortwave for a while so it was just recently that I noticed the program
was missing. Anybody have information on it?

Jerry Ruhno
epsilon!mb2c!gbr

From -8405354450764585054
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c2b5d794c424129,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-27 14:18:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!cbosgd!gatech!ut-sally!seismo!mo
From: mo@seismo.CSS.GOV (Mike O'Dell)
Newsgroups: net.ham-radio
Subject: 2m Base Antennas
Message-ID: <1249@seismo.CSS.GOV>
Date: Mon, 27-Jan-86 17:18:22 EST
Article-I.D.: seismo.1249
Posted: Mon Jan 27 17:18:22 1986
Date-Received: Wed, 29-Jan-86 04:29:34 EST
Organization: Center for Seismic Studies, Arlington, VA
Lines: 8

Ok folks, time for another great survey. I am interested in comments
and recommendations for 2 meter base antennas, both omni-verticals
and beams, but my real interest is the verticals. Which one do you
use, how does it get out, which ones have you used and hated??

Here is your big chance to help someone buy the "right" antenna.

-Mike O'Dell

From 4763651448781882403
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,d9cbf4f9e871d535,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-29 05:50:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!houxl!jim
From: jim@houxl.UUCP (J.HAWKINS)
Newsgroups: net.ham-radio
Subject: For Sale
Message-ID: <899@houxl.UUCP>
Date: Wed, 29-Jan-86 08:50:23 EST
Article-I.D.: houxl.899
Posted: Wed Jan 29 08:50:23 1986
Date-Received: Thu, 30-Jan-86 06:28:42 EST
Organization: AT&T Information Systems, Holmdel NJ
Lines: 10

Ten-Tec OMNI-D Tranceiver (Digital)
160-10 meters
SSB DSB CW 200 WATTS

Asking $500.00 Negotiable
PERFECT condition, in original cartons,
All manuals included

     Jim Hawkins (WA2WHV)
     (609) 890-6645

From -5249062345687098316
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c2b5d794c424129
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-29 06:48:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: 2m Base Antennas (Hustler G6-144, Ringo AR-2)
Message-ID: <749@ihu1h.UUCP>
Date: Wed, 29-Jan-86 09:48:58 EST
Article-I.D.: ihu1h.749
Posted: Wed Jan 29 09:48:58 1986
Date-Received: Thu, 30-Jan-86 06:40:01 EST
References: <1249@seismo.CSS.GOV>
Organization: AT&T Bell Laboratories
Lines: 31

> ... 2 meter base antennas .... Which one do you
> use, how does it get out, which ones have you used and hated??

I have two types of 2 meter vertically polarized, omni-directional antennas:

1. Cushcraft AR-2: the original Ringo (not the Ranger). This antenna works better than a 1/4 wave ground plane, but not by much. The real advantage is its small size and its transportability. I've used Ringos on towers, on porches, in attics, and in dorm rooms. If I recall correctly, the coax connector needs a healthy amount of weatherproofing, as its center pin is exposed.

2. Hustler G6-144: originally advertised by Newtronics as the "Master Gainer", and discounted to $69. Built very, very well - more like a commercial grade antenna. Spray it with Krylon (tm), and this antenna outlast its owner. Stainless steel hardware. I don't remember any self-tapping sheet metal screws (ala Cushcraft), rather high quality hose clamps. Thick, solid radials and machined aluminum base. Performance much better than the Ringo, but 10' tall.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 4640259027317548529
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7157a2513615c40,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-29 11:15:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: SWL loggings (Shuttle wreckage sightings, AWACS)
Message-ID: <750@ihu1h.UUCP>
Date: Wed, 29-Jan-86 14:15:18 EST
Article-I.D.: ihu1h.750
Posted: Wed Jan 29 14:15:18 1986
Date-Received: Fri, 31-Jan-86 23:46:44 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 15

5.6800 call?_____US: Coast Guard, Search and Rescue freq, USCG Cutters Dallas and Dauntless wkg CG aircraft. Several reported sightings of Space Shuttle wreckage off Florida coast, usb,

01/29/86 @1730Z-1845Z
[Atlantic Ocean] (B. Parnass)

11.2140 call?_____US: Air Force, AWACS aircraft 'Sentry 51' calling 'Raymond 24', the net control station at 552nd AWACS Tinker AFB Okla, freq='Charlie 4', usb, 01/02/86 @1809Z
[location?] (B. Parnass)

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -6237736419626083447
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ad8c8510e9e5c9f3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-29 18:09:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 Unisoft-Cosmos; site kepler.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!decwrl!amdcad!lll-crg!well!micropro!kepler!mojo
From: mojo@kepler.UUCP (Morris Jones)
Newsgroups: net.ham-radio
Subject: Re: FCC & Automatic control (long but important)
Message-ID: <471@kepler.UUCP>
Date: Wed, 29-Jan-86 21:09:26 EST
Article-I.D.: kepler.471
Posted: Wed Jan 29 21:09:26 1986
Date-Received: Sat, 1-Feb-86 03:36:11 EST
References: <1999@brl-tgr.ARPA>
Reply-To: mojo@kepler.UUCP (Morris Jones)
Organization: MicroPro Int'l Corp., San Rafael, CA
Lines: 19
Summary: This is important!

This Report and Order states in no uncertain terms that third-party
traffic may not be handled without a control operator present. But
what really struck home was the iteration of Part 97, "third party
traffic is traffic on behalf of anyone but the control operator."

That DOES NOT make an exception for traffic that originates from another
amateur radio operator.

That means no mailboxes, no RBBS, no network news reading without a
system control operator monitoring.

It's getting harder and harder to play by the rules.

Mojo, AA4KB

--
Mojo

... Morris Jones, MicroPro Product Development
{lll-crg,ptsfa,dual,well,pyramid}!micropro!kepler!mojo

From 5893507419718767216
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e7cf59054bb62fd6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-30 09:27:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles - hp 1.2 08/01/83; site hp-pcd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!pyramid!hplabs!hp-pcd!dirk
From: dirk@hp-pcd.UUCP (dirk)
Newsgroups: net.ham-radio
Subject: SSTV help needed
Message-ID: <5200006@hpcvmb.UUCP>
Date: Thu, 30-Jan-86 12:27:00 EST
Article-I.D.: hpcvmb.5200006
Posted: Thu Jan 30 12:27:00 1986
Date-Received: Mon, 3-Feb-86 04:40:46 EST
Organization: Hewlett-Packard - Corvallis, OR
Lines: 10
Nf-ID: #N:hpcvmb:5200006:000:317
Nf-From: hpcvmb!dirk   Jan 30 09:27:00 1986

Hello Hams:

  I am interested in any pointers or information you may have on
  SSTV color decoding. I thought that the color was sent in three
  different frames, but it appears that the color information is
  in the same frame. Thanks in advance for any help.

      Dirk Bodily
        KD7UB   hplabs!hp-pcd!dirk

From 2944781920665820727
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3020606011a6a9b7,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,3020606011a6a9b7,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1986-01-30 11:39:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.columbia
Subject: Search for shuttle continues
Message-ID: <752@ihu1h.UUCP>
Date: Thu, 30-Jan-86 14:39:31 EST

Article-I.D.: ihu1h.752
Posted: Thu Jan 30 14:39:31 1986
Date-Received: Sat, 1-Feb-86 04:04:17 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 34
Xref: watmath net.ham-radio:3799 net.columbia:1833

x

SHUTTLE SEARCH CONTINUES

Bob Parnass

Combined units of the US Navy, Coast Guard, and NASA are continuing their operations today off the Florida coast for debris from the Space Shuttle. Several units were monitored in the operation, including:

- USCG Cutters Point Roberts, Dauntless, and Dallas

- USS Samson

- Navy Patrol Boat 778

- USCG Search and Rescue Aircraft 1710

- USCG Search and Rescue Helicopter 1430

- Navy Rescue Aircraft 322

Primary frequencies involved appear to be 5.680 MHz (usb) and 282.8 MHz.

Data Marking Buoys(DMBs), which transmit signals on UHF, are being dropped by aircraft where wreckage is spotted. Try listening for a buoy on 240.6 MHz if you live near the affected area.

--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -1718038265598607721
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5718e731fe17288c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-31 07:57:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site tekigm.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!tektronix!tekig5!tekigm!

alanr
From: alanr@tekigm.UUCP (Alan Rovner)
Newsgroups: net.ham-radio
Subject: 2m Base Antennas - Response to Mike O'Dell
Message-ID: <659@tekigm.UUCP>
Date: Fri, 31-Jan-86 10:57:02 EST
Article-I.D.: tekigm.659
Posted: Fri Jan 31 10:57:02 1986
Date-Received: Sun, 2-Feb-86 01:19:57 EST
Distribution: net
Organization: Tektronix, Beaverton OR
Lines: 15

Mike, I use a Hy Gain V2S 2m omni antenna and am very pleased with it.
It is the same design as the Ringo Ranger II and isopole, ie, 2 stacked
5/8 elements with decoupling sections. The Isopole uses those stupid
looking cones to do the decoupling while the Ringo and V2S use short
element sections. The thing has been outdoors for 4-5 years and shows
absolutely no signs of wear. All the hardware is still shiny clean.
Another good thing about the V2S is its swr. It's basically flat across
the entire 4 MHz band. It is about 7-8' tall and weighs just a few pounds.
I didn't mean this to sound like a commercial, but I really am pleased
with it's performance.

73,
Al Rovner, WA2TMP
Tektronix, Inc.
Vancouver, WA

From -8034221823963456 46
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fd86557da63fba5f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-31 07:57:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!linus!decvax!bellcore!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN number 6 (pr docket 85-23)
Message-ID: <279@inuxi.UUCP>
Date: Fri, 31-Jan-86 10:57:49 EST
Article-I.D.: inuxi.279
Posted: Fri Jan 31 10:57:49 1986
Date-Received: Thu, 13-Feb-86 07:28:17 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 23

qst de k9eui
hr arrl bulletin nr 6 from arrl headquarters
newington ct january 23, 1986

to all radio amateurs bt

fcc has issued a report and order in pr docket 85 23, adding and deleting amateur bands at ghz frequencies and editing part 97. these changes are effective 0001 utc march 1, 1986. fcc has added bands at 47.0 to 47.2 ghz, 76 to 81 ghz, 119.98 to 120.02 ghz and 142 to 149 ghz. removed from the amateur service are the bands at 1215 to 1240 mhz, 48 to 50 ghz, 165 to 170 ghz and 240 to 241 ghz. the amateur satellite service receives new bands at 1260 to 1270 mhz, 2400 to 2450 mhz, 3.40 to 3.41 ghz, 5.65 to 5.67 ghz, 5.83 to 5.85 ghz, 10.45 to 10.50 ghz, 47.0 to 47.2 ghz, 75.5 to 81.0 ghz, 142 to 149 ghz and 241 to 250 ghz.

160 meter privileges at 1810 to 1850 khz have been added in itu region 1.

these changes have been made to complete implementation of the final acts of the 1979 world administrative radio conference. qst will carry further details ar

From 8932979268549021164
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ccb00e4dd5c867e4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-31 08:00:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!linus!decvax!bellcore!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN number 7 (FCC DOCKET...TElephony on 7075-7100 khz)
Message-ID: <280@inuxi.UUCP>
Date: Fri, 31-Jan-86 11:00:38 EST
Article-I.D.: inuxi.280
Posted: Fri Jan 31 11:00:38 1986
Date-Received: Thu, 13-Feb-86 07:28:32 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 14

qst de k9eui
hr arrl bulletin nr 7 from arrl headquarters
newington ct january 23, 1986
to all radio amateurs bt

fcc has adopted a report and order in pr docket 85 104, allowing telephony operation at 7075 to 7100 khz by general, advanced and amateur extra licensees south of 20 degrees north latitude. the new privileges are expected to have minimal impact on non voice operation in this segment by stations on the u.s. mainland, while granting relief from foreign

broadcasting to telephony operation in caribbean insular areas.
this amendment to part 97 is effective 0001 utc february 27,
1986 ar

From 251452840589434713
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,70fa1c625a8f699b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-31 08:02:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!linus!decvax!bellcore!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN 8 (automatic control of digital operation above 50 mhz)
Message-ID: <281@inuxi.UUCP>
Date: Fri, 31-Jan-86 11:02:08 EST
Article-I.D.: inuxi.281
Posted: Fri Jan 31 11:02:08 1986
Date-Received: Thu, 13-Feb-86 07:28:47 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 29

qst de k9eui
hr arrl bulletin nr 8 from arrl headquarters
newington ct january 23, 1986
to all radio amateurs bt

fcc has released a report and order in pr docket 85 105
allowing automatic control for digital operation on frequencies
50 mhz and above. automatic control privileges continue for
repeater, auxiliary and beacon operation. the new privileges
are effective march 1986.

there is a dark lining in this silver cloud. a major goal in
the securing of automatic control privileges for digital
operation at 50 mhz and above had been the facilitation of
packet radio data transfer, computer to computer communication
and packet switching systems. such operation has continued to
be hampered by the requirement that a control operator be
present when third party traffic is handled. fcc has provided
no relief in this quarter in its report and order in pr docket
85 105. fcc found that neither the speed with which a message
is transmitted, nor the operating mode, justified any deviation
from the rule requiring that the control operator of an amateur
station be present at the control point whenever a station
engages in third party traffic. under these circumstances, the
expanded automatic control privileges gained through 85 105 may
be a hollow victory. arrl response to this apparent setback
for packet radio is scheduled for discussion at the january
arrl board meeting, in progress at this writing. watch w1aw

and qst for further details ar

From -1266958860883142470
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d0ce91d83caa4c8d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-31 08:02:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!linus!decvax!bellcore!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL PROPOGATION FORECAST
Message-ID: <282@inuxi.UUCP>
Date: Fri, 31-Jan-86 11:02:58 EST
Article-I.D.: inuxi.282
Posted: Fri Jan 31 11:02:58 1986
Date-Received: Thu, 13-Feb-86 07:29:02 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 49

qst de k9eui
hr propagation forecast bulletin nr 4 from arrl headquarters
newington ct january 27, 1986
to all radio amateurs bt

through the 26th, solar flux numbers for january are lower than those for the same days in the previous solar rotation on all but 6 days. on 3 of these 6, the figures were the same as the last time around. unless something unexpected happens this week, january will be about 1 unit per day lower than december. this is not unexpected, in what could be the last full year of this solar cycle, but it does not necessarily follow that the rest of this cycle will show a steady decline. the final months of the 3 other cycles for which accurate flux readings are available do not show a consistent daily dropping off, except on a long term, smoothed basis. from the middle of august to the middle of october 1985, the flux was never above 73, and much of the time is was in the high 60s. september averaged only 69.5. but since the middle of october we have had 4 days in the 90s, and 54 days of 75 or higher.

the importance of these statistics is that for the fall and early winter dx season in the northern hemisphere, the sun was active enough for fairly good coverage on all bands except 28 mhz for nearly half of the days. on at least one third of the days we could have done fairly well, even on 28 mhz. solar activity does not rise and fall in smooth or symmetrical curves. it is likely that, except in the few weeks when we move from cycle 21 into cycle 22, we will not see dx conditions generally very different from those we have lived with over the

past year or so.

for the forecast week, we will be operating with the solar flux and sunspot numbers very close to the minimum quiet sun levels. this means that our nightime dx work will be done mostly on 10 mhz and lower frequencies. the 14 mhz band, always crowded, will tend to be even more jammed in daytime hours. how early it opens, and how late it stays open, will depend upon the solar flux numbers, and they will never be much worse than during this week.

we are in a geomagnetically disturbed period as this bulletin is being prepared. this should be over about january 29. the solar flux will be rising by the end of this week. the next major geomagnetic disturbance is expected about february 3 to 4.

there were no visible sunspots for the week january 16 to 22
ar

From 5724096633539547795
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9da6fa3ba3f3843b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-31 09:39:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!dec-rhea!dec-mred!soomre
From: soomre@mred.DEC
Newsgroups: net.ham-radio
Subject: Radio Earth
Message-ID: <844@decwrl.DEC.COM>
Date: Fri, 31-Jan-86 12:39:09 EST
Article-I.D.: decwrl.844
Posted: Fri Jan 31 12:39:09 1986
Date-Received: Sat, 1-Feb-86 20:36:08 EST
Sender: daemon@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 28

Radio Earth is no longer on KCBI Dallas, Texas. It is now broadcast over World Harvest Radio International (WHRI) at 0300 UTC (10 PM EST) on 7400 khz.

I read an article in the International SW Guide about this and the reason for the change was that only about 25% of the usual listeners were tuned to the broadcast over KCBI at 1900-2000 UTC.

Radio Earth plans to broadcast from their own 50kw station in the future from Curacao.

....
Some traffic from the space shuttle recovery crews has also been
noted on 5320 khz.

....
I am looking for World Radio TV Handbooks to add to my collection.
The following years are needed:

1946-1956 1958 1960 1961 1963 1967-1969 1975

.....
Ed Soomre N1BFF

From -8490251930621739979
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 142096,9ba0d3dc3d79268,start
X-Google-Attributes: gid142096,public
X-Google-Thread: 151e61,9ba0d3dc3d79268,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-01 09:55:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site sask.UUCP
Path: utzoo!utcsri!ubc-vision!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio,net.micro.amiga
Subject: Any hams out there got the amiga?
Message-ID: <325@sask.UUCP>
Date: Sat, 1-Feb-86 12:55:51 EST
Article-I.D.: sask.325
Posted: Sat Feb 1 12:55:51 1986
Date-Received: Sat, 1-Feb-86 14:25:28 EST
Distribution: net
Organization: University of Saskatchewan, CANADA
Lines: 13

If any hams out there have an amiga I'd be interested in sharing
any software or ideas on how to use the beast in a ham station.
I've written a program that 'reads and writes' morse code. The output
is just a tone in the left channel. Morse code input is via the fire
button on Joystick 2 (with my keyer wired between pins 6 and 8).
The program doesn't track the code speed yet but I'm working on that (slowly).
(This program is actually a port of one I wrote for the mac a long time ago).
I'd really like to share ideas on how to read/write SSTV RTTY etc.

Please MAIL to ihnp4!sask!hardie

73
Pete Hardie VE5VA (ex ve5bel)

From 5077676327100372010
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6491ebf3e1ae119d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-02 07:07:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site techsup
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!convex!techsup!mikey
From: mikey@techsup
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <-27771438@techsup>
Date: Sun, 2-Feb-86 10:07:00 EST
Article-I.D.: techsup.-27771438
Posted: Sun Feb 2 10:07:00 1986
Date-Received: Thu, 6-Feb-86 21:32:18 EST
References: <273@drutx.UUCP>
Lines: 12
Nf-ID: #R:drutx.UUCP:273:techsup:-27771438:37777777600:385
Nf-From: techsup!mikey   Feb 2 09:07:00 1986

I read on a BBS (un-named) that there was a group up in Oregon that
was busting the HBO stuff durring their test runs in under 30 hours.
The stuff I read went on to say that what made it easy was that they
would just go get a copy of the movie being shown and once that
they know the 'answer in the back of the book' finding the question
was easy.

mikey
trsvax!techsup!bbimg!mikey

From 1079526423099523435
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,35d833644bfe4ca0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-04 06:27:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN 10 (NEW RS SATELLITE???)
Message-ID: <283@inuxi.UUCP>
Date: Tue, 4-Feb-86 09:27:10 EST
Article-I.D.: inuxi.283
Posted: Tue Feb 4 09:27:10 1986
Date-Received: Wed, 5-Feb-86 07:05:12 EST

Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 11

qst de k9eui
hr arrl bulletin nr 10 from arrl headquarters
newington ct february 3, 1986
to all radio amateurs bt

unusual telemetry suggestive of a new rs satellite has been heard at widely separated points on 29.400 mhz, plus or minus doppler shift, beginning february 2. amsat is attempting to determine orbital characteristics and would appreciate receiving reception reports, either at amsat hq or on one of the regularly scheduled amsat nets ar

From 837801970337677493
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,422091c1f0cdadc8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-04 06:28:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL PROPAGATION FORECAST BULLETIN NR 5
Message-ID: <284@inuxi.UUCP>
Date: Tue, 4-Feb-86 09:28:14 EST
Article-I.D.: inuxi.284
Posted: Tue Feb 4 09:28:14 1986
Date-Received: Wed, 5-Feb-86 07:05:27 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 38

qst de k9eui
hr propagation forecast bulletin nr 5 from arrl headquarters
newington ct february 3, 1986
to all radio amateurs bt

last weeks bulletin ended with a prediction of a solar flux rise, but what actually happened surpassed all expectations. a sizable new sunspot group came around the east limb january 30, but its effects had already been seen in a 7 point rise in the solar flux, beginning on the 28th. the number and size of the spots increased, and on february 2 another spot appeared, this time in the western half of the disc. the flux reached 90, its highest since last october. signals were heard on 21 mhz from africa to southern europe with w6 and w7 stations all in together. on 24 and 28 mhz the west coast call areas were also in well, working w1 and w2 land not audible in florida.

the new lease on life for 10, 12 and 15 meters could last through much of the forecast week. it may be washed out by a recurrence of the disturbance of january 7, expected about february 4 or 5.

it will be of interest to see if the lower solar flux peaks of november 15, december 16 and january 16, all apparently from one area of the sun, return in february. their effects would be maximum between about february 11 and 14. there have been no double peak months since last july, an exceptionally active month for so late in the solar cycle. vagaries in radio propagation, while frustrating at times, are all part of our great game. they may be more readily apparent in the low sunspot years, when activity on normally busy bands falls off. the author of these bulletins welcomes reports of propagation events that do not seem to fit normal patterns. send them to ed tilton, w1hdq, po box 5529, spring hill, fl 33526. please enclose an sase if a reply is wanted.

there were no visible sunspots for the week january 23 to 29. ar

From -7853156111799500071
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,574e7e22f66acca4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-04 07:13:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 9 (ARRL ANNUAL MEETING REPORT)
Message-ID: <285@inuxi.UUCP>
Date: Tue, 4-Feb-86 10:13:28 EST
Article-I.D.: inuxi.285
Posted: Tue Feb 4 10:13:28 1986
Date-Received: Fri, 7-Feb-86 21:11:54 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 108

qst de k9eui
hr bulletin nr 9 from arrl headquarters newington ct
january 26 1986 to all radio amateurs bt

the arrl board of directors held its annual meeting in hartford ct on january 23 and 24 1986. president larry e. prince, w4ra was reelected to serve until the 1988 annual meeting. also reelected were executive vice president david sumner, k1zz, secretary perry williams, w1ued and treasurer james e. mc cobb

jr, k1llu. newly elected as first vice president was jay a. holladay, w6ejj. leonard m. nathanson, w8rc and william j. stevens, w6zm were elected as vice presidents. tod olson, k0to, is the new international affairs vice president. replacing olson as dakota division director is the present vice director howard mark, w0ozc. serving on the executive committee, in addition to messrs price, holladay and sumner, will be directors paul grauer, w0fir, george s. wilson, w4oyi, frank m. butler jr, w4rh and hugh a. turnbull, w3abc until the 1987 annual meeting.

the board asked the president to take actions to correct the restrictive and crippling effects of fcc docket 85-105 on the development of packet radio and packet radio emergency (traffic) the order in the docket requires a control operator on duty at a digipeater when third party traffic is to be handled. the president was also asked to (garbled) equally to perform administrateve and clerical tasks which are required of any vec. a petition will be filed with the fcc requiring the labeling of home electronic equipment with regard to its susceptibility to rf energy.

the league will seek memoranda of understanding with the national weather service and with the civil air patrol concerning the service of amateurs to these agencies in emergencies. moreover, the executive vice president will promote local memoranda of understanding between amateur radio emergency service untis and the cities, towns, states and service groups they can serve. a brochure explaining amateur radio disaster capabilities, suggested by the emergency communications advisory committee was ordered to be produced and distributed to the media and served agencies. plans to continue discussing the possibility of league involvement in call sign issuance with the fcc were left in place, despite some expressed misgivings.

the board adopted a modified band plan for the 160 meter band. cw, rtty and other narrow band modes will be urged to use 1800 to 1840 khz while cw, ssb, sstv and other wideband modes can use 1840 to 2000 khz. because the segment from 1830 to 1850 is the most common international allocation in the band, amateurs are encouraged to use it only for intercontinental qsos. the board did not agree to a proposal that these subbands should be incorporated in the fcc rules at this point. the board agreed that field day activities and communications seeking award credit may be carried on in all amateur bands except 10.1 to 10.15 mhz where u.s. amateurs are required to protect non amateur services of other countries from interference. no change was made in rules for the five band awards however. in recogintion of dxcc being fifty years old in 1987, plans for a golden jubilee dxcc award will be developed for board consideration at the july meeting.

the board approved implementation of a national repeater data base at arrl headquarters, available by phone to repeater coordinators. it also decided that the repeater coordinators newsletter should be offered by subscription to the general membership, while continuing its free distribution to repeater coordinators. however, a separate action reiterates that the league is not a national coordinator and does not choose, endorse or certify coordinators. its role is to offer support services to coordinators chosen by served groups in the various parts of the country. the repeater directory indications that certain repeaters are coordinated is determined by these corrdinators and not arrl.

in other areas of interest, the board recognized with thanks the work of the federal preemption task force as having been virtually complete in the adoption by the fcc of prb1, and it was discharged. a new legal strategy committee will be appointed by the president to provide assistance to volunteer counsels in relation to antenna ordinances zoning restrictions as they relate to amateur radio and deed restriction problems. the headquarters staff was asked to prepare in consultation with experienced members in the field a guidebook for conventions and hamfests. special encouragement and support will be provided to amateur radio clubs at u.s. military institutions, particularly those at which communications and electronics training is performed. the board took two actions looking forward to the arrl 75th anniversary in 1989. the arrl will offer to host the 1989 triennial meeting of iaru. criteria for selecting the 1989 arrl national convention site were also adopted. these criteria will be published in the march and april issues of qst and selections made at the july 24 meeting from among applications received from interested groups by july 1 1986.

matters being studied by board committees include a study of message traffic overloads during disasters. a special blue ribbon committee will be appointed by the president for this purpose. another special committee will take a close look at all the advisory committees, including thier size, selection of members, tenure and financing. also to be studied is the possibility of arrl providing a tape recorded news and information service to be accessed by telephone. the feasibility of combining several arrl newsletters into one readily and inexpensively available to members will be explored by the publications committee. full details of other studies will be in the march issue of qst. ar

From -1222093015604060944
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,25c780e146560668,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-04 12:07:50 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!dec-rhea!dec-vmsint!
los
From: los@vmsint.DEC (Edward J. Los)
Newsgroups: net.ham-radio
Subject: HPS streetlights can cause RFI
Message-ID: <908@decwrl.DEC.COM>
Date: Tue, 4-Feb-86 15:07:50 EST
Article-I.D.: decwrl.908
Posted: Tue Feb 4 15:07:50 1986
Date-Received: Fri, 7-Feb-86 08:39:14 EST
Sender: daemon@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 8

I found that high pressure sodium streetlights have a failure mode in which they periodically extinguish and reignite. Just before reignition, they cause severe RFI on 80m. If you are having troubles with periodic QRN on 80m, you may want to check the streetlights in your neighborhood. In my case, one lamp was cycling every 60 seconds before I had the utility replace it.

Ed, KB1JG

From 8391176334796300232
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bdc6573b00b4bbb2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-05 19:58:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: SWL log (more Shuttle search, USAF, CAP, NOAA, etc.)
Message-ID: <757@ihu1h.UUCP>
Date: Wed, 5-Feb-86 22:58:17 EST
Article-I.D.: ihu1h.757
Posted: Wed Feb 5 22:58:17 1986
Date-Received: Fri, 7-Feb-86 21:12:21 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 87

x

The shortwave stations in the following list were monitored recently. ICOM R71A, Drake R7 (Gilfer version), and Kenwood TS930S receivers were used, connected to random length wire antennas.

2.5333 call?_____unidentified: time-varying speech inversion scramblers u
sing preambles. sounds like the USAF TAC signals heard o
n 11.214 MHz, usb, 02/04/86 @0241Z
[location?] (B. Parnass)

2.6968 GLD3______Land's End Radio, cw, 02/04/86 @0244Z
[England] (B. Parnass)

2.7000 5BA_______Cyprus Radio, Radiotelephone Maritime Service, female vo
ice id loop, usb, 02/04/86 @0246Z
[Nicosia, Cyprus] (B. Parnass)

4.0788 WJG_______WJG Telephone Company, marine/coastal, usb, 02/03/86 @12
42Z
[location?] (B. Parnass)

4.3535 GKP2______Portishead Radio, cw, 02/04/86 @0230Z
[Portishead, England] (B. Parnass)

4.3730 call?_____US: Navy, "Giant Killer" wkg L4I, usb, 02/04/86 @1738Z
[Oceana NAS, VA] (B. Parnass)

4.3760 call?_____US: Coast Guard, USCG Helicopter 1710 wkg USCG Cutter Da
llas during search for Space Shuttle wreckage off Florid
a coast, usb, 02/03/86 @1326Z
[Atlantic Ocean] (B. Parnass)

call?_____US: Coast Guard, USCG search for Space Shuttle wreckage
off Florida coast, usb, 02/01/86 - 02/02/86
[Atlantic Ocean] (others)

4.4287 NMN_______US: Coast Guard, wkg USCG Cutter Dallas during search fo
r Space Shuttle wreckage off Florida coast, usb, 02/04/8
6 @0235Z
[Portsmouth, VA] (B. Parnass)

4.4645 call?_____US: Civil Air Patrol, "Profile 2", in NH, wkg "Keystone
5" in PA, usb, 02/03/86 @1251Z
[New Hampshire] (B. Parnass)

4.5000 VNG_______Australia: Australian Telecommunications Commission, tim
e sigs, am, 02/02/86 @1256Z
[Lyndhurst, Vict, Australia] (B. Parnass)

5.4260 KRH50_____US: State, US Embassy, QRA tape, cw, 02/02/86 @0201Z
[London, England] (B. Parnass)

5.4280 Acrobat___US: Air Force, "Acrobat" (Andrews AFB) wkg "Oklahoma", l
sb, 02/02/86 @0206Z
[Andrews AFB, Washington DC] (B. Parnass)

5.6960 call?_____US: Coast Guard, "Mobile Air" wkg CG aircraft, usb, 02/0
4/86 @1750Z

[Mobile, AL] (B. Parnass)

call?_____US: Coast Guard, "Traverse City Air" wkg CG aircraft, us
b, 02/04/86 @1747Z
[Traverse City, MI] (B. Parnass)

NMNN______US: Coast Guard, "Portsmouth" wkg CG Rescue 1433, mentio
ned using 8.984 as a secondary frequency, usb, 02/04/86
@1745Z
[Portsmouth, VA] (B. Parnass)

6.7300 call?_____US: Air Force, Tactical Air Command, Andrews AFB wkg in-
flight aircraft Spar 60 w/phone patch to Homestead AFB (
FL), usb, 02/01/86 @1505Z
[Andrews AFB, Washington DC] (B. Parnass)

7.5000 VNG_______Australia: Australian Telecommunications Commission, tim
e sigs, am, 02/02/86 @1300Z
[Lyndhurst, Vict, Australia] (B. Parnass)

8.8760 KJY74_____US: NOAA, National Research Center, calling KL308 withou
t response, usb, 02/04/86 @1817Z
[Miami, FL] (B. Parnass)

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -3621012889543075284
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9e5d592a899107ee,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-07 15:31:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-smoke!smoke!ACardenas.ES@xerox.ARPA
From: ACardenas.ES@xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Call-Letter License Frames
Message-ID: <742@brl-smoke.ARPA>
Date: Fri, 7-Feb-86 18:31:01 EST
Article-I.D.: brl-smok.742
Posted: Fri Feb 7 18:31:01 1986
Date-Received: Tue, 11-Feb-86 06:22:17 EST
Sender: news@brl-smoke.ARPA
Lines: 32

Bob:

Here in California there is a new trend... Car license plate frames

with call letters engraved.

i.e. "KA4993" (and often a city is indicated).

It has replaced the 'courtesy card' and alerts the police that either you or someone who loves you works for the 'agency'/state/pd/so/fd et al.

Any ideas what/who the above call letters belong to? A search of the POLICE CALL 1986 (the new issue is out @$7.95 {radio shack}) shows that all call letters of p.d's, agencies, state and federal, have three or four letters followed by two or three numbers.

i.e. 'KXX123 or KXXX123 or KWO37-(Los Angeles 24-Hour Weather Service, Mount Wilson, US Government).

The above letters (KA4993) do not fit this model. Any ideas?

Thanks, Bob!

Tony Cardenas
WA6IGJ
QA Auditor,
6085 Project, Xerox.ES

From 7631163213979407678
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5940a47a88e2c7ba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-07 17:15:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!harvard!seismo!brl-smoke!smoke!price%marlin@NOSC.ARPA
From: price%marlin@NOSC.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: QSL cards
Message-ID: <749@brl-smoke.ARPA>
Date: Fri, 7-Feb-86 20:15:13 EST
Article-I.D.: brl-smok.749
Posted: Fri Feb 7 20:15:13 1986
Date-Received: Tue, 11-Feb-86 06:24:11 EST
Sender: news@brl-smoke.ARPA
Lines: 26

Jon--Many people make QSL cards, and most of the current contenders are listed in the classified ads in the back pages of QST each month.

In terms of uniqueness--I have used black & white photographs on

my cards for many years. Just take a 3x5 picture to your local
"Instant Printing Service" or whatever. They'll make a plate or
screen (costs ~$15 but lasts forever) and then they'll run off
however many cards you want, now or anytime in the future. In
this way you can make your card as unique/personal as you wish.
Alternatively, if you know someone who's a graphics buff, have him/
her draw a unique design in camera-ready form, and take that to your
friendly local printer.

Most of the printers in QST have "stock" cards which get the job done,
and relatively cheaply. You'll find in many cases, however, that
if you buy one of these cards, you'll soon have a half dozen just
like them on your wall from other stations.

Uniqueness is going to cost you a bit more money, but I've gotten
so many compliments on my card that it's been worth it to me. And
besides, it may have gotten me some replies that I wouldn't have
gotten otherwise. I'll never know, but....

73--Jim, K6ZH

From 7660219702761303796
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,9f79997cdbc47582,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,9f79997cdbc47582,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-09 11:32:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!amdcad!lll-crg!
seismo!mo
From: mo@seismo.CSS.GOV (Mike O'Dell)
Newsgroups: net.ham-radio,net.ham-radio.packet
Subject: FCC awards pink ticket for BBS
Message-ID: <1346@seismo.CSS.GOV>
Date: Sun, 9-Feb-86 14:32:20 EST
Article-I.D.: seismo.1346
Posted: Sun Feb 9 14:32:20 1986
Date-Received: Tue, 11-Feb-86 07:20:08 EST
Organization: Center for Seismic Studies, Arlington, VA
Lines: 22
Keywords: BBS Pink
Xref: watmath net.ham-radio:3818 net.ham-radio.packet:222

I have just been informed that all the packet BBS's are now off the air.
A ham in Florida was just awarded a pink ticket for operating a packet
BBS. I don't have many (any!) details, but the cause cited appears
to be the bit about "no 3rd party traffic while under automatic control."
(See the latest ARRL newletter for details....)

While I am not a fan of interconnecting BBS's (we know how well Usenet

works - I hope ham packet is more useful!), this materially restricts why anyone would want to use packet in the first place - computer to computer communications (yes, a TNC is a computer...).

Rumor has it that the august ARRL considers packet to vitally important to the survival of ham radio. I suggest they mount an effort at least as vocal as the last "no code" fiasco if they don't want to see it go down in flames. The next thing you know, they'll be applying the ruling to digipeaters.

"I learned the code, so now what can I connect to??"

-Mike O'Dell
KB4RGM

From 7793101929730913312
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,81a519546d01b745,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-09 16:35:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!linus!philabs!cmcl2!seismo!brl-smoke!smoke!A-EPSTEIN@columbia-20.ARPA
From: A-EPSTEIN@columbia-20.ARPA (Adam Epstein)
Newsgroups: net.ham-radio
Subject: IC-02AT
Message-ID: <788@brl-smoke.ARPA>
Date: Sun, 9-Feb-86 19:35:44 EST
Article-I.D.: brl-smok.788
Posted: Sun Feb 9 19:35:44 1986
Date-Received: Wed, 12-Feb-86 20:52:52 EST
Sender: news@brl-smoke.ARPA
Lines: 16

  Does anybody know how to increase the search/scan rate on the IC-02AT? Out of the box, it's painfully slow. It was really easy to adjust on my IC-290A and on my IC-45A, but I don't remember seeing anything in the 02AT documentation (which I don't have in my possession at the moment).

  Also, I have the mods that allow Tx & Rx out of band (for the 02AT). Rx is fair to at least 162.55 MHz without retuning. I didn't bother with the Tx part of the mod. I have only hardcopy, but if I get a sufficient number of requests, I'll key 'em in and mail 'em out.

-Adam
 -N2DHH

From -8550595882056096181
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9e5d592a899107ee
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-10 04:58:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Call-Letter License Frames
Message-ID: <760@ihu1h.UUCP>
Date: Mon, 10-Feb-86 07:58:16 EST
Article-I.D.: ihu1h.760
Posted: Mon Feb 10 07:58:16 1986
Date-Received: Wed, 12-Feb-86 05:57:30 EST
References: <742@brl-smoke.ARPA>
Organization: AT&T Bell Laboratories
Lines: 21

x
     My 1985 FCC records indicate that KA4993 is licensed to
     the State of California for several thousand mobile and
     portable units, on numerous police   frequencies. Fre-
     quencies include several between 42.08 and 42.88
     MHz,
     as well as 154.905, 154.920, and 154.935 MHz.

     The licensee's telephone number is listed as (916)445-
     6875.

> i.e. "KA4993" (and often a city is indicated).
>
> It has replaced the 'courtesy card' and alerts the police that either
> you or someone who loves you works for the 'agency'/state/pd/so/fd et
> al.
>
> Any ideas what/who the above call letters belong to? ....
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -9198215578878097914
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fdfade3f2551ef7e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-10 06:57:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!genrad!panda!talcott!harvard!seismo!brl-smoke!smoke!
carpenter@NBS-VMS.ARPA

From: carpenter@NBS-VMS.ARPA (CARPENTER, ROBERT)
Newsgroups: net.ham-radio
Subject: RE: QSL Card Contents .....
Message-ID: <800@brl-smoke.ARPA>
Date: Mon, 10-Feb-86 09:57:32 EST
Article-I.D.: brl-smok.800
Posted: Mon Feb 10 09:57:32 1986
Date-Received: Thu, 13-Feb-86 19:09:37 EST
Sender: news@brl-smoke.ARPA
Lines: 24

As a VHF-UHF operator, I recommend that you include you VUCC Grid Square on your card. This is a world-wide system of location specification which divides the globe into "squares" of one degree N-S by two degrees E-W. There are also finer divisions of 1/10th these intervals, but they are not widely used. You will find hams all over the world using this notation, and I expect it to eventually become widely used on HF as well as the higher bands. Since you apparently live the the DC area, you are probably in FM18 (S of 77 N) or FM19. Contact me on 301-921-3274 if you want more info.

73 and gud DX

Bob W3OTC

PS. I have just gone to the local "Speedeeprint" for my last two sets of cards. The manager has a ham friend... Of course the result isn't extremely beautiful, but you will find a lot of people without 7-color cards these days....

From -5665948488419513903
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,14bf4f6c4ad49d8b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-10 09:56:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!genrad!panda!talcott!harvard!seismo!brl-smoke!smoke!
gauthier@JPL-VLSI.ARPA
From: gauthier@JPL-VLSI.ARPA
Newsgroups: net.ham-radio
Subject: NEW DATA BANK...ITS OPEN & FREE...
Message-ID: <806@brl-smoke.ARPA>
Date: Mon, 10-Feb-86 12:56:07 EST
Article-I.D.: brl-smok.806
Posted: Mon Feb 10 12:56:07 1986
Date-Received: Thu, 13-Feb-86 19:10:00 EST

Sender: news@brl-smoke.ARPA
Lines: 23

PLEASE FORWARD TO ALL BULLETIN BOARDS...

The new JPL/NASA "OPEN" Radiation Effects Data Bank for electronic components is now an ARPANET as well as MILNET and SPAN.

The data bank contains Single Event Upset (SEU) and Total Ionizing Dose (TID) test data. Also, FREE data books and technical reports on electronic components.

Contact:

ARPANET JPL-VLSI VAX (o 10.3.0.54)

dial up 818-354-4360 or 818-354-5125

File name is RADATA

NO PASSWORD REQUIRED.

ANY QUESTIONS CONTACT: MIKE GAUTHIER, K6ICS
JET PROPULSION LABORATORY
818-354-2126

From 412069150481079659
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,81a519546d01b745
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-10 09:56:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!genrad!panda!talcott!harvard!seismo!brl-smoke!smoke!price%marlin@NOSC.ARPA
From: price%marlin@NOSC.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: Re: IC-02AT
Message-ID: <807@brl-smoke.ARPA>
Date: Mon, 10-Feb-86 12:56:29 EST
Article-I.D.: brl-smok.807
Posted: Mon Feb 10 12:56:29 1986
Date-Received: Thu, 13-Feb-86 19:10:25 EST
Sender: news@brl-smoke.ARPA
Lines: 8

Adam--I for one would like to know how to RX on an IC-02 up to 162 MHz or thereabouts--would make a nice weather station rcvr. Would be glad to send you an SASE or if you can put it here on the net, I'd be appreciative.

73rds--Jim, K6ZH, San Diego

From -4922818910575636096
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,788b98af6fd21bcb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-10 14:42:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!genrad!panda!talcott!harvard!seismo!brl-smoke!smoke!
hoffman%pitt@CSNET-RELAY.ARPA
From: hoffman%pitt@CSNET-RELAY.ARPA (Bob Hoffman)
Newsgroups: net.ham-radio
Subject: Call letters
Message-ID: <820@brl-smoke.ARPA>
Date: Mon, 10-Feb-86 17:42:50 EST
Article-I.D.: brl-smok.820
Posted: Mon Feb 10 17:42:50 1986
Date-Received: Thu, 13-Feb-86 19:15:15 EST
Sender: news@brl-smoke.ARPA
Lines: 18

Call letters in the form KA4993 are mobile-only licenses issued
up until a couple of years ago, presumably when they ran out of
numbers. For example, our fire department has three sets of call
letters:
     KGE609 -- Base station only at station #1
     KIT823 -- Base station only at station #2
     KC7766 -- All mobiles and portables at both stations.

This was required because the licensee name is the same on all
licenses. Mobile-only licenses issued recently have five digits instead
of four, and I can't remember offhand whether there are two, three,
or four letters in front. Recent Base-only and Base-Mobile licenses
are of the form KNxx000 -- four letters beginning with KN, followed by
three digits.

--
Bob Hoffman, N3CVL   {allegra, bellcore, cadre, idis, psuvax1}!pitt!hoffman
Pitt Computer Science   hoffman%pitt@csnet-relay

From -3019957809343266335
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,48bc496ea488637e,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,48bc496ea488637e,start
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1986-02-10 14:49:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 Apollo 11/21/85; site apollo.uucp
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!wanginst!apollo!rees

From: rees@apollo.uucp (Jim Rees)
Newsgroups: net.analog,net.ham-radio
Subject: Need freq counter recommendations
Message-ID: <2bddd2a1.1de6@apollo.uucp>
Date: Mon, 10-Feb-86 17:49:18 EST
Article-I.D.: apollo.2bddd2a1.1de6
Posted: Mon Feb 10 17:49:18 1986
Date-Received: Wed, 12-Feb-86 07:31:05 EST
Organization: Apollo Computer, Chelmsford, Mass.
Lines: 11
Xref: watmath net.analog:678 net.ham-radio:3820

I'm in the market for a frequency counter. I don't want to spend more
than $150. Ideally it should cover 50 Hz to 500 MHz.

Are the counters you see advertised in the back of Ham Radio and similar
magazines any good? What should I look for, and look out for? Will
I be sorry if I don't get 9 digits?

Typical uses would be setting the markers on my sweep generator (4.5 Mhz,
26 MHz, 42 Mhz), setting the LO frequency in my ATV receiver (~450 MHz),
adjusting touchtone pads (remember the old ones with the big inductors?),
and similar home jobs.

From 5174641753583659029
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,83b223bb37e1fff1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-10 17:53:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: CRRL BULLETIN NR 4 (Manitoba Sect Mgr Nominations)
Message-ID: <288@inuxi.UUCP>
Date: Mon, 10-Feb-86 20:53:49 EST
Article-I.D.: inuxi.288
Posted: Mon Feb 10 20:53:49 1986
Date-Received: Wed, 12-Feb-86 08:18:09 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 11

qst de k9eui
hr crrl bulletin nr 4 from crrl headquarters
london ont february 10, 1986
to all radio amateurs bt

nominations for the office of manitoba section manager are now
open. for more information, see the canadian newsfronts column

in february qst.

1986 marks the 50th birthday of raqi, the provincial society
radio amateur du quebec ar

From 600115046364479853
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2d1894d3cb2ff523,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-10 17:54:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL PROPAGATION FORECAST BULLETIN NR 6
Message-ID: <289@inuxi.UUCP>
Date: Mon, 10-Feb-86 20:54:27 EST
Article-I.D.: inuxi.289
Posted: Mon Feb 10 20:54:27 1986
Date-Received: Wed, 12-Feb-86 08:18:35 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 31

qst de k9eui
hr propagation forecast bulletin nr 6 from arrl headquarters
newington ct february 10, 1986
to all radio amateurs bt

after about 4 weeks of very low activity, the sun developed a
rash of major flares and new sunspots during the past week.
from 69 on january 27, the solar flux was up to 103 by february
5. suddenly the amateur bands sounded like 1983 again. 14
mhz, which had been going dead soon after local sunset, became
almost a 24 hour dx band again. 21 and 24 mhz did almost as
well, and 28 mhz, long almost totally quiet, was running wild
again. during saturday night there was an aurora of such
intensity that even 432 mhz dx was workable on ssb, as well as
cw. 2 meter operators as far south as sarasota, florida used
the aurora to build up their grid square totals. k1tol in
maine was heard on 50 mhz in sweden by sm6pu, and the british
50 mhz beacon gb3six was heard by k1jrw in massachusetts. the
50 mhz band was open to south america hours at a time.

solar flux is on the way down now, but it may not drop too far.
the area of the sun that brought januarys highest flux reading
will be facing us again this week. it should keep things
interesting on 14 and 21 mhz, if not 24 and 28 mhz, after about
wednesday. our lowest solar flux this month is expected about
february 17 through 24. by about the 26th we should know if a

recurrence of the early february flux peak is likely.

american sunspot numbers for january 30 through february 5 were
between 9 and 58 with a mean of 35.1. this activity follows a
14 day stretch of no visible spots ar

From 2644788293705155585
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ea67fd670c139b5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-11 12:35:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!genrad!panda!talcott!harvard!seismo!brl-smoke!smoke!
clements@BBNCCA.ARPA
From: clements@BBNCCA.ARPA (Bob Clements)
Newsgroups: net.ham-radio
Subject: Re: Freq counter recommendations
Message-ID: <844@brl-smoke.ARPA>
Date: Tue, 11-Feb-86 15:35:37 EST
Article-I.D.: brl-smok.844
Posted: Tue Feb 11 15:35:37 1986
Date-Received: Thu, 13-Feb-86 17:37:04 EST
Sender: news@brl-smoke.ARPA
Lines: 40

> From: rees@apollo.uucp (Jim Rees)
> Subject: Need freq counter recommendations
> Date: Mon, 10-Feb-86 17:49:18 EST
> Organization: Apollo Computer, Chelmsford, Mass.

> I'm in the market for a frequency counter. I don't want to spend more
> than $150. Ideally it should cover 50 Hz to 500 MHz.
>
> Are the counters you see advertised in the back of Ham Radio and similar
> magazines any good? What should I look for, and look out for? Will
> I be sorry if I don't get 9 digits?
>
> Typical uses would be setting the markers on my sweep generator (4.5 Mhz,
> 26 MHz, 42 Mhz), setting the LO frequency in my ATV receiver (~450 MHz),
> adjusting touchtone pads (remember the old ones with the big inductors?),
> and similar home jobs.

I've owned two Heathkit counters and one el-cheapo back of the magazine
brand counter. Surprisingly, the Heathkits have been pretty good. I took
top place in the W1AW freq measuring tests a few times with the simpler
of the Heathkits. [Anyone wanna buy it? No, that's misuse of the net.
Forget I said that.]

The el-cheapo kind has very bad temperature and time stability. Usually
just a cheap crystal sitting in the middle of an ordinary PC board.

It seems to take a lot of bucks to get 500 MHz coverage. I would advise

a 50 or 100 MHz unit and an external prescaler, which is fairly cheap.

For the jobs you mention, you don't seem to need nine digits. And for the price you're looking for, you wouldn't be accurate to the last digit anyway.

Disclaimer: My info is a few years old. There may be a wonderful and inexpensive unit out there now that I don't know about.

73,
Bob, K1BC

clements@bbn.arpa
{ihnp4, decvax, ...}!bbncca!clements

From -6877391465279855538
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,9f79997cdbc47582
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,9f79997cdbc47582
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-11 14:14:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 Unisoft-Cosmos; site kepler.UUCP
Path: utzoo!linus!decvax!decwrl!pyramid!hplabs!well!micropro!kepler!mojo
From: mojo@kepler.UUCP (Morris Jones)
Newsgroups: net.ham-radio,net.ham-radio.packet
Subject: Re: FCC awards pink ticket for BBS
Message-ID: <501@kepler.UUCP>
Date: Tue, 11-Feb-86 17:14:29 EST
Article-I.D.: kepler.501
Posted: Tue Feb 11 17:14:29 1986
Date-Received: Thu, 13-Feb-86 19:05:49 EST
References: <1346@seismo.CSS.GOV>
Reply-To: mojo@kepler.UUCP (Morris Jones)
Organization: MicroPro Int'l Corp., San Rafael, CA
Lines: 29
Xref: linus net.ham-radio:3222 net.ham-radio.packet:230
Summary: The FCC has a point. Suggestions?

There's a very important point to the FCC ruling that we have to remember. Amateur Radio CANNOT become a common carrier! Besides providing unfair competition with the commercial carriers, it's contrary to the spirit of *Amateur* Radio as experimentalists and hobbyists.

Now how do we tread the fine line and operate our packet BBSes? If there really is no control over third party traffic on Amateur Radio, then we start to cross that line. I think at the very least we'll have to emphasize clearly the nature of the third party traffic that will be permissable (non-business, trivial, experimental -- following the guideline that "Amateur Radio traffic must be trivial to the degree that recourse to the established commercial carriers is not

justified").

I also think we're going to have to provide more control over the
BBSes -- more control operators and control points. It may mean
a set of rules for designating BBS users as control operators, and
providing protected access.

It won't be easy, but we can find a way to live with it.

Personally I think the spectrum should be chopped up and sold to
the highest bidder ....

--
Mojo
... Morris Jones, MicroPro Product Development
{lll-crg,ptsfa,dual,well,pyramid}!micropro!kepler!mojo

From 5971477119910905411
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fe16b5ac47c7f919,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-11 17:12:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles - hp 1.2 08/01/83; site hp-pcd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!decwrl!pyramid!hplabs!hp-pcd!rm
From: rm@hp-pcd.UUCP (rm)
Newsgroups: net.ham-radio
Subject: Old Gear
Message-ID: <5200001@hpcvla.UUCP>
Date: Tue, 11-Feb-86 20:12:00 EST
Article-I.D.: hpcvla.5200001
Posted: Tue Feb 11 20:12:00 1986
Date-Received: Sat, 15-Feb-86 04:43:50 EST
Organization: Hewlett-Packard - Corvallis, OR
Lines: 10
Nf-ID: #N:hpcvla:5200001:000:307
Nf-From: hpcvla!rm   Feb 11 17:12:00 1986

I haven't hammed for 15 years, but when I found this net, I realized that I had
some gear in the garage that might be salable. How about an SBE 33? Is it worth
anything?

Also, a Vibroplex "Presentation" gold-plated baseplate, jeweles movement Bug..

Same question.

Bob
HP-PCD!RM (ex K0KVP & DL5ML)
73

From 1793862830637701197
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93644cffe277a01d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-12 16:56:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!vrdxhq!dennis
From: dennis@vrdxhq.UUCP (R. Dennis Gibbs)
Newsgroups: net.ham-radio
Subject: Active antennas for shortwave listening
Message-ID: <2586@vrdxhq.UUCP>
Date: Wed, 12-Feb-86 19:56:09 EST
Article-I.D.: vrdxhq.2586
Posted: Wed Feb 12 19:56:09 1986
Date-Received: Fri, 14-Feb-86 06:26:16 EST
Organization: Verdix Corporation, Chantilly, VA
Lines: 29
Keywords: MFJ 1024, ICOM R71A

I have recently returned to the hobby of shortwave listening after an absence of over 10 years. I recently bought an ICOM R71A receiver, which is far better than the National HRO-60 I used to use. I am having a problem concerning the choice of a proper antenna for Shortwave Listening.

I live in a third floor apartment. Currently I am using a 30' length of wire which lies around the perimeter of my listening room. I am not permitted to run wires outside my window, nor am I allowed to hang any wires from my balcony. My only alternatives for an antenna are a long wire strung around the room, or perhaps an active antenna.

I am considering purchasing a remote active antenna, such as the MFJ 1024. This antenna is small enough (only 54 inches) to be mounted outside, on my balcony. My other alternative is to purchase an antenna tuner and attach my 30' length of wire to it.

My question is: Which will give me better performance, an outdoor-mounted active antenna, or an indoor 30 foot longwire antenna with an antenna tuner? It has always been my understanding that a properly constructed long wire antenna mounted outdoors will outperform an active antenna. But since my "long wire" antenna can only be 30 feet long, and can only be indoors, I am thinking that the outdoor active antenna might give me better performance in this case.

I would appreciate any opinions and advice concerning this matter.

Dennis Gibbs
..!{umcp-cs, seismo, verdix}!vrdxhq!dennis

From 7845949275440841840
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,93644cffe277a01d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-14 04:01:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site mb2c.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!mb2c!gbr
From: gbr@mb2c.UUCP (Jerry Ruhno)
Newsgroups: net.ham-radio
Subject: Re: Active antennas for shortwave listening
Message-ID: <505@mb2c.UUCP>
Date: Fri, 14-Feb-86 07:01:13 EST
Article-I.D.: mb2c.505
Posted: Fri Feb 14 07:01:13 1986
Date-Received: Sat, 15-Feb-86 04:25:42 EST
References: <2586@vrdxhq.UUCP>
Organization: Michigan Bell, Southfield, MI
Lines: 23

> I have recently returned to the hobby of shortwave listening after an absence
> of over 10 years.....
>
> I live in a third floor apartment. Currently I am using a 30' length of wire
> which lies around the perimeter of my listening room. I am not permitted
> wires outside my window, nor am I allowed to hang any wires from my balcony...
>
> I am considering purchasing a remote active antenna, such as the MFJ 1024.
> My other alternative is to purchase an antenna tuner and attach my 30'
> length of wire to it.....
>
> My question is: Which will give me better performance, an outdoor-mounted
> active antenna, or an indoor 30 foot longwire antenna with an antenna tuner?..

I am also interested in the same information. There are two tuners that I know of that are for random longwire antennas. One is by MFJ (I forget the model number) and the Mini-Tun by Grove Enterprises. Does any body have information on these tuners?

Jerry Ruhno
epsilon!mb2c!gbr

From -1075423651264013267
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93644cffe277a01d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-14 11:18:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihwpt.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihwpt!knudsen
From: knudsen@ihwpt.UUCP (mike knudsen)
Newsgroups: net.ham-radio

Subject: Re: Active antennas for shortwave listening
Message-ID: <701@ihwpt.UUCP>
Date: Fri, 14-Feb-86 14:18:32 EST
Article-I.D.: ihwpt.701
Posted: Fri Feb 14 14:18:32 1986
Date-Received: Sun, 16-Feb-86 03:54:40 EST
References: <2586@vrdxhq.UUCP>
Organization: AT&T Bell Laboratories
Lines: 22

> My only alternatives for an antenna are a long wire strung around the room, or
> perhaps an active antenna.
>
> I am considering purchasing a remote active antenna, such as the MFJ 1024.
> This antenna is small enough (only 54 inches) to be mounted outside, on my bal-
> cony. My other alternative is to purchase an antenna tuner and attach my 30'
> length of wire to it.
> Dennis Gibbs
> ..!{umcp-cs, seismo, verdix}!vrdxhq!dennis

I have been wondering about the Sony active antenna (or remote
antenna tuner?) advertised in the back of the instruction book
that came with the ICF-2002 I just bought at a hamfest.
It looks expensive, and all I know is from the picture
in the booklet. Probably not many stores carry such a thing.

Does anyone have any experience, or even price info, on this
gadget? I'm pretty sure it would work with any radio,
as the antenna connections on the ICF are nothing special.
mike k w9nrd

From 2777280840026657970
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93644cffe277a01d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-15 05:41:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Active antennas (MFJ1020 review)
Message-ID: <763@ihu1h.UUCP>
Date: Sat, 15-Feb-86 08:41:54 EST
Article-I.D.: ihu1h.763
Posted: Sat Feb 15 08:41:54 1986
Date-Received: Sun, 16-Feb-86 05:28:11 EST
References: <2586@vrdxhq.UUCP> <505@mb2c.UUCP>
Organization: AT&T Bell Laboratories
Lines: 110

> > I have recently returned to the hobby of shortwave listening after an absence
> > of over 10 years.....
> >
> > I live in a third floor apartment. Currently I am using a 30' length of wire
> > which lies around the perimeter of my listening room. I am not permitted
> > wires outside my window, nor am I allowed to hang any wires from my balcony...
> >
> > I am considering purchasing a remote active antenna, such as the MFJ 1024.
> > My other alternative is to purchase an antenna tuner and attach my 30'
> > length of wire to it.....
> >
> > My question is: Which will give me better performance, an outdoor-mounted
> > active antenna, or an indoor 30 foot longwire antenna with an antenna tuner?..
>
>   I am also interested in the same information. There are two tuners that I
>   know of that are for random longwire antennas. One is by MFJ (I forget the
>   model number) and the Mini-Tun by Grove Enterprises. Does any body have
>   information on these tuners?
>
>
>
>   Jerry Ruhno
>   epsilon!mb2c!gbr

x

I posted an article on the MFJ 1020 indoor active antenna over a year ago, but have since replaced my ICOM R70 with an R71A and Drake R7, and moved to a house with a lot of land.

I don't know how the MFJ 1024 outdoor active antenna stacks up against the indoor model, but I can recommend the indoor unit as long as you connect 20 or so feet of wire to it. In my case, the wire was lying on the floor inside my 2nd floor apartment, then wrapped around the inside of a window frame. Being tucked between the plaster wall and the frame, the wire was hidden from view.

I still use my MFJ occasionally as a preamp for my out-
door 75' wire. It seems to perform as well as, or better than, my Ameco FET preamplifier.

MFJ offers a limited time free trial of MFJ equipment if bought directly from MFJ. A friend also wonders about the 1024 and said he will take advantage of the free trial. He bought a 1020A last week and uses it with a short outdoor wire from his apartment. If you
do buy the MFJ 1020, be sure to run it from 12 VDC rather than 9 VDC, to get best results.

==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

ARTICLE FOLLOWS:

MFJ 1020 Active (Indoor) Antenna

Bob Parnass, AJ9S

The MFJ 1020 Active Antenna consists of a telescoping antenna and a preselector-type circuit inside the now familiar beige and wood grain cabinet. The frequency coverage of approximately 200 KHz to 30 MHz is divided into 5 bands.

A small, external power supply is required, but not provided.

The 1020 lists for $80 new, but I purchased it at a hamfest for $20, and performed one minor repair (replaced a fiber washer at the base of the telescoping antenna). I use this unit with an ICOM R-70 general coverage receiver. Overall, the MFJ 1020 works better than expected, although still not as good as an outdoor antenna.

The Bad News

Phono jacks are used rather than the SO-239 type.

The inclusion of an LED indicator lamp in the 1020 really precludes the prolonged use of any internal battery.

One problem with my particular unit is that, despite the dial markings, coverage ends at about 28.5 MHz (rather than 30.0 MHz). There is no simple trimmer capacitor that can be adjusted as a remedy. One of these days (yawn), I'll have to trim an inductor.

Active antennas are more prone to electrical interference. A photoelectric nightlight in an adjacent room causes a high QRN level, due to the SCR in the dimming circuit, and must be disabled during listening periods. Emissions from the horizontal oscillators of TV sets in the building also cause problems.

Use of a narrow band (tuneable, in this case) antenna makes "instant QSY" impossible. One cannot make full

use of the broadband capabilities of the new generation of general coverage receivers. This is a shame, especially if one has a receiver such as the ICOM R-71 or the Kenwood R2000 which contain several memories.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -6951052618394193577
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f0e8e7127063101c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-15 18:18:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!linus!decvax!decwrl!dec-rhea!dec-regina!kroth
From: kroth@regina.DEC (Philip J. Kroth)
Newsgroups: net.ham-radio
Subject: Address for Handi-Hams
Message-ID: <1167@decwrl.DEC.COM>
Date: Sat, 15-Feb-86 21:18:56 EST
Article-I.D.: decwrl.1167
Posted: Sat Feb 15 21:18:56 1986
Date-Received: Sun, 16-Feb-86 09:13:02 EST
Sender: daemon@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 35

A guy at work asked me for the address of Handi-Hams. After thinking about it I thought that there might be other people out there who might want it too:

Here is the address of Handi-Hams. Handi-Hams is an organization of handicapped and non-handicapped people who help other handicapped people get licensed and on the air. If you know of a handicapped person, licensed or unlicensed, who would like assistance or if you would like to help, contact Keith Graham who is the director:

Keith Graham
Handi-Ham Systems
Courage Center
3915 Golden Valley Road
Golden Valley, MN 55422

The preceding information was given to me by Gayle WA1OPN from Worcester, MA. Gayle is a blind and deaf Amateur also

suffering from MS. She is limited to CW operation only but is in the process of getting the necessary equipment which will allow her to operate packet. As anyone who knows Gayle will agree, she is an inspiration in the truest sense of the word. Despite her three handicaps, she earned an extra class license, teaches radio theory to people around the world, holds two part time jobs and writes articles about computers and the handicapped which have been published in several languages. She has received many awards including a commendation from President Reagan.

Philip Kroth KA2QIK/1

From 8277820325648596696
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93644cffe277a01d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-16 18:55:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site well.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!decwrl!amdcad!lll-crg!well!mo
From: mo@well.UUCP (Maurice Weitman)
Newsgroups: net.ham-radio
Subject: Re: Active antennas for shortwave listening
Message-ID: <662@well.UUCP>
Date: Sun, 16-Feb-86 21:55:39 EST
Article-I.D.: well.662
Posted: Sun Feb 16 21:55:39 1986
Date-Received: Tue, 18-Feb-86 04:26:10 EST
References: <2586@vrdxhq.UUCP> <701@ihwpt.UUCP>
Reply-To: mo@well.UUCP (Maurice Weitman)
Organization: Whole Earth 'Lectronic Link, Sausalito, CA
Lines: 34

In article <701@ihwpt.UUCP> knudsen@ihwpt.UUCP (mike knudsen) writes:
>
>I have been wondering about the Sony active antenna (or remote
>antenna tuner?) advertised in the back of the instruction book
>that came with the ICF-2002 I just bought at a hamfest.
>It looks expensive, and all I know is from the picture
>in the booklet. Probably not many stores carry such a thing.
>
>Does anyone have any experience, or even price info, on this
>gadget? I'm pretty sure it would work with any radio,
>as the antenna connections on the ICF are nothing special.
>   mike k   w9nrd
>
I've recently purchased an AN-1 with an ICF-2010. The AN-1 cost me $79,
the 2010 was $269 at Whole Earth Access in Berkeley. The AN-1 looks like
it would work with any receiver imaginable: it comes with a cord with two
mini-plugs, a cord with a mini-plug and a pair of alligator clips, a

"coupler" to slip over a telescopic antenna, and a "coupler" to rest the
receiver on.

Since I've never had an outdoor antenna here, it's hard for me to evaluate
its performance except to say that it certainly improves the signal
strength and quality of the telescoping antenna.

My only complaints with the AN-1 are that it requires six AA cells, and
although there is a jack for 9vdc input, no ac adapter is provided.

--
Maurice Weitman   9600   ..!{hplabs,lll-crg,ptsfa,glacier}!well!mo
       | 57600   (415)549-0280 voice   (415)549-0388 modem-2400
   this^is not   300   mcimail mweitman   source bdk788
     a pipe   110   P. O. Box 10019   Berkeley, CA 94709

From 7770686868814184430
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,40700282e5bb2751,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,40700282e5bb2751,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1986-02-17 11:14:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.PCS 1/10/84; site mtuxo.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!mhuxt!houxm!mtuxo!yossi
From: yossi@mtuxo.UUCP (j.friedman)
Newsgroups: net.ham-radio,net.wanted
Subject: For sale: YEASU FT101B
Message-ID: <1314@mtuxo.UUCP>
Date: Mon, 17-Feb-86 14:14:20 EST
Article-I.D.: mtuxo.1314
Posted: Mon Feb 17 14:14:20 1986
Date-Received: Tue, 18-Feb-86 04:07:59 EST
Organization: AT&T Information Systems Labs, Holmdel NJ
Lines: 7
Xref: watmath net.ham-radio:3842 net.wanted:8186

I have a YEASU FT101B transceiver in excellent condition.
Includes Shure pedestal mike.
I will accept best offer.

Please contact:
Nick Conigliaro
mtuxo!london!njc

From -1333636943170069477
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,adc25ec2e6d1e0fb,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-17 12:24:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!brl-smoke!smoke!Geoff@SRI-CSL.ARPA
From: Geoff@SRI-CSL.ARPA (the tty of Geoffrey S. Goodfellow)
Newsgroups: net.ham-radio
Subject: Justice Seen Dropping Opposition To Comm Privacy Bills.
Message-ID: <1013@brl-smoke.ARPA>
Date: Mon, 17-Feb-86 15:24:46 EST
Article-I.D.: brl-smok.1013
Posted: Mon Feb 17 15:24:46 1986
Date-Received: Wed, 19-Feb-86 20:28:25 EST
Sender: news@brl-smoke.ARPA
Lines: 75

CommunicationsWeek -- Monday, February 10, 1986 -- Page 9.

By Karen Lynch

WASHINGTON -- The Justice Department is expected to drop its opposition to legislation protecting the privacy of new communications technologies against unauthorized interception, congressional sources said last week.

Congressional and industry representatives have been meeting with Justice Department officials to counter what they had characterized as the departments misunderstanding of some parts of the bill.

The meetings have also been used to redraft portions of the legislation to alleviate some of the departments concerns, Sen. Patrick J. Leahy, D-Vt., said last week.

Leahy is sponsoring an electronic communications privacy bill in the Senate, and Rep. Robert W. Kastenmeier, D-Wis., chairman of the House Subcommittee on Courts, Civil Liberties and the Administration of Justice, has an identical bill pending in the House.

Both bills would protect cellular radio, electronic mail, private networks and other transmission systems and services not now covered by the federal wiretap law. The bills would prohibits the FBI from accessing such communications without court orders, and the measures would assign penalties to private citizens unlawfully interception transmissions.

Last November, James Knapp, deputy assistant attorney general of Justice's Criminal Division, charged that the legislations could "unnecessarily complicate procedures" without enhancing individuals' rights of privacy.

Now, however, "Justice is beginning to approach it more and more

with a non-idealogical bent," Leahy said. "I think they'll sign off."

Attorney General Edmund Meese has given the go-ahead for the Justice Department to support the legislation if some modifications are made, said David W. Beier III, counsel to the subcommittee Kastenmeier chairs.

The industry has shown willingness to make some of those changes, said Philip Walker, general counsel, regulatory affairs, for GTE Telenet Communications Inc. One of the department's concerns has been the high level of protection the bill gives data from government access before and after transmission, he said.

Kastenmeier's subcommittee will host the department at a hearing at the end of the month, and the subcommittee will vote to send the bill to the House floor.

"It would be an absolute shame if we couldn't put it through this year," Leahy said, calling his bill "one of the least controversial" in Congress.

Leahy warned, however, that the bill would have to be moved by this summer. Otherwise, debate over taxes and the budget, along with this year's national elections, could bump the communications privacy measures to next year.

Senate Subcommittee on Patents, Copyrights & Trademarks counsel John Podesta said it is unclear whether the communications privacy bill would move separately or along with a computer crime bill also pending in Congress.

GTE's Walker said the customers are expressing increasing concern about the security of their electronic mail transmissions. Still, lack of security has not proven a deterrent to the business, he said during a press briefing his company held on the privacy bills.

From -3531201382662457310
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5480f0b55366c6a7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-17 17:26:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!brl-smoke!smoke!brosen@BBN-SPCA.ARPA
From: brosen@BBN-SPCA.ARPA (Bruce L. Rosen)
Newsgroups: net.ham-radio
Subject: How to QSL to DX stations
Message-ID: <1022@brl-smoke.ARPA>
Date: Mon, 17-Feb-86 20:26:38 EST
Article-I.D.: brl-smok.1022
Posted: Mon Feb 17 20:26:38 1986

Date-Received: Wed, 19-Feb-86 20:29:39 EST
Sender: news@brl-smoke.ARPA
Lines: 11

I have very little experience with sending QSL cards to DX stations, besides sending via the bureaus (and now the ARRL's outgoing card service). I would appreciate info on the hows and wherefores. Some specific questions are: 1) When do I know that sending via outgoing bureau is a no-no and that some more direct action will be required? 2) How do I deal with IRC's? 3) A couple of years ago I QSO'ed HZ1TC, who gave an OE3xxx as a QSL manager. How do I handle this? 4) Has this all been written up in QST some time in the past 10 years? If so, a reference to such an article will probably save considerable typing wear-and-tear.

Thanks in advance and 73 -- Bruce (K1FFX - brosen@bbn-spc.arpa)

From -200663739961366243
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b37c83a99d7895c2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-19 01:23:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!brl-smoke!smoke!price%marlin@NOSC.ARPA
From: price%marlin@NOSC.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: QSL info, please
Message-ID: <1096@brl-smoke.ARPA>
Date: Wed, 19-Feb-86 04:23:00 EST
Article-I.D.: brl-smok.1096
Posted: Wed Feb 19 04:23:00 1986
Date-Received: Sun, 23-Feb-86 05:44:29 EST
Sender: news@brl-smoke.ARPA
Lines: 11

DX buffs--

Can anyone out there, like K1XM, provide me with QSL info for BY1PK in China? I worked him (I think--shoestring QSO) during the last weekend's DX Contest and would VERY much like to get his card!

Thanks, 73rds--

Jim Price, K6ZH, PRICE@NOSC.ARPA

From 9202368225691524111
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a6aa324920af3fe6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-01 22:07:37 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: In the same vein...
Message-ID: <39@petrus.UUCP>
Date: Sun, 2-Mar-86 01:07:37 EST
Article-I.D.: petrus.39
Posted: Sun Mar 2 01:07:37 1986
Date-Received: Sun, 2-Mar-86 19:02:26 EST
Organization: Bell Communications Research, Inc
Lines: 22

Actually, *my* favorite "engineer/physicist/mathematician" joke is as follows:

An engineer goes to bed. He is rudely awakened in the middle of the night
to discover that his wastepaper basket is on fire. He jumps up, runs
to the bathroom, grabs a bucket, fills it with water, rushes back to
the fire and empties the bucket on the fire. Satisfied that the fire is
out, he goes back to bed.

A physicist goes to bed. He is rudely awakened in the middle of the night
to discover that his wastepaper basket is on fire. He jumps up, runs
to the bathroom and pauses. Taking into account the chemical composition
of the fire's fuel, the available oxygen concentration and thermal
output of the fire, he fills the bucket with just enough water to put
out the fire. He then runs over to the trashcan and dumps the bucket.
Satisfied that the fire is out, he goes back to bed.

A mathematician goes to bed. He is rudely awakened in the middle of the night
to discover that his wastepaper basket is on fire. He jumps up, thinks
for a moment, and then goes back to bed confident that there exists
a solution to the problem at hand.

Phil

From 3440016415316913158
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f418fa684d5267c2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-02 08:01:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!akguc!
mtunh!mtuni!mtune!ky2d-2!n2aam
From: n2aam@ky2d-2.UUCP (Dave)
Newsgroups: net.ham-radio
Subject: shortwave listening nets on the hf. bands
Message-ID: <140@ky2d-2.UUCP>
Date: Sun, 2-Mar-86 11:01:45 EST
Article-I.D.: ky2d-2.140

Posted: Sun Mar 2 11:01:45 1986
Date-Received: Wed, 5-Mar-86 04:46:45 EST
Distribution: na
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 2

*** REPLACE THIS LINE WITH YOUR MESSAGE ***
Does anyone on line know of nets dedicated to shortwave listening on the hf. bands? Any information with regard to such nets would be appreciated. 73s Dave...n2aam

From 3868763756205952003
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fd95a3dbc1b456c3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-03 08:54:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: SWL log (wargames?, Cuba, Soviet & Spanish Navies, etc.)
Message-ID: <779@ihu1h.UUCP>
Date: Mon, 3-Mar-86 11:54:57 EST
Article-I.D.: ihu1h.779
Posted: Mon Mar 3 11:54:57 1986
Date-Received: Tue, 4-Mar-86 05:17:45 EST
Distribution: na
Organization: AT&T Bell Laboratories
Lines: 62

2.6860 call?_____US: Coast Guard, USCG Cutter Point Martin wkg Cutter Point Arena, usb, 03/02/86 @2355Z
[location?] (B. Parnass)

4.0692 WOM_______AT&T ship-to-shore radiotelephone, wkg WAB5822 the "Renegade", usb, 02/26/86 @0155Z
[Ft Lauderdale, FL] (B. Parnass)

4.1420 call?_____unidentified: sounds like US Navy wargames at sea, tracking "bogies" "in the white", "red", and "black". Station "Alpha Whiskey" net control with "Tango", "November", and "Kilo", lsb, 02/26/86 @0155Z
[location?] (B. Parnass)

4.2080 ESJG______USSR: Russian ship wkg Russian shore station U??2, cw, 02/27/86 @0150Z
[location?] (B. Parnass)

4.2650 DAM_______Norddeich Radio, cw marker, 02/27/86 @0158Z
[W Germany] (B. Parnass)

```
   5.3200    call?_____US: Coast Guard, USCG stn Alexandria wkg Cutter Point Ar
                        ena, usb, 03/02/86 @2356Z
                        [location?] (B. Parnass)

   6.2870    77URY_____unidentified: sounds like Spanish Navy, "72WTT de 77URY
                        23RC", similar to logging on 6.330 MHz on same day, cw,
                        03/02/86 @0320Z
                        [location?] (B. Parnass)

   6.3070    UFB_______USSR: Russian Navy, Odessa Radio, wkg UIHW, cw, 03/02/86
                         @0330Z
                        [Odessa, USSR] (B. Parnass)

   6.3200    call?_____US: Coast Guard, USCG stn Alexandria wkg Cutter Point Ar
                        ena, lsb, 03/02/86 @2354Z
                        [location?] (B. Parnass)

   6.3300    72JKL_____Spain: Spanish Navy, Madrid Naval, "78EAL de 72JKL 13RG"
                        , cw, 03/02/86 @0336Z
                        [Madrid, Spain] (B. Parnass)

  17.0648    EDZ6______Aranjuez Radio, cw marker, 03/02/86 @2114Z
                        [Spain] (B. Parnass)

  17.1658    CLA_______Havana Radio, wkg Russian vessel UKHZ, cw, 03/02/86 @213
                        7Z
                        [Cojimar, Cuba] (B. Parnass)

  17.1753    CLS_______Havana Radio, cw marker, 03/02/86 @2133Z
                        [Havana, Cuba] (B. Parnass)

  17.3800    FUM_______France: French Navy, cw marker, 03/02/86 @2146Z
                        [Papeete, Polynesia] (B. Parnass)

  17.4040    KKN44_____US: State, embassy, cw marker, 03/02/86 @2148Z
                        [Monrovia, Liberia] (B. Parnass)

--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -7925736703625395926
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,291b7289cf935ce9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-03 09:59:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-adm!brl-smoke!smoke!
YOUNG@MARLBORO.DEC.COM
From: YOUNG@MARLBORO.DEC.COM
```

Newsgroups: net.ham-radio
Subject: QSL Info Update
Message-ID: <1462@brl-smoke.ARPA>
Date: Mon, 3-Mar-86 12:59:58 EST
Article-I.D.: brl-smok.1462
Posted: Mon Mar 3 12:59:58 1986
Date-Received: Wed, 5-Mar-86 05:45:23 EST
Sender: news@brl-smoke.ARPA
Lines: 9

Worked LU1E over the weekend, and he gave LU3AJW as his QSL info:
Roberto Gonzalez Gavio
Congreso 4234 2-A
1431 Buenos Aires, CF, Argentina

Paul, K1XM

From 1329887711535095349
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5b465d0ed31a3913,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-03 15:03:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-adm!brl-smoke!smoke!
stephany.WBST@Xerox.COM
From: stephany.WBST@Xerox.COM
Newsgroups: net.ham-radio
Subject: Re: \"The Case of the Poor Planner\" (clean)
Message-ID: <1471@brl-smoke.ARPA>
Date: Mon, 3-Mar-86 18:03:42 EST
Article-I.D.: brl-smok.1471
Posted: Mon Mar 3 18:03:42 1986
Date-Received: Wed, 5-Mar-86 05:48:16 EST
Sender: news@brl-smoke.ARPA
Lines: 5

I saw a silent one-reeler from about the time of WW1 with the same
thing. the carpeneter fills a barrel of brick, unties the rope, strikes
his head on the pully, the bootom falls out of the barrel, the carpenter
falls and the remains of the barrel falls on his head.
Joe N2XS

From -2416711162199950012
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f5062a6c520d37f5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-03 18:20:26 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL PROPAGATION FORECAST NR 9
Message-ID: <298@inuxi.UUCP>
Date: Mon, 3-Mar-86 21:20:26 EST
Article-I.D.: inuxi.298
Posted: Mon Mar 3 21:20:26 1986
Date-Received: Wed, 5-Mar-86 04:00:50 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 41

qst de k9eui
hr propagation forecast bulletin nr 9 from arrl headquarters
newington ct march 3, 1986
to all radio amateurs

as you may have observed, conditions on 14, 21, 24 and 28 mhz have been running better than predicted by the monthly qst propagation charts much of the time since early february. if you copy solar flux information from wwv daily you know why. the solar flux reached 103, 30 points above the base figure used for the qst charts, on february 5 and it was at or above the base figure most of the time, except for a few days just after the middle of february.

the solar flux is currently following its february curve almost exactly. it was up to 89 at bulletin time, high enough to make things hot for the arrl dx contest phone weekend, march 1 and 2. the first of two active areas of the sun, responsible for the february peak came around the east limb of the sun again march 2, still looking lively. the flux is running higher than would be expected from that one group, so the second may be contributing, as it did last month a few days before its actual appearance around the east edge of the solar disk.

fast rising solar flux curves mean increased geomagnetic activity, and increasing absorbtion of signal energy, especially on high latitude paths. such conditions may be accompanied by increased signal levels and higher muf, on north south paths and other low latitude or transequatorial circuits. these effects were common during early february, even to the extent of 50 mhz openings to south america, and major auroral periods on 144, 220 and even 432 mhz. watch for more of the same around march 8 and 9. more conventional propagation is generally good just before and just after such disturbances. watch march 3 through 5 and 10 through 11. our lower frequencies should be working well around the middle of march and whenever the wwv k index is 2 or lower and the solar flux

is in the low 70s or high 60s.

american sunspot numbers for february 20 through 26 were
between 0 and 6 with a mean of 2.6 ar

From -289680931903351594
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e2b7b90ea60e4622,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-04 10:02:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!linus!philabs!cmcl2!seismo!brl-adm!brl-smoke!smoke!CRC.DlosLV@Xerox.COM
From: CRC.DlosLV@Xerox.COM
Newsgroups: net.ham-radio
Subject: Re: Orbit Predictions for Oscar 10
Message-ID: <1500@brl-smoke.ARPA>
Date: Tue, 4-Mar-86 13:02:18 EST
Article-I.D.: brl-smok.1500
Posted: Tue Mar 4 13:02:18 1986
Date-Received: Sat, 8-Mar-86 22:15:10 EST
Sender: news@brl-smoke.ARPA
Lines: 7

Rob,

Check with AMSAT. They have many programs for doing what you
want. They have ads in the current mags.

Chuck...
W5USJ

From 6064782136185610l4
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,60db395912f8372c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-04 12:38:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site telesoft.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!ittatc!dcdwest!sdcsvax!
telesoft!bruceb
From: bruceb@telesoft.UUCP (Bruce Bergman @favorite)
Newsgroups: net.ham-radio
Subject: 02at mods and etc...
Message-ID: <314@telesoft.UUCP>
Date: Tue, 4-Mar-86 15:38:19 EST
Article-I.D.: telesoft.314
Posted: Tue Mar 4 15:38:19 1986
Date-Received: Fri, 7-Mar-86 06:43:29 EST
Organization: TeleSoft, SanDiego CA
Lines: 42

[line eater offering]

Someone posted a message asking if others would like to see
the mods required for tx/rx on a 02at. I can't remember who
posted it (except that it was a N2...), and our stinkin net
daemon deleted the message.

Could that gentlemen please send me (or post) the mods to the
02at? I have several people who have asked me to forward the
information that I don't have yet. I'd be glad to collect it
all and forward it...

And my question still remains: Anyone with knowledge of how to
modify handhelds to receive and/or transmit in the public
service range (~150-162) - please forward a copy of instructions
and I'll re-forward them. Especially for the 02at, 2at, Kenwood
2500 and 2600 (those are the ones I'm hearing interest in...)

To those who sent me mail requesting copies of the above: Don't
fret - I still have your name and will forward when I receive a
copy.

thanks!

bruce

Added: About the joke I sent - I found out it isn't original -
I've received about 10 copies of the (supposed) first issue.
sigh at least it was interesting (hi hi)

--
                  bang!-
allegra!\   \
crash!   \   gould9!--\
ihnp4!   \   \
           >--sdcsvax!---->--telesoft!bruceb (Bruce Bergman N7HAW)
noscvax! /   /
scgvaxd! /   sdencore!--/
ucbvax! /   /
              talaris!-

From 1865617386862685285
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8ce3daebbc8cc87e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-06 21:58:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-adm!brl-smoke!smoke!DFRoode%UCIVMS.BITNET@WISCVM.WISC.EDU

From: DFRoode%UCIVMS.BITNET@WISCVM.WISC.EDU
Newsgroups: net.ham-radio
Subject: TAPR/Packet Radio
Message-ID: <1602@brl-smoke.ARPA>
Date: Fri, 7-Mar-86 00:58:33 EST
Article-I.D.: brl-smok.1602
Posted: Fri Mar 7 00:58:33 1986
Date-Received: Tue, 11-Mar-86 01:26:31 EST
Sender: news@brl-smoke.ARPA
Lines: 7

Can anyone supply me with the address of TAPR (Tuscon Amateur Packet
Radio)? Is there another network mailing list for packet radio related
discussions?

    Dana, WA6NGO
    Bitnet: DFRoode@UCICP6
    Arpa: Roode@ics.uci.edu

From 4935562547154791208
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d96f3fd9ab1917c3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-07 08:04:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!ittatc!dcdwest!sdcsvax!ncr-
sd!hp-sdd!hplabs!tektronix!tekcrl!teklabs!rafaeld
From: rafaeld@teklabs.UUCP (Rafael De Arce)
Newsgroups: net.ham-radio
Subject: KB6LUY de WD6CMX...
Message-ID: <3287@teklabs.UUCP>
Date: Fri, 7-Mar-86 11:04:34 EST
Article-I.D.: teklabs.3287
Posted: Fri Mar 7 11:04:34 1986
Date-Received: Mon, 10-Mar-86 08:37:19 EST
Organization: Tektronix, Beaverton OR
Lines: 9

Congradulations and welcome to ham radio. Nice to see that you made the trip.
It took a little work but I think you will consider the effort worth while.
What you have proved is that it's not impossible.

I felt the same way when they sent me my first ticket. Now comes the real
fun. working your first contacts and later, DX.

Enjoy es hope to cu agn 73 sk

From 4873003167747355168
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,219c07977d4b7e38,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-07 11:41:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-adm!brl-smoke!smoke!sidb@ARDC
From: sidb@ARDC (AED)
Newsgroups: net.ham-radio
Subject: New book on radio history
Message-ID: <1617@brl-smoke.ARPA>
Date: Fri, 7-Mar-86 14:41:26 EST
Article-I.D.: brl-smok.1617
Posted: Fri Mar 7 14:41:26 1986
Date-Received: Tue, 11-Mar-86 01:26:42 EST
Sender: news@brl-smoke.ARPA
Lines: 23

For Rich and all the other radio history buffs,

The book that I was talking about the other day is "The Continuous Wave,
Technology and American Radio, 1900-1932" by Hugh G. J. Aitken: Princeton
University Press 1985. ISB N 0-691-08376-2

The book is about the transformation of radio in this country from the spark
thru, arcs, the huge alternators and then to vacuum tubes. The book covers
all the companies that I had heard about in the dim, dark days of the past,
like NESCO, GE, Federal, the various de Forest companies and even the
formation of RCA. Some of the names of the heros are Alexanderson, Bullard,
Elwell, Fessenden and Armstrong just to mention a few. Did you know that all
of Armstrong's patent on the superhet was tossed out by the Supreme Court?
Most were given to Frenchman who claimed to have invented it and shown it to
Armstrong during WW1. The book is full of all kinds of interesting stuff.

Amateur radio gets a pretty good mention in the book. I doubt if the author
is a ham?

See you on '79 next time in Yuma.

Sid
WB2TNO

From -7441663601336927485
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bc9778c92f2e071,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-07 13:33:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-adm!brl-smoke!smoke!jeffr@sri-spam
From: jeffr@sri-spam
Newsgroups: net.ham-radio
Subject: Best End-fed Antenna for 40 Meters ?

Message-ID: <1621@brl-smoke.ARPA>
Date: Fri, 7-Mar-86 16:33:24 EST
Article-I.D.: brl-smok.1621
Posted: Fri Mar 7 16:33:24 1986
Date-Received: Tue, 11-Mar-86 01:26:53 EST
Sender: news@brl-smoke.ARPA
Lines: 8

Is there a particular type of end-fed antenna that performs better than
others on 40 meters ? XYL-imposed aesthetics dictate I use an end-fed
antenna, and the random horizontal wire I put up is a marginal performer
at best, even with a resonant counterpoise. . . .

Tnx es 73,
N6MNI - Jeff

From -8650179290514779644
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b56bdd6eb51f0bd2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-07 17:59:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-adm!brl-smoke!smoke!price%marlin@nosc.ARPA
From: price%marlin@nosc.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: Sunspots of the future
Message-ID: <1628@brl-smoke.ARPA>
Date: Fri, 7-Mar-86 20:59:35 EST
Article-I.D.: brl-smok.1628
Posted: Fri Mar 7 20:59:35 1986
Date-Received: Tue, 11-Mar-86 01:27:05 EST
Sender: news@brl-smoke.ARPA
Lines: 20

An interesting item crossed by desk yesterday. Here at NOSC in San
Diego, we have a group of Atmospheric Physics types who specialize
in propagation modelling and prediction. Dr. Adolf Paul has what
appears to be THE model for predicting sunspot numbers. He was the
first, and for quite a while the only, guy to predict the huge peak
we had in 1980.

His forecast for the next peak is attainment for a short time of
just over 100 in 1990 (the peak in 1980 was more like 170). Even
worse news is the peak for 2000 is forecast at about 80. We won't
see 100+ again until many of us won't be here to see it anyway!

I have a handy 1-page writeup about this with a chart of sunspot cycles
from 1940 to 2040. If the request list isn't TOO long, I'd be willing
to mail it to interested parties. The diagram would be kinda hard

to put on the net!

73rds--Jim Price, K6ZH, PRICE@NOSC.ARPA

From -5049369078420187701
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b523e226a8e0dd49,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-07 18:07:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site sunybcs.UUCP
Path: utzoo!watmath!sunybcs!ugbowen
From: ugbowen@sunybcs.UUCP (Devon Bowen)
Newsgroups: net.ham-radio
Subject: Dormatory antenna
Message-ID: <2905@sunybcs.UUCP>
Date: Fri, 7-Mar-86 21:07:36 EST
Article-I.D.: sunybcs.2905
Posted: Fri Mar 7 21:07:36 1986
Date-Received: Sat, 8-Mar-86 05:35:04 EST
Organization: SUNY/Buffalo Computer Science
Lines: 13

I am new to this net, so please pardon my ignorance.
What is the difference between the net.ham-radio and the
net.ham-radio.packet boards?

And, does anyone know of a small antenna that I could put
in a dormatory room? I left my rig at home because I have
no desent antenna system for such a small area. Keep in
mind that I also have to think about interference with
radio and tv's being so close. Any help is appreciated...

73...
                                Devon E
                                KA2NRC

From 9213399260099574909
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4c9188a24a11b5d5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-08 18:12:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-adm!brl-smoke!smoke!BRAD@SU-CSLI.ARPA
From: BRAD@SU-CSLI.ARPA (Brad Horak)
Newsgroups: net.ham-radio
Subject: Stolen Ham Gear
Message-ID: <1646@brl-smoke.ARPA>
Date: Sat, 8-Mar-86 21:12:23 EST

Article-I.D.: brl-smok.1646
Posted: Sat Mar 8 21:12:23 1986
Date-Received: Tue, 11-Mar-86 01:29:17 EST
Sender: news@brl-smoke.ARPA
Lines: 42

Sorry for the wide distribution, but this stuff COULD show up at a
Deerfield, MA. flea! --Brad N6BDE

VHF/UHF AMATEUR GEAR STOLEN!!!

The following equipment was stolen from Kit Blanke's (WA6PWW) truck while visiting Glen Thomas (WB6W) Thursday, Mar. 6. The Milpitas, CA. police have this info, too (Milpitas PD Case #86-4704). If anyone finds any of this stuff, they should contact the Milpitas PD at (408)942-2400, or Kit at (home)408-263-8944 or (work)408-987-9669. Thanks.

Kenwood TH41-AT w/large battery pack.	Serial #5060830
Kenwood TM-401A 440 MHz transceiver.	Serial #4031165
Kenwood TM-201A 2-meter transceiver.	Serial #3122014
ICOM IC-3AT 220 MHz HT w/BP-8 battery.	Serial #14902168
Tempo S-1 2-meter HT w/o a battery.	(Milpitas PD has Serial #)

NOTES: The TH41-AT and IC-3AT have charged batteries, so someone could show up on the air with them.

The Tempo S-1 has Glen Thomas' driver's license number and OLD call (WB6YZI) engraved in the bottom.

The TH41-AT has Kit's call written in indelible ink on the radio. It is on the back of the radio, and only visible when you remove the battery pack.

The TM-201A has no antenna connector on it. The connector was yanked off when the radio was removed from the truck. (The connector hangs from the back of the radio on a coax pigtail. The pigtail broke, so there would now be a short piece of coax coming out of the radio with no connector on it.)

de Frank Kibbish, WB6MRQ.

From 6497229070493160454
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f6f9dfc4bdf4d0f1,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-10 08:50:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!linus!philabs!cmcl2!seismo!
brl-adm!brl-smoke!smoke!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: Sunspots of the future
Message-ID: <1679@brl-smoke.ARPA>
Date: Mon, 10-Mar-86 11:50:11 EST
Article-I.D.: brl-smok.1679
Posted: Mon Mar 10 11:50:11 1986
Date-Received: Sat, 15-Mar-86 20:47:18 EST
Sender: news@brl-smoke.ARPA
Lines: 7

Maybe this is related to the article some years ago stating that the neutrino
flux measured in the 1950s from the Sun was gone when the measurements were
repeated in the 1970s. The conclusion was that the thermonuclear reaction in
the Sun had gone out and we were living on stored heat. Mmm..., no wonder the
winters seem to be getting gradually colder.

-John S., W3IKG

From -8243878510408844825
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba8e3a94230969d0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-10 09:30:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!linus!philabs!cmcl2!seismo!
brl-adm!brl-smoke!smoke!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: Dormatory antenna
Message-ID: <1680@brl-smoke.ARPA>
Date: Mon, 10-Mar-86 12:30:13 EST
Article-I.D.: brl-smok.1680
Posted: Mon Mar 10 12:30:13 1986
Date-Received: Sat, 15-Mar-86 20:47:28 EST
Sender: news@brl-smoke.ARPA
Lines: 3

What bands do you want to work with this antenna?

-John S., W3IKG

From -8540018575526487974
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,70b512f3e5314f34,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1986-03-10 12:10:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!linus!philabs!cmcl2!seismo!
brl-adm!brl-smoke!smoke!IAIPS-ACIPS@USC-ISIF.ARPA
From: IAIPS-ACIPS@USC-ISIF.ARPA
Newsgroups: net.ham-radio
Subject: REQUEST FOR QSL INFO
Message-ID: <1687@brl-smoke.ARPA>
Date: Mon, 10-Mar-86 15:10:51 EST
Article-I.D.: brl-smok.1687
Posted: Mon Mar 10 15:10:51 1986
Date-Received: Sat, 15-Mar-86 20:47:55 EST
Sender: news@brl-smoke.ARPA
Lines: 10

Does anyone (Paul?) have a QTH/QSL MGR/stateside call for:

        V47M - St. Kitts

worked during the ARRL DX SSB Contest?

Tnx -- George
        W1TQS/4

From 8373511370210322798
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6dc5ba0f673f60fa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-10 13:24:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!linus!philabs!cmcl2!seismo!
brl-adm!brl-smoke!smoke!DFRoode%UCIVMS.BITNET@WISCVM.WISC.EDU
From: DFRoode%UCIVMS.BITNET@WISCVM.WISC.EDU
Newsgroups: net.ham-radio
Subject: TAPR address/Packet radio list
Message-ID: <1688@brl-smoke.ARPA>
Date: Mon, 10-Mar-86 16:24:46 EST
Article-I.D.: brl-smok.1688
Posted: Mon Mar 10 16:24:46 1986
Date-Received: Sat, 15-Mar-86 20:48:07 EST
Sender: news@brl-smoke.ARPA
Lines: 14

In case there are others out there that wanted to know, the address
    for TAPR is:

         Tuscon Amateur Packet Radio Corporation
         PO Box 22888
         Tucson, AZ 85734-2888

To get signed up on the packet radio mailing list, send to:

packet-radio-request@MIT-EDDIE.arpa

Thanks to all that replied,

Dana - WA6NGO

From -2806803446203212978
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ca0ebd1ef86e80f2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-10 16:03:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!decvax!bellcore!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!akguc!
mtunh!mtung!mtunf!mtune!ky2d-2!n2aam
From: n2aam@ky2d-2.UUCP (Dave)
Newsgroups: net.ham-radio
Subject: want adds on this net
Message-ID: <142@ky2d-2.UUCP>
Date: Mon, 10-Mar-86 19:03:43 EST
Article-I.D.: ky2d-2.142
Posted: Mon Mar 10 19:03:43 1986
Date-Received: Wed, 12-Mar-86 23:37:13 EST
Distribution: na
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 1

I would like to know if it is ok to post a want add for used amateur radio
equipment on this net. If one of he net sysopps can inform me regarding this it
would be appreciated. 73s...Dave.

From 3822003532264560283
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,823e38cbb97c1d31,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-10 16:40:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!linus!philabs!cmcl2!seismo!
brl-adm!brl-smoke!smoke!W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA (Keith Petersen)
Newsgroups: net.ham-radio
Subject: IC02AT band expansion mods
Message-ID: <1690@brl-smoke.ARPA>
Date: Mon, 10-Mar-86 19:40:42 EST
Article-I.D.: brl-smok.1690
Posted: Mon Mar 10 19:40:42 1986
Date-Received: Sat, 15-Mar-86 20:48:19 EST
Sender: news@brl-smoke.ARPA
Lines: 68

This is a repost for those who missed it the first time around.

Band Expansion Modification For The IC-02AT

By LTC Steve Peter, CAP

---

1. Remove back from radio (9 screws must be loosened).

2. Carefully remove radio chassis from front case by pulling out top of radio and lifting slightly (to remove contacts from bottom case.) Be extremely careful of ribbon cable and heat sink compound on power amplifier module.

3. While leaving case of radio face down, there are two diodes visible near top of case (diode range board sticks out a little from under the tone board). The diode on the right should have the top lead lifted by touching with a hot soldering iron. This can be accomplished without removing any board since diodes extend just from beneath top PC board. Leave other end of diode (which is under the top board anyway) alone. The diode can easily be reconnected if necessary. If you remove the wrong diode, the coverage range will be reduced rather than expanded. If you do not desire to transmit out of band, you may skip to the step that mentions adjusting the VC.

4. Using wire cutters, snip the top lead of R182-470K ohm resistor (yellow-violet-yellow). This resistor is next to IC-102.

5. Next, tack a wire on to pin 13 of IC-102 and run to ground connection. I used the PTT ground near the switch. Dress wire to avoid pinching. This now allows the transmitter to operate on any frequency the VCO will cover.

6. Install radio chassis back into front cover. Leave back off temporarily.

7. Carefully apply power to radio and enter a frequency on the 160 MHz band. (I recommend the continuous weather 162.55 etc.)

8. With power still applied adjust slug on VCO (not the trimmer cap) in a counter clockwise direction until receiver hears desired station. This sets the upper limit of your range and is about 1/2 to 3/4 turns from where it was set before.

9. If you have a counter you can set the upper frequency you wish to use and adjust the VCO until the counter reads proper frequency. (I adjusted for upper frequency of 165 MHz and radio will still transmit on 140 MHz which will cover all appropriate VHF frequencies.)

10. This completes the modification. A few words of caution:

a. The radio is not type accepted for use in the commercial band.

b. Make sure you install the battery latch correctly on bottom of radio, or battery will become permanently locked onto radio.

c. Tighten screws on bottom of radio snuggly. If they loosen while battery is connected you cannot remove the battery. (This has happened to many units and it would be prudent to periodically check these screws to assure their tightness.)

d. If you do not adjust the VCO after the mod, the radio will cover approximately 133 MHz to 155 MHz as it comes for ICOM.

That's it, KA0JRQ's tech files...
Relayed and edited by KG2U/Bill

From -6447788715034206806
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e589af87a75d8fad,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-10 21:58:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!linus!philabs!cmcl2!seismo!
brl-adm!brl-smoke!smoke!DPHARP01%ULKYVX.BITNET@WISCVM.WISC.EDU
From: DPHARP01%ULKYVX.BITNET@WISCVM.WISC.EDU
Newsgroups: net.ham-radio
Subject: Help with Bearcat 100 Scanner
Message-ID: <1691@brl-smoke.ARPA>
Date: Tue, 11-Mar-86 00:58:06 EST
Article-I.D.: brl-smok.1691
Posted: Tue Mar 11 00:58:06 1986
Date-Received: Sat, 15-Mar-86 20:48:30 EST
Sender: news@brl-smoke.ARPA
Lines: 16

I own a plain-vanilla Bearcat 100 (not 100xl) and have had it
for quite some time now with no real major problems. However, I live
real close to our local airport and wouldn't mind receiving the
aircraft bands. Has anyone had any luck in possibly altering the
scanner to cover these bands? I've seen the ads for downconversion
boxes, but didn't want to invest that kind of money. Please
understand that I have no idea how difficult this may be, but if it
can or can't be done I wouldn't mind learning more about the scanner
internals....

Thanks in advance,
David Harpe
University of Louisville

NetMail: dpharp01@ULKYVX.BITNET
Phone: (502) 588-6303

From 2508668664552647228
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,709fed7ba1de2402,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-11 07:43:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN nr 17 (FCC Docket 85-105 auto. digital control above 50 MHz)
Message-ID: <299@inuxi.UUCP>
Date: Tue, 11-Mar-86 10:43:00 EST
Article-I.D.: inuxi.299
Posted: Tue Mar 11 10:43:00 1986
Date-Received: Thu, 13-Mar-86 06:50:21 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 16

qst de k9eui
hr arrl bulletin nr 17 from arrl headquarters
newington ct march 5, 1986
to all radio amateurs bt

the arrl has filed a petition for extraordinary relief in docket 85 105, requesting the fcc to temporarily rescind its prohibition on the transmission of third party traffic by amateur stations using digital communications under automatic control above 50 mhz, while the fcc considers some 19 petitions for reconsideration filed by amateur radio operators and groups, including arrl. in its petition the league stated that the fccs prohibition, if permitted to take effect, would have a crippling effect on the development of packet radio. for further details, see the arrl letter and happenings, may qst
ar

From 3560780897362609160
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e88f1e94de7d66b3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-11 07:43:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: CRRL BULLETIN nr 8
Message-ID: <300@inuxi.UUCP>

Date: Tue, 11-Mar-86 10:43:32 EST
Article-I.D.: inuxi.300
Posted: Tue Mar 11 10:43:32 1986
Date-Received: Thu, 13-Mar-86 06:48:07 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 13

qst de k9eui
hr crrl bulletin nr 8 from crrl headquarters
london ont march 10, 1986
to all radio amateurs bt

to celebrate its 40th anniversary, scarborough amateur radio club is offering a special award. for details, contact scarborough amateur radio club. box 174, station d, scarborough, ontario m1r 5b5.

crrl is updating its listing of repeaters prior to publishing the 1986 crrl repeater directory. if you have updates or changes, please report them to crrl soon ar

From 6853932104480420269
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eca291e2094a74aa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-11 07:45:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL PROPAGATION FORECAST BULLETIN nr 10
Message-ID: <301@inuxi.UUCP>
Date: Tue, 11-Mar-86 10:45:10 EST
Article-I.D.: inuxi.301
Posted: Tue Mar 11 10:45:10 1986
Date-Received: Thu, 13-Mar-86 06:48:32 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 33

qst de k9eui
hr propagation forecast bulletin nr 10 from arrl headquarters
newington ct march 10, 1986
to all radio amateurs bt

in the past two days, areas of the sun responsible for the february flux peak of 103, and the major geomagnetic disturbance of the 7th, were facing the earth again. the first of the two sunspot groups seen in february came back on schedule in early march, producing a flux peak of 93 on march

4, and a strong magnetic disturbance on the 7th. the other group which brought a secondary flux peak of 99 on february 10 has not returned to view, and flux values are running about ten percent below the february figures.

the flux now appears headed for near minimum levels before the middle of march, with no major geomagnetic disturbances likely this week. with the flux currently in the middle 80s, the 21, 24 and 28 mhz bands are doing fairly well, though activity is moving towards mostly transequatorial coverage, and this becoming more brief as the flux moves lower. the dx potential of the 14 mhz band is also falling again. no reversal of this trend is likely before the last week of march. the prediction charts printed monthly in qst now become more useful as they are based on near minimum solar flux levels. seasonal propagation changes related to the increased hours of daylight in the northern hemisphere will also become increasingly noticeable. this seasonal factor is also apparent in the appearance of the qst charts.

american sunspot numbers for february 27 through march 5 were between 6 and 25 with a mean of 16.9. the monthly means for january and february were 1.84 and 18.75 respectively ar

From -8098361388498705982
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a0a021454dabfc1e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-11 10:02:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!linus!philabs!cmcl2!seismo!
brl-adm!brl-smoke!smoke!price%marlin@nosc.ARPA
From: price%marlin@nosc.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: Some interesting West Coast DX
Message-ID: <1699@brl-smoke.ARPA>
Date: Tue, 11-Mar-86 13:02:48 EST
Article-I.D.: brl-smok.1699
Posted: Tue Mar 11 13:02:48 1986
Date-Received: Sat, 15-Mar-86 20:48:42 EST
Sender: news@brl-smoke.ARPA
Lines: 32

This current sunspot peak has netted me a few interesting catches
at 0200Z plus/minus 15 minutes the past two nights from San Diego.

UI8OAE on 14.025

BY5RA on 14.010

UM8MFB on 14.215 SSB

UA9YE on 14.190 SSB (Zone 18)

AP2MQ on 14.175 SSB

Two goodies "got away" but were working west coast stations:

VU2CK on 14.181

UJ8SAD on 14.170

Really excellent openings! I worked the above with a barefoot
transceiver and a 3-el. tribander at about 30 feet.

Moral of the story--give a listen on 20 at your local sunset the next
couple of days!

73--Jim, K6ZH

P.S. Thanks to all of you who requested a copy of the "sunspots of
the future" article--it'll be in the mail (and I mean U.S. Mail in
this case) by the end of the week.

From 237753159799937040
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e589af87a75d8fad
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-11 10:26:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!linus!philabs!cmcl2!seismo!
brl-adm!brl-smoke!ron
From: ron@brl-smoke.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Help with Bearcat 100 Scanner
Message-ID: <1700@brl-smoke.ARPA>
Date: Tue, 11-Mar-86 13:26:20 EST
Article-I.D.: brl-smok.1700
Posted: Tue Mar 11 13:26:20 1986
Date-Received: Sat, 15-Mar-86 20:48:53 EST
References: <1691@brl-smoke.ARPA>
Organization: Ballistic Research Lab (BRL)
Lines: 14

> I own a plain-vanilla Bearcat 100 (not 100xl) and have had it
> for quite some time now with no real major problems. However, I live
> real close to our local airport and wouldn't mind receiving the
> aircraft bands. Has anyone had any luck in possibly altering the
> scanner to cover these bands? I've seen the ads for downconversion
> boxes, but didn't want to invest that kind of money. Please
> understand that I have no idea how difficult this may be, but if it
> can or can't be done I wouldn't mind learning more about the scanner

> internals....

One problem is that aviation radio is AM not FM like nearly everything
else that the scanner handles.

-Ron

From -7814180014531051213
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b523e226a8e0dd49
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-11 16:17:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!akguc!
mtunh!mtuni!mtune!ky2d-2!jak
From: jak@ky2d-2.UUCP (Jim kutsch)
Newsgroups: net.ham-radio
Subject: Re: Dormitory antenna
Message-ID: <143@ky2d-2.UUCP>
Date: Tue, 11-Mar-86 19:17:11 EST
Article-I.D.: ky2d-2.143
Posted: Tue Mar 11 19:17:11 1986
Date-Received: Sat, 15-Mar-86 04:02:33 EST
References: <2905@sunybcs.UUCP>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 15

Years ago when I was in a college dorm, my two roommates (both hams too)
and I loaded the dorm's rain gutters and downspouts as our antenna. We
placed a small wood block under each downspout to insulate it from the
metal (ground) pipe underneath. Then, we ran a very small enameled wire
(#28 or so) through a hole in the screen out and under a sheet metal
screw in the nearby downspout. Using an antenna tuner and an old HW100
we worked most of W. Va. with a signal as good as most mobile stations.
Admittedly, most of the junctions operated as diodes and perhaps we
generated TVI but no TVs were allowed in the dorm and there were no
houses nearby.

73, Jim ky2d.

p.s. net.ham-radio.packet is for packet radio related discussions;
net.ham-radio is for all other aspects of ham-radio.

From 3375255529639563897
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,57b854ea8157b172,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-12 13:31:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: AMSAT Phase 3-C Report
Message-ID: <48@petrus.UUCP>
Date: Wed, 12-Mar-86 16:31:01 EST
Article-I.D.: petrus.48
Posted: Wed Mar 12 16:31:01 1986
Date-Received: Fri, 14-Mar-86 04:50:05 EST
Organization: Bell Communications Research, Inc
Lines: 114

Posted: Mon Mar 3, 1986 5:19 PM GMT Msg: PGIG-2405-3207
From: JFLASKA
To: Amsat
Subj: IIIC Status #3

The Amsat DL team of DJ5KQ, Werner Haas and DK1YQ, Hanspeter Kuhlen wpent the weekend at the Amsat lab in Golden, Colorado. Purpose of their trip was to exchange information, particularly for the Rudak experiment, as well as other matters. DK1YQ also met Sunday with a Tapr representative. 16mm and photo documentation of the construction activities andw the team will return to Germany on 3 March.

The RF Power Amplifier module will be slightly larger than projected. As a result the mounting points on the stringers are no longer valid, and new ones are being made to accomodate the changed dimensions.

The Arm Safe Plug has been prewired and is installed.

The Export License Application forms were not received by W3GEY prior to the weekend. The originals are complete and the entire file with all needed copies will be in his hands in a couple of days.

The Main Battery Pack was wired and the battery case was assembled and closed. The main battery is now mounted in the spacecraft, but will likely be removed one more time to allow installation of the last mounting screw for the fuel tank.

No progress was made on mounting the Helium Bottle Bracket. That awaits the manufacture of additional mounting parts. An alternative mounting plan has been decided upon.

A milestone of sorts has been achieved. The Main Fuel Tank has been mounted and all mounting ascrews except one have been installed. That will require temporary removal of the main battery as noted above. The fit of the Main Tank was unusually good and the installation was relatively routine. The reaction from W3GEY was "somethingmust be wrong...that was too easy". Those familiar with the build of the two prior Phase III satellites will

remember that the nylon spacers which mount between the tank and the center core of the spacecraft had to be of various different thickness. In the present instance all the nylon spacers are identical.

The Thermal-Vac schedule remains unchanged. Presently a feed through connector for the Vacuun chamber is being sought and hopefully will be promptly located. There is at least a chance that the Vibration test may also be done at the Martin-Marietta facility. That question is presently undecided.

Again, as in the past, the contents of this report should be made available to Packet and Bulletin Board systems.
More next week.

WB0RLY

Posted: Mon Mar 10, 1986 1:14 AM GMT Msg: AGIG-2414-3346
From: JFLASKA
To: AMSAT
Subj: IIIC STATUS #4

IIIC Status #4 9 March 1986

Since our Project Manager, W3GEY, was out of the country this weekend construction activities were under the leadership of W8FAR, Hal Hebert, who has been acting as Construction Manager for the last several months at the Amsat lab in Golden, Colo.

On our Wednesday evening net W3GEY made several announcements that may be of profound importance. The first was that based on reports from usually reliable sources our launch date may have slipped by a month . This is unconfirmed, but is passed along for whatever it may be worth.

The second announcement was a good one. Martin-Marietta has reportedly given us clearance to radiate from the Thermal-Vac unit during the 2 week test now scheduled to begin 23 May, 1986. The decision has not yet been made as to whether the transponders will be turned on during the test, but those of us in the Denver area may have the opportunity to work IIIC during that time. Final decision on this awaits the pleasure of Amsat USA and Amsat DL.

The revised mounting stringers to accomodate the enlarged dimension power amplifier have been completed and await the anodizing process. Fit checks with the revised Amplifier module template were satisfactory today.

The Rudak connector in the wiring harness was changed in accordance with the request of DK1YQ, Hanspeter Kuhlen, and is ready.

Two of the three 2M antenna boxes were installed. The third awaits the installation of other parts. These are for the reflector

elements of the 2M antenna system.

The Torque magnets are installed. These consist of rod magnets in the upper and lower parts of each arm. In addition, the mounting rings, which join these magnets are installed for both the upper, as well as the lower units. While this had been predicted to be a knuckle-skinner, and plenty of bandaids were on hand, it turned out not to be much of a problem. This system is used to control, and change, the attitude of the spacecraft.

The Export License Application forms were delivered to W3GEY prior to his leaving on his trip, and should have been delivered to Amsat Headquarters before he departed these friendly shores enroute to UK.

Copy the next report next week. We're told that this info is getting on packet systems and that the reaction is favorable. Our only purpose is to keep Amsat members informed of what is going on with their satellite.

WB0RLY

From -1168753983887212201
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,174af41061d784ae,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-12 15:51:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ki4pv.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!hropus!ki4pv!tanner
From: tanner@ki4pv.UUCP (Tanner Andrews)
Newsgroups: net.ham-radio
Subject: Re: want ads on this net
Message-ID: <7043@ki4pv.UUCP>
Date: Wed, 12-Mar-86 18:51:23 EST
Article-I.D.: ki4pv.7043
Posted: Wed Mar 12 18:51:23 1986
Date-Received: Fri, 14-Mar-86 06:06:50 EST
Organization: CompuData South, DeLand
Lines: 12

I must register my extreme objection to the posting of advertisements in this forum. I advise use of net.forsale (na.forsale, fl.forsale) rather than this forum.

I fear that if we start permitting advertisements (most of which will, for most readers, be for items far far away) we will find that the information-bearing articles are buried under the advertising.

tanner andrews, systems
compudata south, deland
--
<std dsclm, copies upon request> Tanner Andrews

From 2264859132146839232
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f7bf54bc3f590bd3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-13 05:39:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!houxm!whuxl!whuxlm!akgua!
akguc!mtunh!mtuni!mtune!ky2d-2!n2aam
From: n2aam@ky2d-2.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: the cactus net
Message-ID: <144@ky2d-2.UUCP>
Date: Thu, 13-Mar-86 08:39:41 EST
Article-I.D.: ky2d-2.144
Posted: Thu Mar 13 08:39:41 1986
Date-Received: Sat, 15-Mar-86 21:52:11 EST
Distribution: na
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 2

Has anyone on line ever heard of the cactus network? It is a system of linked
repeaters in the southern and western united states. If anyone has more
information on this net it would be appreciated. What vhf. or uhf. bands does it
use and how are the repe
eaters linked? 73s......Dave n2aam

From 8689112367835062170
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2a75ebf243686adf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-13 07:36:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ssc-bee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!ittatc!dcdwest!sdcsvax!
sdcrdcf!hplabs!tektronix!uw-beaver!ssc-vax!ssc-bee!maa
From: maa@ssc-bee.UUCP (Mark A Allyn)
Newsgroups: net.ham-radio
Subject: Old 1960's novel with ham radio in it (query)
Message-ID: <498@ssc-bee.UUCP>
Date: Thu, 13-Mar-86 10:36:39 EST
Article-I.D.: ssc-bee.498
Posted: Thu Mar 13 10:36:39 1986
Date-Received: Sun, 16-Mar-86 00:39:39 EST
Distribution: net
Organization: Boeing Aerospace Co., Seattle, WA
Lines: 19

Sometime in the 1950's or 1960's there was a novel written which had
ham radio in it. It was written for a teen age to pre-teen age audiance.

Unfortunately I can't remember the title or author. I only remember that
one of the charactors was Randy Morrow who was interested in learning to
become a radio ham and another charactor was Chip Morton or it may have
be Morson??? Chip was allready a ham when the story began and he was a
bit unfriendly to Randy but opened up and help Randy get his
novice license as the story went on. A third charactor was Dave something
- - maybee Schefield - - who worked at a TV station.

If anyone out there remembers anything about that book, I would very much
appreciate it if they let me know!

Thank you very much in advance!!

Mark A. Allyn
!uw-beaver!ssc-vax!ssc-bee!maa
206-773-3437

From -2990738438274708089
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,174af41061d784ae
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-13 07:54:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site bambi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!petrus!magic!science!bambi!steve
From: steve@bambi.UUCP (Steve Miller)
Newsgroups: net.ham-radio
Subject: Re: want ads on this net
Message-ID: <319@bambi.UUCP>
Date: Thu, 13-Mar-86 10:54:27 EST
Article-I.D.: bambi.319
Posted: Thu Mar 13 10:54:27 1986
Date-Received: Fri, 14-Mar-86 08:08:46 EST
References: <7043@ki4pv.UUCP>
Organization: Bell Communications Research Inc., Morristown, NJ
Lines: 7

> I must register my extreme objection to the posting of advertisements
> in this forum. I advise use of net.forsale (na.forsale, fl.forsale)
> rather than this forum.
>
Nonsense!

Steve Miller WA4LDA ihnp4!bambi!steve

From 417879216247430253
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c120b5261943714c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-13 09:16:08 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!linus!philabs!cmcl2!
harvard!seismo!brl-adm!brl-smoke!smoke!price%marlin@nosc.ARPA
From: price%marlin@nosc.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: QSL info, pse--who was that guy?
Message-ID: <1773@brl-smoke.ARPA>
Date: Thu, 13-Mar-86 12:16:08 EST
Article-I.D.: brl-smok.1773
Posted: Thu Mar 13 12:16:08 1986
Date-Received: Sun, 16-Mar-86 00:36:13 EST
Sender: news@brl-smoke.ARPA
Lines: 16

Very early this morning (like 1100Z) I worked T21ZK on 7001. He's
on Tuvalo, a rock in the Pacific near the date line/equator. According
to the oldest logbooks I have around, this was VR8 before it was T2.
The question is: back when the world was flat, was this place known
as something more familiar--like Gilbert Island, or some such? It
appears to be a new one for me, but I've got DX cards from over 20
years of operating and I'm not sure how to sort this one out.

Also I need his QSL info. The newest Callbook only shows T2AXX type
calls, none with a ZK in them.

Thanks in advance for any help. 73--Jim, K6ZH.

P.S. The sunspot info is "in the mail" for those who requested it.

From -4218586665220688250
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,276e4c55b32f6708,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-13 22:20:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!glacier!oliveb!
hplabs!qantel!lll-lcc!lll-crg!seismo!brl-adm!brl-smoke!smoke!clements@BBNCCQ.ARPA
From: clements@BBNCCQ.ARPA (Bob Clements)
Newsgroups: net.ham-radio
Subject: W0RLI Packet Radio Mailbox/Gateway version 11.2
Message-ID: <1797@brl-smoke.ARPA>
Date: Fri, 14-Mar-86 01:20:21 EST
Article-I.D.: brl-smok.1797
Posted: Fri Mar 14 01:20:21 1986
Date-Received: Mon, 17-Mar-86 06:01:54 EST
Sender: news@brl-smoke.ARPA
Lines: 126

Version 11.2 of the W0RLI MailBox/Gateway has been released. The
binaries and documentation are in PAKT112A.LBR and the sources are in

PAKT112B.LBR. These are now available from SIMTEL20 as:

```
Filename          Type  Bytes    CRC

Directory PD:<CPM.PACKET>
PAKT112A.LBR.1              BINARY   108800  5FC0H
PAKT112B.LBR.1              BINARY   145280  75A4H
```

The changes since the last such posting, version 10.0, are summarized
below in an extract from the CHANGES.TNC file.

For those who have not seen this system before, a brief description:

The W0RLI MailBox and GateWay is a system which runs on a Xerox 820
computer and which operates on Amateur Packet Radio via one or two
TAPR TNCs (or clones). It also runs with TNC-2s (W3IWI is running one).

The W0RLI system is running at over 75 sites in some number of
countries and makes up the majority of the packet mail forwarding
system. It is also used for gatewaying between local packet areas and
long haul links on HF, or to nearby nets on other VHF/UHF bands.
For a more complete description, see NOTES.TNC.

Hank is not on ARPANET or Usenet. I will be glad to relay comments
and questions to him. If you want the distribution on disk, send
a self-addressed stamped 8" SSSD disk (in re-usable mailer) to Hank at
his callbook address. Two disks if you want the sources as well.
To reduce the load on Hank, I will do the same under the same conditions.
I am also good in the Callbook.

73,
Bob, K1BC

ARPANET: CLEMENTS@BBN
Usenet: {ihnp4, decvax, linus, ...}!bbncca!clements

[Extract of CHANGES.TNC follows]

     W0RLI MailBox and GateWay   Version 11.2

     Changes and additions since version 11.1 are:

Added DE (Display Excluded users).
Added KF (Kill all forwarded).
Added KM (Kill Mine) command.
Added LF (list forwarded), LY (list read).
Added P5 Y / P5 N (enable/disable kill after forward).
Moved help and info text out of config, freeing some memory.
Added $V, print changable parameter values.

     Changes and additions since version 11.0 are:

No msg of day, very short menu for connect by bbs.

     Changes and additions since version 10.7 are:

Added DB - display users maked as BBS.
Added commands to set "allow only bbs" flags from menu:
"P3 Y" or "P3 N" for COMM, P4 same for PRINTER.
Added "allow bbs only" for COMM and PRINTER port.
Added "is a bbs" tag in user record.
Added login count to user record.
GateWay connect to linked station now connects to distant
GateWay, then brings up GateWay and connects to user.
(This is NOT layer 3 ...)

Added "P <call>" - show path to user.
Better command dispatcher.

     Changes and additions since version 10.6 are:

Added DL, DS - display local and sysop users.
Removed "call back" "is bbs" "mail drop" from user record.
Beacon got non-local calls, fixed.
Corrected error detection on S and M commands.

     Changes and additions since version 10.5 are:

Added log file buffering.
Added WA, WN, WS, AN, AS commands for file management.
Added "N" command, user set own name.
Removed extra writes of mail file header.
W now lists $sys files if SYSOP.
M command now parses @ and < correctly.
Download of $sys files not allowed.
Parallel printer code from k4nta into cbios.mac
Addition of "B" command to GateWay menu.

     Changes and additions since version 10.4 are:

Fix "EF" crash on insert of blank line.
Addition of M command in gateway mode.

     Changes and additions since version 10.2 are:

New user record not written until exit. Bad data if gate used.
Addition of "EF" simple file editor.
Bug fix, P1, P2 trashed "illegal call" flag.
Beacon line now not show calls with msgs that will forward.
V now gives "*** Done" when it finishes.
Corrected handling of DEL for BS.
Change to CBIOS.COM to do xon/xoff flow control.
Fixed wrong msg # in svc msg text.

     Changes and additions since version 10.0 are:

Service msg was not logged correctly.
Added RM command: "Read Mine".
Added k1bc's "P" command.
Added optional call and I qualifier to X command.
FWD.TNC parsing now ignores leading blanks, all text after call.
Added MAIL.BAK and USER.BAK to configuration file. Can specify drive.
Fixed loss of timeout if con req during disconnect sequence.
Treat DEL same as BS from TNC.
Added V command: copy file.
Added logging for local user functions, switch in config to turn off.
Call with all blanks hung system at connect. Fixed.
Allow all legal file name chars.
Zero digi allowed NO connects, fixed.
Seperate "max digi counts" for each port.
Max calls in "unread mail" list in config.tnc.

[End of extract]

From -6741199466743748640
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f37c1150f3cf1a0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-14 11:31:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!glacier!oliveb!
hplabs!qantel!lll-lcc!lll-crg!seismo!brl-adm!brl-smoke!smoke!clements@bbnccq.ARPA
From: clements@bbnccq.ARPA (Bob Clements)
Newsgroups: net.ham-radio
Subject: ARRL Bull #19: Packet gets a reprieve
Message-ID: <1811@brl-smoke.ARPA>
Date: Fri, 14-Mar-86 14:31:37 EST
Article-I.D.: brl-smok.1811
Posted: Fri Mar 14 14:31:37 1986
Date-Received: Tue, 18-Mar-86 01:16:04 EST
Sender: news@brl-smoke.ARPA
Lines: 28

Hr ARRL Bulletin Nr 19 From ARRL Headquarters
Newington CT March 14, 1986, Edited by K1BC
To All Radio Amateurs BT

VHF packet radio got a big boost today. At ARRL request, the FCC
suspended parts of its rules to permit third party traffic by packet
stations under automatic control. Several conditions are attached to
the waiver. Provisions of Sec 97.80(b) and 97.114(b)4, which were both
to be added to the rules March 14, are waived to permit Amateur
stations retransmitting digital packet radio communications on 50 MHz
and higher bands using AX.25 or compatible protocol to be operated
under automatic control while retransmitting third party traffic.

This waiver applies only to the retransmission of third party traffic

originated at another Amateur station which is under local or remote control. When an Amateur station is operated under automatic control, devices must be installed and procedures must be implemented which will ensure compliance with the rules when the control operator is not present at the control point of the Amateur station. This waiver will remain in effect until the Commission takes final action on the petitions for reconsideration filed in PR Docket 85 105.

Amateur packet operators must be alert to the increased dependency upon them for monitoring during the period of this waiver. They should immediately make known to the responsible control operator of an automatic packet station any misuse of his station so the licensee can take corrective action. In summary, VHF packet radio may continue under automatic control. AR

From 1265656292970131788
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f62a249b8bc2938,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-14 13:02:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!glacier!oliveb!
hplabs!qantel!lll-lcc!lll-crg!seismo!brl-adm!brl-smoke!smoke!clements@bbnccq.ARPA
From: clements@bbnccq.ARPA (Bob Clements)
Newsgroups: net.ham-radio
Subject: ARRL DX Bull #11
Message-ID: <1819@brl-smoke.ARPA>
Date: Fri, 14-Mar-86 16:02:34 EST
Article-I.D.: brl-smok.1819
Posted: Fri Mar 14 16:02:34 1986
Date-Received: Tue, 18-Mar-86 01:16:36 EST
Sender: news@brl-smoke.ARPA
Lines: 51

Hr DX Bulletin Nr 11 From ARRL Headquarters
Newington CT March 14, 1986, Edited by K1BC
To All Radio Amateurs BT

Thanks to KB1BE and the Connecticut DX Association for the following DX information.

DXCC desk. Thanks to further information received, DJ5RT/TT8 will now be credited for DXCC, effective April 1.

Zambia. 9J2LC marks the last stop on their African DX tour for Lloyd and Iris Colvin. Look for them on 20 meter SSB and 20 and 40 meter CW. QSL all contacts on the African tour via the YASME Foundation.

Tonga. A35ZK is being operated by Kazu, JJ1TZK. This operation will be followed by T21ZK on Tuvalu, then by a T32 on Eastern Kiribati. Operation is primarily on 20 and 40 meter CW, with some 15 and 20 meter SSB. QSL to JJ1TZK.

Svalbard. JW5E, Tom, is active on 20 meter SSB. QSL via LA5NM.

Falkland Islands. VP8LP, Bob, is active on 20 meter SSB around 2300Z near 14208 KHz. QSL via G3VPW.

Guinea Bissau. J52UAH, Pierre, is active on 20 meter SSB and CW. QSL via F6FNU.

Greece. SV1SL, Giorgio, has been worked on 3790 KHz at 0410Z.

Faroe Islands. OY5NS has been worked on 3793 KHz at 0100Z. QSL via W3HNK.

China. BY1QH, Yuan, in Beijing has been extremely active on 20 meter SSB between 2330 and 0145Z on 14226.5 KHz. This has been a very regular station on the W7PHO DX net at this time, operating four or five nights each week.

Tokelaus. Ron, ZL1AMO, is expected to operate ZK3RW very shortly. Operation is expected to be on 20 and 40 METER cw with some 15 and 20 METER Ssb.

fernando De NORONHA. PY7PO/py0f is active between 2200 and 2300Z on 20 meter SSB and has been reported on 75 meter SSB. PY0FG has been worked on 75 meter SSB at 0115Z. QSL to PT7AZ.

Lerins Island. Four French Amateurs will activate F9ER/P on SSB and F6HMJ/P on CW on April 19 and 20. SSB frequencies will be 3780, 7085, 14180, 21315 and 28510 KHz, CW frequencies will be 10 KHz above the band edge.

Uganda. DJ5RT will be active as 5X5WR on all bands by March 17. AR

From 7186271810761890904
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2acdb22be14c29ec,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-15 10:29:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site sunybcs.UUCP
Path: utzoo!watmath!sunybcs!ugbowen
From: ugbowen@sunybcs.UUCP (Devon Bowen)
Newsgroups: net.ham-radio
Subject: dormatory antenna
Message-ID: <2938@sunybcs.UUCP>
Date: Sat, 15-Mar-86 13:29:17 EST
Article-I.D.: sunybcs.2938
Posted: Sat Mar 15 13:29:17 1986
Date-Received: Sun, 16-Mar-86 08:33:15 EST
Organization: SUNY/Buffalo Computer Science
Lines: 5

Keywords: antenna

I would prefer to broadcast on 80 or 40 meter, although I know this seems
improbable.

Devon Bowen - KA2NRC
University of Buffalo

From -3001796782874935457
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b523e226a8e0dd49
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-15 11:01:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!
gatech!gitpyr!kludge
From: kludge@gitpyr.UUCP
Newsgroups: net.ham-radio
Subject: Re: Dormitory antenna
Message-ID: <1547@gitpyr.UUCP>
Date: Sat, 15-Mar-86 14:01:36 EST
Article-I.D.: gitpyr.1547
Posted: Sat Mar 15 14:01:36 1986
Date-Received: Sun, 16-Mar-86 10:44:27 EST
References: <2905@sunybcs.UUCP> <143@ky2d-2.UUCP>
Reply-To: kludge@gitpyr.UUCP (Scott Dorsey)
Organization: Georgia College Of Universal Knowledge
Lines: 43
Keywords: antennae, gutters, beds, college

In article <143@ky2d-2.UUCP> jak@ky2d-2.UUCP (Jim kutsch) writes:
>Years ago when I was in a college dorm, my two roommates (both hams too)
>and I loaded the dorm's rain gutters and downspouts as our antenna. We
>placed a small wood block under each downspout to insulate it from the
>metal (ground) pipe underneath. Then, we ran a very small enameled wire
>(#28 or so) through a hole in the screen out and under a sheet metal
>screw in the nearby downspout. Using an antenna tuner and an old HW100
>we worked most of W. Va. with a signal as good as most mobile stations.
>Admittedly, most of the junctions operated as diodes and perhaps we
>generated TVI but no TVs were allowed in the dorm and there were no
>houses nearby.

Here at Tech, many of the dorms have bunk beds with metal frames. It
turns out that if you remove the bottom bunk and place it on the floor
or on top of the wardrobes, that the frame with the top bunk remains
pretty stable and resonates pretty close to 6M. With a little tuning,
it works pretty well, and you can put a desk underneath it. At one point,
I had almost 100W going through the bed (not while my roommate was sleeping,
of course).

Disclaimer: Everything I say is probably a trademark of someone. But

don't worry, I probably don't know what I'm talking about.

Scott Dorsey (kh6hsk)
Kaptain_kludge
ICS Programming Lab (Where old terminals go to die), Rich 110,
Georgia Institute of Technology, Atlanta, Georgia 30332
...!{akgua,allegra,amd,hplabs,ihnp4,seismo,ut-ngp}!gatech!gitpyr!kludge

USnail: Box 36681, Atlanta GA. 30332
--

Disclaimer: Everything I say is probably a trademark of someone. But
don't worry, I probably don't know what I'm talking about.

Scott Dorsey
Kaptain_kludge
ICS Programming Lab (Where old terminals go to die), Rich 110,
Georgia Institute of Technology, Atlanta, Georgia 30332
...!{akgua,allegra,amd,hplabs,ihnp4,seismo,ut-ngp}!gatech!gitpyr!kludge

USnail: Box 36681, Atlanta GA. 30332

From -120719330011983362
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,60346a4a1eb3656,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-17 13:57:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Cordless Phone tapped in New Jersey
Message-ID: <790@ihu1h.UUCP>
Date: Mon, 17-Mar-86 16:57:06 EST
Article-I.D.: ihu1h.790
Posted: Mon Mar 17 16:57:06 1986
Date-Received: Wed, 19-Mar-86 04:53:43 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 67

x
From the March 11, 1986 issue of the New York Times:

Cordless Phones Raise
An Eavesdropping Issue

By Joseph F. Sullivan

"TRENTON, March 10 - Cordless telephones are at the cen-

ter of a debate in the New Jersey Division of Criminal Justice over whether current wiretap laws apply to the interception of conversations pulled out of the air."

"Last December someone recorded hours of conversations that George Spanos, a Republican newly elected to the Plainsboro Township Committee ...., had over his cordless telephone with two political associates...."

"Mr. Spanos, who works for the New Jersey Office of Telecommunications and Information Systems at state police headquarters...said he was shocked when he learned his private conversations were being recorded....."

"...[the tapes eventually] found their way to Donald R. Belsole, the director of the Division of Criminal Justice. Mr. Belsole said the tapes might form the basis for criminal charges. But first, he said, he and his staff have to agree on whether the state's wiretap statutes apply."

"Mr. Cantu, who received the tapes of Mr. Spano's conversations from an intermediary, said he believed they had been made by a ham radio operator...."

"Mr. Belsole agreed that the state wiretap statues.....would cover the situation, but he said that other lawyers in his office disagreed. He asked for a report from his staff."

"Enis Coleman [of the FCC], said FCC regulations adopted in 1935 and updated last year to cover cable communications banned the unauthorized interception and use of any licensed transmission and carried penalties of up to two years in prison and a $10,000 fine."

"'The problem with cordless telephones is so new that we haven't had time to get into court with it,' Mr. Coleman said, 'but I expect that in the future we will'."

"....a lawyer who represents Mr. Cantu said the proper application of wiretap laws to the Plainsboro case was unclear. He said he had found only two state court cases involving cordless telephones - in Kansas and Rhode Island. In those cases, he said, the courts had admitted evidence obtained through the recording of conversations over cordless telephones."

"However, he said he had found a Federal District Court ruling that took the opposite position and suppressed the evidence obtained in this way. The court held, he said,

that conversations over a cordless telephone were the same
as those over a closed system and came under 'wire commun-
ications.'"

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 272692982558037440
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,da5faaa2f9f4b10,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-17 16:17:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Phase 3-C Report
Message-ID: <55@petrus.UUCP>
Date: Mon, 17-Mar-86 19:17:31 EST
Article-I.D.: petrus.55
Posted: Mon Mar 17 19:17:31 1986
Date-Received: Tue, 18-Mar-86 07:25:02 EST
Organization: Bell Communications Research, Inc
Lines: 55

Posted: Mon Mar 17, 1986 2:24 AM GMT Msg: MGIG-2422-8559
From: JFLASKA
To: AMSAT
Subj: IIIC STATUS #5

IIIC Status #5 16 March 1986

Today was a good visiting day at the Amsat lab. Greg Barr, Administrator of the L5 Society and Jill Steele, President of the Colorado Front Range Chapter of the L5 society were our guests. The members of the construction team were delighted to welcome them and to provide a running narrative on what was being done. Also, WB5PMR, Al and family, visited the lab enroute to a vacation in the High Country. On 20 March we're expecting KA0OOQ, Gerry, for a short visit, and on 23 March, W8GUS, Ron, is expected to be with us. The Colorado group welcomes all who might be interested in the IIIC project. Should you be in the Denver area in the next 8-10 weeks and desire a tour, you can call W3GEY at 530-9340 or the writer at 238-3274 and we'll do our best to oblige. The area code is 303.

Latest word on the Mode S transponder is optimistic. The electronics design and bread-boarding is going well. The final amplifier design has been completed by N6CA, Chip Angle, and the amplifier is presently undergoing tests. While still slightly behind schedule,

the Mode S transponder has a good chance of being completed on time. The box, or enclosure, for the transponder is in process of manufacture locally.

The Main Wiring Harness was installed today. While the installation was a loose one, everything seemed to be nominal. The Wiring Harness Plug brackets for the solar cells were mounted in all 3 arms.

W3GEY, Jan will be in the Washington area all of the coming week. He has with him the design drawings for the oversize mounting stringers for the IHU in arm 3. These were described earlier as being needed to resolve a space problem in mounting the Helium Bottle Bracket. We expect these parts by next weekend.

We're advised the Kick Motor Mounting Brackets are enroute from Amsat DL. Additionaly, parts for the Rudak Experiment will be sent to Germany on 17 March from local inventory.

Machine Shop work is being done on the lower ring of the Helium Bottle Bracket. As previously indicated, a fix for this problem is decided on and no further problem should be experienced in this area.

Thanks to all who have relayed this info via packet systems. W3GEY reports that these updates are on one of the UoSat satellites.

More next week.

73, WB0RLY

From 5601655262239405316
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ca0ebd1ef86e80f2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-18 06:28:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 Apollo 11/21/85; site apollo.uucp
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!wanginst!apollo!jimv
From: jimv@apollo.uucp (James Vienneau)
Newsgroups: net.ham-radio
Subject: Re: want adds on this net
Message-ID: <2c911fd1.46b9@apollo.uucp>
Date: Tue, 18-Mar-86 09:28:54 EST
Article-I.D.: apollo.2c911fd1.46b9
Posted: Tue Mar 18 09:28:54 1986
Date-Received: Fri, 21-Mar-86 04:44:14 EST
References: <142@ky2d-2.UUCP>
Organization: Apollo Computer, Chelmsford, Mass.
Lines: 9

> I would like to know if it is ok to post want add for used amateur radio equipment on this net.
> If one of he net sysopps can inform me regarding this it would be appreciated.
73s...Dave.

Since most radio equipment can be shipped, I see no reason not to. Personally, I enjoy reading
these ads, it gives me an idea of what stuff is worth.

****
* The preceding is strictly the authors opinion *
****

From 5073561299928918353
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,88375ddc8f77a0e,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,88375ddc8f77a0e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-18 08:00:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio,net.ham-radio.packet
Subject: ARRL BULLETIN 19 (FCC RULE SUSPENSION re digital packet radio)
Message-ID: <302@inuxi.UUCP>
Date: Tue, 18-Mar-86 11:00:49 EST
Article-I.D.: inuxi.302
Posted: Tue Mar 18 11:00:49 1986
Date-Received: Wed, 19-Mar-86 05:16:43 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 29
Xref: watmath net.ham-radio:3948 net.ham-radio.packet:246

qst de k9eui
hr arrl bulletin nr 19 from arrl headquarters
newington ct march 14, 1986
to all radio amateurs bt

amateur radio got a big boost today. at arrl request, the fcc suspended part of its rules to permit third party traffic by packet stations under automatic control. several conditions are attached to the waiver. provisions of sec 97.80 b and 97.114 b 4, which were both to be added to the rules march 14, are waived to permit amateur stations retransmitting digital packet radio communications on 50 mhz and higher bands using ax.25 or compatible protocall to be operated under automatic control while transmitting third party traffic. this waiver applies only to the retransmission of third party traffic originated at another amateur station which is under local or remote control.

when an amateur station is operated under automatic control, devices must be installed and procedures must be implemented which will ensure compliance with the rules when the control operator is not present at the control point of the amateur station. the waiver will remain in effect until the commission takes final action on the petitions for reconsideration filed in pr docket 85 105. amateur packet operators must be alert to the increased dependency upon them for monitoring during the period of this waiver. they should immediately make known to the responsible control operator of an automatic packet station any misuse of his station so the licensee can take corrective action. in summary, vhf packet radio may continue under automatic control. ar

From 6997343364452289794
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,d65d8e7293157cc8,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,d65d8e7293157cc8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-18 09:26:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site orca.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!hplabs!tektronix!orca!philb
From: philb@orca.UUCP (Phil Biehl)
Newsgroups: net.analog,net.ham-radio
Subject: Telephone ring detector
Message-ID: <2032@orca.UUCP>
Date: Tue, 18-Mar-86 12:26:12 EST
Article-I.D.: orca.2032
Posted: Tue Mar 18 12:26:12 1986
Date-Received: Fri, 21-Mar-86 05:01:21 EST
Distribution: na
Organization: Tektronix, Wilsonville OR
Lines: 20
Xref: watmath net.analog:716 net.ham-radio:3951

I'm in the process of adding telephone capabilities (autopatch) to the UHF ham repeater I am working on. I would like to be able to detect the ringing current produced by an incoming call. What I need is a CMOS compatible signal indicating that ringing current is present on the drop. That is, a pulse for every ring burst.

I would like to have as much isolation from the drop as possible and have been considering optoisolators to connect the logic to the line.

I would like to get a consensus on your favortie ring current detector. Please mail or post responses. Thanks much.

Phil Biehl
(503) 685-2122
Tektronix Inc., Wilsonville OR

tektronix!orca!philb

From -4438806655594706874
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,afc9804427623c50,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-18 10:11:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!ittatc!dcdwest!sdcsvax!
sdcrdcf!hplabs!qantel!lll-lcc!lll-crg!seismo!brl-adm!brl-smoke!smoke!
CRC.DlosLV@Xerox.COM
From: CRC.DlosLV@Xerox.COM
Newsgroups: net.ham-radio
Subject: Re: Which TNC-2?
Message-ID: <1886@brl-smoke.ARPA>
Date: Tue, 18-Mar-86 13:11:14 EST
Article-I.D.: brl-smok.1886
Posted: Tue Mar 18 13:11:14 1986
Date-Received: Sun, 23-Mar-86 00:51:02 EST
Sender: news@brl-smoke.ARPA
Lines: 10

Paul,

It's a whole lot easier to get on HF with the Kantronics than
any of the others. You have to do a hardware revision to do it with any
of the TAPR work-a-likes. With the Kantronics, all you do is a keyboard
entry.

Chuck...
W5USJ

From 2708949742698332602
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e136bd04610a2fdb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-18 11:08:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!ittatc!dcdwest!sdcsvax!
sdcrdcf!hplabs!qantel!lll-lcc!lll-crg!seismo!brl-adm!brl-smoke!smoke!
DFRoode%UCIVMS.BITNET@WISCVM.WISC.EDU
From: DFRoode%UCIVMS.BITNET@WISCVM.WISC.EDU
Newsgroups: net.ham-radio
Subject: 15 meters
Message-ID: <1889@brl-smoke.ARPA>
Date: Tue, 18-Mar-86 14:08:19 EST

Article-I.D.: brl-smok.1889
Posted: Tue Mar 18 14:08:19 1986
Date-Received: Sun, 23-Mar-86 00:51:59 EST
Sender: news@brl-smoke.ARPA
Lines: 9

I havent been very active on HF of late, but what you are describing
    seems very normal to me. When 15 is good, its open well into
    the evening. In recent months, 15 has been very dead, with most
    activity gone by late afternoon. When solar conditions happen to
    be good for a day, its easy to believe 15 stayed open longer.
    Reading the propogation reports, it seems that we have had several
    days with reasonable solar flux in the last month or so.

         Dana - WA6NGO

From -7059638510642185990
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,174af41061d784ae
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-18 12:20:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site techsup
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!pur-ee!uiucdcs!
convex!techsup!root
From: root@techsup
Newsgroups: net.ham-radio
Subject: Re: want ads on this net
Message-ID: <-27771437@techsup>
Date: Tue, 18-Mar-86 15:20:00 EST
Article-I.D.: techsup.-27771437
Posted: Tue Mar 18 15:20:00 1986
Date-Received: Sat, 22-Mar-86 14:15:11 EST
References: <7043@ki4pv.UUCP>
Lines: 19
Nf-ID: #R:ki4pv.UUCP:7043:techsup:-27771437:000:541
Nf-From: techsup!root   Mar 18 14:20:00 1986

/* Written 9:54 am Mar 13, 1986 by bambi.UUC!steve in techsup:net.ham-radio */
> I must register my extreme objection to the posting of advertisements
> in this forum. I advise use of net.forsale (na.forsale, fl.forsale)
> rather than this forum.
>
         Nonsense!   <============================|
                                                    |
         Steve Miller WA4LDA ihnp4!bambi!steve |
/* End of text from techsup:net.ham-radio */ |
                                                    |
                              agreed! <==

Gary Kueck
trsvax!techsup!root
Radio Shack Technical Support #0220
(817) 338-2288
KA80GP

From -7111829752124599455
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,174af41061d784ae
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-18 13:14:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!ittatc!dcdwest!sdcsvax!sdcrdcf!hplabs!qantel!lll-lcc!lll-crg!seismo!brl-adm!brl-smoke!smoke!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: want ads on this net
Message-ID: <1894@brl-smoke.ARPA>
Date: Tue, 18-Mar-86 16:14:03 EST
Article-I.D.: brl-smok.1894
Posted: Tue Mar 18 16:14:03 1986
Date-Received: Sun, 23-Mar-86 00:52:58 EST
Sender: news@brl-smoke.ARPA
Lines: 10

"This net" is gatewayed to the ARPANet which is taxpayer-supported.
Posting advertisements, especially from commercial businesses, could
jeaopardize this connection.

"Want" ads, which ask for a source of equipment, software, etc., are OK
but should not be replied to by the vendor on the net. Or so is my
understanding.

John S., W3IKG
jhs at mitre-bedford.arpa

From -481170502394914873
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a8597cb2ba4eddc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-18 14:22:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!ittatc!dcdwest!sdcsvax!sdcrdcf!hplabs!qantel!lll-lcc!lll-crg!seismo!brl-adm!brl-smoke!smoke!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: dormItory antenna
Message-ID: <1899@brl-smoke.ARPA>
Date: Tue, 18-Mar-86 17:22:19 EST

Article-I.D.: brl-smok.1899
Posted: Tue Mar 18 17:22:19 1986
Date-Received: Sun, 23-Mar-86 00:53:59 EST
Sender: news@brl-smoke.ARPA
Lines: 18

There is ALWAYS A WAY.

My dormitory antenna, lo those many years ago, was a piece of about 100 feet of #22 enameled wire from the dorm to a tall pine tree. I used the standard shirt buttons for insulators and a simple PI network in the transmitter to match it. I worked all over the eastern half of the US on 80 meter CW with 3 watts. Incidentally, the transmitter was made by rewiring an old AM broadcast receiver that somebody threw out. The audio output stage became the final, and the other tubes served as oscillator, cathode follower, driver etc.

Gawsh what fun compared to today's era of plug it in and if it doesn't seem to work, send it back to the factory (when probably all that was needed was to read the manual).

-John S., W3IKG

My advice: Get an antenna tuner and tune up whatever wire you can put up or connect to! (But don't get ANYWHERE NEAR the power lines!!!!!!!!!!!!!!!!!)

From -6480878391075606170
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab839152a2428534,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-18 18:43:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!ittatc!dcdwest!sdcsvax!
sdcrdcf!hplabs!qantel!lll-lcc!lll-crg!seismo!brl-adm!brl-smoke!smoke!
ED@MC.LCS.MIT.EDU
From: ED@MC.LCS.MIT.EDU (Ed Schwalenberg)
Newsgroups: net.ham-radio
Subject: Carl & Jerry
Message-ID: <1904@brl-smoke.ARPA>
Date: Tue, 18-Mar-86 21:43:25 EST
Article-I.D.: brl-smok.1904
Posted: Tue Mar 18 21:43:25 1986
Date-Received: Sun, 23-Mar-86 00:56:18 EST
Sender: news@brl-smoke.ARPA
Lines: 14

When I was about 7, casting about for something to read, my father said, "Go up in the attic and find the box of old PE's and bring it here. See the "Carl & Jerry" stories? Read them." So I did. At first I didn't understand the electronics part, but they were fun stories anyway (at least the early ones; the later (college era) stories tended to be about yucky girls). After I had gone through the entire batch (ten years' worth) I was starting to understand some of the electronics part, so I read them again.

And again. Then I started reading the Carl Kohler stories, Transistor Topics, and what have you. Then I started reading the whole magazines. And again. And again. I learned an awful lot that way, which served me in good stead at MIT and continues to serve me now.

Does anyone know where John T. Frye is now? Did he ever publish anything other than Carl & Jerry?

From -6454324022039240457
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,deb1ed18162f9c9f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-19 08:27:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL PROPAGATION FORECAST BULLETIN #7
Message-ID: <290@inuxi.UUCP>
Date: Wed, 19-Feb-86 11:27:17 EST
Article-I.D.: inuxi.290
Posted: Wed Feb 19 11:27:17 1986
Date-Received: Thu, 20-Feb-86 07:58:15 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 34

qst de k9eui
hr propagation forecast bulletin nr 7 from arrl headquarters
newington ct february 17, 1986
to all radio amateurs bt

from january 26 to february 16 the solar flux was higher than at the same point in the previous solar rotation. over the first 15 days of february the solar flux was never below 82, and it was 90 or higher for 10 days beginning february 2. not since june 1984 have we seen numbers like these, and for comparable conditions on our dx frequencies we would have to look back even farther.

also exceptional was the intensity of geomagnetic disturbances of february 8 and 9. the writer cannot recall hearing wwv k indices of 8 and 9 before, in 12 years of daily monitoring. the february 8 a index of 110 is exceeded only once in our records.

as evidence piles up it seems that few auroras, if any, have had such impact on the world above 50 mhz. users of 432 mhz, particularly, marveled at the strength, quality and geographical coverage, though it must be remembered that uhf stations and techniques have improved markedly in recent years.

the two fairly impressive sunspot groups involved have now gone around the west limb of the sun and we can expect flux values in the low 70s and high 60s until almost the end of the month. it will be interesting to see if these active areas return in early march, when their part of the suns (surface) will be facing the earth again. the author is not betting on it.

american sunspot numbers for february 6 through 12 were between 21 and 46 with a mean of 33 ar

From 130625292144974606
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8da9466e24c4ee64,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-19 10:12:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN 13A (FCC DOCKET...VE WRITTEN ELEMENT EXAM CREDIT)
Message-ID: <291@inuxi.UUCP>
Date: Wed, 19-Feb-86 13:12:25 EST
Article-I.D.: inuxi.291
Posted: Wed Feb 19 13:12:25 1986
Date-Received: Fri, 21-Feb-86 04:18:59 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 24

qst de k9eui
hr arrl bulletin nr 13a from arrl headquarters
newington ct february 13, 1986
to all radio amateurs bt

the (fcc) has initiated a rulemaking proceeding, docket 86 63, to determine whether examination credit should be given for written elements for amateur radio operator examinations coordinated by volunteer examiner coordinators, vecs, under subpart i of part 97 of the rules. this action was taken in response to a petition for rulemaking filed by lebert a. scupp. at present, credit can be given only for telegraphy examination elements.

the commission also enquired whether it is necessary to continue to require the filing of an application for a license (at the) time a person takes an examination. the possibilities for expanding the use of the certificate of successful completion of an examination will also be explored.

comments are due by april 30, 1986, reply comments by may 31,

1986.

details will appear in qst ar

From 3637816986951907274
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93644cffe277a01d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-19 14:39:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!amdcad!lll-crg!
seismo!brl-smoke!wmartin
From: wmartin@brl-smoke.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Re: Active antennas for shortwave listening
Message-ID: <1139@brl-smoke.ARPA>
Date: Wed, 19-Feb-86 17:39:10 EST
Article-I.D.: brl-smok.1139
Posted: Wed Feb 19 17:39:10 1986
Date-Received: Fri, 21-Feb-86 07:34:52 EST
References: <2586@vrdxhq.UUCP> <701@ihwpt.UUCP>
Organization: USAMC ALMSA, St. Louis, MO
Lines: 10

Check the latest (40th, 1986 issue) of the World Radio TV Handbook; many
libraries get this, and it might be findable in bookstores since it is
now distributed in the US by Billboard. In the back is a section of
equipment reviews, and a nice feature this year is a short column of
Larry Magne's detailing the "best" and "worst" of SWL equipment. One
category covered is active antennas. It will help steer you away from
buying any really bad units (I believe, working from memory, that the
Grove active antenna was one of the worst...)

Will

From 4340016920591928912
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1054fea4a1f8b974,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-19 14:56:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles - hp 1.2 08/01/83; site hp-pcd.UUCP
Path: utzoo!linus!decvax!decwrl!pyramid!hplabs!hp-pcd!rm
From: rm@hp-pcd.UUCP (rm)
Newsgroups: net.ham-radio
Subject: Wanted: Used Linear
Message-ID: <5200002@hpcvla.UUCP>
Date: Wed, 19-Feb-86 17:56:00 EST
Article-I.D.: hpcvla.5200002
Posted: Wed Feb 19 17:56:00 1986
Date-Received: Sun, 23-Feb-86 06:11:48 EST

Organization: Hewlett-Packard - Corvallis, OR
Lines: 4
Nf-ID: #N:hpcvla:5200002:000:159
Nf-From: hpcvla!rm   Feb 19 14:56:00 1986

I am looking for a used linear, 80m-10m, preferably a Heath SB220.
Please provide information in care of Bob Merritt, hp-pcd!rm.

         Don McMinds, KB7JI

From -1049834823466359252
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f749217bb516f432,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-20 07:31:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxd.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: RE:QSLing
Message-ID: <848@inuxd.UUCP>
Date: Thu, 20-Feb-86 10:31:23 EST
Article-I.D.: inuxd.848
Posted: Thu Feb 20 10:31:23 1986
Date-Received: Fri, 21-Feb-86 06:12:06 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 26

A section in the Foriegn Call Book lists the DX QSL bureaus. Most of these
bureaus are accessed by the ARRL QSL bureau . Stations listing other
foreign stations as managers can be sent via the bureau under the managers
call however, to assure a return card, I would definitely send it direct
to the manager with the appropriate number of IRCs / Postage stamps (their
country's stamps) or if it is not a Communist controlled country, a green
stamp ($1.00 USA) with a "self addressed envelop" (incl. USA) will do the job.
The green stamp is usually cheaper but the USA $ is illegal in some countries.

If you are not sure of the country's policy regarding USA monies, send
IRC's. These can be purchased from dx station managers at a reduced price
of that required by the postal service. The number of required IRC's per
a given location is given in the Foreign Call Book but in some locations,
the number of required IRC's listed is high. Most managers will return
any unused IRCs so use the book's information to assure sufficient postage.
PLEASE KEEP IN MIND::::
A QSL manager is a volunteer so make it easy for him and you will get
your qsl. Good luck!! ES GD DXing   RICH KN9K

P.S. All USSR QSL mail goes to Box 88, Moscow and I use the ARRL QSL
     bureau for these cards. Don't expect a quick reply. I still

am receiving USSR qsls 3 years back. Also be sure to contact
your "voluntary" qsl manager in your area and supply him with
the necessary items. Your manager's address can be found in
certain issues of QST.

From 4989150493583758811
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,9f79997cdbc47582
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,9f79997cdbc47582
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-20 15:58:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!ritcv!ccivax!rb
From: rb@ccivax.UUCP (rex ballard)
Newsgroups: net.ham-radio,net.ham-radio.packet
Subject: Re: FCC awards pink ticket for BBS
Message-ID: <421@ccivax.UUCP>
Date: Thu, 20-Feb-86 18:58:11 EST
Article-I.D.: ccivax.421
Posted: Thu Feb 20 18:58:11 1986
Date-Received: Mon, 24-Feb-86 05:00:37 EST
References: <1346@seismo.CSS.GOV> <501@kepler.UUCP>
Reply-To: rb@ccivax.UUCP (What's in a name ?)
Organization: CCI Telephony Systems Group, Rochester NY
Lines: 24
Xref: linus net.ham-radio:3247 net.ham-radio.packet:240
Summary: The FCC is "selling the park"

As I recall, AT&T attempted to get the FCC to outlaw phone patches
on the basis that the established common carrier was loosing
the revenue from the long distance connection.

A citation such as this does not necessarily mean that the final
word has been given, but it is not a good sign. It seems like
the FCC has taken a profound change in it's role as protector of
a public commodity. The emphasis seems to be on commercialization
of the "Ether" (tells you how long I've been a ham).

I personally see this as being identical to selling national park
land.

Of course, when looking at the "Mobile Homes" in the national parks,
and the "Store Bought Ham Gear" in some ham shacks, I wonder if these
actions are not justified. The last "Home Brew" rig I built wouldn't
be usable today (no FCC certification). As for "advancing the state
of the art", except for a few "advancements" in the digital communications
fields, the last big contributions of ham radio were "SSB", and "SSTV".

I keep wondering how long it will be before "CB" bbs's start showing
up.

If we don't use it, we'll loose it.

From -4464842265988360018
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,78146a7d1c113a08,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,78146a7d1c113a08,start
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1986-02-20 17:07:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!ritcv!ccivax!rb
From: rb@ccivax.UUCP (rex ballard)
Newsgroups: net.dcom,net.ham-radio
Subject: Re: H. R. 3378 on interception of communication
Message-ID: <422@ccivax.UUCP>
Date: Thu, 20-Feb-86 20:07:34 EST
Article-I.D.: ccivax.422
Posted: Thu Feb 20 20:07:34 1986
Date-Received: Mon, 24-Feb-86 05:00:59 EST
References: <1184@ecsvax.UUCP>
Reply-To: rb@ccivax.UUCP (What's in a name ?)
Distribution: net
Organization: CCI Telephony Systems Group, Rochester NY
Lines: 59
Xref: linus net.dcom:1478 net.ham-radio:3248
Summary: Guild by association, circumstantial evidence, redundancy, overkill.

I read this article with great concern. I may be wrong but the
last time reception of a signal was illegal was WWII. Many Japanese
Americans were put in prison camps as spies for simply owning a radio.

Commercial carriers (broadcast and telecomm) have now been given permission
to scramble their transmissions. This should be enough to discourage any
but the professional evesdropper. The professional evesdropper will either
use the information (sell it to a competitor) in such a way that it will
be difficult to trace, or be caught because of evidence other than
ownership of the reciever and/or decoding mechanism.

It reminds me of the man convicted of moonshining because he owned a still.
the man asked; "you mean I'm guilty because I had the equipment?",
the judge said "yes, that's right"
the man said "then you might as well convict me of rape as well!!!"
the judge said "you mean you've raped some one?"
the man said "No, but I've sure got the equipment".

It was mentioned on a nationally broadcast radio show, that you could
call a cable operator in another city (or even state) and get the
appropriate codes for a DES type tvro decoder, in exchange for your VISA
card number. This was highly reccomended, because one particular
city charged a fee that was less than half the price of our local
cable company.

In New York, it is illegal to connect a decoder to the cable circuit.
In fact, if you connect a "cable ready" VCR and a "cable ready" television
to a "Y" adapter, you can be fined or imprisoned. I can understand the
cable company getting upset if you "tap in" without paying anything, but
paying double for the same cable seems a bit unreasonable. The fee
is $5/month per connection plus $5/month for a "Cable company decoder"
plus $N/month for each "premium channel" you wish to recieve.

I support encryption of commercial signals, particularly the "per program"
options, because it exempts the broadcaster from liability and censorship
problems. A "premium channel" can show R and X rated movies and if someone
complains, they had to have either paid for the priviledge of watching or
used an unauthorized descrambler.

HR 3378 ensures the broadcaster that he is exempt from liability for
broadcasting a potentially offensive signal, that should be the
goal of this bill. Instead, it has made the reciever liable for
owning decoding equipment.

By the way, use of any survaillence equipment, in including acoustical
"Big Ears" and optical telescopes, for the purpose of invasion of privacy
is already covered by other state and federal laws. The most difficult
part of enforcing this is proof that privacy was invaded. If a contracter
outbids you by using ANY surveillance device, optical, acoustical, or
electronic, there is still the problem of proving that serveilance was
used, caused you damages, and was done for the explicit purpose of
invading your privacy. In a civil case, where only a "preponderance
of the evidence" is required, there is a remote chance of winning the
case. In a criminal case, where there can be "no reasonable doubt"
of all these facts, the chances of conviction are very slim.

Interesting point: In Colorado, they stopped issuing "private investigators"
liscences. The legislatures decided that the state could not grant anyone
the right to invade another person's privacy, reguardless of how it was done.

From 8903947941654225444
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5106ddb32ff7e881,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-21 05:36:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!linus!decvax!bellcore!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!
akguc!mtunh!mtuni!mtune!ky2d-2!ad7i
From: ad7i@ky2d-2.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: packet in 3rd pty traffic
Message-ID: <135@ky2d-2.UUCP>
Date: Fri, 21-Feb-86 08:36:24 EST
Article-I.D.: ky2d-2.135
Posted: Fri Feb 21 08:36:24 1986
Date-Received: Mon, 24-Feb-86 08:28:43 EST

Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 133

The following message from Tom Clark, W3IWI, was found on
NJIT's Digital Radio Net. I have posted it here for
your information, ad7i

M 16123 Tom Clark (W3IWI,2976)   2/21/86   1:02 AM L:124
KEYS:/FCC 85-105/K1OJH COMMENTS/NEWS FROM ARRL/BBS STATUS & RECOMMENDATIONS/
TO: (Group 95)

The following message may be of interest to those of you who are concerned
about FCC 85-105, what you can do, what the ARRL is doing, etc.
              = = = = = = = = = = = = = = = = =
9953 PY 5749 K1BC   K1OJH   860220 more on FCC rules
At K1OJH :   197 From K1OJH Rcvd 860219/0200, Sent 860219/1931
Date: Feb. 18, 1986
  To: NEPRA SYSOPs
From: Dick Eastman
Subj: New FCC Regs

Just a note to let you know what I've been up to. In addition to
the various bits and pieces of messages that I have been
forwarding to you, I have also been talking with Perry Williams
at the ARRL. Perry is the person at the League who deals
primarily with the FCC. He did tell me a few things that have
been going on recently.

First of all, the FCC monitoring station in Maine that has been
getting all the publicity recently has not yet issued any
citations. They have called (at least) two SYSOPs that they
suspected might be running unattended H.F. stations. In one case,
they found no licensed Amateur on the premises during time of
operation. That person has not yet received a citation. If he
does get one, it will be for unattended operation below 30 MHz.
This issue is unrelated to the recent regulations issued.
Unattended operation below 30 MHz always has been and will
continue to be a violation of FCC regulations.

As to the new regulations, this is considered to be an "Open
Issue", with several items not yet clearly defined by the FCC.
The FCC's Chief of the Special Services Division (who is the Boss
of the head of the Private Radio Branch which administers Amateur
Radio) visited the ARRL in Newington last Thursday. He was given
a demonstration of packet radio, including traffic handling via
W1AW-4 running W0RLI software and W1AW-5 unattended digipeater.
The Chief was favorably impressed by what he saw and discussed it
at some length in a meeting afterwards. He stated that the FCC
should be encouraging development of Amateur Radio digital
networks.

ARRL President Price and several other reps, including Perry Williams will meet with the head of the FCC's Private Radio Bureau in Washington at the end of this month. At this meeting, the ARRL will suggest new definitions of Amateur communications in a "store and forward" mode versus Third Party Traffic. Both FCC Chiefs have verbally recognized there is a difference and have expressed willingness to consider them seperately. The League is very optimistic on this issue. The regulatory authorities in several European countries already differentiate handling messages on behalf of hams versus non-Amateurs. Hopefully similar logic can be worked into the FCC's regulations.

A second item on the agenda at this meeting will be a discussion of who holds responsibility for "traditional" Third Party Traffic. It is the League's position that the analogy is that of a postcard in the Postal System. It's free and open, anyone in the path may read it, but in most cases will not. The actual responsibility lies with the person who originated the message, not with eag("mailman" along the route. The FCC may or may not agree with this analogy, the League has a bit less optimism on this.

> There is a side issue here that I did not discuss with Perry: namely the rules about plain and unencrypted communications. I really have reservations about the recent developments in sending binary files back and forth. I'm not sure I know all the ramifications of this, but I sure am uneasy about someone loading a binary file onto a PBBS to be pulled later by someone else. In a direct QSO, there would be less of a question. I would sure hate to "muddy the waters" when discussing BBS freedoms with the FCC.

Depending upon the outcome of the ARRL/FCC meeting, the ARRL will file for Reconsideration of the recent rulemaking. Perry Williams also recommends other interested individuals and groups should also file for reconsideration. Calm, well-thought out comments in volume will help. (Unless I hear otherwise from NEPRA's officers, I will also file such a motion in the name of NEPRA.)

What do we do today? Perry very quickly pointed out that no one at the League will recommend that you do or do not continue operating your VHF BBS in unattended mode. He said that in his recent discussions with FCC officials, it is clear to him that the FCC has not finally decided how to handle ham radio "store and forward" QSOs. The recent written rulemaking was very definitive in some ways, yet does not reflect what the various FCC officials are saying in face-to-face conversations.
xD
Perry Williams would not give an "official" League recommendation, but did point out that W1AW-4 and W1AW-5 are remaining in operation in unattended mode. In fact, this unattended VHF BBS was demonstrated to a senior FCC official last~r

Thursday. Perry stated he would be "very surprised" if anyone receives a citation for unattended operation of a BBS above 30 MHz.

What does NEPRA recommend to New England SYSOPs? The conservative viewpoint is to operate only when the SYSOP is seated in front of the screen with his finger on the switch. A more liberal method is "damned the regulations, full speed ahead". I believe the reality is some where in between. The FCC is very interested in unattended operation on H.F., but has paid no attention to VHF operations. Obviously, each of you must decide for yourselves. Probably maintaining a low profile is best. I, for one, am very willing to have an unattended VHF BBS in operation under my call. If I had an H.F. gateway, I'd power the H.F. rig off whenever there wasn't a licensed amateur in the house.

For the future: I (we) should file a Request for Reconsideration with the FCC. Input is hereby solicited. Please pass on your concerns to the traffic handlers using your BBS. The National Traffic System should be heavily involved in this.

To quote that great American philosopher, Yogi Berra: the game ain't over 'till it's over.

- Dick, K1OJH

= = = = = = = = = = = = = = = = =

You may be interested to know that TAPR is filing a strongly worded set of comments with the FCC that are being written at this very minute. Those who are coordinating this activity are NK6K, WA7GXD, WB9FLW, WB6YMH & W3IWI.

73 de Tom, W3IWI

From -5783072562306243599
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c393f4fe30ec15a5,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,c393f4fe30ec15a5,start
X-Google-Attributes: gid11946d,public
X-Google-Thread: 11f2eb,75bf93b52bae6f6f
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 123782,c393f4fe30ec15a5,start
X-Google-Attributes: gid123782,public
X-Google-ArrivalTime: 1986-02-21 05:46:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!lll-crg!well!hoptoad!gnu
From: gnu@hoptoad.uucp (John Gilmore)
Newsgroups: net.legal,net.ham-radio,net.dcom,net.mail
Subject: Re: Justice Seen Dropping Opposition To Comm Privacy Bills.
Message-ID: <542@hoptoad.uucp>
Date: Fri, 21-Feb-86 08:46:25 EST
Article-I.D.: hoptoad.542
Posted: Fri Feb 21 08:46:25 1986

Date-Received: Mon, 24-Feb-86 05:54:50 EST
References: <1012@brl-smoke.ARPA>
Organization: Nebula Consultants in San Francisco
Lines: 56
Xref: linus net.legal:2705 net.ham-radio:3251 net.dcom:1480 net.mail:1384
Summary: MUCH more to this bill than meets the eye.

I got a copy of the bill (HR3378, S1667) by calling Sen. Leahy's office.

One thing that this bill does is legalizes the use of "tracking devices" by law enforcement people, after getting a court order. It puts various restrictions on their use, but basically says that if the cops want to put a bug on your car, person, clothes, or whatever, they are likely to be able to find a legal way to do it. Furthermore, they can plant the device *before* obtaining a court order, as long as they take it away "when the information sought is obtained, or when the application for the [court] order is denied". They have 48 hours to file the application for the court order, i.e. they can track you for 2 days without breaking the law and without getting a court's permission. If they find out what they need to know, they can remove the bug and no harm done. RIIIIIIIIIIIIIIIGHT!

It treats this kind of bug as almost equivalent to a "pen register", which is something the phone co. puts on your line to record who you are calling.

The bill also defines "pen register" to include "a device which records and/or decodes electronic or other impulses which identify the numbers dialed *or otherwise transmitted* on the telephone line..." This definition includes any data transmitted on the line, and could be construed to include digitized voice ("numbers").

It makes it legal for the cops to break and enter your house, car, or wherever in order to install a bug or wiretap. It nicely provides that the government may not force someone who operates a communications system to break and enter to plant government bugs. I'm sure the Communications Workers of America are happy to hear it.

It loosens a number of restrictions on actual wiretaps too, including allowing officials below the level of Assistant Attorney General to approve them, expanding the list of suspected crimes that you can wiretap for, and allowing 48 hours instead of "ASAP" for making the recordings available to the judge.

I find all of this utterly repugnant and don't see how it has any place in a "Privacy of private communications" bill.

This bill is being pushed "because somehow we forgot to protect non-voice information going over phone lines". But check Covert Action Information Bulletin #11, December 1980, pg 37: "Our Department of Defense and Department of Justice have been extremely careful in orchestrating the legal definition of 'interception' to *exclude* the acquisition of information of a non-oral nature." (emphasis theirs)

The NSA has been using this loophole for years. I'm sure they aren't
closing it off unless the bill opens another hole at least as big.

I don't know if Congress thought it was legalizing wiretapping of
datacomm when they passed it last time. What are they writing into law
that they don't understand this time? I'm sure that some of the new
wordings and definitions in today's bill will have similar effects.
See net.ham-radio for some of the problems.
--
John Gilmore {sun,ptsfa,lll-crg,ihnp4}!hoptoad!gnu   jgilmore@lll-crg.arpa

From 2144828947703919975
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93644cffe277a01d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-21 08:43:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!brl-smoke!wmartin
From: wmartin@brl-smoke.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Re: Active antennas for shortwave listening
Message-ID: <1201@brl-smoke.ARPA>
Date: Fri, 21-Feb-86 11:43:09 EST
Article-I.D.: brl-smok.1201
Posted: Fri Feb 21 11:43:09 1986
Date-Received: Mon, 24-Feb-86 05:11:56 EST
References: <2586@vrdxhq.UUCP> <701@ihwpt.UUCP> <1139@brl-smoke.ARPA>
Organization: USAMC ALMSA, St. Louis, MO
Lines: 9

Here is what that short "Best and Worst" article in the 1986 WRTH says
about active antennas:

Best: McKay Dymek/Stoner DA-100D
      Also, "almost anything made by Datong" was in the "Best" category.

Worst: Grove ANT-9 (Severe overloading problems)

Will

From -1324187173682529134
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,81a519546d01b745
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-21 13:38:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site telesoft.UUCP
Path: utzoo!linus!decvax!ittatc!dcdwest!sdcsvax!telesoft!bruceb
From: bruceb@telesoft.UUCP (Bruce Bergman @favorite)
Newsgroups: net.ham-radio
Subject: Re: IC-02AT

Message-ID: <305@telesoft.UUCP>
Date: Fri, 21-Feb-86 16:38:57 EST
Article-I.D.: telesoft.305
Posted: Fri Feb 21 16:38:57 1986
Date-Received: Mon, 24-Feb-86 21:21:17 EST
References: <788@brl-smoke.ARPA>
Organization: TeleSoft, SanDiego CA
Lines: 31

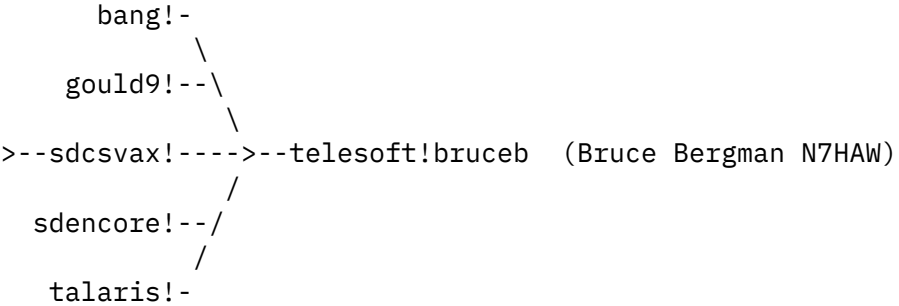
>   Also, I have the mods that allow Tx & Rx out of band (for the 02AT).
> Rx is fair to at least 162.55 MHz without retuning. I didn't bother
> with the Tx part of the mod. I have only hardcopy, but if I get a
> sufficient number of requests, I'll key 'em in and mail 'em out.

I would LOVE to hear about mods for RX and TX! Please, if you can,
post the instructions. If you don't want to do that, just leave
me your address and I'll send a SASE or something...

To anyone else: If you know of mods that can be made to the popular
2-meter FM handhelds, I'd really like to hear about them. I am the
Assistant Emergency Coordinator for our city and have members who
want to know how to scan public-service freqs with their HT's.

Any correspondence greatly appreciated!

73's

bruce
--


From -3834824933481746020
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93644cffe277a01d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-21 17:46:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!linus!decvax!bellcore!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!
akguc!mtunh!mtung!mtunf!mtune!ky2d-2!ai2q
From: ai2q@ky2d-2.UUCP (Alex)
Newsgroups: net.ham-radio

Subject: Re: Re: Active antennas for shortwave listening
Message-ID: <136@ky2d-2.UUCP>
Date: Fri, 21-Feb-86 20:46:07 EST
Article-I.D.: ky2d-2.136
Posted: Fri Feb 21 20:46:07 1986
Date-Received: Mon, 24-Feb-86 08:31:13 EST
References: <2586@vrdxhq.UUCP> <701@ihwpt.UUCP>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 32

>
> > My only alternatives for an antenna are a long wire strung around the room,
or
> > perhaps an active antenna.
> >
> > I am considering purchasing a remote active antenna, such as the MFJ
1024.
> > This antenna is small enough (only 54 inches) to be mounted outside, on my
bal-
> > cony. My other alternative is to purchase an antenna tuner and attach my
30'
> > length of wire to it.
> > Dennis Gibbs
> > ..!{umcp-cs, seismo, verdix}!vrdxhq!dennis
>
> I have been wondering about the Sony active antenna (or remote
> antenna tuner?) advertised in the back of the instruction book
> that came with the ICF-2002 I just bought at a hamfest.
> It looks expensive, and all I know is from the picture
> in the booklet. Probably not many stores carry such a thing.
>
> Does anyone have any experience, or even price info, on this
> gadget? I'm pretty sure it would work with any radio,
> as the antenna connections on the ICF are nothing special.
> mike k w9nrd
>

I'd suggest you take a look at some of the designs W7ZOI published
in the ARRL publication "Solid State Design for the Radio Amateur."
I built up a direct coupled amplifier using four stages and used it
with a homebrew loop antenna to achieve incredible results down on 75 meters.
By turning the loop, you can eliminate local QRN yet still hear as much on the
2' loop indoors as I could on the G5RV outside (wish I could transmit on it!)
HIActive antennas are really only limited by the inherent noise in the amplifier
itself. Do not have any experience with the MFJ or Sony (or Palomar) but I
can tell you that active antennas work - and work well! Good luck es 73
Alex AI2Q, Freeport, Long Island, New York

From 2382975988957342440
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11906e,3e1d519fd5b39d80,start
X-Google-Attributes: gid11906e,public

X-Google-Thread: 16325b,3e1d519fd5b39d80,start
X-Google-Attributes: gid16325b,public
X-Google-Thread: 14b8a3,3e1d519fd5b39d80,start
X-Google-Attributes: gid14b8a3,public
X-Google-Thread: 14eb2a,3e1d519fd5b39d80,start
X-Google-Attributes: gid14eb2a,public
X-Google-Thread: 151e61,3e1d519fd5b39d80,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1197bb,3e1d519fd5b39d80,start
X-Google-Attributes: gid1197bb,public
X-Google-Thread: 1520b8,3e1d519fd5b39d80,start
X-Google-Attributes: gid1520b8,public
X-Google-Thread: 14d763,3e1d519fd5b39d80,start
X-Google-Attributes: gid14d763,public
X-Google-ArrivalTime: 1986-02-22 21:24:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site ucbjade.BERKELEY.EDU
Path: utzoo!lsuc!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!ucbvax!ucbjade!
ucbiris!michael
From: michael@ucbiris.BERKELEY.EDU (Tom Slone [(415)486-5954])
Newsgroups: net.politics,net.nlang,net.ham-
radio,net.jobs,net.auto.tech,net.bio,net.math.stat,net.med,net.micro,net.rec.wood,
net.travel,net.database
Subject: Travel to Nicaragua & work at your profession/hobby for 2 weeks
Message-ID: <358@ucbjade.BERKELEY.EDU>
Date: Sun, 23-Feb-86 00:24:21 EST
Article-I.D.: ucbjade.358
Posted: Sun Feb 23 00:24:21 1986
Date-Received: Mon, 24-Feb-86 08:42:03 EST
Sender: network@ucbjade.BERKELEY.EDU
Reply-To: michael@ucbiris.BERKELEY.EDU (Tom Slone [(415)486-5954])
Organization: tecNICA
Lines: 47
Xref: lsuc net.politics:3382 net.nlang:1909 net.ham-radio:781 net.jobs:983
net.auto.tech:775 net.bio:111 net.math.stat:116 net.med:2174 net.micro:2862
net.rec.wood:181 net.travel:869 net.database:214

tecNICA is a non-profit organization which sponsors people to visit and work in Nicaragua in their professions or hobbies for 2 or more weeks. Volunteers pay their own airfare, and the sponsoring Nicaraguan agencies pay for the volunteers' room and board during the visit. I have gone to Nicaragua with tecNICA and can personally recommend it as a rewarding cross-cultural experience. The help which you would provide to Nicaragua now would be invaluable during this time of crisis. Knowledge of Spanish is recommended, but not essential.

"Originally conceived as a project to assist Nicaraguans with computer technology, the scope of tecNICA's activity has steadily increased, and now includes engineering, business management, economic planning, building trades, and a wide variety of other fields. The typical delegation getting off the plane in Managua includes people with skills ranging from machine tool design to insurance marketing, and the variety is constantly increasing."

This years' scheduled trips are: March 7-22, April 4-19, May 2-17, May

30 - June 14, June 27 - July 12, August 1-16, September 5-20, October 3-18, November 7-22 and tentatively December 5-19.

Here is a sampling of specialists now needed:

- General computer professionals (especially IBM 370, 4331, 34 series, OS, databases's, and all micros)
- Computer service/repair technicians
- Computer analyst - billing and data acquisition
- Digital logic teachers
- Microprocessor fundamentals teachers
- Two-way radio engineers and technicians
- Data transmission, switching - engineers, technicians
- Telephone engineers and technicians
- Electronic trouble-shooting engineers
- Electrical engineers (power equipment)
- Industrial electrician
- Medical instrumentation/electronics technicians
- Economists, statisticians
- Diesel and automotive technicians
- Public health workers
- Carpenter/cabinet makers/teachers
- Translators, interpretors

tecNICA can be contacted at the following places:

- Berkeley (National Office) 110 Brookside Drive, Berkeley, CA 95705; (415)654-7768
- San Francisco (415)848-0292
- New York (212)427-0634
- Boston (617)783-1668
- Seattle (206)321-1367
- Chicago (312)524-0198
- Los Angeles (213)970-1495

From -6079535276473941864
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,54c33a3c42ea8803,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15d222,54c33a3c42ea8803,start
X-Google-Attributes: gid15d222,public
X-Google-ArrivalTime: 1986-02-23 16:20:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site telesoft.UUCP
Path: utzoo!linus!decvax!ittatc!dcdwest!sdcsvax!telesoft!bruceb
From: bruceb@telesoft.UUCP (Bruce Bergman @favorite)
Newsgroups: net.jokes,net.ham-radio
Subject: "The Case of the Poor Planner" (clean)
Message-ID: <307@telesoft.UUCP>
Date: Sun, 23-Feb-86 19:20:35 EST
Article-I.D.: telesoft.307
Posted: Sun Feb 23 19:20:35 1986
Date-Received: Wed, 26-Feb-86 06:33:31 EST
Organization: TeleSoft, SanDiego CA
Lines: 74

Xref: linus net.jokes:14666 net.ham-radio:3256

[line eater offering]

I'm posting this to both net.jokes and net.ham-radio, mainly
because I haven't read anything about "real life" this funny
in a long time, and it involves hams.

This was taken from the latest issue of the newsletter my ham
club puts out. I can't vouch for it's authenticity, but the
ham who contributed it is a pretty reliable source.

Evidently an insurance company wanted to know the whole story
about one of their claims - I'd say this guy gave them everything
they requested...

Enjoy!

"I am writing in response to your reqest for additional information in
block number three of the accident-reporting form. I put "poor
planning" as the cause of my accident. You said in your letter that I
should explain more fully, and I trust that the following details will
be sufficient. I am an amateur radio operator. On the day of the
accident I was working alone on the top section of my new 80 foot tower,
when I completed my work, I discovered that I had, over the course of
several trips up the tower, brought up about 300 lbs of tools and
spare hardware. Rather than carry the now unneeded tools and material
down by hand, I decided to lower the items down in a small barrel by
using a pulley, which fortunately was attached to the gin pole at the
top of the tower."

"Securing the rope at ground level, I went to the top of the tower and
loaded the tools and materials into the barrel. Then I wentback to the
ground and untied the rope, holding it tightly to ensure a slow descent
of the 300 lbs of tools. You will note in block #11 of the accident-
reporting form that I weigh only 155 lbs."

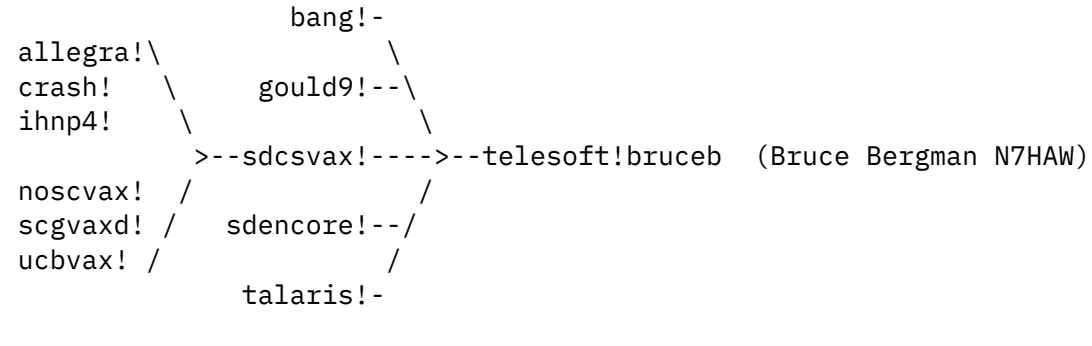
"Due to my suprise at being jerked off the ground so suddenly, I lost
my presence of mind and forgot to let go of the rope. Needless to say,
I proceeded at a rather rapid rate of speed up the side of the tower.
In the vicinity of the 40 foot level, I met the barrel coming down.
This explains my fractured skull and broken collarbone. Slowed only
slightly, I continued my rapid ascent, not stopping until the fingers
of my right hand were two knuckles deep into the pulley."

"Fortunately, by this time, I had regained my presence of mind and
was able to hold on to the rope in spite of my pain. At approximat-
ely the same time, however, the barrel of tools hit the ground and
the bottom fell out of the barrel. Devoid of the weight of the tools,
the barrel now weighed approximately 20 lbs. I refer you again to my
weight in block #11. As you might imagine, I began a rapid descent

down the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming up, this accounts for the two fractured ankles and the lacerations of my legs and lower body."

"The encounter with the barrel slowed me enough to lessen my injuries when I fell onto the pole of tools and fortunately, only three vertabrae were cracked. I am sorry to report, however, that as I lay there on the tools in pain, unable to stand and watching the empty barrel 80 feet above me...I again lost my presence of mind...I let go of the rope."

Contributed by Dean Haney W6RFM, retyped by myself, N7HAW.
--



From 3102338103154827131
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1847d8aca191a4e2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-24 07:31:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!linus!decvax!decwrl!dec-rhea!dec-munich!ora
From: ora@munich.DEC (Ora Jaervinen CIM Engineering Munich)
Newsgroups: net.ham-radio
Subject: Antenna questions
Message-ID: <1325@decwrl.DEC.COM>
Date: Mon, 24-Feb-86 10:31:09 EST
Article-I.D.: decwrl.1325
Posted: Mon Feb 24 10:31:09 1986
Date-Received: Wed, 26-Feb-86 06:56:53 EST
Sender: daemon@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 29

Does anyone have any practical experience with the following products:

1) Kantronics UTU-XT and AEA CP-100 terminal units.

> The Kantronics seems to have a more features (built in microprocessor with AMTOR etc.) while the AEA one is a 'plain' RTTY converter (or modem, if you like). The price is roughly the same though; makes one wonder whether the actual 'modem' part of the AEA is so much

better? Also, I would be interested to know whether you can bypass
the internal micro in the UTU-XT (tap the demodulator output directly)
if you want to use your own SW/HW to decode strange speeds, codes,
protocols etc.?

2) Trap slopers.

There is a number of small companies advertising very similarly
looking trap slopers in CQ, 73 etc. Are these any good? Something like
that would suit my limited space very well. I'm becoming active after
a long time again; I need a compact wire antenna to get on the air
in the first place (until I get something better for 20/15/10) and
would be using it on 80/40 permanently (maybe 160). No DX ambitions
for 80, just short-range ragchewing.

3) Butternut HF4B ('Bytterfly')

This is a very compact 'mini-beam' for 20/15/12/10 meters. I realize
that one cannot expect the performance of a full-size six-element
monobander from this one, but it's about maximum that I can put up.
Any experiences? Any other recommendations for a *very* small beam?

From -9170025616816580403
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6ea4f689387076d8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-24 12:02:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!linus!decvax!decwrl!dec-rhea!dec-koning!koning
From: koning@koning.DEC (Paul Koning -- LAS Engineering)
Newsgroups: net.ham-radio
Subject: Homebrew rigs
Message-ID: <1340@decwrl.DEC.COM>
Date: Mon, 24-Feb-86 15:02:57 EST
Article-I.D.: decwrl.1340
Posted: Mon Feb 24 15:02:57 1986
Date-Received: Wed, 26-Feb-86 07:19:22 EST
Sender: daemon@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 7

rb writes:
> The last "Home Brew" rig I built wouldn't
> be usable today (no FCC certification).

FCC certification doesn't apply to homebrew rigs.

paul pa0pkg/w1

From -5107894818824200979

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ec563cc79f1ec141,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-24 14:56:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site duts.UUCP
Path: utzoo!linus!decvax!decwrl!sun!amdahl!duts!obu
From: obu@duts.UUCP (obu)
Newsgroups: net.ham-radio
Subject: ATTN: WA2TMP
Message-ID: <230@duts.UUCP>
Date: Mon, 24-Feb-86 17:56:14 EST
Article-I.D.: duts.230
Posted: Mon Feb 24 17:56:14 1986
Date-Received: Wed, 26-Feb-86 07:35:53 EST
Distribution: net
Organization: Amdahl Corp, Sunnyvale CA
Lines: 14

Hi Al, I have been reading your postings on here for a few months now
and we weren't able to post news onto the net from Amdahl.
They just turned that feature back on and I thought I'd drop you a line.
If I knew how to send you mail directly I would avoid using the net, but
that is something I haven't figured out yet. What new with you?
I have some things to tell you. Give me a call sometime.

TNX, Steve Magee- N2SM
Days (408) 746-7415
Eves (408)984-7838

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The opinions expressed are those of the author and not necessarily
those of Amdahl Corporation, its employees, or management.

From 396121152922071918
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15d222,54c33a3c42ea8803
X-Google-Attributes: gid15d222,public
X-Google-Thread: 151e61,54c33a3c42ea8803
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-24 15:35:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 SMI; site sun.uucp
Path: utzoo!linus!decvax!decwrl!sun!falk
From: falk@sun.uucp (Ed Falk)
Newsgroups: net.jokes,net.ham-radio
Subject: Re: "The Case of the Poor Planner" (clean)
Message-ID: <3288@sun.uucp>
Date: Mon, 24-Feb-86 18:35:04 EST
Article-I.D.: sun.3288
Posted: Mon Feb 24 18:35:04 1986
Date-Received: Wed, 26-Feb-86 07:35:19 EST

References: <307@telesoft.UUCP>
Organization: Sun Microsystems, Inc.
Lines: 10
Xref: linus net.jokes:14687 net.ham-radio:3259

>
> I'm posting this to both net.jokes and net.ham-radio, mainly
> because I haven't read anything about "real life" this funny
> in a long time, and it involves hams.
>
> [long convoluted, funny accident report]

Actually, that accident was taken from a great irish folk-ballad called
"Why Paddy's Not At Work Today" or something like that.

From -1481769383377677282
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,10937fa632cb9fe9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-24 17:00:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!linus!decvax!bellcore!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN 16 (F2A EMISSION IN 10 METER REPEATER SUBBAND)
Message-ID: <293@inuxi.UUCP>
Date: Mon, 24-Feb-86 20:00:44 EST
Article-I.D.: inuxi.293
Posted: Mon Feb 24 20:00:44 1986
Date-Received: Wed, 26-Feb-86 06:42:49 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 17

QST DE K9EUI
HR ARRL BULLETIN NR 16 FROM ARRL HEADQUARTERS
NEWINGTON CT FEBRUARY 21, 1986
TO ALL RADIO AMATEURS BT

FCC HAS AMENDED SECTION 97.61A OF THE AMATEUR RULES TO PERMIT
F2A EMISSION IN THE 29.5 TO 29.7 MHZ REPEATER SUBBAND.

ARRL HAD PETITIONED FOR THE AMENDMENT SO THAT F2A EMISSION, THE
PRIMARY MODE USED TO IDENTIFY BY TELEGRAPHY AMATEUR F3E
EMISSION REPEATERS, WOULD BE AVAILABLE IN THE 10 METER REPEATER
SUBBAND.   FCC ALSO EDITORIALLY AMENDED SECTION 97.61A TO SHOW
F2A EMISSION IN OTHER AMATEUR BANDS WHERE REPEATER OPERATION IS
AUTHORIZED.   THE COMMISSION SAID THE AMENDMENT WAS NECESSARY
BECAUSE THE EMISSION DESIGNATOR   F2A   HAD   BEEN   OMITTED

INADVERTENTLY FROM THOSE BANDS WHEN THE PREVIOUS EMISSION
DESIGNATORS WERE CONVERTED TO THE NEW SYSTEM AR

From -7954533128201606468
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,224844ea1b609e41,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-24 17:01:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!linus!decvax!bellcore!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN 15 (RUSSIAN SPACECRAFT/SATELLITES)
Message-ID: <294@inuxi.UUCP>
Date: Mon, 24-Feb-86 20:01:50 EST
Article-I.D.: inuxi.294
Posted: Mon Feb 24 20:01:50 1986
Date-Received: Wed, 26-Feb-86 06:43:02 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 23

QST DE K9EUI
HR ARRL BULLETIN NR 15 FROM ARRL HEADQUARTERS
NEWINGTON CT FEBRUARY 20, 1986
TO ALL RADIO AMATEURS BT

A VERY LARGE RUSSIAN SPACECRAFT CALLED MIR WAS LAUNCHED
FEBRUARY 19. IT WILL BE A MANNED SPACE STATION FORMING THE
CORE OF SOVIET MANNED SPACEFLIGHT FOR THE NEXT SEVERAL YEARS.

A SMALL, MANUALLY DEPLOYED SATELLITE CALLED ISKRA 4 WILL BE ONE
OF THE FIRST HAM IN SPACE ACTIVITIES FROM MIR. PREVIOUS ISKRAS
CONTAINING AMATEUR RADIO EQUIPMENT WERE MANUALLY EJECTED FROM
SALYUT 7.

THE FIRST CREW SHOULD REACH MIR IN THE NEXT WEEK OR SO.
SEVERAL COSMONAUTS ARE LICENSED AMATEURS AND OPERATION FROM MIR
BY THEM IS THOUGHT A LIKELY PROSPECT.

THE 10 METER SIGNALS RECENTLY THOUGHT TO BE FROM RS9 HAVE NOW
BEEN POSITIVELY IDENTIFIED (AS COMING FROM RS1). RS1 CEASED
REGULAR OPERATION IN 1980 BUT COMES TO LIFE OCCASIONALLY WHEN
CONDITIONS ARE RIGHT. RS9 AND 10 ARE NOW SCHEDULED FOR LAUNCH
IN LATE MAY. AR

From -7782818855558052677
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8bdc6f53d80722bf,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-24 17:03:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!linus!decvax!bellcore!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN 14 (ENY and SD Section Manager Election)
Message-ID: <295@inuxi.UUCP>
Date: Mon, 24-Feb-86 20:03:03 EST
Article-I.D.: inuxi.295
Posted: Mon Feb 24 20:03:03 1986
Date-Received: Wed, 26-Feb-86 06:43:14 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 10

QST DE K9EUI
HR ARRL BULLETIN NR 14 FROM ARRL HEADQUARTERS
NEWINGTON CT FEBRUARY 17, 1986
TO ALL RADIO AMATEURS BT

BALLOTS FOR THE SECTION MANAGER ELECTIONS FOR THE EASTERN NEW
YORK AND SOUTH DAKOTA SECTION HAVE BEEN COUNTED ACCORDING TO
THE PRESCRIBED RULES.   THE FOLLOWING HAVE BEEN   DECLARED
ELECTED.   EASTERN NEW YORK WB2VUK AND SOUTH DAKOTA W0YMB.
THEIR TERMS OF OFFICE BEGIN APRIL 1, 1986 AR

From 3694198248147541171
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc3578da73677c4e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-24 17:04:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!linus!decvax!bellcore!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: CRRL BULLETIN 6/5 (DOC LICENSE FEES - SPECIAL PREFIXES)
Message-ID: <296@inuxi.UUCP>
Date: Mon, 24-Feb-86 20:04:17 EST
Article-I.D.: inuxi.296
Posted: Mon Feb 24 20:04:17 1986
Date-Received: Wed, 26-Feb-86 06:43:27 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 19

QST DE K9EUI
HR CRRL BULLETIN NR 6/5 FROM CRRL HEADQUARTERS

LONDON ONT FEBRUARY 24, 1986
TO ALL RADIO AMATEURS BT

DOC HAS INFORMED CRRL THAT, EFFECTIVE APRIL 1, AMATEURS APPLYING FOR A STATION LICENCE, FOR THE FIRST TIME ONLY, WILL HAVE TO PAY A FEE OF 26 DOLLARS. THE FEE WILL DROP TO 20 DOLLARS THE FOLLOWING YEAR. AMATEURS WHO REQUIRE A STATION LICENCE FOR ONLY PART OF A YEAR CAN PAY ON A PRO RATED BASIS. CANDIDATES FOR DOC EXAMINATIONS WILL HAVE TO PAY A 5 DOLLAR FEE FOR EACH PORTION OF AN AMATEUR RADIO EXAMINATION THEY TRY.

CRRL HAS FORMALLY ASKED DOC TO CONTINUE THE PRACTICE OF ISSUING SPECIAL CALLSIGN PREFIXES TO HELP CANADIAN AMATEURS PUBLICIZE SIGNIFICANT EVENTS IN THE LIFE OF THE COUNTRY. THE SUBMISSION PRESENTS A PLAN WHEREBY AMATEURS WOULD ASSIST DOC IN ISSUING THE PREFIXES, KEEPING DOC INVOLVEMENT, AND COSTS, TO A MINIMUM
AR

From -6341988637469987846
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba448fb5a72f6942,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-24 17:06:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!linus!decvax!bellcore!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL PROPAGATION FORECAST BULLETIN NR 8
Message-ID: <297@inuxi.UUCP>
Date: Mon, 24-Feb-86 20:06:14 EST
Article-I.D.: inuxi.297
Posted: Mon Feb 24 20:06:14 1986
Date-Received: Wed, 26-Feb-86 06:43:40 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 40

QST DE K9EUI
HR PROPAGATION FORECAST BULLETIN NR 8 FROM ARRL HEADQUARTERS
NEWINGTON CT FEBRUARY 24, 1986
TO ALL RADIO AMATEURS BT

THE SOLAR FLUX CURVE FOR FEBRUARY IS TAKING ON THE SHAPE OF A SLIGHTLY IRREGULAR SINE WAVE. FROM 84 ON FEBRUARY 1 IT RISES QUICKLY TO 99 ON THE 3RD, PEAKS AT 103 ON THE 5TH, SLIDES TO 95 BY THE 9TH, AND TUMBLES DOWN TO 70 ON THE 17TH. IT HAS BEEN AS LOW AS 67 SINCE, AND AT 69 ON THE 23RD, IT APPEARS READY TO START UPWARD AGAIN.

THE ODDS ARE AGAINST THE FLUX REACHING 103 IN EARLY MARCH, AS

IT DID IN FEBRUARY. THAT FIGURE WAS THE HIGHEST SINCE JULY 1984, AND WE ARE NOW IN WHAT IS PROBABLY THE LAST FULL YEAR OF CYCLE 21. AN APPRECIABLE RISE SHOULD BE UNDERWAY HOWEVER BEFORE NEXT WEEKS BULLETIN.

THE TWO WEEK RUN AT 85 OR HIGHER MADE THE FIRST HALF OF FEBRUARY A VERY INTERESTING TIME ON 21, 24 AND 28 MHZ. NOW THAT WE ARE BACK TO QUIET SUN LEVELS AGAIN, 24 AND 28 MHZ ARE ALMOST DEVOID OF DX, AND 21 MHZ IS ACTIVE MAINLY IN THE LOWER LATITUDES AND ON TRANSEQUATORIAL CIRCUITS. NO MAJOR CHANGE IN THIS PATTERN IS EXPECTED BEFORE ABOUT THE 25TH.

EARLY FEBRUARY WAS MARKED BY THE MOST SEVERE GEOMAGNETIC DISTURBANCES IN SEVERAL YEARS. BECAUSE OF THE 28 DAY MONTH, WE CAN EXPECT RECURRENT MAJOR GEOMAGNETIC EFFECTS ON ABOUT THE SAME DATES IN MARCH. THIS TWO MONTH PATTERN IS APPARENT IN PROPAGATION RECORDS FOR FEBRUARY AND MARCH AS FAR BACK AS THE 1930S. VHF ENTHUSIASTS TAKE NOTE THAT THE SECOND WEEKEND OF MARCH SHOULD BE MARKED IN RED ON YOUR OPERATING SCHEDULE.

WE WERE IN A DISTURBANCE OF MILDER CATEGORY AS THIS BULLETIN WAS BEING PREPARED. IT SHOULD BE OVER BY THE 26TH. THE LAST 2 DAYS OF FEBRUARY AND THE FIRST FEW OF MARCH SHOULD BE OF SLIGHTLY BETTER THAN AVERAGE PROPAGATION ON ALL DX FREQUENCIES.

AMERICAN SUNSPOT NUMBERS FOR FEBRUARY 13 THROUGH 19 WERE BETWEEN 0 AND 20 WITH A MEAN OF 4.9. AR

From -7682975759618937698
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15d222,54c33a3c42ea8803
X-Google-Attributes: gid15d222,public
X-Google-Thread: 151e61,54c33a3c42ea8803
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-24 20:13:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!hao!hplabs!oliveb!glacier!kestrel!ladkin
From: ladkin@kestrel.ARPA (Peter Ladkin)
Newsgroups: net.jokes,net.ham-radio
Subject: Re: "The Case of the Poor Planner" (clean)
Message-ID: <5142@kestrel.ARPA>
Date: Mon, 24-Feb-86 23:13:54 EST
Article-I.D.: kestrel.5142
Posted: Mon Feb 24 23:13:54 1986
Date-Received: Sun, 2-Mar-86 05:57:44 EST
References: <307@telesoft.UUCP>
Organization: Kestrel Institute, Palo Alto, CA
Lines: 23
Xref: linus net.jokes:14719 net.ham-radio:3268

In article <307@telesoft.UUCP>, bruceb@telesoft.UUCP (Bruce Bergman @favorite)

writes:
>
> This was taken from the latest issue of the newsletter my ham
> club puts out. I can't vouch for it's authenticity, but the
> ham who contributed it is a pretty reliable source.
>
There is a recording of Gerard Hoffnung reading this at the
Oxford Union, which I highly recommend.
It's at least 25 years old, so it might be hard to find.

A joke? Let's see....

An engineer, a physicist and a mathematician are shown a
room with a long upright tube on the floor, with a ping
pong ball at the bottom, and a pitcher of beer.
The problem is...how to get the ball out?
The engineer empties the beer into the tube, and of course
there's not enough. He breaks the tube to get the ball out.
The physicist empties the beer into the tube, and blows
hard down the side to blow the ball out.
The mathematician drinks the beer and waits......

A joke you say? But it's Monday.

From -7043009720221592748
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93644cffe277a01d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-25 06:09:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site omen.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!pyramid!hplabs!
tektronix!reed!omen!caf
From: caf@omen.UUCP (Chuck Forsberg WA7KGX)
Newsgroups: net.ham-radio
Subject: Re: Re: Active antennas for shortwave listening
Message-ID: <301@omen.UUCP>
Date: Tue, 25-Feb-86 09:09:04 EST
Article-I.D.: omen.301
Posted: Tue Feb 25 09:09:04 1986
Date-Received: Fri, 28-Feb-86 21:26:09 EST
References: <2586@vrdxhq.UUCP> <701@ihwpt.UUCP> <136@ky2d-2.UUCP>
Reply-To: caf@omen.UUCP (Chuck Forsberg WA7KGX)
Organization: Omen Technology, Portland
Lines: 9

I've used a Dymek DA-100 antenna for a few years, about ten years ago.

Good results on BC and LF, not so good at ten meters.   With the whip
on top of a 20-40' grounded tower, noise pickup was much reduced.
Cross mod from 100 kHz Loran-C was a nuisance, and I've blown three input
fet's over the years. Make sure you get one that isn't potted!

It's been a while since I've experimented with active antennas, but I'd
be tempted to try a source follower with a power fet.

From -1858308156727337883
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3920d7bb09671656,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-25 07:49:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!decvax!bellcore!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: SWL log (Soviet Navy, Cuban diplomats, and more)
Message-ID: <770@ihu1h.UUCP>
Date: Tue, 25-Feb-86 10:49:02 EST
Article-I.D.: ihu1h.770
Posted: Tue Feb 25 10:49:02 1986
Date-Received: Thu, 27-Feb-86 03:30:40 EST
Distribution: na
Organization: AT&T Bell Laboratories
Lines: 45

Monitored using ICOM R71A and Drake R7 receivers and a 70' wire:

```
   4.5995    KOP334____US: Civil Air Patrol, "Magpie 424", taking roll call of
                       other "Magpie" stations in net, usb, 02/19/86 @0203Z
                       [Idaho] (B. Parnass)

   5.2580    CMU967____USSR: Russian Navy, wkg RMNK and EXIB (Russian merchant
                       vessels?), "QRR QSX 6783", cw, 02/20/86 @0115Z
                       [Santiago, Cuba] (B. Parnass)

   5.5350    call?_____Eastern Airlines, female operator wkg Eastern flight 953
                       , usb, 02/23/86 @0205Z
                       [Bermuda] (B. Parnass)

   6.7830    CMU967____USSR: Russian Navy, wkg EXIB in Cyrillic, "QYT 8182", cw
                       , 02/20/86 @0113Z
                       [Santiago, Cuba] (B. Parnass)

   7.5180    call?_____unidentified: time-varying speech inversion scramblers u
                       sing preambles. sounds like the USAF TAC signals heard o
                       n 11.214 MHz, heard similar sigs on 2.5333 MHz, usb, 02/
                       24/86 @0123Z
                       [location?] (B. Parnass)

  13.6160    SON61_____Poland: Polska Agencja Prasowa, xmtg msgs to SPCJ and SP
                       XG, in non-English, cw, 02/22/86 @1523Z
                       [Warsaw, Poland] (B. Parnass)
```

```
  13.6525    FDY_______France: French Air Force, cw marker, 02/22/86 @1533Z
                       [Orleans, France] (B. Parnass)

  13.9821    CLP1______Cuba: Ministry of Foreign Affairs, wkg CLP7 (Cuban embas
                       sy in Brassaville, Congo - not heard) in sloppy cw. QSYd
                        to 13.985 @1925Z, 02/22/86 @1908Z
                       [Havana, Cuba] (B. Parnass)

  13.9850    CLP1______Cuba: Ministry of Foreign Affairs, QSYd from 13.9821, wk
                       g CLP7, asked for "grupo 71" in sloppy cw. Changed to RT
                       TY @1926Z, 02/22/86 @1925Z
                       [Havana, Cuba] (B. Parnass)

--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -7962641801725658955
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,761896bb92c5bdd8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-25 08:12:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!akguc!
mtunh!mtuni!mtune!ky2d-2!ad7i
From: ad7i@ky2d-2.UUCP (Paul)
Newsgroups: net.ham-radio
Subject: TAPR's request for reconsideration
Message-ID: <139@ky2d-2.UUCP>
Date: Tue, 25-Feb-86 11:12:27 EST
Article-I.D.: ky2d-2.139
Posted: Tue Feb 25 11:12:27 1986
Date-Received: Fri, 28-Feb-86 08:17:38 EST
Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 312


from NJIT's Digital Radio Net

M 17419  Tom Clark (W3IWI,2976)   2/24/86  10:44 PM  L:305
KEYS:/FCC 85-105/TAPR FILES PETITION FOR RECONSIDERATION/FULL TEXT/PSE
CIRCULATE/
TO: (Group 95)

The following document was filed by TAPR with the FCC on Feb.24 in
response to the recent FCC Report and Order 85-105 pertaining to
automatic control of packet radio systems operating at frequencies
above 50 MHz. The credit for pulling this document together should
go to Harold Price, NK6K with some of the various ideas and comments
```

having been generated by WA7GXD, WB6YMH, W3VS and W3IWI.

73 de Tom, W3IWI

= = = = = = = = = = = = = = = = = = = =

February 24, 1986

Before the
Federal Communications Commission
Washington, DC 20554

In the matter of	)	
Amendment of Part 97 of the	)	PR Docket No. 85-105
Commission's Rules to permit	)	
automatic control of amateur	)	RM-4879
radio stations.	)	

PETITION FOR RECONSIDERATION

Filed by:
Tucson Amateur Packet Radio
P.O. Box 22888
Tucson, Arizona 85734

To the Commission:

Tucson Amateur Packet Radio, a club with international membership consisting of 1400 amateur packet radio enthusiasts which has coordinated the volunteer development of many of the major building blocks of the existing amateur packet network, and whose members have contributed since 1981 in the development of packet radio hardware, software, and operating procedures, hereby submits this petition for reconsideration of the report and order on PR docket No. 85-105. Our comments are limited to activities and operation above 50 MHz, as 85-105 only addresses these frequencies.

Our reasons for requesting a reconsideration are:

1) The inclusion of third-party traffic limitations, given the current definition of third-party traffic, puts severe constraints on the design and utilization of the developing packet radio network.

The questions that arise in the amateur packet community over this issue are mainly semantic ones, caused by attempting to force new technologies to fit the old definitions supplied by 97.3. The FCC has stated both at amateur gatherings and in the comments associated with several recent actions that it is in-

terested in promoting computer assisted amateur communications and what is commonly referred to as Computer-Based-Message-Systems (CBMS), or Bulletin Board Systems (BBS). Bulletin Boards are central repositories of messages sent between two or more parties. The messages are stored for indefinite periods of time on the bulletin board until they have been read by all parties concerned. The messages are seldom sent on behalf of the control operator of the BBS itself, and that's where the third-party rules begin to cloud the issue.

By strict application of the current definition of third party traffic :

> 97.3(v) Third party Traffic. Amateur radio communication by or under the supervision of the control operator at an amateur radio station on behalf of anyone other than the control operator.

A digital BBS system under automatic control could not transmit messages stored on it that are not originated by or destined for the control operator of that BBS. This makes illegal the major purpose of the bulletin board system.

During the early development and on the air testing of packet radio message systems, amateurs have viewed the message relay device as a repeater. A repeater, as defined by 97.3(l), is a device that automatically retransmits the radio signals of other amateur radio stations. Part 97 does not specify a minimum length for the time delay between receipt of the radio signal and its retransmission.

Repeaters, as commonly used, can pass traffic between two amateurs, neither of whom are control operators of the repeater, with out having that traffic defined as third-party. Repeaters have regulatory limitations of their own, however, and the development of more complex message systems and other packet switching devices will soon pass beyond the limits of the current definition of "repeater".

Existing amateur BBS systems are already handling large numbers of messages. Recent statistics reported by east coast stations show counts of more than 1000 messages per month at each of several sites. These systems are developing more sophisticated methods of automatically forwarding messages from site to site.

To review, the language specified by 85-105, makes the BBS function, desired by both the amateur population and the FCC, illegal unless the BBS is classed as a repeater. Imminent developments in packet radio will make this classification invalid for some devices under the current definitions. Therefore, 85-105, while attempting to permit continued experimentation, actually inhibits it.

A fix for this problem could be to include language in part 97 that specifically states that traffic originated by an amateur station on behalf of an amateur and destined for an amateur is not third-party traffic. This would make the permitted activities of automatic control digital devices, serving in a relay capacity but not classified as repeaters under the current definitions, match the permitted activities of classic repeaters. We note that several countries which prohibit third party messages (including West Germany, Norway, Japan and New Zealand) have chosen the interpretation that amateur-to-amateur messages passed thru packet radio BBS networks do not constitute third party traffic.

2) The inclusion of third-party traffic restrictions, for traffic of a character not discussed in 1) above, will severely limit the utility of packet radio networks for public service applications.

The following discussion presumes the acceptance of the above argument, and that the type of third-party traffic discussed is traffic on behalf of someone other than the control operator of the origination or destination station.

The FCC has done much to promote the use of high speed digital communications in the amateur service. The constant growth of experimentation in packet radio began when the use of the ASCII code at speeds of 300 bps and more were permitted. The majority of digital communications currently takes place at 1200 bps. 9600 bps is in limited use now, with 56kbps devices under construction.

A requirement that third-party traffic be monitored at each relay point in the network will limit the speed of the network to that of the reading speed of the slowest control operator. It would probably force the construction of two parallel networks, one at low speed for third-party traffic, and one at high speed for non-third-party traffic. This is undesirable.

The requirement to monitor the traffic at each relay point in the network also places severe constraints on the design and implementation of the network. In most of the networks now under discussion, the message is only guaranteed to appear in its entirety at its entry to the network, and at its exit. While the message is in the network, it is broken into many small pieces. They may be out of sequence as they pass a relay point. Some parts of the message may take a different path through the network.

With such message fragmentation, a control operator at an intermediate relay point may not have sufficient information as to the content of the message being relayed to correctly judge whether the character of the message is that of third-party traffic or not.

On the other hand, TAPR and its members share the FCC's concern over potential abuse of the network by commercial interests. The problem then becomes one of making sure the amateur regulations are followed, while at the same time making it possible to build the network.

We believe that it is possible to meet both of these goals. The key is in treating the packet radio network, consisting of an unspecified number of relay stations, as a "pipe". The pipe has an input and an output. At the entrance and exit to the pipe are non-automated control operators, who are ensuring compliance with the rules. Once a message has been placed in the pipe by a control operator, it need not be rechecked by an operator at each relay point that makes up the pipe. The message is again checked by a control operator at the end of the pipe if it is destined for a third-party. The amateur who was the control operator at the origination point of the message is responsible for ensuring compliance with the rules.

We cite as an example: Assume that a network exists between San Francisco and Los Angeles. There are two parallel paths in this network, one that runs down the coast at 9600 bps on 221.95 MHz, and a second that runs via Sacramento through the central valley. An earthquake simulation is taking place between the Red Cross in San Francisco and the State Office of Emergency Services (OES) in Los Angeles. The Red Cross has entered a series of damage reports and hospital bed estimates into a hand-held computer. There are 40,000 characters of data involved. They hand the computer to an amateur to transmit the data to Los Angeles over the amateur packet network. This is obviously third-party traffic. It is also obviously something that could not have been sent using voice, Morse code, or other slow data rate modes, in less than five hours.

The amateur in San Francisco reviews the data and determines that it meets the amateur rules and regulations. He then, as control operator of a station attached to the entry point of the network, (the pipe), enters the data into the network. It now flows through the pipe toward Los Angeles. Also in the pipe, simultaneously, are perhaps 20 other two way conversations. Monitoring of the messages while in transit through the pipe is difficult to do as it flows at high speed through two different paths. Part of the messages may even be automatically stored on disk at an intermediate point if the Los Angeles end of the network is down or congested. Once the message traffic is in Los Angeles, the control operator of the station at the final destination reviews them before passing them to the third-party.

A question that will certainly be raised at this point is, "Is this actually likely to occur in the near future?" Yes. The predecessor to the network above exists now. There are 5 relay points along the coast between Los Angeles and San Francisco

operating on 145.01 MHz at 1200 baud. There are 4 relay points that go up the central valley on 145.05 MHz at 1200 baud. During an exercise with the State OES, amateurs were handed a disk from an Apple II computer which contained simulated third-party traffic. This traffic was relayed through the network to an attended BBS system in San Francisco where it was stored and later transmitted through a second network to Sacramento. Similar networks and public service drills exist in other areas of the country. Large networks exist in the New England area, the Mid Atlantic States, and in Florida.

The only thing missing between the imaginary scenario and the actual one is higher baud rates and an increased level of automatic control. Both of those elements will be required if the amateur network is to provide a high level of service and reliability in time of need.

To review, we suggest that the network be viewed as a pipe, and that control operators at the input and the output to the pipe are sufficient to ensure compliance with third party traffic regulations.

At no time do we recommend that the third parties themselves be given direct access to the network.

The question of unauthorized, i.e. commercial, access to the network must be discussed. Since the regulations for traditional non-digital repeaters do not require constant monitoring, neither should the elements of a digital network. The only monitoring required for repeaters under automatic control is when third-party traffic is involved, this topic is discussed above. Monitoring does go on, however, in the course of daily amateur activities.

Policing of the amateur frequencies to keep intruders out has always had a great deal of support in the amateur community, and high speed digital communications will be no different. Although the same things that make it hard to monitor third-party traffic "in the pipe" will also affect an intruder watch, the intruder must still use the same pipe input as everyone else. Here, monitoring is easy. In fact, at its simplest level, packet radio is the embodiment of the FCC's underlying requirements for automatic control, "devices must be installed and procedures must be implemented...". The network entry and exit points are rigidly controlled by the protocols inherent in packet radio. Although the particular procedures will change as the network evolves, their attributes will remain the same. The originating and destination station are readily discernible. Activity is easily monitored and tracked by a computer. The devices necessary to do this monitoring will be readily available, since they are the same devices used by the general amateur population for access to the network. The prices of such devices have fallen from 00 to 9.00 in three years as the number of amateurs

using the mode rose from 200 to 14,000.

In summary for point 2), we believe that a requirement to monitor third-party traffic at each relay point in the network places such severe constraints on the design and implementation of the network as to bring the feasibility of construction of such a network into question. The alternative of making the network off-limits to third-party traffic would be to fall far short of the requirements of 97.1(a).

We believe that this problem can be fixed by adding a clause to the new 97.80(b) as follows:

> [(b) No amateur station may be operated under automatic control while transmitting third-party traffic]
>
> , unless that station is serving in a relay role in a network of digital stations where the traffic was originated at a station not under automatic control.

and elsewhere when third-party traffic is discussed.

TAPR wishes to thank the FCC staff for their obvious interest in amateur packet radio and its continuing development.

/s/

Dr. Thomas A. Clark, W3IWI, Director
for Lyle Johnson, WA7GXD, President
Tucson Amateur Packet Radio
P.O. Box 22888
Tucson, Arizona 85734

From -8617513259460541174
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11946d,c393f4fe30ec15a5
X-Google-Attributes: gid11946d,public
X-Google-Thread: 123782,c393f4fe30ec15a5
X-Google-Attributes: gid123782,public
X-Google-Thread: 151e61,c393f4fe30ec15a5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-25 10:15:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!
mcvax!ukc!warwick!rpt
From: rpt@warwick.UUCP (Richard Tomlinson)
Newsgroups: net.ham-radio,net.dcom,net.mail
Subject: Re: Justice Seen Dropping Opposition To Comm Privacy Bills.
Message-ID: <419@snow.warwick.UUCP>
Date: Tue, 25-Feb-86 13:15:46 EST

Article-I.D.: snow.419
Posted: Tue Feb 25 13:15:46 1986
Date-Received: Fri, 28-Feb-86 21:41:29 EST
References: <1012@brl-smoke.ARPA> <542@hoptoad.uucp>
Reply-To: rpt@warwick.UUCP (Richard Tomlinson)
Followup-To: net.followup
Distribution: net
Organization: Applied Maths, Maths Institute, University of Warwick, UK.
Lines: 8
Xref: watmath net.ham-radio:3881 net.dcom:1697 net.mail:1455
Summary: distribute to USA only please

[food]

Can I suggest that discussion of legal issues is restricted to the country
in which the law applies. Discussion of USA legislation is of no interest
to us in Europe.
--

        ...!mcvax!ukc!warwick!rpt

From 6497374034951902399
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8063c8daf2b4203a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-25 15:48:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-smoke!smoke!FRANK@RADC-TOPS20.ARPA
From: FRANK@RADC-TOPS20.ARPA
Newsgroups: net.ham-radio
Subject: tr-2500 mod?
Message-ID: <1255@brl-smoke.ARPA>
Date: Tue, 25-Feb-86 18:48:54 EST
Article-I.D.: brl-smok.1255
Posted: Tue Feb 25 18:48:54 1986
Date-Received: Fri, 28-Feb-86 21:29:04 EST
Sender: news@brl-smoke.ARPA
Lines: 11

With all of the talk on the net about increasing the frequency coverage of the
Icom 02-AT I began wondering about my own rig. Does anyone have information
on how to increase the frequency coverage of the Kenwood TR-2500? Or, is this
even a possibility with this rig? I am presently using an MFJ converter to
receive the National Weather Service on 152.55 Mhz. but it sure would be nice
to do away with that little black box. Any help would be greatly appreciated.

          73's
          Joe - N2EUV

P.S. Please don't tell me to trade my rig for the Icom.

From 7483980996159131604
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,68fdf15b5108583a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-26 06:01:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site genat.UUCP
Path: utzoo!utcs!mnetor!genat!george
From: george@genat.UUCP (George Gorsline)
Newsgroups: net.ham-radio
Subject: ARRL Bulletin 16
Message-ID: <2572@genat.UUCP>
Date: Wed, 26-Feb-86 09:01:10 EST
Article-I.D.: genat.2572
Posted: Wed Feb 26 09:01:10 1986
Date-Received: Thu, 27-Feb-86 05:49:14 EST
Organization: Genamation Inc. (Toronto Ontario, Canada)
Lines: 26

*** REPLACE THIS LINE WITH YOUR MESSAGE ***

hr arrl bulletin nr 16 from arrl headquarters
newington ct february 21, 1986
to all radio amateurs bt

fcc has amended section 97.61a of the amateur rules to permit f2a
emission in the 29.5 to 29.7 mhz repeater subband.

arrl had petitioned for the amendment so that f2a emission, the
primary mode used to identify by telegraphy amateur f3e emission
repeaters, would be available in the 10 meter repeater subband. fcc
also editorially amended section 97.61a to show f2a emission in other
amateur bands where repeater operation is authorized. the commission
said the amendment was necessary because the emission designator f2a
had been omitted inadvertently from those bands when the previous
emission designators were converted to the new system ar

... de VE3YDX - Why DX? Because its there (Why not?)
--
     George Gorsline, Jr. VE3FIU / K8HI
     One of the VE3YDX gang... Y DX? Because it's there(~Y)!
               __... ...__ . ... _.. _..._
     Genamation, 351 Steelcase Rd. West, Markham Ontario L3R 3W1
     {allegra|linus|ihnp4|...}!utzoo!mnetor!genat!george
     (416) 475-9434

From -1418437137885625862
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dc833d8d4334112f,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1986-02-26 06:02:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site genat.UUCP
Path: utzoo!utcs!mnetor!genat!george
From: george@genat.UUCP (George Gorsline)
Newsgroups: net.ham-radio
Subject: CRRL Bulletin 6/5
Message-ID: <2573@genat.UUCP>
Date: Wed, 26-Feb-86 09:02:20 EST
Article-I.D.: genat.2573
Posted: Wed Feb 26 09:02:20 1986
Date-Received: Thu, 27-Feb-86 05:49:26 EST
Organization: Genamation Inc. (Toronto Ontario, Canada)
Lines: 28

*** REPLACE THIS LINE WITH YOUR MESSAGE ***
qst de w1aw
hr crrl bulletin nr 6/5 from crrl headquarters
london ont february 24, 1986
to all radio amateurs bt

doc has informed crrl that, effective april 1, amateurs applying for
a station licence, for the first time only, will have to pay a fee of
26 dollars. the fee will drop to 20 dollars the following year.
amateurs who require a station licence for only part of a year can
pay on a pro rated basis. candidates for doc examinations will have
to pay a 5 dollar fee for each portion of an amateur radio
examination they try.

crrl has formally asked doc to continue the practice of issuing
special callsign prefixes to help canadian amateurs publicize
significant events in the life of the country. the submission
presents a plan whereby amateurs would assist doc in issuing the
prefixes, keeping doc involvement, and costs, to a minimum ar

de VE3YDX   ... because its there
--
     George Gorsline, Jr. VE3FIU / K8HI
     One of the VE3YDX gang... Y DX? Because it's there(~Y)!
               __... ...__ . ... _.. _.._
     Genamation, 351 Steelcase Rd. West, Markham Ontario L3R 3W1
     {allegra|linus|ihnp4|...}!utzoo!mnetor!genat!george
     (416) 475-9434

From -6170084112834929930
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7340fd19a6ad5c1a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-26 06:04:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site genat.UUCP
Path: utzoo!utcs!mnetor!genat!george

From: george@genat.UUCP (George Gorsline)
Newsgroups: net.ham-radio
Subject: ARRL Propagation 8
Message-ID: <2574@genat.UUCP>
Date: Wed, 26-Feb-86 09:04:07 EST
Article-I.D.: genat.2574
Posted: Wed Feb 26 09:04:07 1986
Date-Received: Thu, 27-Feb-86 05:49:38 EST
Organization: Genamation Inc. (Toronto Ontario, Canada)
Lines: 49

*** REPLACE THIS LINE WITH YOUR MESSAGE ***
qst de w1aw
propagation forecast bulletin nr 8 from arrl headquarters
newington ct february 24, 1986
to all radio amateurs

the solar flux curve for february is taking on the shape of a slightly irregular sine wave. from 84 on february 1 it rises quickly to 99 on the 3rd, peaks at 103 on the 5th, slides to 95 by the 9th, and tumbles down to 70 on the 17th. it has been as low as 67 since, and at 69 on the 23rd, it appears ready to start upward again.

the odds are against the flux reaching 103 in early march, as it did in february. that figure was the highest since july 1984, and we are now in what is probably the last full year of cycle 21. an appreciable rise should be underway however before next weeks bulletin.

the two week run at 85 or higher made the first half of february a very interesting time on 21, 24 and 28 mhz. now that we are back to quiet sun levels again, 24 and 28 mhz are almost devoid of dx, and 21 mhz is active mainly in the lower latitudes and on transequatorial circuits. no major change in this pattern is expected before about the 25th.

early february was marked by the most severe geomagnetic disturbances in several years. because of the 28 day month, we can expect recurrent major geomagnetic effects on about the same dates in march. this two month pattern is apparent in propagation records for february and march as far back as the 1930s. vhf enthusiasts take note that the second weekend of march should be marked in red on your operating schedule.

we were in a disturbance of milder category as this bulletin was being prepared. it should be over by the 26th. the last 2 days of february and the first few of march should be of slightly better than average propagation on all dx frequencies.

american sunspot numbers for february 13 through 19 were between 0 and 20 with a mean of 4.9.

de VE3YDX   Why not? __... ..._

--
George Gorsline, Jr. VE3FIU / K8HI
One of the VE3YDX gang... Y DX? Because it's there(~Y)!
__... ...__ . ... _.. _..._
Genamation, 351 Steelcase Rd. West, Markham Ontario L3R 3W1
{allegra|linus|ihnp4|...}!utzoo!mnetor!genat!george
(416) 475-9434

From 616646443233504867
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,666d8a67618d76ba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-26 06:21:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site genat.UUCP
Path: utzoo!utcs!mnetor!genat!george
From: george@genat.UUCP (George Gorsline)
Newsgroups: net.ham-radio
Subject: Canadx Get-together HC8 slides and other goodies
Message-ID: <2576@genat.UUCP>
Date: Wed, 26-Feb-86 09:21:59 EST
Article-I.D.: genat.2576
Posted: Wed Feb 26 09:21:59 1986
Date-Received: Thu, 27-Feb-86 05:50:18 EST
Organization: Genamation Inc. (Toronto Ontario, Canada)
Lines: 41

On March 15, the Canadian DX Association in conjunction with the Toronto DX Club will be hosting a special dinner metting at the Taipan Restaurant. Cost of the authenic, multi-course, Chinese diner from one of Toronto's better Chinese restaurants will be $18.00 per person (plus taxes and gratuities).

At the meeting Rick Dorsch, Jr., NE8Z, accompanied by his XYL, will show slides plus a video on the latest HC8X DX-pedition. Much of the HC8 wildlife will be explained also.

Rick is a medical doctor. He is licensed to practice in a number of less developed countries. His past or present calls include: F0MH, FG0MH, HC1EE, HC1MD, HC5EE, HC7EE, HC8EE, HC8MD, HC8VHF, HC9A, HD5EE, HD8EE, HD8CD, HD9EE, HD9X, HD0E, HD0EE, HD8CD, KZ5GC, PJ8RD, VP2AAB, VP2EEL, ZF1CW, AND WB8ABN. His XYL has operated under the calls HC1MM AND HC8MM. Many of us have worked Rick under one or more of the above calls.

Plan to attend. It should be a great evening.
There will be a cash bar at 18:30 with dinner at 19:30 (local).
As we have to commit to the restaurant for the number of people attending, please let me know, at the address below, if you with or without your XYL, or friend are coming. Also, so that the club doesn't get stuck for paying for committed seats for people who don't show up, I

would appreciate your sending your cheque for $22 to cover the dinner,
taxes and gratuities and a similiar amount for your guest.

Wilf, VE3FEA
Secretary-Treasurer, Canadx
1254 Avenue Road
Toronto, Ontario
M5N 2G7
--
George Gorsline, Jr. VE3FIU / K8HI
One of the VE3YDX gang... Y DX? Because it's there(~Y)!
          __... ...__ . ... _.. _..._
Genamation, 351 Steelcase Rd. West, Markham Ontario L3R 3W1
{allegra|linus|ihnp4|...}!utzoo!mnetor!genat!george
(416) 475-9434

From 3816984709094925041
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,54c33a3c42ea8803
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-26 06:51:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ecsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!mcnc!ecsvax!mjg
From: mjg@ecsvax.UUCP (Michael Gingell)
Newsgroups: net.ham-radio
Subject: Re: "The Case of the Poor Planner" (clean)
Message-ID: <1237@ecsvax.UUCP>
Date: Wed, 26-Feb-86 09:51:39 EST
Article-I.D.: ecsvax.1237
Posted: Wed Feb 26 09:51:39 1986
Date-Received: Sat, 1-Mar-86 00:45:52 EST
References: <307@telesoft.UUCP>
Organization: North Carolina Educational Computing Service
Lines: 11

This is a case of direct plagiarism of a speech given by an English
raconteur and wit, Gerard Hoffnung, to the Oxford University English
Speaking Union in the early 1950s. I have a cassette of the speech
which was about a building worker taking a barrel of bricks from
the bottom of a building to the top. Apart from that and the fact that
his presentation is incredibly funny the story is identical.

Mike Gingell ....decvax!mcnc!ecsvax!mjg

From 7508853321699624156
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,ae6a18d5ea777ecb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-26 09:53:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ulysses.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ulysses!wmbr
From: wmbr@ulysses.UUCP (W. M. Brelsford)
Newsgroups: net.ham-radio
Subject: DXCC Country List
Message-ID: <1191@ulysses.UUCP>
Date: Wed, 26-Feb-86 12:53:59 EST
Article-I.D.: ulysses.1191
Posted: Wed Feb 26 12:53:59 1986
Date-Received: Fri, 28-Feb-86 08:33:14 EST
Distribution: net
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 341

The current ARRL DXCC country list follows. Changes from the
previous posting include a new field for ITU prefix allocations.

The colon-separated fields are:

1. primary amateur prefix
2. country
3. continent
4. ITU zone(s)
5. CQ zone(s)
6. ITU prefix allocation(s)
7. other prefixes

For my own use, I added a first field containing a symbol
for status (- for worked, # for confirmed, etc.). With
programs such as sort, awk and grep, one can use the file
for printing lists by prefix, country name, continent, etc.

Please send corrections and suggestions to me.

Bill Brelsford K2DI
AT&T, Murray Hill
ulysses!wmbr

A2:Botswana:Af:57:38:A2,8O
A3:Tonga:Oc:62:32:A3
A4:Oman:As:39:21:A4
A5:Bhutan:As:41:22:A5
A6:United Arab Emirates:As:39:21:A6
A7:Qatar:As:39:21:A7
A9:Bahrain:As:39:21:A9
AP:Pakistan:As:41:21:AP-AS,6P-6S
BV:Taiwan:As:44:24
BY:China:As:33,42,43,44:23,24:BA-BZ,XS,3H-3U

C2:Nauru:Oc:65:31:C2
C3:Andorra:Eu:27:14:C3
C5:The Gambia:Af:46:35:C5
C6:Bahamas:NA:11:08:C6
C9:Mozambique:Af:53:37:C8-C9
CE:Chile:SA:14,16:12:CA-CE,XQ-XR,3G
CE9:Antarctica:An:67,69,70,71,72,73,74:12,13,29,30,32,38,39::DP,FT8Y,KC4,LA,LU_Z,O
R4,VK0,VP8,Y8,ZL5,ZS1,3Y,4K,8J
CE0A:Easter Is:SA:63:12
CE0X:San Felix:SA:14:12
CE0Z:Juan Fernandez:SA:14:12
CM:Cuba:NA:11:08:CL-CM,CO,T4
CN:Morocco:Af:37:33:CN,5C-5G
CP:Bolivia:SA:12,14:10:CP
CT:Portugal:Eu:37:14:CQ-CU,XX
CT3:Madeira Is:Af:36:33
CU:Azores:Eu:36:14::CT2
CX:Uruguay:SA:14:13:CV-CX
D2:Angola:Af:52:36:D2-D3
D4:Cape Verde:Af:46:35:D4
D6:Comoros:Af:53:39:D6
DL:Germany W:Eu:28:14:DA-DR
DU:Philippines:Oc:50:27:DU-DZ,4D-4I
EA:Spain:Eu:37:14:AM-AO,EA-EH
EA6:Balearic Is:Eu:37:14
EA8:Canary Is:Af:36:33
EA9:Ceuta & Melilla:Af:37:33
EI:Ireland:Eu:27:14:EI-EJ
EL:Liberia:Af:46:35:A8,D5,EL,5L-5M,6Z
EP:Iran:As:40:21:EP-EQ,9B-9D
ET:Ethiopia:Af:48:37:ET,9E-9F
F:France:Eu:27:14:FA-FZ,HW-HY,TH,TK,TM,TO-TQ,TV-TX
FG:Guadeloupe:NA:11:08
FH:Mayotte:Af:53:39
FK:New Caledonia:Oc:56:32
FM:Martinique:NA:11:08
FO:Clipperton Is:NA:10:07
FO:French Polynesia:Oc:63:32
FP:St Pierre & Miquelon:NA:09:05
FR:Glorioso Is:Af:53:39
FR:Juan de Nova, Europa:Af:53:39
FR:Reunion:Af:53:39
FR:Tromelin:Af:53:39
FS:St Martin:NA:11:08::FG
FT8W:Crozet:Af:68:39
FT8X:Kerguelen Is:Af:68:39
FT8Z:Amsterdam & St Paul Is:Af:68:39
FW:Wallis & Futuna Is:Oc:62:32
FY:French Guiana:SA:12:09
G:England:Eu:27:14:GA-GZ,MA-MZ,VP-VS,ZB-ZJ,ZN-ZO,ZQ,2A-2Z
GD:Isle of Man:Eu:27:14
GI:No Ireland:Eu:27:14
GJ:Jersey:Eu:27:14

GM:Scotland:Eu:27:14
GU:Guernsey:Eu:27:14
GW:Wales:Eu:27:14
H4:Solomon Is:Oc:51:28:H4
HA:Hungary:Eu:28:15:HA,HG
HB:Switzerland:Eu:28:14:HB,HE
HB0:Liechtenstein:Eu:28:14
HC:Ecuador:SA:12:10:HC-HD
HC8:Galapagos Is:SA:12:10
HH:Haiti:NA:11:08:HH,4V
HI:Dominican Rep:NA:11:08:HI
HK:Colombia:SA:12:09:HJ-HK,5J-5K
HK0:Malpelo Is:SA:12:09
HK0:San Andres & Providencia:NA:11:07
HL:Korea:As:44:25:DS-DT,D7-D9,HL-HM,P5-P9,6K-6N
HP:Panama:NA:11:07:HO-HP,H3,H8-H9,3E-3F
HR:Honduras:NA:11:07:HQ-HR
HS:Thailand:As:49:26:HS
HV:Vatican:Eu:28:15:HV
HZ:Saudi Arabia:As:39:21:HZ,7Z,8Z
I:Italy:Eu:28:15:IA-IZ
IS:Sardinia:Eu:28:15
J2:Djibouti:Af:48:37:J2
J3:Grenada:NA:11:08:J3
J5:Guinea-Bissau:Af:46:35:J5
J6:St Lucia:NA:11:08:J6
J7:Dominica:NA:11:08:J7
J8:St Vincent:NA:11:08:J8
JA:Japan:As:45:25:JA-JS,7J-7N,8J-8N:KA1
JD:Minami Torishima:Oc:45:27::KA1
JD:Ogasawara:As:45:27::KA1
JT:Mongolia:As:32,33:23:JT-JV
JW:Svalbard:Eu:18:40
JX:Jan Mayen:Eu:18:40
JY:Jordan:As:39:20:JY
K:United States:NA:06,07,08:03,04,05:AA-AL,KA-KZ,NA-NZ,WA-WZ
KC6:Belau:Oc:64:27
KC6:Micronesia:Oc:65:27
KG4:Guantanamo Bay:NA:11:08
KH1:Baker,Howland,Am Phoenix:Oc:61,62:31::KB6
KH2:Guam:Oc:64:27::KG6
KH3:Johnston Is:Oc:61:31::KJ6
KH4:Midway Is:Oc:61:31::KM6
KH5:Palmyra, Jarvis Is:Oc:61:31::KP6
KH5K:Kingman Reef:Oc:61:31::KP6K
KH6:Hawaii:Oc:61:31
KH7:Kure Is:Oc:61:31
KH8:Am Samoa:Oc:62:32::KS6
KH9:Wake Is:Oc:65:31::KW6
KH0:Mariana Is:Oc:64:27::KG6RST
KL7:Alaska:NA:01,02:01
KP1:Navassa Is:NA:11:08
KP2:Virgin Is:NA:11:08::KV4

KP4:Puerto Rico:NA:11:08
KP5:Desecheo Is:NA:11:08
KX6:Marshall Is:Oc:65:31
LA:Norway:Eu:18:14:JW-JX,LA-LN,3Y
LU:Argentina:SA:14,16:13:AY-AZ,LO-LW,L2-L9
LX:Luxembourg:Eu:27:14:LX
LZ:Bulgaria:Eu:28:20:LZ
OA:Peru:SA:12:10:OA-OC,4T
OD:Lebanon:As:39:20:OD
OE:Austria:Eu:28:15:OE
OH:Finland:Eu:18:15:OF-OJ
OH0:Aland Is:Eu:18:15
OH0:Market Reef:Eu:18:15::OJ0
OK:Czechoslovakia:Eu:28:15:OK-OM
ON:Belgium:Eu:27:14:ON-OT
OX:Greenland:NA:05,75:40::XP
OY:Faroe Is:Eu:18:14
OZ:Denmark:Eu:18:14:OU-OZ,XP,5P-5Q
P2:Papua New Guinea:Oc:51:28:P2
PA:Netherlands:Eu:27:14:PA-PI
PJ2:Neth Antilles:SA:11:09:PJ,P4:PJ3-4,P42-4
PJ5:St Maarten, Saba, St Eus:NA:11:08::PJ6-8,P45-8
PY:Brazil:SA:12,13,15:11:PP-PY,ZV-ZZ
PY0:Fernando de Noronha:SA:13:11
PY0:St Peter & St Paul Rocks:SA:13:11
PY0:Trindade & Martin Vaz Is:SA:15:11
PZ:Surinam:SA:12:09:PZ
S2:Bangladesh:As:41:22:S2-S3
S7:Seychelles:Af:53:39:S7
S9:Sao Tome & Principe:Af:47:36:S9
SM:Sweden:Eu:18:14:SA-SM,7S,8S
SP:Poland:Eu:28:15:HF,SN-SR,3Z
ST:Sudan:Af:48:34:SS-ST,6T-6U
ST0:Southern Sudan:Af:48:34
SU:Egypt:Af:38:34:SS,SU,6A-6B
SV:Greece:Eu:28:20:J4,SV-SZ
SV:Mt Athos:Eu:28:20
SV5:Dodecanese:Eu:28:20
SV9:Crete:Eu:28:20
T2:Tuvalu:Oc:65:31:T2
T31:Central Kiribati:Oc:62:31:T3
T32:East Kiribati:Oc:61:31
T30:West Kiribati:Oc:65:31
T5:Somali:Af:48:37:T5,6O
T7:San Marino:Eu:28:15:T7
TA:Turkey:As:39:20:TA-TC,YM
TF:Iceland:Eu:17:40:TF
TG:Guatemala:NA:11:07:TD,TG
TI:Costa Rica:NA:11:07:TE,TI
TI9:Cocos Is:NA:11:07
TJ:Cameroon:Af:47:36:TJ
TK:Corsica:Eu:28:15
TL:Central African Rep:Af:47:36:TL

TN:Congo:Af:52:36:TN
TR:Gabon:Af:52:36:TR
TT:Chad:Af:47:36:TT
TU:Ivory Coast:Af:46:35:TU
TY:Benin:Af:46:35:TY
TZ:Mali:Af:46:35:TZ
UA1:European RSFSR:Eu:19,20,29,30:16:EK,EM-EO,ER-ES,EX-EZ,LY,RA-RZ,UA-
UZ,YL,4J-4L:UA346,UN,UV,UW,UZ,RA,RN,RV,RW,RZ
UA1:Franz Josef Land:Eu:75:40::UZ1,RA1,RZ1
UA2:Kaliningradsk:Eu:29:15::UZ2,RA2,RZ2
UA9:Asiatic
RSFSR:As:20,21,22,23,24,25,26,30,35,75:17,18,19,23::UA0,UN,UV,UW,UZ,RA,RN,RV,RW,RZ
UB:Ukraine:Eu:29:16::UT,UY,RB,RT,RY
UC:White RSFSR:Eu:29:16:EU-EW:RC
UD:Azerbaijan:As:29:21::RD
UF:Georgia:As:29:21::RF
UG:Armenia:As:29:21::RG
UH:Turkoman:As:30:17::RH
UI:Uzbek:As:30:17::RI
UJ:Tadzhik:As:30:17::RJ
UL:Kazakh:As:30:17::RL
UM:Kirghiz:As:31:17::RM
UO:Moldavia:Eu:29:16::RO
UP:Lithuania:Eu:29:15::RP
UQ:Latvia:Eu:29:15::RQ
UR:Estonia:Eu:29:15::RR
V2:Antigua, Barbuda:NA:11:08:V2
V3:Belize:NA:11:07:V3
V4:St Kitts, Nevis:NA:11:08:V4
V8:Brunei:Oc:54:28:V8
VE:Canada:NA:02,03,04,09,75:01,02,03,04,05:CF-CK,CY-CZ,VA-VG,VO,VX-VY,XJ-XO
VE1:Sable Is:NA:09:05::CY0
VE1:St Paul Is:NA:09:05::CY9
VK:Australia:Oc:55,58,59:29,30:AX,VH-VN,VZ
VK9L:Lord Howe Is:Oc:60:30
VK9N:Norfolk Is:Oc:60:32
VK9X:Christmas Is:Oc:54:29
VK9Y:Cocos-Keeling Is:Oc:54:29
VK9Z:Mellish Reef:Oc:55:30
VK9Z:Willis Is:Oc:55:30
VK0:Heard Is:Af:68:39
VK0:Macquarie Is:Oc:60:30
VP2E:Anguilla:NA:11:08
VP2M:Montserrat:NA:11:08
VP2V:Br Virgin Is:NA:11:08
VP5:Turks & Caicos Is:NA:11:08
VP8:Falkland Is:SA:16:13
VP8:So Georgia Is:SA:73:13::LU_Z
VP8:So Orkney Is:SA:73:13::LU_Z
VP8:So Sandwich Is:SA:73:13::LU_Z
VP8:So Shetland Is:SA:73:13::LU_Z,CE9,HF0,4K
VP9:Bermuda:NA:11:05
VQ9:Chagos:Af:41:39

VR6:Pitcairn Is:Oc:63:32
VS6:Hong Kong:As:44:24
VU:India:As:41:22:AT-AW,VT-VW,8T-8Y
VU7:Andaman & Nicobar Is:As:49:26
VU7:Laccadive Is:As:41:22
XE:Mexico:NA:10:06:XA-XI,4A-4C,6D-6J
XF4:Revilla Gigedo:NA:10:06
XT:Burkina Faso (Upper Volta):Af:46:35:XT
XU:Kampuchea:As:49:26:XU
XV:Vietnam:As:49:26:XV,3W
XW:Laos:As:49:26:XW
XX9:Macao:As:44:24
XZ:Burma:As:49:26:XY-XZ
Y2:Germany E:Eu:28:14:Y2-Y9
YA:Afghanistan:As:40:21:T6,YA
YB:Indonesia:Oc:54:28:JZ,PK-PO,YB-YH,7A-7I,8A-8I
YI:Iraq:As:39:21:HN,YI
YJ:Vanuatu (New Hebrides):Oc:56:32:YJ
YK:Syria:As:39:20:YK,6C
YN:Nicaragua:NA:11:07:HT,H6-H7,YN
YO:Romania:Eu:28:20:YO-YR
YS:El Salvador:NA:11:07:HU,YS
YU:Yugoslavia:Eu:28:15:YT-YU,YZ,4N-4O
YV:Venezuela:SA:12:09:YV-YY,4M
YV0:Aves Is:NA:11:08
Z2:Zimbabwe:Af:53:38:Z2
ZA:Albania:Eu:28:15:ZA
ZB:Gibraltar:Eu:37:14
ZC:Cyprus SBA:As:39:20
ZD7:St Helena:Af:66:36
ZD8:Ascension Is:Af:66:36
ZD9:Tristan da Cunha & Gough Is:Af:66:38
ZF:Cayman Is:NA:11:08
ZK1:No Cook Is:Oc:62:32
ZK1:So Cook Is:Oc:63:32
ZK2:Niue:Oc:62:32
ZK3:Tokelau Is:Oc:62:31
ZL:New Zealand:Oc:60:32:ZK-ZM
ZL7:Chatham Is:Oc:60:32
ZL8:Kermadec Is:Oc:60:32
ZL9:Auckland Is, Campbell Is:Oc:60:32
ZP:Paraguay:SA:14:11:ZP
ZS1:So Africa:Af:57:38:H5,S4,S8,V9,ZR-ZU:ZS2456
ZS2:Pr Edward & Marion Is:Af:57:38
ZS3:Namibia:Af:57:38
1A0:S M O M:Eu:28:15:1A~
1S:Spratly Is:As:50:26:1S~
3A:Monaco:Eu:27:14:3A
3B6:Agalega & St Brandon:Af:53:39::3B7
3B8:Mauritius:Af:53:39:3B
3B9:Rodriguez Is:Af:53:39
3C:Equatorial Guinea:Af:47:36:3C
3C0:Annobon:Af:52:36

3D2:Fiji Is:Oc:56:32:3D
3D6:Swaziland:Af:57:38:3D
3V:Tunisia:Af:37:33:TS,3V
3X:Guinea:Af:46:35:3X
3Y:Bouvet:Af:67:38
4S:Sri Lanka:As:41:22:4P-4S
4U:ITU Geneva:Eu:28:14
4U:UN HQ:NA:08:05:4U
4W:Yemen:As:39:21:4W
4X:Israel:As:39:20:4X,4Z
5A:Libya:Af:38:34:5A
5B:Cyprus:As:39:20:C4,H2,P3,5B
5H:Tanzania:Af:53:37:5H-5I
5N:Nigeria:Af:46:35:5N-5O
5R:Malagasy Rep:Af:53:39:5R-5S,6X
5T:Mauritania:Af:46:35:5T
5U:Niger:Af:46:35:5U
5V:Togo:Af:46:35:5V
5W:Western Samoa:Oc:62:32:5W
5X:Uganda:Af:48:37:5X
5Z:Kenya:Af:48:37:5Y-5Z
6W:Senegal:Af:46:35:6V-6W
6Y:Jamaica:NA:11:08:6Y
7O:PDR Yemen:As:39:21:7O
7P:Lesotho:Af:57:38:7P
7Q:Malawi:Af:53:37:7Q
7X:Algeria:Af:37:33:7R,7T-7Y
8P:Barbados:NA:11:08:8P
8Q:Maldive Is:As:41:22:8Q
8R:Guyana:SA:12:09:8R
9G:Ghana:Af:46:35:9G
9H:Malta:Eu:28:15:9H
9J:Zambia:Af:53:36:9I-9J
9K:Kuwait:As:39:21:9K
9L:Sierra Leone:Af:46:35:9L
9M2:W Malaysia:As:54:28
9M6:E Malaysia:As:54:28:9M,9W:9M8
9N:Nepal:As:42:22:9N
9Q:Zaire:Af:52:36:9O-9T
9U:Burundi:Af:52:36:9U
9V:Singapore:As:54:28:S6,9V
9X:Rwanda:Af:52:36:9X
9Y:Trinidad & Tobago:SA:11:09:9Y-9Z
~~:Abu Ail, Jabal at Tair:As:39:21

From 7145384419066553809
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,80359b6b264665f7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-26 10:56:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!

harvard!seismo!brl-adm!brl-smoke!wmartin
From: wmartin@brl-smoke.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Repair Shop Pointers
Message-ID: <1324@brl-smoke.ARPA>
Date: Wed, 26-Feb-86 13:56:03 EST
Article-I.D.: brl-smok.1324
Posted: Wed Feb 26 13:56:03 1986
Date-Received: Sun, 2-Mar-86 19:48:09 EST
Distribution: net
Organization: USAMC ALMSA, St. Louis, MO
Lines: 37

This posting went out to the ARPA side of the Info-Hams list during the period when the USENET gateway was down, so I'm posting a copy on the USENET side now. If you see a duplicate copy, my apologies.

I have a Hy-Gain Galaxy R-530 shortwave receiver, which right now is in need of repair. (It's a phase-lock circuit, which now won't lock, which I assume is due to component aging or alignment problems, and so it cannot tune any frequency and is worthless unless fixed. Since it was a $900 radio, I can't bring myself to just junk it.)

Anyway, the last time I had it worked on (due to a lightning strike that sent a surge thru the power lines and fried its innards), I had sent it back to the factory. This was a decade or so ago. Since then, Hy-Gain had been taken over by Telex. I wrote the factory last year and got the response that they no longer had the spare parts in stock and could not service the receiver any more, but they referred me to two possible sources for this service. I list them below. What I was wondering was if anyone on the net has ever dealt with either of these firms, or knows anything about them? If you have any info, either by personal experience or by third-hand rumor, whether it is positive or negative, please let me know. Both of these places are far away from me, and I'll have to ship the receiver UPS to either of them, so I can't investigate myself. (I'm in St. Louis, MO, by the way.)

The firms are:

CW Electronics, 800 Lincoln St., Denver, CO 80203 (303)832-1111

Jack Lingeman, 2223 So. Stuhr Rd., Grand Island, NE 68801 (308)382-3519

Also, if anyone has any recommendations for "favorite" repair shops, or those with a good reputation for working on esoteric ham gear (quality of work is more important than rates charged), I'd like to hear them!

Regards, Will Martin

ARPA/MILNET: wmartin@almsa-1.ARPA USENET: seismo!brl-bmd!wmartin

From -5057457593743635474

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,78146a7d1c113a08
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,78146a7d1c113a08
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1986-02-26 12:04:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!brl-adm!brl-smoke!ron
From: ron@brl-smoke.ARPA (Ron Natalie <ron>)
Newsgroups: net.dcom,net.ham-radio
Subject: Re: H. R. 3378 on interception of communication
Message-ID: <1332@brl-smoke.ARPA>
Date: Wed, 26-Feb-86 15:04:22 EST
Article-I.D.: brl-smok.1332
Posted: Wed Feb 26 15:04:22 1986
Date-Received: Sun, 2-Mar-86 19:33:47 EST
References: <1184@ecsvax.UUCP> <422@ccivax.UUCP>
Distribution: net
Organization: Ballistic Research Lab (BRL)
Lines: 11
Xref: watmath net.dcom:1710 net.ham-radio:3898

> In New York, it is illegal to connect a decoder to the cable circuit.
> In fact, if you connect a "cable ready" VCR and a "cable ready" television
> to a "Y" adapter, you can be fined or imprisoned. I can understand the
> cable company getting upset if you "tap in" without paying anything, but
> paying double for the same cable seems a bit unreasonable. The fee
> is $5/month per connection plus $5/month for a "Cable company decoder"
> plus $N/month for each "premium channel" you wish to recieve.

Remember, it used to be illegal to install your own telephones, too.

-Ron

From 5990520181292957953
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9949ca3760d419c2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-26 14:01:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!harvard!seismo!brl-adm!brl-smoke!smoke!Gray.ES@Xerox.COM
From: Gray.ES@Xerox.COM
Newsgroups: net.ham-radio
Subject: IF Filters
Message-ID: <1341@brl-smoke.ARPA>
Date: Wed, 26-Feb-86 17:01:45 EST
Article-I.D.: brl-smok.1341
Posted: Wed Feb 26 17:01:45 1986
Date-Received: Sun, 2-Mar-86 19:48:46 EST
Sender: news@brl-smoke.ARPA

Lines: 47

How to make your otherwise unselective receiver/transceiver into a real
"DX machine":

Replace one or all of the ceramic IF filters with something with better
selectivity and stopbands of course!

Here are a couple of outfits that sell these filters on a retail basis
that don't require that you buy a minimum of 50 or more:

Radio Plus+
3635 Chastain Way
Pensacola, Fl 32503

Radio West
3417 Purer rd.
Escondido, Ca. 92505

Aiming primarily at AM filter replacements there is Radio Plus+. They
advertise filter mods for the Uniden CR2021/DX-400; Kenwood R600, R1000,
R2000; Icom R70 and R71A, Yaesu FRG series, plus many other receivers.
Filters are of the NTK and Murata Erie Ceramic type but they are the
larger ones not found in any of the commercially manufactured general
coverage receivers. His prices are reasonable (19.00 to 29.00) and the
filters perform quite well. I've put these in the Yaesu FRG7700, Kenwood
R600 and ICOM R71A with excellent increases in selectivity and
intelligibility. Filter kits are available for the new Sony 2010. SSB
filters are also available.

Radio West has some nice filters, primarily the Collins/Rockwell
mechanical type. They sell for 150.00 which includes a small circuit
board on which the filter is mounted along with a FET for a little extra
gain. Considering that Collins/Rockwell is now quoting a 144.00 price
tag with a 21 week lead time for sale and manufacture of any of its
455Khz filters, Radio West is a bargain. I have installed these filters
in my Kenwood R1000 with excellent results. Filters in stock range from
wide (9Khz at 60db) to narrow (500Hz).

International Radio in Florida (I don't have the adress on me right now,
but they advertise in most ham periodicals) has a excellent line of
SSB/CW filters for the Icom, Kenwood and Yaesu radios at considerable
savings. I installed their 2.1 Khz filter in my R71A with good results.
Prices vary. A example is the ICOM FL44A SSB filter (2.4 Khz), retail is
150.00 (some sales show them at 144.00) the International Radio filter
equivalent is 89.00. The 2.1 Khz model is avalable for 99.00.

Happy SWL'ing
Scott KD6CQ

From 8088561166275891606
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,9fba58417e19278a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-26 14:27:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!frohne
From: frohne@pur-ee.UUCP (Henry R Frohne)
Newsgroups: net.ham-radio
Subject: Orbit Predictions for Oscar 10
Message-ID: <3821@pur-ee.UUCP>
Date: Wed, 26-Feb-86 17:27:14 EST
Article-I.D.: pur-ee.3821
Posted: Wed Feb 26 17:27:14 1986
Date-Received: Fri, 28-Feb-86 08:32:23 EST
Reply-To: frohne@pur-ee.UUCP (Henry R Frohne)
Organization: Electrical Engineering Department , Purdue University
Lines: 9

I am looking for a program to predict the orbits of Oscar 10. Something in Fortran would be nice but beggars can't be choosers. I have an Apple II with a Z-80 card and of course the vax machines here at Purdue. If anyone can mail me the source code for this application I would be grateful. It is a drag searching the sky for the bird.

Thanks & 73,

Rob (KL7NA/9)

From 8429620365092799992
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,54c33a3c42ea8803
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15d222,54c33a3c42ea8803
X-Google-Attributes: gid15d222,public
X-Google-ArrivalTime: 1986-02-26 14:48:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site winston.UUCP
Path: utzoo!utcsri!ubc-vision!winston!foreman
From: foreman@winston.UUCP (Alastair Foreman)
Newsgroups: net.jokes,net.ham-radio
Subject: Re: "The Case of the Poor Planner" (clean)
Message-ID: <180@winston.UUCP>
Date: Wed, 26-Feb-86 17:48:55 EST
Article-I.D.: winston.180
Posted: Wed Feb 26 17:48:55 1986
Date-Received: Wed, 26-Feb-86 22:42:21 EST
References: <307@telesoft.UUCP>
Reply-To: foreman@winston.UUCP (Alastair Foreman)
Organization: New Media Technologies, Burnaby, BC, CANADA
Lines: 29
Summary:

In article <307@telesoft.UUCP> bruceb@telesoft.UUCP (Bruce Bergman @favorite)
writes:
>[line eater offering]
>
>I'm posting this to both net.jokes and net.ham-radio, mainly
>because I haven't read anything about "real life" this funny
>in a long time, and it involves hams...
>
>   ... I am sorry to report, however, that as I lay
>there on the tools in pain, unable to stand and watching the empty
>barrel 80 feet above me...I again lost my presence of mind...I let
>go of the rope."
>

As far as I know, the original version of this story (involving a
bricklayer) is by Gerard Hofnung in his presentation to the Oxford Union,
quite a long time ago (1950's ?).

The entire presentation is on a VERY funny record.

--
    Alastair Foreman
    New Media Technologies Ltd.
    ..decvax!microsoft!ubc-vision!winston!foreman
    ..ihnp4!alberta!ubc-vision!winston!foreman

    #108 4664 Lougheed Highway
    Burnaby, B.C., Canada,
    V5C 5T5
    (604) 291-7111

From 2609563340564392564
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d168c82c7e3fa0a5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-26 15:45:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles hp 1.3 exp 09/24/84; site hplsla.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!pyramid!pesnta!
hplabs!tektronix!uw-beaver!tikal!hplsla!glenne
From: glenne@hplsla.UUCP (glenne)
Newsgroups: net.ham-radio
Subject: Re: CQ 440 MHz
Message-ID: <13500004@hplsla.UUCP>
Date: Wed, 26-Feb-86 18:45:00 EST
Article-I.D.: hplsla.13500004
Posted: Wed Feb 26 18:45:00 1986
Date-Received: Mon, 3-Mar-86 01:42:02 EST
References: <13500003@hplsla.UUCP>
Lines: 24
Nf-ID: #R:hplsla:13500003:hplsla:13500004:000:563
Nf-From: hplsla!glenne   Feb 26 16:45:00 1986

Subject: 440 MHz repeater for sale

Tony,

In response to your notes response regarding a 440 MHz repeater:

What model is the Motorola repeater ?

What are the specs on the duplexor ?
How many cavities does it have ?
Notch Depth ? Rejection ?

What are you using for a controller ? What control functions avail ?

Your offer sounds very appealing and we would appreciate
knowing more about it.

Glenn Engel, NN7N (206-334-0576 evenings, 206-335-2066 day)

ihnp4!{hplabs,harpo}!hp-pcd!hplsla!glenne
uw-beaver!tikal!hplsla!glenne

From -3728522468089116119
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,af7cf6a66afc028e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-27 05:52:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-adm!brl-smoke!smoke!crash!scotto@nosc.ARPA
From: scotto@nosc.ARPA
Newsgroups: net.ham-radio
Subject: Apple/Ham Software
Message-ID: <1371@brl-smoke.ARPA>
Date: Thu, 27-Feb-86 08:52:06 EST
Article-I.D.: brl-smok.1371
Posted: Thu Feb 27 08:52:06 1986
Date-Received: Mon, 3-Mar-86 01:24:09 EST
Sender: news@brl-smoke.ARPA
Lines: 14

Is there any software available for the Apple //'s that will aid in
getting my technician license?

I have a morse code program, but would like to use the computer for
question/answer type lessons.

Thanks -

---Scott O'Connell crash!scotto@ucsd - or - crash!scotto@nosc
{ihnp4, cbosgd, sdcsvax, noscvax}!crash!scotto

$

From 2545478059874756143
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,81a519546d01b745
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-27 12:19:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site trsvax
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!convex!trsvax!ron
From: ron@trsvax
Newsgroups: net.ham-radio
Subject: Re: IC-02AT
Message-ID: <52800068@trsvax>
Date: Thu, 27-Feb-86 15:19:00 EST
Article-I.D.: trsvax.52800068
Posted: Thu Feb 27 15:19:00 1986
Date-Received: Tue, 4-Mar-86 04:47:06 EST
References: <305@telesoft.UUCP>
Lines: 6
Nf-ID: #R:telesoft.UUCP:305:trsvax:52800068:000:104
Nf-From: trsvax!ron   Feb 27 14:19:00 1986

I'll second that. I'd love to the 02AT mod's also!!!

     Ron Light

     ...{microsoft,ctvax,sco}!trsvax!ron

From -6155367901153492409
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15d222,54c33a3c42ea8803
X-Google-Attributes: gid15d222,public
X-Google-Thread: 151e61,54c33a3c42ea8803
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-27 12:42:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site alberta.UUCP
Path: utzoo!utcsri!ubc-vision!alberta!jim
From: jim@alberta.UUCP (Jim Easton)
Newsgroups: net.jokes,net.ham-radio
Subject: Re: Re: "The Case of the Poor Planner" and a joke
Message-ID: <820@alberta.UUCP>
Date: Thu, 27-Feb-86 15:42:14 EST

Article-I.D.: alberta.820
Posted: Thu Feb 27 15:42:14 1986
Date-Received: Thu, 27-Feb-86 22:17:16 EST
References: <307@telesoft.UUCP> <180@winston.UUCP>
Organization: U. of Alberta, Edmonton, AB
Lines: 38

> >   ... I am sorry to report, however, that as I lay
> >there on the tools in pain, unable to stand and watching the empty
> >barrel 80 feet above me...I again lost my presence of mind...I let
> >go of the rope."
> >
>
> As far as I know, the original version of this story (involving a
> bricklayer) is by Gerard Hofnung in his presentation to the Oxford Union,
> quite a long time ago (1950's ?).
>
That's when I saw saw it first too. The trouble with getting old
is that one very seldom sees a new joke and the good ones tend to
get mangled.

     The obligatory joke;

A little boy was being instructed about God in his Sunday School.
His father had also instructed him on the experimental method and
he decided to test the theory.

So he wrote a letter to God asking God to send him $100. When the
post office got the letter addressed to God they didn't quite know
what to do with it so they sent it to the postmaster who in turn
passed it on to the PM.

The PM thought that was pretty good and that he should encourage the
boys belief in God but that $5 would look like a lot to a little boy
and would probably be sufficient. He instructed his secretary to send
the boy a cheque for $5.

When the boy received it he wrote another letter to God.

Dear God,

Thank you for the $100. As you probably know it came through Ottawa
and as usual those bastards deducted 95%.

     Jim Easton (..!alberta!jim)

From -2769790796884099491
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ec7978302f46c66,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-27 13:10:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site sphinx.UChicago.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!gargoyle!sphinx!supp
From: supp@sphinx.UChicago.UUCP (Steve Upp)
Newsgroups: net.ham-radio
Subject: FT-980
Message-ID: <1740@sphinx.UChicago.UUCP>
Date: Thu, 27-Feb-86 16:10:46 EST
Article-I.D.: sphinx.1740
Posted: Thu Feb 27 16:10:46 1986
Date-Received: Sat, 1-Mar-86 02:54:40 EST
Organization: U. Chicago - Computation Center
Lines: 9

Does anyone have any experiences they would like to share concerning the
Yaesu 980? I'm considering purchasing one for my first rig and have not
located any of the reviews in the Ham magazines.

Thanks Much
Steve Upp

...!ihnp4!gargoyle!sphinx!supp

From -1478716498653189142
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47c91a66f8c16c2f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-28 08:53:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-adm!brl-smoke!smoke!jcole@apg-3
From: jcole@apg-3 (James Cole STEEP-MTDS AV879-4954)
Newsgroups: net.ham-radio
Subject: Please ADdd
Message-ID: <1406@brl-smoke.ARPA>
Date: Fri, 28-Feb-86 11:53:10 EST
Article-I.D.: brl-smok.1406
Posted: Fri Feb 28 11:53:10 1986
Date-Received: Mon, 3-Mar-86 01:17:12 EST
Sender: news@brl-smoke.ARPA
Lines: 3

Pleas add me to the list.

              j[DJim

From -6508808073047375187
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f3d16122949232dc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-28 13:09:15 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!genrad!panda!talcott!
harvard!seismo!brl-adm!brl-smoke!smoke!YOUNG@MARLBORO.DEC.COM
From: YOUNG@MARLBORO.DEC.COM
Newsgroups: net.ham-radio
Subject: QSL Routes
Message-ID: <1415@brl-smoke.ARPA>
Date: Fri, 28-Feb-86 16:09:15 EST
Article-I.D.: brl-smok.1415
Posted: Fri Feb 28 16:09:15 1986
Date-Received: Tue, 4-Mar-86 01:25:39 EST
Sender: news@brl-smoke.ARPA
Lines: 36

Responses to QSL information requests:

BY1PK: Chinese Radio Sports Association, Box6106, Beijing, People's Republic of China. If you know the operator was not a native, there may be a more direct route as well.

CX4HS: Alberto Symonds, Rbla M. Gandhi 485, Montevideo, Uruguay

PJ2FR: For 1983 CQ WPX SSB and CQ WW SSB 1983 and 1984: N6KT, Richard J. Smith, 3281 Loma Alta Drive, Santa Clara, CA 95051. Otherwise: van der Vilies, Ledaweg 55, Curacao, Netherlands Antilles

ZD7CW: N4CID, Thomas F. Wood, 709 West Morris Circle, Dunn, NC 28334

HH7PV: Pat De Verteuil, Abricots, Via Jeremie, Haiti. You could also try W1FJ, Al Rousseau, 180 Den Quarry Road, Lynn, MA 01904. W1FJ is the QSL manager for HH2VP, but I don't think HH7PV is the same station.

PY2FZ: Miguel E. L. Garcia, Box 55154, 04733 Sao Paulo, sp, Brazil.

ZM8OY: Mrs. Kaye Hannigan, The Terrace, Warrington, Otago, New Zealand
ZM is a special prefix. ZM8OY is the same station as ZL8OY.

LU1E: probably a special event callsign. I'd try the LU BURO: Radio Club Argentina, Box 97, Correo Central, 1000 Buenos Aires, CF, Argentina.

VP2MW: WB2LCH, Gene W. Ege, Sr., P. O. Box 64, Gloucester, NJ 08030.

4N3X: Special YU callsign, try the YU BURO: SRJ, Box 48, 11001 Belgrade, Yugoslavia.

73 and good dx
de KQ1F and K1XM

From -4091733397649648678

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c6c98c2de7908258,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-02-28 15:20:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!dec-rhea!dec-mred!
soomre
From: soomre@mred.DEC
Newsgroups: net.ham-radio
Subject: WRNO Schedule
Message-ID: <1438@decwrl.DEC.COM>
Date: Fri, 28-Feb-86 18:20:46 EST
Article-I.D.: decwrl.1438
Posted: Fri Feb 28 18:20:46 1986
Date-Received: Sat, 1-Mar-86 22:45:23 EST
Sender: daemon@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 18

The current schedule for WRNO is as follows.

(times in GMT or UTC)

0000-0300   7355
0300-0500   6185   (to 1200 on Sundays)
1200-1330   9715   (Sunday only)
1500-1700   11965 (from 1330 Sundays)
1700-2100   15420
2100-2230   11705
2230-0000   9770

....
73

Ed Soomre N1BFF

From 2860276091024422947
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e64f7dbf94b2e539,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,e64f7dbf94b2e539,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1986-03-01 01:53:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio,net.space
Subject: Info on Japanese Amateur Satellite 1

Message-ID: <37@petrus.UUCP>
Date: Sat, 1-Mar-86 04:53:40 EST
Article-I.D.: petrus.37
Posted: Sat Mar 1 04:53:40 1986
Date-Received: Sat, 1-Mar-86 22:25:17 EST
Organization: Bell Communications Research, Inc
Lines: 363
Xref: watmath net.ham-radio:3893 net.space:6177

Posted: Sat Feb 22, 1986   2:54 AM GMT   Msg: KGIG-2396-4697
From: TOKAMOTO
To: DOCS
Subj: JAS1.DOC

```
 I--------------------------------------------------I
 I                                                  I
 I                J   A   S   -   1                 I
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Introduction:

JAS-1 is an amateur radio satellite, promoted by JARL as a joint venture with NASDA. NEC constructed "system" units (space frame, power supply etc.), while JAMSAT, with its selected volunteer JAS-1 project team, designed and built the "mission" units (transponders, telemetry/command and house keeping micro-computer) and ground support systems.

JAS-1 has been completed and has passed all the necessary tests. It is in a clean room waiting for the launch, currently scheduled for August 1986.

The outline of this unique satellite is explained in the following.

Many thanks to Harold Price, NK6K, for his assistance in the preparation of this article.

February 11, 1986

N6MBM/JA2PKI
Tak Okamoto
191 Pinestone,
Irvine, CA 92714

Hamnet : 72307,3224
Telemail : TOKAMOTO

- -

JAS-1 Mission Objectives:

1. JAS-1 will provide reliable world-wide amateur radio communications.

2. JAS-1 will enable radio amateurs to study tracking and command techniques.

3. JAS-1 will offer an in-space "proving ground" for radio amateur developed and built transponders and sub-systems.

4. JAS-1 will provide NASDA an opportunity to carry out a "multi-payload" launch using their new "H-1" launcher. (NASDA has never engaged in a multi-payload launch, thus the JAS-1 project will offer NASDA an excellent opportunity by providing them with an active payload having its own telemetry-beacon and transponder for ranging.)

- -

1. Form and general dimensions:

The spacecraft takes the form of a 26-facet polyhedron, which measures 400 mm X 400 mm X 470 mm and weighs 50 kilograms.

2. Launch and Orbit:

JAS-1 will be launched into a circular low-earth orbit, which will be non-sun synchronous and non-polar.

Launch vehicle	: H-1 2 stage rocket
Launch number	: Test Flight # 1
Launch site	: Tanegashima Is. Japan
Launch date	: August 1986
Estimated inclination	: 50 degrees
Estimated altitude	: 1500 k.m.
Estimated period	: 120 minutes
Estimated window per pass	: 20 minutes/pass
Estimated passes per day	: 8 passes/day

3. Designed life:

Estimated lifetime is 3 years

4. Special Features of JAS-1:

JAS-1 carries two separate mode J transponders. One is a linear transponder, and the other is a digital "store-and-forward" transponder mainly for non-real-time communication between stations located in different time zones.

The reasons for selecting mode J for this first Japanese amateur radio communications satellite are:

a) It is becoming increasingly difficult to use 145-MHz for a satellite downlink because of man-made electrical noise and other interference.

b) The planners of JAS-1 wanted to provide a successor to AMSAT OSCAR-8's mode J, which was originally developed by JAMSAT's engineering team back in 1976.

c) 435 MHz is much quieter than 145 MHz as a downlink band, it is comparatively free from man-made noise and sky-temperature effects.

The digital transponder will provide "error-free" information exchange.

5. Transponders:

a) The linear transponder = mode JA :

The passband will be 100 kHz wide. The transponder will have an output of 1 watt p.e.p. Ground stations will need an uplink power of 100 watts e.i.r.p. The sidebands will be reversed, i.e., the uplink is LSB, the downlink is USB. There will be a 100 mW c.w. beacon switchable to PSK when needed.

Uplink pass band : 145.90 MHz - 146.00 MHz
Downlink pass band : 435.80 MHz - 435.90 MHz
Beacon freq. : 435.795 MHz
Translate freq. : 581.80 MHz

b) The digital transponder = mode JD :

There will be four 145 MHz band input channels using Manchester coded FM for the uplink. Ground stations will need 100 watts e.i.r.p. There will be one downlink channel in the 435 MHz band using PSK, the

output will be 1 watt RMS.

Channels are :

```
Uplink   channel 1 : 145.850 MHz
  ,,     channel 2 : 145.870 MHz
  ,,     channel 3 : 145.890 MHz
  ,,     channel 4 : 145.910 MHz
Downlink channel   : 435.910 MHz
```

The data format is HDLC. The protocol is AX.25 Level 2 Version 2. The data transfer rate is 1200 bps for both uplink and downlink.

The reasons for not using Bell-202 type FSK modulation are:

a) To reduce the parts count onboard JAS-1. Using Manchester coded FM for uplink reduces JAS-1's onboard decoder chip count by 16.

b) To improve the downlink margins. Due to JAS-1's tight power budget, only 1 watt is generated by the downlink transmitter. A more efficient modulation scheme like PSK is required.

JAS-1 will be a store and forward system but not a real time digipeater. Digipeating is not an effective use of a low orbit satellite such as JAS-1, which has a limited communication foot print and visibility time.

JAS-1 has 4 uplink channels for 1 downlink channel. This is because the difference of channel efficiency between uplink and downlink. An uplink channel is shared by several ground users. Since the ground users can't hear each other, and are listening to the downlink channel anyway, the uplinks are subject to packet collisions. This scheme is called "Pure ALOHA", and is known to have a theoretical maximum channel throughput of 18.4%. The JAS-1 downlink is 100% efficient, since only JAS-1 transmits there. To balance capacity, as well as add redundancy, four uplink channels are used.

The combined uplink efficiency is then 4 * 18.4% or 76%. The remaining downlink time is used for general messages and telemetry data.

JAS-1 will accept a connect from only one station at a time with the software scheduled for initial use. Multiple connections will be supported in subsequent software updates. General packet operation is scheduled to begin in November 1986.

6. Digital Hardware:

The microprocessor is a MIL-STD-883B screened NSC-800 running with a 1.6MHz clock. This is the only processor on board. It controls the digital transponder and also acts as an IHU (Integrated Housekeeping Unit).

The on-board memory has a 1.5MB physical storage capacity. 48 chips of NMOS 256K DRAMs are used. A hardware based error-detection/correction circuit is incorporated to protect the entire 1.5 MB and provide an 1 MB error free memory area. The system program occupies some 32KB, the rest is used for message storage.

The memory unit is physically divided into four identical 256KB memory cards, any one of which can be assigned as the system area. Up to three cards can be turned off. This design provides system redundancy and allows command stations to control power consumption without a total loss of service.

JAS-1 has five hardware HDLC controllers. Four of them are for the uplink channels and one is for the downlink channel. In total, these controllers consist of some 140 CMOS MSIs, yet their power consumption is less than that of a single NMOS LSI HDLC controller like WD-1933.

JAS-1 does not have any ROM but has simple hardware boot strap circuit instead. This design is to increase system flexibility and reliability.

7. Power system:

25 of JAS-1's 26 faces are covered with a total of 979 pieces of solar cells. They will generate 8.5 watts of power at the beginning of life.

JAS-1 employs 11 Ni-Cd battery cells with a capacity of 6 AH. These supply 14 volts average to JAS-1's main power buss. The 14 volts is converted and regulated to +10V, +5V and -5V.

8. Antenna system:

JAS-1 has three antennas.

2 m reception antenna

Slant 1/4 wave Mono-pole	Isotropic	-4 dBi gain

70 cm transmission antenna

Mode-JA : Slant Turnstile L.H.C.P. +Z axis +3 dBi gain
Mode-JD : Slant Turnstile R.H.C.P. -Z axis +3 dBi gain

9. Attitude control:

Forced shaking using the earth's geomagnetic field. JAS-1 has two 1 ATm sq. permanent magnets in its Z axis.

10. Telemetry:

Analog system telemetry has 12 analog channels and 33 system status flags. This telemetry can be sent without the help of the NSC800 microprocessor and will be turned on automatically by the separation from the H-1 launcher. The telemetry is sent on the 100mW beacon on 435.795MHz in CW, switchable to PSK.

Digital system telemetry has 29 analog channels and 33 system status flags. This software driven telemetry can be sent in any format, and can include short text messages. This telemetry can be sent on either the mode JD downlink channel (435.910MHz) or the mode JA CW beacon (435.795MHz).

11. Command:

A simple 3-channel tele-command system is used for global control functions, e.g. JA transponder "ON"/"OFF", JD transponder "ON"/"OFF" and independent "ON"/"OFF" of the A-0 beacon. An additional 37 channels are available mainly for controlling the digital transponder.

Onboard command from the NSC-800 is also available.

12. Ground stations:

Mode-JA:

A ground station setup which was used for Amsat Oscar-8 mode-J can be used for JAS-1 mode-JA. A station with a 10 watt 2 m SSB transmitter and a 10dBi beam for uplink; and a 70 cm receiver (with low NF) with a 15dBi beam for downlink; should be adequate for this job.

Mode-JD:

In addition to the mode-JA set up, FM mode is required for the 2 m transmitter.

Since JAS-1 uses the standard AX.25 protocol and 1200 bps data rate, ground stations will be able to use a TAPR-style TNC, a 2 m FM transmitter and a 70 cm receiver without modification.

The JAS-1 modem, a special interface board, will be made available containing the Manchester modulator and an audio PSK demodulator allowing connection to the "modem disconnect" connector of a TAPR-style TNC. The modem also connects to the audio input and PTT of the 2m FM transmitter and to the audio output and frequency control (option) of a 70 cm SSB receiver.

Although JAS-1 will be available to individual access, the general amateur community will benefit from "JAS-1 gateways". Messages relayed through gateways can be sent worldwide and is as easy as sending messages to distant stations via a W0RLI HF gateway.

13. Outline of project history/schedule:

November 1982 : Freezing of conceptual/preliminary design

December 1982 : Preliminary Design

April 1983 : Detail Design
- June 1984 Engineering Modules Integration & Test
Ground Support System Integration

July 1984 : Flight Model #1 Integration & EIC/MIC
- December 1984

January 1985 : Flight Model #1 General Test
- March 1985

January 1985 : Flight Model #2 Integration & EIC/MIC
- August 1985

August 1985 : Flight Model #2 General Test
- November 1985

November 1985 : Software development.
- ?

References:

JARL News, JAS-1 User's Guide (Those are available only in

Japanese.)

From -4583408244648558920
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1aaeda3b2d8a6ff5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-03-01 13:51:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 SMI; site sun.uucp
Path: utzoo!watmath!clyde!burl!ulysses!bellcore!decvax!decwrl!sun!falk
From: falk@sun.uucp (Ed Falk)
Newsgroups: net.ham-radio
Subject: Does anyone know Radio Phillipines' freq./schedule?
Message-ID: <3304@sun.uucp>
Date: Sat, 1-Mar-86 16:51:07 EST
Article-I.D.: sun.3304
Posted: Sat Mar 1 16:51:07 1986
Date-Received: Sun, 2-Mar-86 19:08:19 EST
Distribution: net
Organization: Sun Microsystems, Inc.
Lines: 17

Now that the Philipines have ousted their old government (and taken
over the national voice of the Phillipines by force), I would very
much to give them a listen, but I can't find them at any of the
frequencies in my guide. For that matter, does Haiti have a radio
station?

Also, in case you're interested, radio Nicaragua can be reached on
6015 in English for about an hour starting at 0400. The problem is
that VOA comes on half an hour into their broadcast and starts interfering.
I find that their programming consists of A) propaganda, B) real news
and C) american space-cadets who came down to Managua "be one with
the revolution" or something like that. It's easy to recognize the
propaganda and space cadets and filter them out. The real news can
be an eye-opener, as they cover a lot of stuff the American press won't
touch.

          -ed falk, sun microsystems.

From -8910679394245020946
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9d0af5ecff8923b0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-05 07:04:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!YOUNG@MARLBORO.DEC.COM
From: YOUNG@MARLBORO.DEC.COM
Newsgroups: net.ham-radio
Subject: Greenstamps VS IRCs

Message-ID: <2850@brl-tgr.ARPA>
Date: Tue, 5-Nov-85 10:04:29 EST
Article-I.D.: brl-tgr.2850
Posted: Tue Nov 5 10:04:29 1985
Date-Received: Fri, 8-Nov-85 07:08:39 EST
Sender: news@brl-tgr.ARPA
Lines: 30

The question of IRCs versus dollars is, unfortunately, not simple. The
best one depends on what country you are QSLing to. For example:

When sending a QSL to VU you should use IRCs because it is illegal for
Indians to have American Dollars, and you could get them in BIG trouble.

ZL hams are also not supposed to receive dollars.

In Australia, an American Dollar is not sufficient for air mail postage.

In 3D6, it takes lots of IRCs to buy an air mail stamp (I think 5). If
you work one of the missionaries, you can send a dollar instead, and it
will cost you less and give him more.

In Ecuador, at the moment it is possible to buy IRCs but not to turn them
in! You are better off sending a dollar (which they can change to sucres)
if you want a card.

If you are a foreign ham sending to the US, and you have access to IRCs and
to dollars, you should send either $1.00 or 2 IRCs, whichever is cheaper.
The post office charges 65 cents for an IRC, and returns 35 cents. However,
most hams who receive IRCs don't turn them in; they re-use them, or they
sell them to other hams at some price between 35 and 65 cents.

The best thing to do usually is to ask the other ham what he prefers, if
in doubt send IRCs (you can get the correct number of IRCs from a list in
the Callbook).

                    Paul Young, K1XM

From 9018468130744780511
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c86694311e104082,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-05 09:07:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Cc:
Message-ID: <2857@brl-tgr.ARPA>
Date: Tue, 5-Nov-85 12:07:31 EST

Article-I.D.: brl-tgr.2857
Posted: Tue Nov 5 12:07:31 1985
Date-Received: Fri, 8-Nov-85 07:16:58 EST
Sender: news@brl-tgr.ARPA
Lines: 25

Subject: scanner antennas

Austin Custom Antennas sells a fairly effective scanner antenna. If it is not
available locally at your favorite ham radio store (if there are any left)
you can order or obtain information from Dick Austin at:

     Austin Custom Antennas
     P.O. Box 357
     Sandown NH 03873

     Telephone: (603) 887-2926.

I haven't tried his scanner antenna, but all of his products which I have
tried have worked extremely well.

The log-periodic is another quite valid approach, but it is of course
directional. You might want one of Austin's units or something designed
along the same lines even if you also buy or build a log-periodic.

Incidentally, Dick will quote on custom antennas for specialized purposes,
as the name of his company suggests. Hint: his current hot item is antennas
for cellular mobile telephone service.

                              73 to the net,
                              John S., W3IKG

From 3445592094982192331
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a78c0eb87006eb4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-05 09:12:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: RTTY English Press Station list update
Message-ID: <21424@mgweed.UUCP>
Date: Tue, 5-Nov-85 12:12:28 EST
Article-I.D.: mgweed.21424
Posted: Tue Nov 5 12:12:28 1985
Date-Received: Thu, 7-Nov-85 04:41:48 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 264

The following is a list of frequencies where English language press stations can be found on HF. This list is from personal monitoring and not copied from any other lists!

These press stations all transmit in English, some all the time, others just occasionally.

The "SB" column indicates USB or LSB to be selected for normal copy.

The "SH" column indicates the shift (Mark to Space frequency difference) used. Note that most use 425Hz shift.

The "BD" column indicates the baud rate, not words per minute. This is standard Baudot rtty code. Most foreign stations use "FIGS J" as the bell and "FIGS S" as apostrophe, which is the reverse of American machines.

The "M" in the "BD" column indicates that the station is a frequency division multiplex transmission using 16 to 24 subcarriers. The shift is usually 85 Hz and many terminal units will not copy this. Receiving these fdm stations with the bfo off sounds like a buzz-saw. These stations are the best source of AP/UPI news, quite similar in format to the wire line press service sent to radio stations. The best way to tune these in is to select USB, tune onto the station from the high frequency side to the upper-most subcarrier. This subcarrier is usually the one carrying the news. They may be either 50 or 74 baud.

The "SVC" column shows the abbreviation of the news service.

The "CALL" column is obvious. Not all stations give identify with a call sign. Some use the same call sign on all frequencies at once, and some have calls for each frequency in use, but do not indicate which call is for which transmitter.

Not all stations of a particular service carry the same text. The VOA, for example carries as many as 4 different "programs" at the same time. the ARF, however, has the same text on all 4 frequencies at once.

I have not given times of transmissions. That is too difficult to pin down accurately. Many stations are on continuously.

The frequencies given are within 2 kHz. Some stations do slide up or down a little, reverse their mark and space frequencies on occasion, and my receiver readout does not include the amount of bfo offset (about 1.5 kHz).

Happy tuning de K9EUI

KHZ	SB	SH	BD	SVC	CALL	KHZ	SB	SH	BD	SVC	CALL
2024	U	85	50M	AP/UPI	AFRTS	10201	U	85	74M	AERO	AFRTS
2137	U	85	74M	AP/UPI	AFRTS	10205	U	85	50M	AP/UPI	AFRTS
2232	U	85	74M	AP/UPI	AFRTS	10207	U	85	50M	AERO	AFRTS
2419	U	85	74M	AP/UPI	AFRTS	10232	U	85	74	VOA	VOA
3162	U	850	74	EFE		10269	U	425	50	TFC	
4045	U	85	50M	AP/UPI	AFRTS	10317	U	85	74M	AERO	AFRTS
4515	U	85	50M	AP/UPI	AFRTS	10330	U	85	74	VOA	VOA
4620	U	85	50M	AP/UPI	AFRTS	10332	U	85	74	VOA	VOA
5239	U	425	50	MENA		10410	L	425	74	VOA	VOA
5239	U	425	50	TANJUG		10413	U	85	50M	AP/UPI	AFRTS
5240	U	425	50	NX		10437	U	425	50	NX	
5345	U	85	50M	AP/UPI	AFRTS	10460	U	425	74	UN	4UZ
5432	U	85	50	AP/UPI	AFRTS	10543	L	425	50	ADN	
5435	L	425	74	VOA	VOA	10598	U	425	50	VNA	VNA25
5460	L	425	74	VOA	VOA	10616	L	425	50	AFP	FTK61
6834	U	85	50M	AP/UPI	AFRTS	10648	U	425	50	AP	GIC30B
6853	U	425	50	REUTER	GPE26	10730	L	425	50		
6941	U	170	74	VOA	VOA	10761	L	85	74M		VER
6983	U	425	50	AP	GIC26B	10785	L	425	50	ADN	Y2V43B
6992	U	85	50M	AP/UPI	AFRTS	10879	U	425	50	TASS	
7442	U	425	74	VOA	VOA	10879	U	425	50	TASS	REM750
7478	U	425	74	VOA	VOA	10880	U	425	74	VOA	VOA
7534	U	85	50M	AP/UPI	AFRTS	10882	L	425	50	REUTER	

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7784   U   85  50M AP/UPI  AFRTS   10905 U   85 50M AP/UPI  AFRTS
7872   U   85  50M AP/UPI  AFRTS   10958 U  425 50  REUTER  GPE30B
7872   U   85  74M AERO    AFRTS   10960 U  425 50  REUTER  GPE30
7970   L  425  50  PL              10972 L  425 74  VOA
   VOA
8000   U   85  50M AP/UPI  AFRTS   10985 U  425 50  BAK
   RCB53
8022   L  425  50  AFP             11004 U   85 50M AP/UPI  AFRTS
8031   U   85  50M AP/UPI  AFRTS   11048 U   85 50M AP/UPI  AFRTS
8031   U   85  50M AP/UPI  AFRTS   11069 U   85 74M AP/UPI  AFRTS
8148   U   85  50M AP/UPI  AFRTS   11170 L  425 50  KCNA
8192   L  425  50  PAP      SOI31  11230 U   85 74  VOA
   VOA
8506   U   85  50M AP/UPI  AFRTS   11424 L   85 74M    VER
9050   U   85  50M AP/UPI  AFRTS   11484 U   85 50M AP/UPI  AFRTS
9053   L  425  50  ANSA    ISX90   11498 U   85 74M AP/UPI  AFRTS
9070   U  425  50  REUTER          11502 L  425 50  BTA
9080   U  425  50  REUTER          11539 U   85 50M AP/UPI  AFRTS
9120   U  425  50  REUTER  GPN29   11540 L  425 50  REUTER  GPE30B
9214   U   85  50M AP/UPI  AFRTS   11599 U   85 50M AP/UPI  AFRTS
9236   U   85  74M AP/UPI  AFRTS   11622 U  425 50  PAP
   SOL36
9259   U   85  50M AP/UPI  AFRTS   12085 U  425 50  BAK
   RCB55
9285   U   85  50M AP/UPI  AFRTS   12128 L  425 50  ANSA
   IRJ31
9349   U  425  50  AP       GIC29B     12185 U  425 50  JANA
9381   U   85  50M AP/UPI  AFRTS   12211 U  425 50  MAP
9397   L  425  50  AFP      FTJ39A     12224 L  425 74  VOA
   VOA
9405   U   85  50M AP/UPI  AFRTS   12280 U  425 50  AP
   GBU32
9430   L  425  50  ATA      ZAT        13238 U   85 50M AP/UPI  AFRTS
9855   L  425  74  VOA      VOA        13410 L  425 50  VNA
   VNA16
9971   U   85  50M WX             13429 L   85 50M    CMB?
10105 U  425   50  TASS    RKA79   13436 L  425 50  DPA
10134 U   85   50M AP/UPI  AFRTS   13460 U  425 50  VNA
   VNA16
10153 L  425   50  KUNA       13487 L  425 50  ANSA   ISX35
10185 L  425   50  AFP      FPK8   13490 U  425 50  BAK
   RCG77
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```
KHZ    SB SH   BD  SVC      CALL   KHZ   SB SH  BD  SVC
   CALL
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```
13493 U  425    50  TASS    RCG77   14901 L  425 50  TASS
    CLN451
13504 L  425    50  KCNA    MVS19   14928 L  425 50  PL
    CLN452
13512 L  425    50  KCNA    HMF37   14974 U  425 50  AP
    GBW34B
13523 U  170    50  INA      YIO71  14985 L   85 74  VOA
    VOA
13537 U  425    50  ADN      Y7A54  14986 L   85 74  VOA
    VOA
13563 U  850    50  CNA      3MA22  15462 L  425 50  JANA
13580 L  425    50  KCNA    HMS79   15480 L  425 50  KCNA
13589 U   85    50M AP/UPI  AFRTS   15482 L  425 50  APS
13598 L  425    50  CETEKA          15506 L  425 50  CETEKA
13612 U  425    50  REUTER          15651 L   85 74  VOA
    VOA
13623 U  425    50  REUTER          15652 L   85 74  VOA
    VOA
13625 U  425    50  REUTER          15694 L  425 50  ANSA
    ISX56
13626 U  425    50  REUTER          15743 L  425 50  VNA
    VNA5
13628 U  425    50  REUTER          15749 U   85 74  VOA
    VOA
13648 L  425    50  CETEKA          15750 U   85 74  VOA
    VOA
13652 U  425    50  MENA    SUA50   15865 U  425 50  BAK
    RBK79
13676 U   85    50M AP/UPI  AFRTS   15865 U  425 50  TASS
    RRG26
13730 L  425    50  AFP             15875 L  425 74  VOA
    VOA
13770 L  425    74  VOA      VOA        15896 U   85 50M AP/UPI  AFRTS
13785 U  425    50  PAP      SON278     15898 L  425 50  CETEKA
13895 L  425    50  ADN      Y2V47 15930 U  425 50  BAK
    RBI78
13898 L  425    50  ANSA       15977 L  425 50  AFP
13975 L  425    50  ANSA    ISX19   15978 L  425 50  AFP
13995 L  425    74  VOA      VOA        15995 U  425 50  INFOIND WER26
14298 L  425    50  TASS       15996 L  425 50  DPA
14360 U  425    50  PAP             16092 U   85 50M AP/UPI  AFRTS
14366 U  425    50  XINHUA          16108 L  425 50  AFP
14372 U  170    50  INA      YIL73  16133 U   85 50M AP/UPI  AFRTS
14387 U   85    50M AP/UPI  AFRTS   16135 U  425 50  XINHUA  BZP54
14418 L  425    50  KUNA       16147 U  425 50  PL
14420 U   85    50M AERO    AFRTS   16209 U  425 50  PAP
    SOQ221
14420 U   85    50M AP/UPI  AFRTS   16223 U  850 50  CNA
    3MA35
14469 U  425    50  TASS       16247 U  425 50  PL
14490 U  425    50  TASS    RNK36   16325 L  425 50  ADN
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    Y2V23
14513 U  425    50  REUTER  GPN34   16336 U  425 50  PL
14523 U  425    50  REUTER  GPN34   16342 U  425 50  TANJUG  YZJ4
14525 L  425    74  VOA      PRS        16347 U  425 50  PL
14547 L  425    50  KYODO   JAL44   16347 U  425 50  TASS
14562 U   85    50M AP/UPI  AFRTS   16380 U  425 50  PL
14565 U  425    50  PL              16384 U  425 50  VNA
    VNA30
14568 L  425    50  KCNA    HMF32   16403 L  425 50  ADN
    Y2V57
14572 U  425    50  JANA       16415 L  425 50  ADN
14631 L  425    50  ANSA    ISX46   17210 L  170 74  AFRTS
14638 L  425    74  ARF      WFK54  17210 U  425 50  XINHUA
14665 L  425    50  ADN             17370 U  425 50  BAK
    RBI73
14698 U  425    50  TASS    REB24   17393 L  425 50  PL
    CLN565
14718 U  425    50  KYODO      17509 U  425 50  TASS   RFD53
14720 U  425    50  BAK      RKB58  17519 U  425 50  TASS
14762 U  425    50  GNA             17525 L  425 50  CETEKA  OLV3
14796 L  425    50  AFP             17545 L  425 50  AFP
    FTK56
14800 L  425    50  ADN      Y2V24  17552 U   85 50M AP/UPI  AFRTS
14825 L  425    50  ADN      Y2V25  17555 U  425 50  MAP
    CNM73
14832 U  425    50  KUNA       17564 U   85 50M AP/UPI  AFRTS
14901 L  425    50  PL       CLN450     17565 U  425 50  AP
    GIW37B
```

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KHZ    SB SH    BD  SVC      CALL   KHZ   SB SH  BD  SVC
    CALL


18005 L  425    50  PL       CLN603     19975 U  425 50  LPS
18012 U  425    50  PL             19981 U  425 50  PARS
18050 U  425    50  TASS       20008 U  425 50  BAKTAR
18063 U   85    74M            20080 L  425 50  AFP    FTU8B
18101 U  425    50  REUTER  GPU30   20085 L  425 50  ANSA
    ISX20
18159 U  425    50  TASS    RTU47   20100 L  425 50  REUTER
18193 U  425    50  PL       CLN603     20105 L  425 50  GOVT
    HSF212
18198 U  425    50  PL              20110 L  425 50  AFP
18205 U   85    50M AP/UPI  AFRTS   20152 U   85 50M AP/UPI  AFRTS
18245 U   85    50M AP/UPI  AFRTS   20155 L  425 50  KUNA
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18261 L  425    50  KUNA       20192 U   85 50M    AFE71
18272 U   85    74  VOA      VOA        20204 U  425 50  TANJUG  YZJ
18292 U  425    50  PL             20312 L  425 50  AFP
18307 L  425    50  KUNA       20326 U  425 50  TAP/PANA
18331 U  425    50  REUTER         20386 U  425 50  REUTER
18333 U  425    50  REUTER  GPE38B  20420 L  425 50  ADN
    Y2V20A
18335 U  425    50  REUTER  GPE38   20421 L  425 50  ADN
18384 U  425    50  TASS    REB24   20430 L  425 50  ANSA
    IRS24
18392 U   85    50M AP/UPI  AFRTS   20483 L  425 74  VOA
    PRS
18437 U   85    50M AP/UPI  AFRTS   20494 U  425 50  PAP
    SOV249
18459 U  425    50  PAP            20506 U  425 50  KUNA
18519 L   85    50  AFP            20535 L  425 50
18540 U  425    50  PL             20559 U  425 50  JANA
18543 L  425    74  ARF      WFK48  20614 U  425 50
18547 U  425    50  AP       GIY38B     20625 U   85 50M AP/UPI  AFRTS
18602 U   85    74  VOA      VOA        20728 L  425 50  ANSA
    IRS27
18603 U   85    74  VOA      VOA        20776 U  425 50  INFOIND
18671 L  425    50  AFP      FTS67  20804 U  425 50  KUNA
18675 L  425    50  IINA       20837 U   85 50M AP/UPI  AFRTS
18682 U  425    50  REUTER         21784 L  425 50  KUNA
18695 U  425    50  MAP      CNM82  21787 U  425 50  KUNA
18700 L  425    50  DPA            21801 L   85 74  VOA
    VOA
18701 L  425    50  DPA            21804 L  425 50
18787 U  425    50  SUNA       21839 U  425 50  TASS
18824 L  425    50  ADN      Y2V38A     21849 L  425 50
18835 U  425    50  TASS    RWN74   22760 U  425 50  AP
    DZK79
18860 L  850    50  ATA            22781 U  425 50  TASS
    RDD73
18871 U  425    50  XINHUA         22782 L  425 74  ARF
    WFN62
18988 L  425    50  CETEKA         22790 U  425 50  TASS
19067 U  425    50  MAP      CNM83  22813 L  425 50  ADN
    Y2V29
19105 L  425    50            22885 L  425 50  ADN
19148 U  425    50  XINHUA  BAJ29   22909 U  425 50  KUNA
19162 U   85    50M AP/UPI  AFRTS   22918 U   85 50M AP/UPI  AFRTS
19171 U  425    50  MAP      CNM85  22955 L  425 50  ANSA
19280 L  425    74  UN       4UZ        23064 U   85 74M AP/UPI  AFRTS
19395 U  425    50  JIJI       23315 U   85 50M AP/UPI  AFRTS
19519 U  425    50  UPI            23499 U   85 50M AP/UPI  AFRTS
19525 L  425    50  CETEKA  OLD4    23542 U  425 50  REUTER  GLF43
19565 L  425    50  ANA            23751 L  425 50  AFP
19668 L  170    50  PL             23770 L  425 74  ARF
    WFG93
19712 U  425    50  PL             24029 U   85 50M AP/UPI  AFRTS
19818 U   85    50M AP/UPI  AFRTS   24089 U   85 50M AP/UPI  AFRTS
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   19825 L  425    50  OANA       24790 L  425 50  ANSA    ISX24
   19865 U  425    50  TANJUG  YZJ4    25377 L  425 50  ANSA
       IRX23


From 3005818506191082990
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,62a4d3482f10dbd7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-05 10:37:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!
stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: modulation question
Message-ID: <2861@brl-tgr.ARPA>
Date: Tue, 5-Nov-85 13:37:11 EST
Article-I.D.: brl-tgr.2861
Posted: Tue Nov  5 13:37:11 1985
Date-Received: Fri, 8-Nov-85 07:17:26 EST
Sender: news@brl-tgr.ARPA
Lines: 11

re: problem with power in a balanced modulator

I think your problem is that you assumed that the diode characteristics
fit a pure square law .  Actual, ideal diodes contain higher terms,
third, fourth, etc. power.  An ideal diode is  I=Io(1-exp(eE/kT)), which
must be expanded in a power series.   In the balanced configuration all
odd terms cancel so you are left with the square, fourth power and
higher even powers.  Your math only took into account the first square
term.  I did not work it out but I believe that is the problem.

                  Joe  N2XS


From 4535359310642490537
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7189604055d2bea7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-05 11:40:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!rachiele@NADC
From: rachiele@NADC
Newsgroups: net.ham-radio
Subject: greenstamps
Message-ID: <2863@brl-tgr.ARPA>
Date: Tue, 5-Nov-85 14:40:02 EST
Article-I.D.: brl-tgr.2863
Posted: Tue Nov  5 14:40:02 1985
```

Date-Received: Fri, 8-Nov-85 07:18:00 EST
Sender: news@brl-tgr.ARPA
Lines: 6

Sending money to a HAM to cover postage is not a violation of the amateur code. And I think what was meant by "the main source of income of the island (though it isn't an island)" is the postage industry, not the HAM!

Jim
KA3OKP

From -3861457183126346878
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69be7231e6b1ca11,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-05 16:30:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 96 (RADIOLOCATION GETS PART OF 160 METERS)!!
Message-ID: <21431@mgweed.UUCP>
Date: Tue, 5-Nov-85 19:30:00 EST
Article-I.D.: mgweed.21431
Posted: Tue Nov 5 19:30:00 1985
Date-Received: Sun, 10-Nov-85 07:11:07 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 24

qst de k9eui
hr arrl bulletin nr 96 from arrl headquarters
newington ct november 4, 1985
to all radio amateurs bt

by fcc report and order released october 31, non government radio location has been given primary status at 1900 to 2000 khz. this action in pr docket 84 874 relates to the projected allocation of 1605 to 1705 khz to broadcasting, which will displace radio determination stations in that range. effective december 9, 1985, amateur stations in the 1900 to 2000 khz range must not cause harmful interference to the radio location service and are afforded no protection from interference arising from radio location operations.

this is not as bad as it seems, however, as fcc will not accept applications from radio location stations at 1605 to 1705 khz for moves to 160 until july 1, 1987. according to fcc, this means that amateur operators will continue to have virtually exclusive non government use of 1900 to 2000 khz until private radio location transmitters become operational. january qst

will carry further details ar

From 784879305155139983
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ba2aeb821ae28bf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-05 16:30:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 94A (shuttle info)
Message-ID: <21432@mgweed.UUCP>
Date: Tue, 5-Nov-85 19:30:38 EST
Article-I.D.: mgweed.21432
Posted: Tue Nov 5 19:30:38 1985
Date-Received: Sun, 10-Nov-85 07:11:22 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 36

qst de k9eui
hr arrl bulletin nr 94a from arrl headquarters
newington ct october 30, 1985
to all radio amateurs bt

during the 7 day spacelab mission d1, astronauts dg2km and
dd6cf will operate amateur station dp0sl.

there will be three modes of operation, 1, beacon operation
with inserted callsign, no receive. 2, beacon operation with
automatic recording of incoming calls. there will be one
minute receiving time with recording of received calls on tape.
3, two way voice communication using f3e emission. the normal
channel pair will be 145.575 mhz transmit, 437.275 receive.
other pairs are 145.450 transmit 437.125 receive, 145.475
transmit 437.175 receive, 145.550 transmit 437.225 receive.
additional receive frequencies are 437.325 and 437.375 mhz.

an effective radiated power, erp, of 20 dbw is recommended for
contacts with spacelab. for example, a 70 cm transmitter with
10 watts power output combined with a 10 db gain antenna would
be a good choice.

keplerian elements for d1,
element set   3
epoch   85/305.59930556
drag   2.5e minus 04
inclination   57.17
raan   185.5548
eccentricity   .00099

arg of perigee	331.9019
mean anomaly	11.8423
mean motion	15.81006178
semi major axis	6704.0908

From 6326118244367873503
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1bee8b858838c2b3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-05 16:31:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 44
Message-ID: <21434@mgweed.UUCP>
Date: Tue, 5-Nov-85 19:31:54 EST
Article-I.D.: mgweed.21434
Posted: Tue Nov 5 19:31:54 1985
Date-Received: Sun, 10-Nov-85 07:11:35 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 41

qst de k9eui
hr propagation forecast bulletin nr 44 from arrl headquarters
newington ct november 4, 1985
to all radio amateurs bt

for several months solar activity has been lower than might have been expected at this point only about nine years into solar cycle 21. at the middle of october there was a remarkable reversal of this trend. the first sunspot activity of any consequence since last july appeared on the east limb of the sun october 15. in a few days it produced solar flux readings of 95 on october 22 and 23, and a run above 75 for 12 consecutive days. the most recent 75 had been logged on august 11.

this rise could not have come at a better time, as we are just entering the prime dx season for the northern hemisphere. the second half of october saw 21 mhz open over much of the world, and 24 and 28 mhz were more active than at anytime this past year. though the solar flux was back down to 70, both 21 and 28 mhz were fairly productive in the recent arrl sweepstakes and cq ww dx contests.

judging by the shape of our october solar flux curve, there is a fairly good chance for another surge beginning about november 11, when the same area of the sun will be facing the earth again. this could begin as early as november 6, as there was a

small bulge in the flux curve beginning october 9.

as this bulletin was being prepared, we were at the peak of a strong geomagnetic disturbance. this should be giving way to improved propagation november 4 to 6. mildly disturbed conditions may be with us much of the time through november 19. the best overall time of the entire fall should be november 20 to 28, with the muf the highest at the beginning of that period.

american sunspot numbers for october 24 through 30 were between 0 and 53 with a mean of 11 ar

From -6076251032463463720
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ab261e812e0d3c2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-05 17:39:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!price%marlin@nosc.ARPA
From: price%marlin@nosc.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: QSL info and QRP DX
Message-ID: <2879@brl-tgr.ARPA>
Date: Tue, 5-Nov-85 20:39:07 EST
Article-I.D.: brl-tgr.2879
Posted: Tue Nov 5 20:39:07 1985
Date-Received: Fri, 8-Nov-85 06:02:05 EST
Sender: news@brl-tgr.ARPA
Lines: 47

For Pete, VE5BEL, ihnp4!sask!hardie@seismo.css.gov--

My mailer won't seem to talk to your mailer in reverse, so I have to put my reply note here on the net. Sorry for the clutter, gang.

--Jim, K6ZH

Pete--

Thanks for your netnote. It came thru loud and clear. The next question will be, are you reading this?

I was in the CQ WW phone contest which was the last weekend of October. I guess I shouldn't say "in" so much as being a casual observer!

I have a Ten-Tec Argonaut which I've had since Dec. of '83 (an Xmas present from my XYL!) I got my WAS in about 6 months with it, but have not seriously considered dedicating my heart and soul to QRP DXCC with the sunspots being as they are. I have worked 54 countries

and have about 40 confirmed thus far. Need only Africa for QRP WAC.

WAS was easy, and even 40 meters was very good to the East Coast on QRP. DX is much harder, and I finally bought a beam last year. It's not much, a TH-3 JRS, but wow, what a difference! Virtually all of my DX has been on 20 and 15 with the exception of a few on 40. I can therefore suggest that if you don't have a beam, get one.

I can also suggest that it's helpful to use "/QRP" with your call when you're trying to get a station's attention. Probably not so useful in pileups, but with only a couple of stations calling it sometimes gets you thru. Most stations will bend over a bit to work QRPers, it seems.

Otherwise, patience and persistence are necessities of QRP life.
I have a programmable keyer that I use in contests--saves some of the frustration of sending my call a zillion times!

Keep in touch. We can try a sked if you'd like some time.

Thanks for the QSL info. 73--

Jim, K6ZH

From 6222632645466803987
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7f446db15bcfc5e6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-05 19:09:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!
FAC0395%UOFT01.BITNET@WISCVM.ARPA
From: FAC0395%UOFT01.BITNET@WISCVM.ARPA (Joe Feustle)
Newsgroups: net.ham-radio
Subject: T77C/M1C
Message-ID: <2881@brl-tgr.ARPA>
Date: Tue, 5-Nov-85 22:09:47 EST
Article-I.D.: brl-tgr.2881
Posted: Tue Nov 5 22:09:47 1985
Date-Received: Fri, 8-Nov-85 06:56:04 EST
Sender: news@brl-tgr.ARPA
Lines: 26

Sorry that my attempt at humor has turned so many flames on (pse save them for those mongolian marvels of manual dexterity and their Onan generators).

I've worked Tony on 4 bands and have QSL cards for all. I wish that others, like FR0FLO, were so organized and prompt in returning cards. The stamps, as the N7 pointed out, are quite attractive. And, yes, *flame off please*, San Marino is indeed not an island.

As in other cases, claims of number are exercises in futility as others always have more (or are bigger!), I have done as many: I have 5-Band DXCC and 289 worked total with 288 confirmed. Discounting my "donations" to VK9NS and other Heard Island expeditions, and others, that's quite simply one heck of an investment in QSL's. Most foreign hams were QUITE cooperative. No one has twisted my arm to get involved in this, and I have quite freely paid my greenstamps and IRC's.

Being from the John Riggins school of amateur radio, I'm not as inclined to take this fine hobby as seriously as some of you on the net seem to. Sorry that my attempt at humor has pulled any chains (I'll leave the leg pulling to our friends in JT0). This certainly isn't the Geritol net, nor is it the Black Sheep of 3.795 fame. So, let's put our flames away and not let it become the Metamucil Net. For my part I'll try to keep my humor to myself.

73 de N8AAT

From -5155550035782344654
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b132b074927915a5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-06 04:28:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!dual!lll-crg!gymble!umcp-cs!seismo!
brl-tgr!tgr!mauseth%vax.runit.unit.uninett@nta-vax.arpa
From: mauseth%vax.runit.unit.uninett@nta-vax.arpa (Kai Mauseth)
Newsgroups: net.ham-radio
Subject: JW - Bear Isl
Message-ID: <2885@brl-tgr.ARPA>
Date: Wed, 6-Nov-85 07:28:16 EST
Article-I.D.: brl-tgr.2885
Posted: Wed Nov 6 07:28:16 1985
Date-Received: Sun, 10-Nov-85 08:57:03 EST
Sender: news@brl-tgr.ARPA
Lines: 7

I don't know if this msg reached you. We have been off the net for a while.

From November 13 JW5VAA will be QRV from Bear Isl. He is going to stay there until spring. QSL mgr is LA4YW, Kolstadtunet 4c, 7078 Saupstad (or buro).
73 de Kai / LA2TO

From -1992235051276839112
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,756b92b26ca4b858,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-06 04:45:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site hlwpb.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!mhuxt!mhuxv!mhuxh!hlexa!hlwpb!lare
From: lare@hlwpb.UUCP (LH Eckenrode)
Newsgroups: net.ham-radio
Subject: CQ WE
Message-ID: <376@hlwpb.UUCP>
Date: Wed, 6-Nov-85 07:45:59 EST
Article-I.D.: hlwpb.376
Posted: Wed Nov 6 07:45:59 1985
Date-Received: Thu, 7-Nov-85 06:07:28 EST
Distribution: net
Organization: AT&T Bell Laboratories, Short Hills, NJ
Lines: 18

Hope everybody is getting ready for CW WE.

Here on the east coast we have noticed a lack of activity on 2M SSB.
If anyone is planning to operate 2M SSB, please let me know. The
multipliers well help us all.

By the way for those interested in DX, I heard a ZA3DED at the bottom of
75 CW last night (3501.5)   A couple of guys worked him. As far as I know, there
is noone active
in ZA3 land at this time. More tham likely a bootlegger.

Good luck in the CQ WE.

73
Larry Eckenrode
KD2NT
hlwpb!lare
Short Hills Rm 2E-214 Ext 2212

From -8794283266957398724
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e7f568fd454a8c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-06 09:10:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site tekecs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!tektronix!orca!tekecs!garyk
From: garyk@tekecs.UUCP (Gary Kaminski)
Newsgroups: net.ham-radio
Subject: Is there a data base for US hams (callbook style)?

Message-ID: <5818@tekecs.UUCP>
Date: Wed, 6-Nov-85 12:10:24 EST
Article-I.D.: tekecs.5818
Posted: Wed Nov 6 12:10:24 1985
Date-Received: Fri, 8-Nov-85 21:46:19 EST
Distribution: net
Organization: Tektronix, Wilsonville OR
Lines: 8

Does anyone know if a data base of US hams is online? Our Salem (Ore.) radio club wants to have a "Get Acquainted" meeting at our normal March meeting, and we want to invite all Salem area hams. I thought if I could get hold of a data base for US or Region-7 hams, I could grep for our local zip codes and get a mailing list for sending out invitations.

Gary Kaminski
!{uw-beaver, zehntel, reed, hplabs, decvax}!tektronix!orca!garyk

From 3450631929946494600
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9d0af5ecff8923b0
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-06 09:39:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Karz.Wbst@Xerox.ARPA
From: Karz.Wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Greenstamps VS IRCs
Message-ID: <2903@brl-tgr.ARPA>
Date: Wed, 6-Nov-85 12:39:52 EST
Article-I.D.: brl-tgr.2903
Posted: Wed Nov 6 12:39:52 1985
Date-Received: Fri, 8-Nov-85 07:37:49 EST
Sender: news@brl-tgr.ARPA
Lines: 26

For those needing a QSL from that rare DX station, there is a better way. A good friend of mine, George Robertson W2AZX, runs a DX Stamp Service out of his home. George will sell you a first class airmail stamp from virtually any country in the world. Thus, you send the DX station (or his foreign QSL manager) a self addressed stamped envelope with his own country's postage, and all he has to do is slip in your card and mail it. George's prices vary from country to country but generally are in the $1.25 range. This is often cheaper than IRC's and less hastle for the DX station as well. In addition it avoids the theft and possible currency law violation problems of "green stamps". George fills most orders within 24 hours. If there is enough interest, I'll put his price list on the net. Alternatively, you can send a sase to:

DX Stamp Service
G. N. Robertson, W2AZX

7661 Roder Parkway
Ontario, New York 14519

George lives just down the road from me, so when I work a rare one I can get stamps the same day. I find I get very fast response from DX stations and often receive favorable remarks on the cards as well. The convenience is definitely appreciated.

73
Bob Karz
K2OID

From -4104625381389772199
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb53ea8db9d7e223,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-06 17:10:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Rajneesh cult freqs - an update
Message-ID: <693@ihu1h.UUCP>
Date: Wed, 6-Nov-85 20:10:06 EST
Article-I.D.: ihu1h.693
Posted: Wed Nov 6 20:10:06 1985
Date-Received: Thu, 7-Nov-85 06:49:45 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 30

x

RAJNEESH CULT FREQUENCIES - AN UPDATE

Bob Parnass, AJ9S

Here is a timely, updated version of the Rajneesh frequencies list, originally posted March 30, 1985. Most notable among the new [1985] allocations are 3 frequencies for "Rajneesh Security".

```
Chidvilas RMC, Inc, Rajneesh
                      [Antelope, OR]_______ 461.8500____KNCB363   (govt recds)
Neo-Balance, Rajneesh__[Antelope, OR]_______ 461.7000____KNDC438   (govt recds)
Rajneesh Communications, Rajneesh
                      [Rajneeshpura, OR]___ 461.8500____KNCB363   (govt recds)
Rajneesh Construction__[Rajneeshpura, OR]___ 461.5500____KNBR691   (govt recds)
Rajneesh Investment, aero & fixed, airport
                      [Rajneeshpuram, OR]__ 122.8000____WWQ8      (govt recds)
Rajneesh Neo-Sannyas International Community
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                      [Antelope, OR]_______ 461.5000____KNDC379   (govt recds)
Rajneesh Puram, Inc____[Antelope, OR]_______ 461.5500____KNBR691   (govt recds)
Rajneesh Security______[Rajneeshpura, OR]___ 461.7000____KNIY370   (govt recds)
              "        [Rajneeshpura, OR]___ 461.8250____KNIY370   (govt recds)
              "        [Rajneeshpura, OR]___ 462.0000____KNIY370   (govt recds)
Rajneeshpuram: Fire____[Rajneeshpuram, OR]__ 460.5750____KNGG554   (govt recds)
Rajneeshpuram: Police__[Rajneeshpuram, OR]__ 460.2750____KNGE528   (govt recds)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -6587717480120905555
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6e99f410547ddc7d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-06 17:53:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!brosen@BBN-SPCA.ARPA
From: brosen@BBN-SPCA.ARPA (Bruce L. Rosen)
Newsgroups: net.ham-radio
Subject: Broadband scanner antennas
Message-ID: <2942@brl-tgr.ARPA>
Date: Wed, 6-Nov-85 20:53:33 EST
Article-I.D.: brl-tgr.2942
Posted: Wed Nov  6 20:53:33 1985
Date-Received: Fri, 8-Nov-85 21:06:12 EST
Sender: news@brl-tgr.ARPA
Lines: 8

Someone had a query on here recently about broadband antennas suitable for
scanner applications.  I was just looking at a brochure I got from Butternut
Electronics recently (I was interested in their multi-band verticals) and I
noticed that they are advertising the "SC-3000" scanner antenna.  Advertised
specs are: 1) 30-512 Mhz 2) omnidirectional 3) "Receive gain - UHF up to 7 dB,
VHF up to 3 dB, low band unity gain."  Suggested list price was around $60.

Bruce K1FFX


From -2314257805122332933
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5c2c066ba7ddac1a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-07 07:28:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Replacement FET for Heath scopes (and other scope comments)
Message-ID: <21464@mgweed.UUCP>
```

Date: Thu, 7-Nov-85 10:28:24 EST
Article-I.D.: mgweed.21464
Posted: Thu Nov 7 10:28:24 1985
Date-Received: Sun, 10-Nov-85 06:44:42 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 52

This is particularly intended for anyone needing replacement FET's
used in the Heath IO-105 scope.

I assume that other Heath scopes use the same device in them:

I am referring to the SCF-2912 in the front end of the vertical amps,
and other places. Nowhere could I find this device listed and did not
want to wait for an order from Heath - I needed the scope NOW!

The result was that I tried a Sylvania ECG-452 and it works perfectly.

Other type FETs tried may have worked if the mate in the other side
of the differential circuit would have been replaced with the same type.
But I could not get DC balance just changing the bad one.

I do not understand the so-called diode protection circuit in the input
circuit. The gate of the device is at zero volts. Why are the diodes
connected to a voltage divider rather than ground or at least something
"stiffer" than this divider. The divider will allow excessive signal
input swings to destroy the input FET.

On the whole, I have been pretty satisfied with this scope (It is the
first dual-trace Heath scope). I bought it second-hand from a friend.

However, This scope went thru 3 power transformers! In one case the
scope was sent back to Heath for repair, where they replaced the
transformer themselves at least once. After getting it back, the
transformer went out again after 24 hours use. The problem each time
was breakdown in the high voltage winding of the transformer.
I took the last one apart and could see the sloppy winding job and
where the breakdown occured. Heath would not admit to having any
problems like this. Out of warranty, I could not see spending the money
for another one of their bad transformers. I ended up bolting the
scope on top of a 3 inch high Bud chassis and rebuilding the entire
power supply section in there. I used an old Knight photoflash
transformer for the high voltage source and have had no trouble for
the last several years.

Horizontal triggering leaves something to be desired but otherwise
the scope is fine. Sure glad I did not buy it new for $400!

Has anyone else out there had any notable experiences with the Heath
scopes?

Oh yes, Since it would not auto-trigger on lower audio frequencies, I

increased the value of one of the coupling capacitors and that solved
that problem.

Bob K9EUI

From 1097210719652566452
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d10804acd9d2f58
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-07 15:33:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site hpfcmt.UUCP
Path: utzoo!linus!philabs!prls!amdimage!amdcad!amd!pesnta!hplabs!hpfcdc!hpfcla!
roger
From: roger@hpfcla.UUCP
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <19700019@hpfcmt.UUCP>
Date: Thu, 7-Nov-85 18:33:00 EST
Article-I.D.: hpfcmt.19700019
Posted: Thu Nov 7 18:33:00 1985
Date-Received: Wed, 13-Nov-85 03:46:55 EST
References: <2549@brl-tgr.UUCP>
Organization: 07 Nov 85 16:33:00 MST
Lines: 67

>Depends on what you think of as ham radio. I rather enjoy reading about
>that sort of thing, as it has something technical to it. On the other
>hand, if I have to read (thank G*d for rn's kill files!) one more
>article about lower-than-30MHZ-conversations-with-some-unknown-little-
>forsaken-island-using-some-foreign-manufactured-rice-rocket-hooked-up-
>to-some-store-bought-heap-of-aluminum-for-a-grand-total-of-10-seconds-to
>exchange-signal-reports, I'll puke.
>
>Ham radio is a diverse hobby. I'm in it for the technical aspects, and
>to learn more about radio, television, digital, and other modes of
>communications. If I just want to talk to somebody, I'll use the
>telephone. Its cheaper and more reliable.
>
>

BRAVO!!!

I agree whole heartedly with Brian. What ever happend to the Ham Radio of
build it yourself/fix it yourself. These days the majority of the rigs we
hear on the air are Japanese rice-boxes operated by glorified CB appliance
operators. What about perpetuating a pool of "trained radio technicians."
Wasn't this part of Ham Radio (or something to that effect) the reason for
Ham Radio in the first place?

What about the propagation of international brotherhood? Since when does

"Your five-nine in Ohio 73..." propagate brotherhood? Have you ever tried to demonstrate the hobby to a newcomer on a conversation such as that?! What kind of accomplishment is it to contact "some-unknown-little-foresaken-island" using maximum legal power and a big store-bought antenna just to exchange false (usually) signal reports? Some suggest removing the code requirement. If that's done, then really what would be the difference between Amateur Radio and CB, other than the fact that skip is legalized on Ham Radio. The day that is done, I send my license in for cancellation!

>So please! Tolerate the not-ham-radio-the way-the-ARRL-invented-it
>traffic as well as the more traditional stuff here in ham-rado. Some of
>us like it!
>
> Brian Kantor, WB6CYT
>

Whoever said that the ARRL is the god of amateur radio? They seem to have put themselves in that position for the primary reasons of self-propagation. Afterall, the more unsophisticated amateurs there are, the more suckers there are likely to be who will send that good-for-nothing organization membership fees. I learned early, I quit after one year. They are the biggest offender of commercialization of amateur radio. Their magazine (not a journal by any means!) used to have some good technical articles. Now it is mainly filled with useless statistics and adds for Japanese junk!

To conclude my flame, I'm all for technical talk on this note category! Technical discussion is part of the hobby. As far as political debates, I feel that it should find another category since it is not at all related to amateur radio.

Roger Jollis KU6I
Fort Collins, Colorado

DE KU6I QRQ QSX 3520 KHZ K

"We're all entitled to our own opinions."

Any opinions here stated are entirely my own and in no way reflect the policies or opinions of my employer.

From -4260779129970925205
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d82b518302f2703c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-08 15:10:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: arrl dx bulletin nr 44
Message-ID: <21495@mgweed.UUCP>
Date: Fri, 8-Nov-85 18:10:39 EST
Article-I.D.: mgweed.21495
Posted: Fri Nov 8 18:10:39 1985
Date-Received: Sun, 10-Nov-85 08:44:33 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 43

qst de k9eui
hr dx bulletin nr 44 from arrl headquarters
newington ct november 8, 1985
to all radio amateurs bt

thanks to kb1be and the connecticut dx association for the following dx information.

namibia. iris and lloyd colvin, continuing their african dx trip, are now working as w6ql/zs3 on both cw and ssb. qsl to yasme.

fiji is. w0jee is active now through november 11.

the gambia. oh2ben/c56 will be operating cw and ssb through november 18.

guinea bissau. j5wad is operating on 80 meters. qsl to w6cna, 10772 avenida roberta, spring valley ca 92078.

jordan. jy stations will use the prefix jy50 from november 4 to 21 to commemorate the 50th birthday of king hussein, jy1.

liberia. 5l call signs are being used this month in honor of radio liberia.

british cyprus. zc4esb is active on 20 meter rtty. zc4hms, a club station, is active on 40 cw.

sri lanka. df2rg/4s7 will be active until november 21.

syria. oe7rkh/yk is active on 40 and 20 meter cw.

lord howe is. vk9nm, operated by dj5cq, will be active until early next year.

would you like to contribute to the dx bulletin program? we are looking for an individual or club who will provide a dx bulletin text every fourth week. if you are interested, please write or call w1aw, 225 main st, newington ct 06111 phone 203 666 1541 ar

From 2895991650858042413
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,db3d7ac16b1ff584,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-08 15:30:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ucla-cs.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!hplabs!sdcrdcf!ucla-cs!wales
From: wales@ucla-cs.UUCP
Newsgroups: net.ham-radio
Subject: More on Kenwood TR-7950 problem
Message-ID: <7507@ucla-cs.ARPA>
Date: Fri, 8-Nov-85 18:30:43 EST
Article-I.D.: ucla-cs.7507
Posted: Fri Nov 8 18:30:43 1985
Date-Received: Mon, 11-Nov-85 06:41:53 EST
Reply-To: wales@ucla-cs.UUCP (Rich Wales/WA6SGA)
Distribution: net
Organization: UCLA Computer Science Department
Lines: 56

Well, after two months and three trips to the local Kenwood service center, my TR-7950 finally works again -- almost.

For those who may not remember, the problem was that the receiver section of the rig would "motorboat" whenever a signal was received. (I don't know whether there were any problems with the transmitter portion of the rig, because since I was unable to hear anything intelligible I was unable to get a signal report from anyone else!)

Anyway, they said they had found (and fixed) some cold solder joints in the PLL (phase-locked loop) board. I had previously supposed that cold solder joints were primarily a "dead on arrival" or "infant mortality" problem (I've had this rig for over a year and a half). Then again, the vibrations attendant to operating "mobile" might (I suppose) aggravate a latent weakness in the rig and eventually cause a failure.

Now for the bad news. Whenever I receive a signal, there is now a faint high-pitched whistle in the received audio (very similar to the sound of a "singing" flyback transformer in a TV set, except that in this case the whistling sound is definitely coming through the speaker and varies in loudness according to the setting of the volume control). The rig was NOT doing this before the problems arose; just to be sure, I checked another Kenwood TR-7950, and this high-pitched whistle does not appear to be a generic failing of this entire make of radio.

This "whistle" is not very loud, by the way -- just loud enough to be heard and to be very annoying.

People, when asked how my signal sounds, almost invariably tell me that I sound just fine. They specifically deny hearing any kind of high-pitched noise on my signal. (Of course, their rigs might have low-pass filters in the audio section -- in which case they wouldn't hear a

whistle even if it were there.

I eventually discovered that I could get rid of the whistle by tweaking a trimmer capacitor in the voltage-controlled oscillator on the PLL board (TC2, near Q9; the VCO is mounted in a little metal shield box on the PLL board). Unfortunately, if I tweak the trimmer enough to get rid of the whistle, the rig will not transmit! (There is a small "window" of adjustment in which the receiver section continue to work fine, even though transmission on part or all of the band becomes impossible.)

I have inspected the boards and the inter-board cabling thoroughly, and there do not appear to be any stray paths for a signal to be getting into the audio from the VCO.

Under no circumstances am I going to take the rig back to Kenwood to have this fixed! There's no way I'm going to give up my rig again for weeks on end.

Any ideas on how to find and fix this problem?
--
Rich Wales // UCLA Computer Science Department // +1 213-825-5683
3531 Boelter Hall // Los Angeles, California 90024 // USA
ARPA: wales@LOCUS.UCLA.EDU -or- wales@UCLA-LOCUS.ARPA
UUCP: ...!(ucbvax,ihnp4)!ucla-cs!wales

From 4967040749035384155
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5c2c066ba7ddac1a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-09 08:58:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 alpha 4/15/85; site tapa.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!tapa!larry
From: larry@tapa.UUCP (Larry Pajakowski)
Newsgroups: net.ham-radio
Subject: Re: Replacement FET for Heath scopes (and other scope comments)
Message-ID: <154@tapa.UUCP>
Date: Sat, 9-Nov-85 11:58:14 EST
Article-I.D.: tapa.154
Posted: Sat Nov 9 11:58:14 1985
Date-Received: Sun, 10-Nov-85 09:25:23 EST
References: <21464@mgweed.UUCP>
Organization: Pata Systems, Deerfield, IL
Lines: 14

I have had good service from an IO-4510 Heath scope with one exception similar to Bob's. The front end is a FET differential pair which has a bad DC drift with temperature (the 4510 is DC coupled). Once after leaving it on in the upright position for 3 days the DC offset (kinda dumb anyway) the DC offset went too far for the trimmer pot rendering it useless.

Has anybody got any ideas about a cheap fast front end, DC to about 25mhz.

which I can use to replace the fet front end?

By the way the scope is very nice. The bandwidth specs. are conservitive
and the trigger works very well.

Larry WA9QOO
ihnp4!tapa!larry

From -8004569719624309250
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3428af64775e0e09
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-09 09:29:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!ky2d-2!ai2q
From: ai2q@ky2d-2.UUCP (Alex)
Newsgroups: net.ham-radio
Subject: Re: More HF radio questions
Message-ID: <51@ky2d-2.UUCP>
Date: Sat, 9-Nov-85 12:29:46 EST
Article-I.D.: ky2d-2.51
Posted: Sat Nov 9 12:29:46 1985
Date-Received: Sun, 10-Nov-85 09:25:11 EST
References: <1091@decwrl.UUCP>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 47

> Some time ago I posted a question to get some help in choosing an HF rig.
> I received quite a lot of negative feedback about Icom product quality
> (but very little on performance!). Of course, if the rig spends half of its
> life in repair shop, super performance won't make you happy...
>
> Nevertheless, I have one more question on the Icom IC-735: it is supposed to
> have a 1200 Bd serial port. The brochure doesn't tell what you can do with it;
> one would assume that you can at least control the frequency, maybe some
> other operating parameters via it.
>
> I then asked the local Icom dealer, and he didn't know. Then I asked Icom
> European HQ, and the didn't know either. WHO KNOWS????? Are there any IC-735
> owners here? Have you ever really used the serial port? Can anyone call Icom
> America to find out?
>
> Having received so much negative feedback on Icom, I started reconsidering
> a Yaesu FT-757GX. Any comments on its performance?

*** REPLACE THIS LINE WITH YOUR MESSAGE ***
Aside from the pros and cons of japanese-made rigs (I have a Ten Tec Argonaut
and an old pair of heathkit Twins - the SB401/SB303), the inclusion
of aserial I/O port allows control of the rig from a remote. A recent
article in QST Magazine outlined a short BASIC program for doing this with
the new Yaesu FT757GX xcvr. (I've actually been toying with acquiring

one of these so I could rig it up with my Model 100 lap-portable).
The feature was written by Kjell Strom, SM6CPI and appears on page 38
of the October 1985 isse. The article also references the following publicat-
ions:

QST, July 1984, p.34, Low Cost Computer Control for the ICOM IC-720;
QST, August 1982, p.19, control of an ICOM IC-701;
QST, May 1981, p. 30, re IC-701;
The 1985 ARRL Handbook for The Radio Amateur, 62nd Edition, C. Hutchinson (ed),
ppgs. 19-24, Fig. 26;
and
Compute! Magazne, August 1982, J. Butterfield and J. Law, VIC Communications:
the RS-232 Interface, p. 99.

So there! I hope this is of interest and I would be quite interested in
learning how others are making out with similar systems of control.
My ideal system would allow the MiniMUF program to pre-set the rig at
the appointed hour for either AMTOR or packet transmissions with automated
message store/forward nodes! I'd also like to find out if anyone has
experienced any problems/solutions with emi/rfi while using these rigs
under program control.

Vy 73, Alex AI2Q, Freeport, Long Island, New York >>AR>>

From -2754415149282937362
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,298b9d77734c189b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-09 16:08:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: more McDonalds freqs
Message-ID: <695@ihu1h.UUCP>
Date: Sat, 9-Nov-85 19:08:45 EST
Article-I.D.: ihu1h.695
Posted: Sat Nov 9 19:08:45 1985
Date-Received: Sun, 10-Nov-85 09:01:15 EST
Distribution: na
Organization: AT&T Bell Laboratories
Lines: 13

McDonald's Corp, regional headquarters, paging
                      [Oakbrook]__________ 472.6875____WCN775   (B. Parnass)
              "   [Oakbrook]__________ 475.6875_mo_KB8167   (B. Parnass)
McDonald's Corp/aka Chicago Regional McDonalds, restaurant, order taker to dri
                      ve-up window, in Aurora (Fox Valley Mall), Montgomery, Y
                      orkville
                      [Illinois]__________ 154.6000_2w_KB63677   (B. Parnass)
McDonalds Corporation, restaurants, drive-up window to order taker and order t

aker to drive-up window, very low power
[Illinois]__________ 35.0200_2w_KB67295 (B. Parnass)

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -3086550164006133781
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a06e87106bb13a24,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-10 08:38:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Butternut SC3000 scanner antenna: user comments
Message-ID: <696@ihu1h.UUCP>
Date: Sun, 10-Nov-85 11:38:33 EST
Article-I.D.: ihu1h.696
Posted: Sun Nov 10 11:38:33 1985
Date-Received: Mon, 11-Nov-85 06:15:14 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 59

x

I recently installed a Butternut SC3000 tri-band scanner antenna on the chimney of my ranch house. The ham-fest price was about $50, $10 lower than prices advertised in the radio magazines.

This is my first outdoor scanner antenna since 1976, so it seems like I can hear "everything" with the SC3000, compared with the indoor antennas to which I've grown accustomed.

It's difficult to evaluate the performance of the SC3000, having just moved to this location and few other antennas installed yet for comparison. On VHF-Hi, the SC3000 equals, or exceeds, a 2 meter Cush Craft Ringo (not the Ranger) mounted 3 feet lower. I'm pleased with the Butternut's UHF performance, often hearing the county sheriff's cars on the repeater input.

I've a few gripes with the SC3000:

- The main vertical element is insulated from DC ground, posing a potential lightning hazard. I

worry about this, and keep the station end of the RG8/U coaxial cable shorted to ground when not in use.

- Assembly was hampered by a scant, one page instruction sheet. It was impossible to place one of the tuning pieces at the exact position called for in the instructions, and the poor fit between two other pieces required improvisation using a shim. No technical discussion is provided, so the theory behind this unusual antenna remains a mystery.

- I had trouble mounting the SC3000. It's supposed to mount over a 1" pipe or inside a conventional 1 1/4 inch tv mast, but it just wouldn't fit inside any of the three 1 1/4 inch Radio Shack steel masts I tried. No brackets or U-bolts are provided, so I had to obtain a set of U-bolts, and mount the antenna in an unorthodox fashion.

- Even though the SC3000 is spec'd at unity gain for VHF-lo, the 19" radial system is really for VHF-hi, so I don't expect very good results on the 30-50 MHz range.

Being an agricultural area, the terrain is flat in this
county, and the winds get quite brisk. The SC3000 is rather frail compared to a Ringo or Hustler G6-144, and dances around in the gusts, but has remained intact for 2 months now.

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -3759886879607931105
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fd6c1ac32b0a65ca,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-12 07:05:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: comments on scope vertical drift
Message-ID: <21588@mgweed.UUCP>
Date: Tue, 12-Nov-85 10:05:55 EST
Article-I.D.: mgweed.21588
Posted: Tue Nov 12 10:05:55 1985

Date-Received: Wed, 13-Nov-85 08:10:01 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 20

After rebuilding the power supplies for my Heath 105 scope, I also had quite a bit of vertical drift. The drift was caused by the power supplies that power the vertical amplifiers (among other things). I had used 78xx type regulators for the positive supply but used zener-to-pnp series pass for the negative supply.

After finally obtaining the proper 79xx type negative regulator and replacing the zener referenced supply with that, the drift went away.

The vertical amp has a lot of gain and ANY power supply variation will cause drift.

I have found that while the absolute value on these 78xx and 79xx regulators is not super good, they are super stable and drift-free. In other words, if you want EXACTLY 5 volts, you may have to hand pick one from a dozen or so.

Bob, K9EUI

From 2745168877206309537
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9712f79293ffb6e3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-12 14:00:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!tektronix!hplabs!hao!seismo!brl-tgr!tgr!YOUNG@MARLBORO.DEC.COM
From: YOUNG@MARLBORO.DEC.COM
Newsgroups: net.ham-radio
Subject: Re: need help on 160 mtr rcvr problem
Message-ID: <3139@brl-tgr.ARPA>
Date: Tue, 12-Nov-85 17:00:15 EST
Article-I.D.: brl-tgr.3139
Posted: Tue Nov 12 17:00:15 1985
Date-Received: Fri, 15-Nov-85 04:25:43 EST
Sender: news@brl-tgr.ARPA
Lines: 20

I used to have a TS-820, and used the transverter plug to do what you want. There is a switch on the back of the radio which must be set in the transverter position. This switch opens the receive line so you can patch your filter or external antenna to it. I had two pieces of RG-174 coming out of my transverter plug, and had a box which would connect them for normal operation or connect the beverage to the receiver input. I also used to connect a second receiver to the transmit antenna through the box, and also an external attenuator and a preamp. The

transverter switch on the TS-820 also opens the screen line to the final amplifier tubes. You have to put a jumper in the plug which reconnects the screens. I don't remember the pinout for the plug, but knowing what it is supposed to do you should be able to figure it out from the schematic. I think the TS-520S also had the same plug and pinout.

If you can't get it to work, I will look for the plug, and if I still have it I will let you know how it is wired.

Paul Young, K1XM

From 1388071331037069629
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7329c733c906bc6a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-12 15:00:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 29
Message-ID: <21604@mgweed.UUCP>
Date: Tue, 12-Nov-85 18:00:20 EST
Article-I.D.: mgweed.21604
Posted: Tue Nov 12 18:00:20 1985
Date-Received: Wed, 13-Nov-85 21:00:44 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 25

qst de k9eui
hr crrl bulletin nr 29 from crrl headquarters
london ont november 11, 1985
to all radio amateurs bt

representatives of crrl and carf met with doc officials in ottawa on october 25. much of the discussion centered on docs new proposal for restructuring the amateur service. crrl and carf are honoring a commitment not to make details of the proposal known until notice of it appears in the canada gazette. at that time, copies of the proposal will be available from all regional and district offices of doc. there will then be a 180 day period in which amateurs, their organizations and other interested parties may comment. further details later.

doc confirms that the removal of frequency and power restrictions on the 160 metre band includes the removal of the no mobile restriction as well. mobile operation is now

permitted on 160 metres.

section manager elections are now under way in the alberta and maritimes/newfoundland sections ar

From 3678571573142436740
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,22f7fa2f0dd09dc7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-12 15:00:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 45
Message-ID: <21605@mgweed.UUCP>
Date: Tue, 12-Nov-85 18:00:43 EST
Article-I.D.: mgweed.21605
Posted: Tue Nov 12 18:00:43 1985
Date-Received: Wed, 13-Nov-85 21:01:34 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 34

qst de k9eui
hr propagation forecast bulletin nr 45 from arrl headquarters newington ct november 11, 1985
to all radio amateurs bt

mentioned as a possibility in last weeks bulletin, an upward trend in the solar flux curve did begin november 5. from 69 on the 4th, the flux was up to 75 by the 8th. just as it did 4 weeks earlier, the curve then dropped one unit, holding there for two days. it remains to be seen if the larger rise that began october 13 will be with us a second time. the several active centers that pushed the flux up to 95 then are due back early this week. if nothing comes of it, we will put on a corrected bulletin later this week. regardless of the flux level, propagation is likely to be very erratic but with an overall trend to better conditions through about november 20. though flux levels may be down, signal strengths and quality should average better november 20 to 25 and 26 through 28 than in the earlier part of the month. the muf for northern hemisphere paths should be the highest of the year at those intervals. the month is likely to end with strong disturbances, but with the muf lower as we move into december.

the author of these bulletins is on his way to florida this week, to assume permanent residence on the gulf coast. mail for him should carry the following address,

edward p. tilton, w1hdq,
p.o. box 5527
spring hill, fl 33526

american sunspot numbers for october 31 through november 6 were
between 0 and 14 with a mean of 3.4 ar

From -7255332378629575102
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f922049c87586bd0
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-12 19:44:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site kitty.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!rocksanne!sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.ham-radio
Subject: Re: Scanner antennas
Message-ID: <576@kitty.UUCP>
Date: Tue, 12-Nov-85 22:44:55 EST
Article-I.D.: kitty.576
Posted: Tue Nov 12 22:44:55 1985
Date-Received: Fri, 15-Nov-85 20:31:57 EST
References: <124@tapa.UUCP>
Organization: Recognition Research Corp., Clarence, NY
Lines: 15

> I am considering the purchase of a Yaesu FRG-9600 and would like to hear
> others thoughts on broadband antennas for the 60-900mhz. coverage of the
> Yeasu receiver.

    Use a log periodic antenna - they are simple to build for that
frequency range. Or, if you want to mount something on a rotor for
directivity, try a log spiral antenna - which is also simple to make from
a large piece of PC board stock.

=== Larry Lippman @ Recognition Research Corp., Clarence, New York   ===
=== UUCP   {decvax,dual,rocksanne,rocksvax,watmath}!sunybcs!kitty!larry ===
=== VOICE   716/741-9185   {rice,shell}!baylor!/   ===
=== FAX   716/741-9635 {AT&T 3510D}   ihnp4!/   ===
===   ===
===   "Have you hugged your cat today?"
               ===

From -1360540489026927817
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,461c7bd1fea3744a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-13 08:03:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!lll-crg!seismo!
brl-tgr!tgr!ptb@mitre-bedford.ARPA
From: ptb@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: Article on Cellular Toll Fraud (aka Cellular Sieve/Swiss Cheese).
Message-ID: <3156@brl-tgr.ARPA>
Date: Wed, 13-Nov-85 11:03:56 EST
Article-I.D.: brl-tgr.3156
Posted: Wed Nov 13 11:03:56 1985
Date-Received: Sat, 16-Nov-85 08:41:18 EST
Sender: news@brl-tgr.ARPA
Lines: 10

Your article on the Cellular telephone service was good. I had a lot
of trouble with the FTP, though. Others experiencing difficulty might
try it with all caps, and a "1" after the name, leaving
<GEOFF>ARTICLE.CELLULAR-SEIVE.1
as the name of the remote file.

This worked ok for me.

                  Peter Baldwin, WA1SNH
                  (ptb@mitre-bedford)

From 9208806183249648281
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5c2c066ba7ddac1a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-13 09:51:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site yojna1.UUCP
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!umcp-cs!aplcen!cp1!yojna1!wb6rqn
From: wb6rqn@yojna1.UUCP (Brian Lloyd)
Newsgroups: net.ham-radio
Subject: Re: Re: Replacement FET for Heath scopes (and other scope comments)
Message-ID: <128@yojna1.UUCP>
Date: Wed, 13-Nov-85 12:51:14 EST
Article-I.D.: yojna1.128
Posted: Wed Nov 13 12:51:14 1985
Date-Received: Sun, 17-Nov-85 05:35:13 EST
References: <21464@mgweed.UUCP> <154@tapa.UUCP>
Organization: Yojna1 Amateur Radio Packet Unix System; Germantown, Md.
Lines: 26

> [...] The front end is a FET differential pair which has a bad
> DC drift with temperature (the 4510 is DC coupled). Once after leaving it
> on in the upright position for 3 days the DC offset (kinda dumb anyway) the
> DC offset went too far for the trimmer pot rendering it useless.
>
> Has anybody got any ideas about a cheap fast front end, DC to about 25mhz.
> which I can use to replace the fet front end?
>

> Larry WA9QOO
> ihnp4!tapa!larry

The temperature problems with DC balance might be cured by making sure that the two devices in the diff pair are thermally connected. Several of the semiconductor mfgrs make matched diff pairs in a single package. These are very fast and very closely matched. Try Siliconix, they have some. I looked very quickly and they have a dual that is designed for wideband differential amp applications. The device number is 2N5564, -65, and -66. I am sure that there are other vendors, and you didn't specify the parameters needed (gfs, quiescent current, etc.).

73 de Brian, WB6RQN

Brian Lloyd
...![bellcore!cp1]!yojna1!wb6rqn

P.S. Also look at 2N5911

From -6369724811355455047
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d10804acd9d2f58
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-13 10:09:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site yojna1.UUCP
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!umcp-cs!aplcen!cp1!yojna1!wb6rqn
From: wb6rqn@yojna1.UUCP (Brian Lloyd)
Newsgroups: net.ham-radio
Subject: Tech vs. Appliance Op -- DX vs. UHF/Packet/Amtor/etc.
Message-ID: <129@yojna1.UUCP>
Date: Wed, 13-Nov-85 13:09:42 EST
Article-I.D.: yojna1.129
Posted: Wed Nov 13 13:09:42 1985
Date-Received: Sun, 17-Nov-85 05:35:26 EST
References: <2549@brl-tgr.UUCP> <19700019@hpfcmt.UUCP>
Organization: Yojna1 Amateur Radio Packet Unix System; Germantown, Md.
Lines: 18

I am not going to repeat what has gone before, but there are many people in the ham radio world. Most of them are appliance operators (I have several appliances here too). For many the entire world is between 1.8 and 30Mhz.

On the other hand, there are many people who build their own gear, interface with their computers, design microwave gear, do EME, and all other sorts of interesting things.

My point is this; please do not dump on someone because he/she enjoys an aspect of our hobby that does not appeal to you. If you do not like the DX bulletins, exercise your right index finger on the 'n' key and go on to the next article. --**PLEASE**-- do not start a flame section of the DX vs. tech operation sort. I, for one, do not want to hear it.

73 de Brian, WB6RQN

Brian Lloyd
...![bellcore!cp1]!yojna1!wb6rqn

From -5509124307104452064
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,615905268f0aad45,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-13 20:10:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: SWL loggings (Russian Navy, NASA, USAF, FEMA, etc.)
Message-ID: <698@ihu1h.UUCP>
Date: Wed, 13-Nov-85 23:10:19 EST
Article-I.D.: ihu1h.698
Posted: Wed Nov 13 23:10:19 1985
Date-Received: Fri, 15-Nov-85 04:54:43 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 34

```
   4.7810    WGY912____US: FEMA, slow speed encrypted cw in 5 character groups,
                          purported to be a VIP relocation site in times of emerg
                         ency, 11/11/85 @0139Z
                         [Mt Weather, VA] (B. Parnass)

  11.1760    call?_____US: Air Force, in-flight aircraft, usb, 11/08/85 @1808Z
                         [Elmendorf AFB, Alaska] (B. Parnass)

  11.1790    call?_____US: Air Force, MAC883 in-flight aircraft asking Scott op
                         erator for radio check, usb, 11/07/85 @1835Z
                         [Scott AFB, IL] (B. Parnass)

  11.7700    call?_____jamming: by signal in the International Bdcst Band, iden
                         tifying in cw with rough note. id="VR", (Soviets known t
                         o jam in this manner), 11/07/85 @1825Z
                         [location?] (B. Parnass)

  14.5560    RIW_______USSR: Russian Navy, Khiva Naval, telling station UCBV 'Q
                         SA no QSX QWK1 ZBR', cw, 11/02/85, @1915Z
                         [Uzbek SSR] (B. Parnass)

  15.1150    call?_____jamming: by signal in the International Bdcst Band, iden
                         tifying in cw with rough note, id="W4" (Soviets known to
                          jam in this manner), 11/02/85 @1949Z
                         [location?] (B. Parnass)
```

  20.1983   call?_____US: NASA, continuous rebroadcast of shuttle transmission
                       s during mission STS-61A, lsb, 11/05/85 @1848Z
                       [location?] (B. Parnass)

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==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -380531625503514551
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d10804acd9d2f58
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-14 04:39:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: $Revision: 1.6.2.13 $; site hpuslma.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!we53!busch!
wucs!wuphys!hpuslma!scott
From: scott@hpuslma.UUCP
Newsgroups: net.ham-radio
Subject: Re: Re: Orphaned Response
Message-ID: <783500001@hpuslma.UUCP>
Date: Thu, 14-Nov-85 07:39:00 EST
Article-I.D.: hpuslma.783500001
Posted: Thu Nov 14 07:39:00 1985
Date-Received: Sat, 16-Nov-85 08:58:50 EST
References: <19700019@hpfcmt.UUCP>
Lines: 13
Nf-ID: #R:hpfcmt:-1970001900:hpuslma:783500001:000:501
Nf-From: hpuslma!scott   Nov 14 06:39:00 1985

Roger,

Aren't you being a little bit hard on the ARRL and their "commercialized maga-
zine?" I just received my Tech license recently and still enjoy seeing the
ads for the many new and different products on the marketplace. Maybe we
should write to ARRL and request more technical articles, but at the same time
I believe they have done a good job over the years promoting and protecting the
rights and privileges of us Hams. By the way I was WA0BNM back in the early
'60's.

Jim Scott
N0GLP

From -6050777747067046699
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5e9e0c0e5792ca47,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-14 04:53:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84 exptools; site hlwpb.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!hlwpb!lare
From: lare@hlwpb.UUCP (LH Eckenrode)
Newsgroups: net.ham-radio
Subject: Comments on DX and ARRL.
Message-ID: <380@hlwpb.UUCP>
Date: Thu, 14-Nov-85 07:53:21 EST
Article-I.D.: hlwpb.380
Posted: Thu Nov 14 07:53:21 1985
Date-Received: Fri, 15-Nov-85 04:58:53 EST
Distribution: net
Organization: AT&T Bell Laboratories, Short Hills, NJ
Lines: 28

Well, I have been sitting here reading the comments on DXing and the ARRL.

First, on ARRL: The QST mag has not contained as much tech stuff as in the past. But, it still gets a lot of info out for everybody, from the begining builder to the contester or DXer. Not to mention the clubs across the nation. It has a purpose in Washington. You may not agree with their views all the time (I know I don't), but still they are the only one there representing us. For that they got my money.

Second, DXing. I have always said that this hobby has something for everyone, be it building, ragchewing, RTTY, CW, DXing or what. If your interested, you can find your niche.

If some quys want to sit for long periods of time on a list to work DX, fine, let them sit there. I don't see them posting to the net complaining about builders not using their equipment.

I have sat on a few list. Because thats the only place some DX station will operate. So if you want to work them on the list you sit. Not all DX contacts are of the slam bam varitey. I have had some very nice QSO's with some rare DX stations at times.

Enough from my soap box. Good whatever to you all be building or DX or list sitting.

73,
Larry
DE KD2NT

From -8315481975041303190
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,262805b6d9df5cee
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-14 09:17:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site kitty.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!ritcv!rocksvax!rocksanne!sunybcs!

kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.ham-radio
Subject: Re: Re: Eavesdropping revisited [How's that again?]
Message-ID: <579@kitty.UUCP>
Date: Thu, 14-Nov-85 12:17:00 EST
Article-I.D.: kitty.579
Posted: Thu Nov 14 12:17:00 1985
Date-Received: Sun, 17-Nov-85 07:32:48 EST
References: <154@pyuxv.UUCP> <138@hydra.UUCP>
Distribution: net
Organization: Recognition Research Corp., Clarence, NY
Lines: 72

> > Congress has a measure under consideration that would
> >strengthen such privacy law requirements extending protection to
> >cellular and cordless telephones. Markup is expected, for both the
> >House and Senate versions of the bill, by early next year. There is a
> >possibility of enactment by the end of 1986.
>   I have always wondered why the cellular radio standard didn't
> include digital transmission under (optional?) encryption. Digital
> transmission would make cellular signals difficult to intercept with
> ...

Digital speech encoding was not used in the cellular telephone concept for reasons of practicability including, but not limited to:

1. The cellular telephone design concept was considered to provide sufficient security to deter the casual listener using consumer-grade `scanners', antennas, etc.  No attempt was even considered to deter a `serious' listener who could spend many thousands of dollars for antenna towers, sophisticated receiving equipment, etc.

2. The cellular telephone concept was intended to be LOW cost and be capable of independent multi-vendor support. Therefore, hardware had to be as simple as possible without employing any one vendor's proprietary technology. While Motorola pretty much developed the cellular concept, they never did it from the standpoint of monopolizing the cellular market - such a monopoly never getting cellular telephones off the ground. While Motorola has also pioneered digital speech encryption using CVSD modulation in their DVP radio systems, this was mostly proprietary technology which Motorola was hardly going to share with the world.

3. Had a digital encryption circuit been used as part of the cellular concept, there is NO practicable way for such a circuit to be kept out of the public's hands. There are at present at least 10 active vendors who manufacture cellular telephone apparatus, and no doubt there will be more. Any `potential' vendor would have to be given encryption circuit details and be sold any integrated circuits designed for this purpose.

4. Had a digital encryption scheme been used so that each cellular

telephone had individual encryption keys, EACH receiving and transmitting site would have had to have a full database containing a unique cellular telephone identifier number and an encryption key. This same database would have to exist for hundreds and even thousands of sites - and be UPDATED. THIS is probably the single most important reason why encryption is not practicable at this time using the present cellular concept. (It would rather defeat the purpose of encryption if, say, the encryption key were transmitted in the clear prior to start of voice transmission, in case anyone thinks this is would eliminate a database requirement.)

5. Radio transmission is full-duplex, so that a monitor receiver would be able to hear only one side of the transmission. (Yes, I know one could use TWO monitor receivers, but how many people have that?)

6. Mobile/portable transmit power is LOW, and the ~900 Mhz frequencies are extremely line-of-sight in their propagation, thereby limiting the receiving range of a casual eavesdropper to only a few miles under most circumstances.

7. There are no identifier transmissions made between cellular telephones and base stations which would enable the casual listener - even if he could decode them - to learn the actual identity of the calling telephone.

8. Cellular channel assignment for working communications is random.

=== Larry Lippman @ Recognition Research Corp., Clarence, New York ===
=== UUCP {decvax,dual,rocksanne,rocksvax,watmath}!sunybcs!kitty!larry ===
=== VOICE 716/741-9185 {rice,shell}!baylor!/ ===
=== FAX 716/741-9635 {AT&T 3510D} ihnp4!/ ===
=== ===
=== "Have you hugged your cat today?"
===

From -2505389234513632597
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5c62114aa0f4d1c0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-14 09:18:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hounx.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!mhuxt!houxm!hounx!nd2k
From: nd2k@hounx.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: QSL route??
Message-ID: <395@hounx.UUCP>
Date: Thu, 14-Nov-85 12:18:02 EST
Article-I.D.: hounx.395
Posted: Thu Nov 14 12:18:02 1985
Date-Received: Sat, 16-Nov-85 00:58:25 EST
Organization: AT&T Bell Labs, Holmdel NJ

Lines: 6

Does anyone have QSL route information for 9U5JB??
Worked it during the CQWW contest a few weeks back.

Al ND2K

From 2870879987058209455
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3d0b9d501c853ea,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-14 11:46:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Elias@MIT-MULTICS.ARPA
From: Elias@MIT-MULTICS.ARPA
Newsgroups: net.ham-radio
Subject: Satellite Help
Message-ID: <3201@brl-tgr.ARPA>
Date: Thu, 14-Nov-85 14:46:10 EST
Article-I.D.: brl-tgr.3201
Posted: Thu Nov 14 14:46:10 1985
Date-Received: Fri, 15-Nov-85 20:56:55 EST
Sender: news@brl-tgr.ARPA
Lines: 18

I am (timidly) entering the ham satellite area, and would like to begin
by listening to a few. I think I have all the right equipment, at
least according to the various books I've read (e.g. the ARRL Satellite
Experimenter's Handbook). I even have a super-duper tracking program
(in "real" life I'm an aero&astro professor at MIT, so THAT part is knid
of home to me). My problem now is: WHERE CAN I GET FRESH ELEMENTS?

A friend of mine subscribed to the AMSAT magazine that succeeded ORBIT
and tells me no fresh elements can be found there; I tried listening to
a supposed Wednesday 2100EST amateur satellite interest net on 3850MHz
with no luck (perhaps I have the wrong day -- the ARRL Manual says it's
on Tuesdays; unfortunately today is wednesday, so I would have to wait a
week to test that).

Can anybody suggest a source for fresh Keplerian elements for, say,
OSCAR-10 and RS-7?

Thanks, Antonio/KA1LLM

From -2334841087928106442
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b3bfdfc9e945dd47,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-11-14 13:04:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: the ARRL and other comments
Message-ID: <21642@mgweed.UUCP>
Date: Thu, 14-Nov-85 16:04:25 EST
Article-I.D.: mgweed.21642
Posted: Thu Nov 14 16:04:25 1985
Date-Received: Fri, 15-Nov-85 05:38:29 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 50

I see where the for/against ARRL debate has surfaced again.

Ralph, WA1ZCH is quite correct in that the ARRL is our only lobby. I'd hate to think where we would be today (if even on the air at all) without them.

Sure, I get upset with the League. They have pulled some real boners in the past, but nobody's perfect. I still think "incentive licensing" was the biggest fiasco in years (at least the way it was done). The League has given opinions and promoted ideas without surveying the membership for their feelings many times (remember no code?). BUT the FCC does listen to them and many great rules changes have occured because of the League. I am a life member but there are times I have thrown QST on the floor!

As far as magazines go, I think the ham magazines today are enough different to satisfy most everyone. It is too expensive to get them all (at least for me) but I do get QST and 73. We get HR at the club station here, and I occasionally grab a CQ off the newsstand.

At least with Wayne Green more or less gone, the editorial page battles have ceased.

Getting back to the League, If there are things you like/dislike about things, have you ever written to the ARRL or your division representative? Just like government, It's pretty hard for a representative to represent you if they don't know how you feel on a topic.

Another service to league members is that you can get copies of the NPRM's and stuff. I once wrote to the ARRL asking why they did not print all the dockets verbatum. Their answer was that there are not enough people that are interested. So they make all this stuff available on request.
This is the sad case - that a very minor percentage of us hams are interested in the FCC happenings, until something undesirable happens and we sit back and bitch about it. How would most of us find out about these happenings if it were not for W1AW!

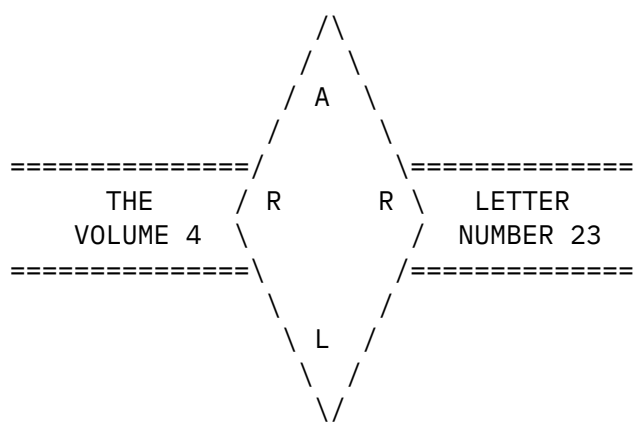
Ralph also mentioned that some hams are technically oriented and some are

operators. I am more like Ralph. I seldom turn on the rig and just call "CQ". I am mostly at the bench working on a project of some kind.

Our local club has about 200 members. I would say that maybe 5 to 10 percent of the membership are technically oriented. (What really makes my day is when I hear a couple of the 75-80 year old hams who have been licensed for over 50 years compare notes on their latest gadget using 555 timers and such when they probably have trouble seeing the devices let alone understand all the state-of-the-art circuits today).

Bob, K9EUI

From 1850904065356344915
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b61d04ad2e54ad69,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-14 20:20:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL Letter Vol 4, #23
Message-ID: <265@inuxi.UUCP>
Date: Thu, 14-Nov-85 23:20:04 EST
Article-I.D.: inuxi.265
Posted: Thu Nov 14 23:20:04 1985
Date-Received: Sat, 16-Nov-85 08:39:58 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 377



November 11, 1985

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In this issue:

o Electronic Communications Privacy Act of 1985

o QCWA to File Comments

o ARRL Speaks on Auxiliary Operation

o ...and much more!

WE'LL SHARE 1900-2000 kHz WITH RADIOLOCATION: FCC

By FCC Report and Order released October 31, non-government radiolocation has been given primary status at 1900-2000 kHz. FCC believes this action in PR Docket 84-874 is a necessary prerequisite to future displacement of radiodetermination now at 1605-1705 kHz, a position ARRL disputes. A future proceeding will address possible expansion of standard broadcasting at 1605-1705 kHz in the Western Hemisphere. ARRL's fight against this reallocation had been in the works for many months; see Happenings, November 1984 QST. Effective December 9, 1985, amateur stations in the 1900-2000 kHz range must not cause harmful interference to the radiolocation services and are afforded no protection from interference arising from radiolocation operations. Though FCC will not accept applications from 1605-1705 kHz radiodetermination stations for moves to 160 until July 1, 1987, plans are afoot to allow new spread-spectrum radiolocation stations access to 1900-2000 kHz as early as December 9 of this year. FCC claims that amateurs will still have "virtually exclusive non-government use of 1900-2000 kHz until private radiolocation transmitters become operational." ARRL may file for reconsideration; watch the Letter for details. January QST will cover more of the 1900-2000 kHz reallocation and resultant changes to Part 97.

WHAT THE LEAGUE HAD TO SAY ON "AUXILIARY OPERATION 'EVERYWHERE'"

In the July 18 Letter, we detailed an FCC proposal (in PR Docket 85-215) to allow auxiliary operation on all amateur frequencies with the exception of 431-433 and 435-438 MHz. Auxiliary operation is defined in Part 97.3 of the Rules as "radio communication for remotely controlling other amateur radio stations, for automatically relaying the radio signals of other amateur radio stations in a system of stations, or for interconnecting with other amateur radio stations in a system of amateur radio stations." Currently, auxiliary operation is allowed only on frequencies above 220.5 MHz. Here are the highlights of the League's comments in 85-215.

The Quarter Century Wireless Association had petitioned FCC to delete the frequency restriction ("all amateur frequency bands above 220.5 MHz, except 431-435 and 435-438 MHz") from Part 97 because "the technological state of the art has made restrictions on auxiliary operation unnecessary." The League sees that the FCC proposal does not deal with spectrum management issues, however. How has technological development had any effect on the need to limit auxiliary operation to certain VHF and UHF frequencies? How will such expansion permit increased flexibility in auxiliary operations? It appears that the proposal would have the effect of shifting auxiliary operations to lower, more congested frequencies.

ARRL comments continue with a discussion of how crowding on the medium- and high-frequency bands makes them unsuitable for auxiliary operation, with the added headache of MF/HF propagation disallowing local frequency coordination of links on those frequencies. Many auxiliary operations, such as remote control of an HF station, require a high duty-cycle, which could only make interference worse in the more crowded bands. Why use long-haul frequencies for short-haul auxiliary links? 2 meters is another bad candidate for auxiliary work; it is fully loaded in many areas of the country. ARRL comments that the Commission is correct in protecting the weak-signal and satellite bands at 431-433 and 435-438 MHz, but similar segments should be protected on all bands.

For these reasons, ARRL has requested that the Commission not permit auxiliary operation on frequencies below 220.5 MHz, that Section 97.86 of the Rules not be modified as proposed, and that the proceeding be terminated without further action.

QCWA REQUESTS EXTENSION OF TIME TO FILE COMMENT IN DOCKET 85-215

The Quarter Century Wireless Association (QCWA), has asked FCC to extend the time in which to file comment in Docket 85-215 (see "What the League Had to Say . . . " above). QCWA said that detailed comment in 85-215 will require time-consuming analysis, and that the Association does not feel it can respond meaningfully within 30 days, and requests an extension of time to

file of 60 days. If granted, this would mean a new Reply Comment deadline of December 24, 1985.

NEW ORLEANS FCC DISTRICT OFFICE MOVES

Effective October 18, the new address for the New Orleans District office is 800 West Commerce, Room 505, New Orleans LA 70123; telephone 504-589-2095. Public inquiries concerning telecommunications matters, complaints of electronic interference and schedules of commercial radio operator examinations should be directed to this address.

1986 CHARGE FOR ARRL/VEC EXAMS

FCC announced on October 31 that effective January 1, 1986, the maximum allowable test fee will be $4.29 for a Volunteer-Examiner-administered Amateur Radio examination. The ARRL/VEC will charge $4.25 per candidate for tests taken in 1986 through Volunteer Examiner Teams working directly with the ARRL/VEC. The ARRL/VEC coordinates test sessions in all fifty states plus many locations overseas. Send an s.a.s.e. to Hq. for an updated printout of the test sessions in your area.

YOU CAN'T TAKE THE SAME TEST THE NEXT TIME

Effective November 8, FCC lifted Rule 97.26(h) requiring a candidate to wait thirty days before being retested on a failed exam element. The Commission now requires that a candidate being retested not take exactly the same test that was failed previously. FCC also directs that the VE Teams have the right not to retest anyone at the same session. Under the ARRL/VEC procedure, a candidate who fails may not be retested at the same test session. Once the candidate fails a written element, his or her participation at a session has ended. Subsequent retesting will occur only when the candidate submits a new Form 6l0 application and an additional test fee.

ARRL ON VEC MAINTENANCE OF EXAM QUESTION POOLS

If the Notice of Proposed Rulemaking in PR Docket 85-196 is adopted as proposed, Volunteer-Examiner Coordinators would be allowed to maintain their own question pools used to create examinations for amateur licenses. This maintenance is presently performed by the FCC, and VECs design written examinations by choosing questions from the FCC-issued pool.

ARRL adheres to the principle that the Commission, and not Volunteer-Examiner Coordinators, should retain responsibility for all Amateur Radio examination question pools. " . . . It appears that it was intended by Congress that the Commission should be

the entity which is responsible for maintenance of the question pools. It is questionable whether the delegation of authority to maintain question pools -- the most basic level of Commission supervision over examination quality -- is statutorially permitted . . . as recently as July 20, 1984, the Commission specifically clarified the rules to require 'that questions chosen for written examinations must be taken verbatim from FCC-approved lists.' Nothing has changed since then to moot that laudatory objective."

The opportunity for Commission review of questions submitted for inclusion in the question pool provides an undeniably beneficial filtering process for the varied type and quality of questions. Since FCC itself has stated that its maintenance of the pools is now mainly a custodial function, it cannot be argued that Commission maintenance of question pools is a significant regulatory burden. Assigning VECs the responsibility for maintaining question pools would be a step away from uniform standards and fairness; it would be a step toward allowing "shopping for the easiest examination."

The second proposal contained in the NPRM is the acceleration of the authority for Volunteer Examiners to design individual examinations for each examination element. While the preparation of individual examinations by VECs has worked out well, it is neither necessary nor desirable to permit individual examiners to prepare examinations from the question pools. If VEs are permitted to create the examinations, it would be possible for them to "teach to the test." VEs would not even have to divulge the contents of an upcoming examination -- they would be authorized to create the same. VECs must erect a "Chinese Wall" between
trainer and examiner functions. This principle would be impossible to enforce at the local club level. The advantage of the present system is that no one in the field knows the contents of a particular examination until shortly before the test date.

There is no unreasonable delay in obtaining examinations; there is an ample number of VECs to create them from the question pool. Paperwork is already time-consuming for Volunteer Examiners. Asking them to prepare examinations on top of this is more of a burden than is advisable. Overall, the League adheres to the principle that VECs, but not VEs, should be authorized to prepare individual examinations from the Commission-maintained question pool.

THE ELECTRONIC COMMUNICATIONS PRIVACY ACT OF 1985

As of mid-September, the Electronic Communications Privacy Act of 1985 (S. 1667 and H.R. 3378) is pending in Congress. The bill would amend Title 18 of the U.S. Code with respect to unlawful interception of wire and wireless electronic communication, authorizing the recovery of civil damages from and introducing stiff penalties for computer crimes and destructive "hacking." The intent is a broadening of the definitions both of protected communications ("any transmission of signs, signals,

writing, images, sounds, data or intelligence of any nature in whole or in part by a wire, radio, electromagnetic, or photoelectric system that affects foreign or interstate commerce") and prohibited practices. Licensed Amateur Radio and CB transmissions are listed among "unprotected" communications (students of double negatives will appreciate that interception of our transmissions would continue to be "not unlawful"), but the progress and evolution of the Act will bear close watching.

902-928 MHZ ACCESS ASKED FOR LOW-POWER VIDEO LINKS

Jerry Iggulden of Valencia, California, has petitioned the FCC for a rulemaking in amendment of Part 15 of the Commission's rules to allow unlicensed operation of low-power video transmitters at 902-928 MHz. "The rules and regulations currently don't allow for the non-licensed, low power transmission in any band suitable for video," Iggulden wrote in his September 11 petition. " . . . The proposed rule changes would allow for a video transmitter and receiver/converter operating at 902 to 928 MHz. It is the perception that these devices would serve the public interest by offering the benefit of broadcasting a video signal from the home video cassette recorder (VCR) to a TV in a remote location(s) (i.e., another room). It is virtually certain that the cost to the consumer for this benefit would be significantly less than a second VCR."

Iggulden, whose interest in the proposed rules changes is in "potential involvement with a company whose business would be to market the proposed devices," notes that the field strength presently allowed by the applicable subpart of Part 15 would be more than adequate for transmission over a short range or within a single-family dwelling. "In fact," he continues, "the Commission may wish to impose a lower field strength limit on the proposed devices in order to prevent interference problems.

What might this mean to amateur operations at 902 MHz? Iggulden's petition, designated as RM-5193 by FCC, appears to have been written without knowledge of the then-impending occupancy of 902-928 MHz by the Amateur Radio Service. Though our amateur allocation at 902 MHz is secondary, we're not secondary to the unlicensed emissions of devices operating under Part 15 -- so any such video links would have to suffer our interference and would be proscribed from interfering with us. And if you think that some of those second-harmonic cordless phone conversations polluting the low end of 80 meters are spicy, what of some of the video we might run into if low-power video links opened up at 902?

WA8AJN LICENSE SUSPENDED; REVOCATION PROCEEDING INITIATED

An Order to Show Cause and Suspension Order has been issued to J. Fred Riley, WA8AJN, of Kenova, West Virginia. Riley, an Extra Class licensee, is charged with violating Section 97.125 of the Amateur Rules -- the rule prohibiting "malicious interference," or jamming of radio communications of others.

Also alleged were violations of Sections 97.84 and 97.123, which are station identification rules. The Commission's September 23 Order requires Riley to show cause why his amateur station license should not be revoked and suspends his amateur operator license, based on these rule violations. Riley had 30 days to request a hearing or a written statement concerning the matter. His request for an extension of the reply period to October 31 was granted; no further news was available to press time.

YOUNG ASTRONAUT COUNCIL VOLUNTEERS SOUGHT

The Young Astronaut Council and ARRL are looking for radio amateur volunteers to provide space communications experiences for young people in YAC chapters around the nation. Think you're ready? Requirements for amateur volunteers are a willingness to devote a substantial amount of time to working with local chapters on a long term basis, and the ability to provide space communications activities such as OSCAR, earth-moon-earth and ham-in-space activities, including monitoring shuttle audio transmissions. Volunteers will be listed as resources in the Young Astronauts Program Chapter Leaders' handbook, and would be contacted directly by local chapter leaders seeking space communications activities. What say? Leave your phone number with the Development Office, ARRL Hq.

MARCE IN SPACE NEXT MONTH

The Marshall Amateur Radio Club Experiment (MARCE) will fly on space shuttle Mission STS-61C, scheduled for launch on December 18. The experiment will transmit telemetry in synthesized speech directly on 435.003 MHz FM and via AMSAT-OSCAR 10 relay on 145.972 MHz FM. Though the experiment may be audible mainly in the southern hemisphere, amateurs in the southern portion of the U.S. may have a shot at taking part in taping MARCE's telemetry. For more details, contact the Development Office, ARRL Hq.

INTERFERENCE FROM ULTRASONIC PEST CONTROL DEVICES

Ultrasonic pest control devices are advertised to repel pests (i.e., mice, rats, roaches, etc.) through the emission of acoustic noise that cannot be heard by people. These devices have been found to cause electromagnetic interference to televi sions, as well as other types of equipment. Frequencies at which interference has been reported range from 20 to 470 MHz. Though pest control devices are not normally subject to FCC controls, ultrasonic devices of this type are subject to the technical and noninterference requirements of Part 18 of the FCC Rules. FCC staff have determined that a minor technical change to ultrasonic pest control devices would substantially reduce their

electromagnetic emissions, hence reducing their RF interference potential. Additional information about this matter may be obtained by contacting Joe Husnay at (301) 725-1585 at the FCC Laboratory.

JOB OPENING IN DXCC

The DX Century Club Branch has an opening for an Assistant DXCC Manager. Primary responsibility is checking QSL cards and making proper DXCC record entries. The Assistant Manager is responsible for managing the DXCC Desk in the absence of the Manager. Applicants for this position should have a General Class (or higher) Amateur Radio license. A high degree of neatness and accuracy in record keeping is essential. Some interest in DXing and DX call signs helpful. Anyone interested in this position should contact Don Search, W3AZD, DXCC Branch Manager, ARRL Hq.

ARRL'S NEW REPEATER DIRECTORY EDITOR: BART J. JAHNKE, KB9NM

Bart comes to the Hq. staff from the Great State of Wisconsin. [He's also writing this -- Editor] He was born and raised near the city of Wausau (the other Insurance City) where his family still operates a 280-acre dairy farm. First licensed as KA9DLH in early 1979, rapid upgrades followed, and he now operates as Extra Class KB9NM [KB9 "Nature Man"]. Back in Wisconsin, Bart operated the VHF/UHF bands exclusively -- mainly on 144 MHz SSB and CW via tropo, meteor scatter, aurora, sporadic-E and EME, with those EME exploits having all been "on the horizon" with fixed-elevation long Yagis. Bart is also a VUCC Awards Manager. These days, Bart can be found below the horizon -- behind the stacks of CD-240 repeater registration cards and computer printouts in Membership Communications Services. [Editor's query: wouldn't EME from a dairy farm be earth-moo-earth?]

*eof

From -8188023350489260119
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,e7293c100380bccb,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,e7293c100380bccb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-14 21:35:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!mtunh!ky2d-2!ai2q
From: ai2q@ky2d-2.UUCP (Alex)
Newsgroups: net.ham-radio,net.ham-radio.packet

Subject: Shugart SA-901 documentation
Message-ID: <52@ky2d-2.UUCP>
Date: Fri, 15-Nov-85 00:35:17 EST
Article-I.D.: ky2d-2.52
Posted: Fri Nov 15 00:35:17 1985
Date-Received: Sat, 16-Nov-85 01:48:23 EST
Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 12
Xref: watmath net.ham-radio:3552 net.ham-radio.packet:129

*** REPLACE THIS LINE WITH YOUR MESSAGE ***
I recently acquired a brand new Shugart Type SA-901 eight-inch disk drive. My present Xerox 820-based packet radio bulletin board and message server runs two Shugart SA-800s. According to the SA-800 manual, the SA-901 will also be applicable to expand the PBBS storage capacity. My problem is I have no data providing the cardedge signals for the SA-901. Does anyone have the required pinout information? I'd be more than happy to photocopy same and return the material, pay postage, etc. OR, a simple listing would be sufficient! Am also looking for power supply requirements (specs). many thanks to whomever can supply this much needed info. Running out of disk space! Very 73 de Alex, AI2Q, Freeport, Long Island, New York >>AR>>

From -8561192163570378
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,26aac8096d1dee23,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-15 07:23:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!lll-crg!seismo!hao!noao!terak!mot!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio
Subject: Re: Article on Cellular Toll Fraud [really a reply I couldn't mail]
Message-ID: <369@anasazi.UUCP>
Date: Fri, 15-Nov-85 10:23:36 EST
Article-I.D.: anasazi.369
Posted: Fri Nov 15 10:23:36 1985
Date-Received: Mon, 18-Nov-85 07:18:47 EST
References: <3143@brl-tgr.ARPA>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 10

I would be interested in getting a copy of the article on cellular toll fraud. If you would, please send it by UUCP mail to the USENET address on my signature. Thanks.

--
John Moore (NJ7E/XE1HDO)

{decvax|ihnp4|hao}!noao!terak!anasazi!john
{hao!noao|decvax|ihnp4|seismo}!terak!anasazi!john
(602) 952-8205 (day or evening)
5302 E. Lafayette Blvd, Phoenix, Az, 85018 (home address)

From 1139709717391096015
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c3289ebb97796f20,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-15 08:30:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!rachiele@NADC
From: rachiele@NADC
Newsgroups: net.ham-radio
Subject: c64 QSL manager
Message-ID: <3265@brl-tgr.ARPA>
Date: Fri, 15-Nov-85 11:30:22 EST
Article-I.D.: brl-tgr.3265
Posted: Fri Nov 15 11:30:22 1985
Date-Received: Sun, 17-Nov-85 06:06:14 EST
Sender: news@brl-tgr.ARPA
Lines: 5

Does anyone out there have a public-domain QSL manager program for the
Commodore 64? Thanks.
                Jim
                KA3OKP

From 7594345851229476847
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d10804acd9d2f58
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-15 23:36:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-sem.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!brl-sem!ron
From: ron@brl-sem.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Re: Orphaned Response
Message-ID: <532@brl-sem.ARPA>
Date: Sat, 16-Nov-85 02:36:50 EST
Article-I.D.: brl-sem.532
Posted: Sat Nov 16 02:36:50 1985
Date-Received: Sun, 17-Nov-85 07:19:16 EST
References: <19700019@hpfcmt.UUCP> <783500001@hpuslma.UUCP>
Organization: Ballistic Research Lab
Lines: 27

> Aren't you being a little bit hard on the ARRL and their "commercialized maga-

> zine?" I just received my Tech license recently and still enjoy seeing the
> ads for the many new and different products on the marketplace. Maybe we
> should write to ARRL and request more technical articles, but at the same time
> I believe they have done a good job over the years promoting and protecting the
> rights and privileges of us Hams. By the way I was WA0BNM back in the early
> '60's.
>
It's just another BYTE. Recent ARRL "protection" stands are about as
serving to the amateur community as Jerry Pournelle is to the advancement
of computer science (read the recent analysis of the need for auxiliary
operation below 220MHz). We launched a letter writing campaign to QST
editors back in 1980 about the technical quality of the articles and even
suggest and volunteered to help with things like technical review of articles
and means for getting better technically qualified writers. The answer,
which was even more galling than just inaction, was that they felt that
they were doing a superlative job. Sure, that's why in the period of a
year we had an article on how to build a TouchTone decoder using 24 PLLs
(for those who don't know, there were chips to do that, albeit exensive...
$14. But if you were going to do it with discreet PLL chips, you can
you only need seven (there are only seven tones) and an article on a
microcomputer application for blind amateurs that sent numbers to them
as a slow series of beeps. Perhaps, some form of encoding (Morse?) would
be more appropriate.

Glad I didn't blow the bucks on a life membership.
-Ron

From -4800588348839323335
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,ea73f03315c57bc9,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,ea73f03315c57bc9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-16 09:57:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!mtuxo!mtunh!ky2d-2!ka2ugq
From: ka2ugq@ky2d-2.UUCP (Tom)
Newsgroups: net.ham-radio,net.ham-radio.packet
Subject: Info on FTP
Message-ID: <54@ky2d-2.UUCP>
Date: Sat, 16-Nov-85 12:57:59 EST
Article-I.D.: ky2d-2.54
Posted: Sat Nov 16 12:57:59 1985
Date-Received: Mon, 18-Nov-85 05:46:49 EST
Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 9
Xref: watmath net.ham-radio:3561 net.ham-radio.packet:137

I have heard many things about FTP, especially for recieving
medium to large-sized files, such as the AX.25 level 2 protocol

specification or something large like that.

Could someone please tell me what FTP is and if (and how) I may
use it?

Thanks and 73's
-Tom Brown KA2UGQ

From 6131575831638291572
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9ebf9acf996fd83,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-17 15:26:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Elements
Message-ID: <688@petrus.UUCP>
Date: Sun, 17-Nov-85 18:26:16 EST
Article-I.D.: petrus.688
Posted: Sun Nov 17 18:26:16 1985
Date-Received: Wed, 20-Nov-85 08:21:13 EST
Organization: Bell Communications Research, Inc
Lines: 165

Catalog number: 12999
Epoch time: 85308.15296718
   Mon Nov 4 03:40:16.364 1985 UTC
Element set: 272
Inclination: 82.9581 deg
RA of node: 228.8651 deg
Eccentricity: 0.0009610
Arg of perigee: 138.9072 deg
Mean anomaly: 221.2789 deg
Mean motion: 12.05051577 rev/day
Decay rate: 4e-08 rev/day^2
Epoch rev: 17076
Semi major axis: 8033.848 km
Anom period: 119.496960 min
Apogee: 1672.523 km
Perigee: 1657.082 km
Ref perigee: 2864.18494393
   Mon Nov 4 04:26:19.155 1985 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time: 85291.31305862
   Fri Oct 18 07:30:48.264 1985 UTC
Element set: 220
Inclination: 82.9553 deg

```
RA of node:       232.5765 deg
Eccentricity:    0.0022821
Arg of perigee:    98.4623 deg
Mean anomaly:     261.9025 deg
Mean motion:   12.08694744 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           16924
Semi major axis:  8017.686 km
Anom period:    119.136780 min
Apogee:           1678.446 km
Perigee:          1641.851 km
Ref perigee:      2847.33560303
   Fri Oct 18 08:03:16.101 1985 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      85295.33070639
   Tue Oct 22 07:56:13.32  1985 UTC
Element set:     344
Inclination:       82.9559 deg
RA of node:       238.8235 deg
Eccentricity:    0.0018579
Arg of perigee:   224.9233 deg
Mean anomaly:     135.0332 deg
Mean motion:   12.02956593 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           16892
Semi major axis:  8043.179 km
Anom period:    119.705067 min
Apogee:           1690.481 km
Perigee:          1660.594 km
Ref perigee:      2851.29952553
   Tue Oct 22 07:11:19.5   1985 UTC

Satellite: oscar-9
Catalog number: 12888
Epoch time:      85306.74143005
   Sat Nov  2 17:47:39.556 1985 UTC
Element set:     809
Inclination:       97.6430 deg
RA of node:       297.7288 deg
Eccentricity:    0.0003736
Arg of perigee:   126.0248 deg
Mean anomaly:     234.1315 deg
Mean motion:   15.27719021 rev/day
Decay rate:      1.468e-05 rev/day^2
Epoch rev:           22638
Semi major axis:  6857.735 km
Anom period:     94.258171 min
Apogee:            495.893 km
Perigee:           490.769 km
Ref perigee:      2862.76431611
   Sat Nov  2 18:20:36.912 1985 UTC
```

```
Beacon:           145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time:      85300.14032412
   Sun Oct 27 03:22:04.3   1985 UTC
Element set:     208
Inclination:       26.3222 deg
RA of node:        112.6587 deg
Eccentricity:    0.5972123
Arg of perigee:    56.5494 deg
Mean anomaly:     347.2277 deg
Mean motion:    2.05855313 rev/day
Decay rate:         3.3e-07 rev/day^2
Epoch rev:             1785
Semi major axis: 26105.524 km
Anom period:    699.520444 min
Apogee:           35320.846 km
Perigee:           4139.766 km
Ref perigee:      2856.15755885
   Sun Oct 27 03:46:53.84  1985 UTC
Translate freq:   581.0047 MHz
Invert:                  1
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      85307.60774287
   Sun Nov  3 14:35:08.983 1985 UTC
Element set:     96
Inclination:       98.1754 deg
RA of node:        12.3807 deg
Eccentricity:    0.0013983
Arg of perigee:   145.3792 deg
Mean anomaly:     214.8320 deg
Mean motion:   14.62001729 rev/day
Decay rate:        1.03e-06 rev/day^2
Epoch rev:            8940
Semi major axis:  7061.932 km
Anom period:     98.495096 min
Apogee:            700.425 km
Perigee:           680.676 km
Ref perigee:      2863.63532454
   Sun Nov  3 15:14:52.39  1985 UTC
Beacon:           145.8260 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      85306.13057229
   Sat Nov  2 03:08:01.445 1985 UTC
Element set:     125
Inclination:       98.6532 deg
RA of node:       335.4894 deg
```

```
Eccentricity:    0.0017597
Arg of perigee:    40.0275 deg
Mean anomaly:     320.2196 deg
Mean motion:   14.22476506 rev/day
Decay rate:        4.6e-07 rev/day^2
Epoch rev:           13497
Semi major axis:  7192.279 km
Anom period:    101.231900 min
Apogee:            835.436 km
Perigee:           810.123 km
Ref perigee:      2862.13834051
   Sat Nov  2 03:19:12.620 1985 UTC
Beacon:           137.5000 MHz

Satellite: noaa-9
Catalog number: 15427
Epoch time:      85304.76155037
   Thu Oct 31 18:16:37.951 1985 UTC
Element set:     44
Inclination:       98.9641 deg
RA of node:       258.2335 deg
Eccentricity:    0.0016504
Arg of perigee:    75.9676 deg
Mean anomaly:     284.3328 deg
Mean motion:   14.11387372 rev/day
Decay rate:        9.8e-07 rev/day^2
Epoch rev:            4560
Semi major axis:  7229.947 km
Anom period:    102.027270 min
Apogee:            883.374 km
Perigee:           859.509 km
Ref perigee:      2860.77644257
   Thu Oct 31 18:38:04.638 1985 UTC
Beacon:           137.5000 MHz


From -2154222194140328975
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a6b16252333b0489,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-17 18:44:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site vax135.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!vax135!hpk
From: hpk@vax135.UUCP (Howard Katseff)
Newsgroups: net.ham-radio
Subject: Need help tracking down broadband RF noise
Message-ID: <1232@vax135.UUCP>
Date: Sun, 17-Nov-85 21:44:34 EST
Article-I.D.: vax135.1232
Posted: Sun Nov 17 21:44:34 1985
Date-Received: Mon, 18-Nov-85 07:45:32 EST
Organization: AT&T Bell Labs, Holmdel, NJ
```

Lines: 19

I have recently been plagued with RF noise, which sounds like a 60 Hz buzz
with clicks superimposed. It is worst from 5 to 8 MHz, and is bothersome
from about 2 to 14 MHz. It is intermittent, but seems to be around
80% of the time.

I walked around my neighborhood with a receiver today and discovered
that it extends at least 4 or 5 houses in each direction on the street.
The noise level varied as I walked down the street. If placed my radio
against a street light pole (we have underground power here), the noise
was much stronger.

I would like to make this noise go away. Can I expect any help from
the power company or the FCC in tracking it down? Any ideas would
be appreciated.

Howard Katseff
AT&T Bell Labs, Holmdel
uucp: ...!ihnp4!vax135!hpk
ARPA: vax135!hpk@berkeley

From 8084631520571426055
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3d0b9d501c853ea
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-18 07:52:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!CRC.DlosLV@Xerox.ARPA
From: CRC.DlosLV@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Satellite Help
Message-ID: <3335@brl-tgr.ARPA>
Date: Mon, 18-Nov-85 10:52:55 EST
Article-I.D.: brl-tgr.3335
Posted: Mon Nov 18 10:52:55 1985
Date-Received: Thu, 21-Nov-85 20:33:38 EST
Sender: news@brl-tgr.ARPA
Lines: 12

Antonio,

    The nets meet on Tuesday nights. Our local net meets on wed
with the information from the previous nights nets. One of the principals
of that net on tues publishes a newsletter for Satellite info. Also, the
AMSAT org. is a good source of info. There is a document of some sort
that comes from NASA I think that publishes all sorts of satellite info.
I dont remember what the specifics are but I can ask at the next net nite.

    73

Chuck... W5USJ

From 448405125953839020
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9cbd3ba7a1e98457,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-18 12:40:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
ATF3W%ASUACAD.BITNET@WISCVM.ARPA
From: ATF3W%ASUACAD.BITNET@WISCVM.ARPA
Newsgroups: net.ham-radio
Subject: HAMS mailing list
Message-ID: <3354@brl-tgr.ARPA>
Date: Mon, 18-Nov-85 15:40:59 EST
Article-I.D.: brl-tgr.3354
Posted: Mon Nov 18 15:40:59 1985
Date-Received: Thu, 21-Nov-85 20:37:04 EST
Sender: news@brl-tgr.ARPA
Lines: 5

Hi,

Will you please add me to the HAMS mailing list. Thank you!

ATF3W%ASUACAD.BITNET@WISCVM.ARPA (Kurt Ernulf, SM6CVN)

From 8700054756645106243
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,262805b6d9df5cee
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-18 22:16:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site ucbjade.BERKELEY.EDU
Path: utzoo!linus!philabs!cmcl2!seismo!lll-crg!lll-lcc!vecpyr!amd!amdcad!decwrl!
ucbvax!ucbjade!newton2
From: newton2@ucbtopaz.BERKELEY.EDU
Newsgroups: net.ham-radio
Subject: Re: Re: Eavesdropping revisited [How's that again?]
Message-ID: <161@ucbjade.BERKELEY.EDU>
Date: Tue, 19-Nov-85 01:16:31 EST
Article-I.D.: ucbjade.161
Posted: Tue Nov 19 01:16:31 1985
Date-Received: Sat, 23-Nov-85 10:05:48 EST
References: <154@pyuxv.UUCP> <138@hydra.UUCP> <579@kitty.UUCP>
Sender: network@ucbjade.BERKELEY.EDU
Reply-To: newton2@ucbtopaz.UUCP ()
Distribution: net
Organization: University of California, Berkeley
Lines: 11

Keywords: Passing encryption keys

It astonishes me how often the brash assertiveness of a posting
scales inversely with the knowledge and authority of the poster.
Comes now Larry Lippman, who says cellular speech encryption
could never work because a huge database of key pairs would have
to include every possible user/transaction. And don't try passing
keys before each transaction-- he's thought of that!

Has he heard of Diffie and Hellman? Shamir, Rivest and Adleman?
Oh.... Never mind....

Doug Maisel

From -7153033703787533537
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f922049c87586bd0
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-18 23:03:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Re: Scanner antennas
Message-ID: <691@petrus.UUCP>
Date: Tue, 19-Nov-85 02:03:07 EST
Article-I.D.: petrus.691
Posted: Tue Nov 19 02:03:07 1985
Date-Received: Wed, 20-Nov-85 08:21:34 EST
References: <124@tapa.UUCP> <576@kitty.UUCP>
Organization: Bell Communications Research, Inc
Lines: 9

> > I am considering the purchase of a Yaesu FRG-9600 and would like to hear
> > others thoughts on broadband antennas for the 60-900mhz. coverage of the
> > Yeasu receiver.

All the reaction I've heard to the FRG-9600 has been strongly negative.
I was considering buying myself one until I saw the Icom R-7000. I think
it's worth waiting for (and paying more for).

Phil

From 843790459768710834
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58341e6c9312898f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-19 13:12:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!IAIPS-ACIPS@USC-ISI.ARPA
From: IAIPS-ACIPS@USC-ISI.ARPA
Newsgroups: net.ham-radio
Subject: BROADBAND RF NOISE
Message-ID: <3408@brl-tgr.ARPA>
Date: Tue, 19-Nov-85 16:12:39 EST
Article-I.D.: brl-tgr.3408
Posted: Tue Nov 19 16:12:39 1985
Date-Received: Thu, 21-Nov-85 21:40:20 EST
Sender: news@brl-tgr.ARPA
Lines: 21

Howard --

Sounds like a leaky underground power transformer; and
the lamppost is probably acting as an "RF probe" - extending
down to/connected closer to the source. That's why it's louder
when you get near it.

Call the electric company. They like to know when their xfmrs
are leaking. It means lost $$$ down the drain (or up in the
air - as the case may be). I know, in my neighborhood when one
of the pole transformers are leaking, it wipes out the AM band
on up.

It might be something else, but a transformer sounds likely.

73,

George
W1TQS/4

From -5809683203378483607
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aa89a2fec52fea96,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-19 18:01:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 30 (EVERYONE SHOULD READ)
Message-ID: <21784@mgweed.UUCP>
Date: Tue, 19-Nov-85 21:01:06 EST
Article-I.D.: mgweed.21784
Posted: Tue Nov 19 21:01:06 1985
Date-Received: Wed, 20-Nov-85 21:15:19 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 36

qst de k9eui
hr crrl bulletin nr 30 from crrl headquarters
london ont november 19, 1985
to all radio amateurs bt

doc has given crrl permission to release the following details of their proposal to restructure the canadian amateur service. there would be three amateur radio certificates. a. b and c.

certificate a would be entry level. candidates would be required to pass an examination on 1, the installation and operation of a modern amateur radio station, with heavy emphasis on preventing rf interference. 2, basic electronic theory, 3, antennas and propagation, and, 4, domestic and international regulations. there would be no morse code test. the following privileges and restrictions would apply, 1, the transmitter portion of the station would have to be commercially built. 2, no emissions below 30 mhz but all modes permitted above 30 mhz, 3, maximum power of 250 watts dc input. and. 4, could not become licensees of repeater or remote base stations.

certificate b would require a 12 wpm morse code sending and receiving test and holders would have certificate a privileges plus the use of all modes below 30 mhz.

certificate c would require a test on advanced electronic theory at a level of difficulty between the present amateur and advanced amateur examinations. holders would be permitted to operate homebuilt transmitting equipment, use 1000 watts dc input. and become licensees or repeaters of remote base stations.

further information will appear in december qst ar

From -236669296748696280
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f19e196669e6438c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-19 18:01:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 46
Message-ID: <21785@mgweed.UUCP>
Date: Tue, 19-Nov-85 21:01:30 EST
Article-I.D.: mgweed.21785
Posted: Tue Nov 19 21:01:30 1985

Date-Received: Wed, 20-Nov-85 21:15:44 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 31

qst de k9eui
hr propagation forecast bulletin 46 from arrl headquarters
newington ct november 18, 1985
to all radio amateurs bt

beginning in the middle of october and lasting through november 16, the solar flux was higher than at the same point in the previous solar rotation. after a november high of 86 on the 15th. the flux dropped to 79 by the 17th and 18th. visible activity on the sun was mostly in the western portion by this time so anything like the october high of 95 now seems unlikely this month. as this bulletin is being written, 21 mhz is full of life but 28 is almost quiet, a condition we will see often in the next two years or so.

except for low muf. propagation was fair to good after the first few days of november. geomagnetic disturbances were mostly mild. and they should have even lower intensity for the next nine days or so.

november 22 to 24 and 26 to 28 should be the best days, but fairly severe disturbances will close out the month. their effects will be most obvious on high latitude circuits.

during october and november, conditions were fairly typical of what would have been expected, with nearly two years left for a cycle of average length. deep lows like those earlier this year appear at seemingly random times in the late years of most cycles for which accurate records are available ar

From -3233318711562601301
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,81bb1decc08b2b4d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-20 07:51:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!brosen@BBN-SPCA.ARPA
From: brosen@BBN-SPCA.ARPA (Bruce L. Rosen)
Newsgroups: net.ham-radio
Subject: Computer Noise
Message-ID: <3438@brl-tgr.ARPA>
Date: Wed, 20-Nov-85 10:51:55 EST
Article-I.D.: brl-tgr.3438
Posted: Wed Nov 20 10:51:55 1985
Date-Received: Sat, 23-Nov-85 08:02:18 EST
Sender: news@brl-tgr.ARPA

Lines: 16

I received my AIR-ROM for the Commodore 64 yesterday, and was up very late copying a variety of previously un-copiable RTTY stations. The AIR package seems to work pretty well. My only quibbles so far are that its Autostart is too stingy in my estimation, and that it doesn't seem to remember what Baudot speed had been set prior to going into ASCII mode. When you come back into Baudot mode, you need to reset the speed if you want something other than 60WPM.

However, I have now experienced having a computer in the ham shack for the first time. The C64 seems to produce incredible amounts of noise, which the receiver (an HQ-180) picks up over the entire spectrum (or at least the part that I listened to last night). I am looking for advice on how to quiet it down. Your personal experiences or references to QST articles would be much appreciated.

Thanks!! Bruce (K1FFX)

From -3676692584133873349
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aa89a2fec52fea96
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-20 09:53:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site sask.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: Re: crrl bulletin nr 30 (EVERYONE SHOULD READ)
Message-ID: <302@sask.UUCP>
Date: Wed, 20-Nov-85 12:53:44 EST
Article-I.D.: sask.302
Posted: Wed Nov 20 12:53:44 1985
Date-Received: Thu, 21-Nov-85 05:29:39 EST
References: <21784@mgweed.UUCP>
Organization: University of Saskatchewan, CANADA
Lines: 18

> hr crrl bulletin nr 30 from crrl headquarters
>
> doc has given crrl permission to release the following details
> of their proposal to restructure the canadian amateur service.
> there would be three amateur radio certificates. a. b and c.
>
> certificate a would be entry level.
> the following privileges and restrictions would apply, 1, the
> transmitter portion of the station would have to be
> commercially built.

If this proposal goes through we will have a licensing structure that FORCES hams to be appliance operators. Furthermore, it would basically

kill the 'art' of QRP as one of the joys of QRP work is to build your rig.
This proposal will have to be killed!

Pete VE5BEL
MAIL: ihnp4!sask!hardie

From -531675277433781379
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7404b6706533ee4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-20 10:08:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Need help tracking down broadband RF noise
Message-ID: <3443@brl-tgr.ARPA>
Date: Wed, 20-Nov-85 13:08:36 EST
Article-I.D.: brl-tgr.3443
Posted: Wed Nov 20 13:08:36 1985
Date-Received: Sat, 23-Nov-85 08:02:43 EST
Sender: news@brl-tgr.ARPA
Lines: 8

The problem might be an old oil bunner. The older ones kept their
ignition on all the time and they radiate like crazy. Did the noise
only come on with the cold weather? using RF filters at the burner
would cure the trouble. I am sure the people with the bum burner have
the same rouble with their TVs and AM radios so would be interested in
cleaning it up if that is the problem.

Joe N2XS

From 3707329560312230797
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4939af33f061cf15,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-20 18:02:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Help identify these SW stations
Message-ID: <700@ihu1h.UUCP>
Date: Wed, 20-Nov-85 21:02:14 EST
Article-I.D.: ihu1h.700
Posted: Wed Nov 20 21:02:14 1985
Date-Received: Fri, 22-Nov-85 23:51:57 EST
Distribution: net

Organization: AT&T Bell Laboratories
Lines: 76

x
Have you monitored any of the following HF stations?
Can you identify their licensees and/or locations?

4.1850 DUPC_____unidentified: "LGW de DUPC pse up 205.8", cw - 12/27/84 @2343Z, LGW is located in Ganddad, Norway
[location?] (B. Parnass)

4.5132 XAC_____unidentified: calling JXG, sloppy cw, with poor note, 0613Z
[location?] (B. Parnass)

5.1680 call?_____unidentified: several minutes of slow, encrypted cw in 5 figure groups, sounds similar to FEMA broadcasts but without station id, 10/30/85 @0230Z
[location?] (B. Parnass)

6.2830 UQOX_____unidentified: "CLJ de UQOX", cw @0510Z
[location?] (B. Parnass)

6.5932 call?_____unidentified: bootleggers? 2 male Americans, usb, 5/9/85 @0119Z
[location?] (B. Parnass)

call?_____unidentified: network of jovial, English speaking males, with Spanish, New York, and Slavic accents, exchanging 3 and 4 digit numbers. Mentioned boats, Acapulco, and phrases: "that's more than I can smoke", "you get to keep the dope". One said he had to go to "watch the Bears (Chicago)". No callsigns used. Identified by first names like Frankie, Batiste, Russ, Alvin, Louis, Tony. usb 11/21/85 @0105Z
[location?] (B. Parnass)

6.6500 call?_____unidentified: bootleggers? 2 male Americans, one with east coast accent, usb, 5/9/85 @0120Z
[location?] (B. Parnass)

6.6970 call?_____unidentified: network in which 4EG called 7RY, usb, @0738Z, sounded like US military
[location?] (B. Parnass)

12.2710 B0P_____unidentified: USN uses this type of tactical callsign, hours of encrypted msgs consisting of 5 character groups, sounds like manually sent cw, words like 'whiskey' in preamble, dash/dot ratio less than 3:1 with operator making several errors 6/2/85 @2135Z
[location?] (B. Parnass)

```
  13.6600    call?_____unidentified: piccolo mode, encoding into musical tones
                       [location?] (B. Parnass)

  14.3685    call?_____unidentified: piccolo mode, encoding into musical tones,
                        10/16/85 @2138Z
                       [location?] (B. Parnass)

  14.8490    call?_____unidentified: piccolo mode, encoding into musical tones
                       [location?] (B. Parnass)

  16.7272    J4EP______unidentified: "WCC de J4EP up 786", cw
                       [location?] (B. Parnass)

  17.1955    LPD46_____unidentified: marker, "QSX 8 12 16", cw, 6/7/85 @1719Z
                       [location?] (B. Parnass)

  17.4098    CLN573____unidentified: calling UJY2 in cw - 10/16/84 @1708Z
                       [location?] (B. Parnass)

  19.7480    call?_____US: unidentified: 7D set up phone patch to 2W, 20th Engi
                       neers, talk of Autovon, usb
                       [location?] (B. Parnass)

--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -8038607954467660991
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dc13c115b9ca829f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-21 13:09:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site hplvle.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!lll-crg!seismo!
harvard!talcott!panda!genrad!decvax!ittatc!dcdwest!sdcsvax!sdcrdcf!hplabs!hpisla!
hplvla!chris
From: chris@hplvla.UUCP (chris)
Newsgroups: net.ham-radio
Subject: Kenwood TW-4000A Problems.
Message-ID: <2800012@hplvle.UUCP>
Date: Thu, 21-Nov-85 16:09:00 EST
Article-I.D.: hplvle.2800012
Posted: Thu Nov 21 16:09:00 1985
Date-Received: Thu, 28-Nov-85 23:40:47 EST
Organization: HP Loveland Instrument Division
Lines: 24


I have recently had the opportunity to fix one of two problems
in my Kenwood TW-4000A, and thought the fix might be of interest.
```

Problem 1: On cold mornings, no transmit modulation evident.
Freeze-mist on the workbench could not duplicate the problem.
Solution: replace the gain and deviation pots with higher quality
units. The pots are very cheap in design, contacts (soldertails)
were crimped on, evidently loose, and would lose contact in cold
conditions. Freeze mist caused condensation which masked the problem.

Problem 2: Very infrequently, the microprocessor appears to go to
never-never land. Display is fluctuating meaningless characters, or
blank. No controls work, including PTT, beeper may sound. Resetting
the micro by power off/on seldom works. Resetting by shorting out the
reset contacts under the lower cover sometimes works. Removing
power for several hours always works (unplugging, not just turning off
the switch).

If anybody has info about problem 2, please reply.

Thanks and 73,
Chris Kelly, WD5IBS
hpfcla!hplvla!chris

From 5594307036634490689
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf6a39ae978771b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-21 13:43:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!wmartin@ALMSA-2.ALMSA
From: wmartin@ALMSA-2.ALMSA (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: Re: Scanner antennas
Message-ID: <3484@brl-tgr.ARPA>
Date: Thu, 21-Nov-85 16:43:09 EST
Article-I.D.: brl-tgr.3484
Posted: Thu Nov 21 16:43:09 1985
Date-Received: Sat, 23-Nov-85 10:48:00 EST
Sender: news@brl-tgr.ARPA
Lines: 26

Not to beat a dead horse, but remember that the Icom R-7000 has the same
bad design as the R-71, and other current Icom products, with a "dynamic"
chip requiring continuous power to maintain the radio's basic operating
system parameters and allow it to work at all. This means mandatory
maintenance (replacing the backup battery, either by expensive service
long after the warranty has expired, or by VERY CAREFUL self-maintenance)
every 7 or so years (fewer to be safe). I would treat that as enough
to disqualify the Icom from consideration either. It just doesn't strike
me that ANY of these new wide-band scanning/monitoring radios (Yaesu
FRG-9600, Icom R-7000, Regency M5000 or M7000, JIL SX-400, and whatever)
are worth buying now, especially for anything near their list prices.
In addition to the sort of design faults mentioned before, reviews

indicate that performance quality certainly doesn't seem to be good
enough to justify the prices. I would give the technology a few more
years of development before putting my money on it...

(If everybody realized this, and nobody bought these boxes, those remaining
would be dumped and might be worth buying at under-$100 prices, realizing
that you have to figure long-term high-maintenance costs in addition to the
initial purchase price. Of course, the manufacturers would have to be
told that these were not selling because they just were not good enough,
not that there was no market for such devices. Then they'd have an
incentive to continue R&D and come up with something better to supply
the market. Otherwise they would just abandon the field.)

Will

From 5034757936070274441
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ee3b498db8887352,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-22 12:05:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site lll-crg.ARpA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!qantel!ptsfa!l5!
lll-crg!medin
From: medin@lll-crg.ARpA (Milo Medin)
Newsgroups: net.ham-radio
Subject: TS-430s and apartment antennas
Message-ID: <1046@lll-crg.ARpA>
Date: Fri, 22-Nov-85 15:05:14 EST
Article-I.D.: lll-crg.1046
Posted: Fri Nov 22 15:05:14 1985
Date-Received: Sun, 24-Nov-85 06:25:24 EST
Organization: Lawrence Livermore Labs, CRG, Livermore Ca
Lines: 22
Keywords: antenna TS-430

Hi. I'm considering purchase of a TS-430s HF transciever and
was wondering what all the people on the net think about it.
Its very capable, reasonably priced and has a general coverage
reciever in it which appeals to me. Any suggestions on where to buy
it from?

Also, it'd be be plugged into an antenna on the roof of my
apartment building, and I'm relatively unsure what my manager will
let me put up there. My first thought would be to go
with an all band vertical like the HF6V, but there might be enough space
to put up a wire antenna as long as it didnt have to be too obstructive.
That way I wouldn't need a radial ground system that I gather most verticals
need in order to work well. The HF6V has a roof mounting kit option
with stub tuned radials, but I'm unclear how well it would
work out. I'm in the ground floor of a 2 story complex and

the view from the roof is pretty clear in all directions, so I should be able to get out fairly well from there. Any suggestions?

Thanks,
Milo Medin
KB6ADT

From 8801675429732768949
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,793560a6cf053104,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-23 09:20:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Prankster disrupts radio broadcasts
Message-ID: <701@ihu1h.UUCP>
Date: Sat, 23-Nov-85 12:20:32 EST
Article-I.D.: ihu1h.701
Posted: Sat Nov 23 12:20:32 1985
Date-Received: Sun, 24-Nov-85 07:27:43 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 20

x
PRANKSTER DISRUPTS RADIO BROADCASTS

Bob Parnass, AJ9S

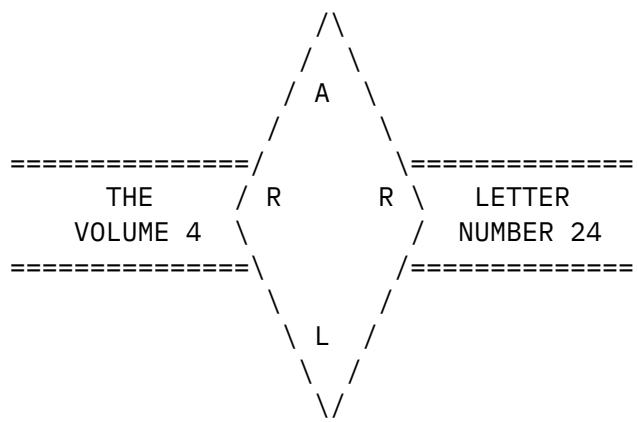
CHICAGO - A pirate broadcaster has been treating Chi-
cago area radio listeners to some unscheduled program-
ming by transmitting on the microwave studio-to-
transmitter links of area AM radio stations.

The last incident, on November 21, involved the 'tap-
ping' of WMAQ-AM facilities. Listeners were assailed
with a barrage of cursing, and were treated to an old
Bob Dylan tune, 'Don't Think Twice'.

WMAQ-AM is the third Chicago station to report an
intrusion.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -5383898199084575377
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,7252ec8c137645d4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-23 17:57:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL LETTER vol. 4, no 24
Message-ID: <267@inuxi.UUCP>
Date: Sat, 23-Nov-85 20:57:21 EST
Article-I.D.: inuxi.267
Posted: Sat Nov 23 20:57:21 1985
Date-Received: Sun, 24-Nov-85 07:44:38 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 345



November 21, 1985

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In this issue:

o ELECTION RESULTS

o W0ORE VIDEO AVAILABLE

o ELECTRONIC EQUIPMENT SEIZED BY FCC

o ...and much more!

DIRECTOR/VICE DIRECTOR ELECTION RESULTS

The ARRL Committee of Tellers met November 20 in Newington to count ballots in the elections just concluded for Director and Vice Director. The number of votes credited to each candidate is as follows; the first listed candidate for each office is declared elected for the next term of office:

Atlantic Division, for Vice Director: James M. Mozley, W2BCH, 2857; Vince H. Bardsley, KB3OM, 2254.

Delta Division, for Vice Director: Lionel A. Oubre, K5DPG, 1246; Robert P. Schmidt, W5GHP, 656.

Great Lakes Division, for Vice Director: Allan L. Severson, AB8P, 3017; Carolyn S. Elliott, KA4JMZ, 1305.

Midwest Division, for Director: Paul Grauer, W0FIR, 1808; Robert S. McCaffrey, K0CY, 1075.

Midwest Division, for Vice Director: Richard W. Ridenour, KB0ZL, 1739; Dick L. Eilers, W0YZV, 1114.

Pacific Division, for Vice Director: Kip Edwards, W6SZN, 1301; Cynthia Delauney, W6PHT, 1061; Glenn E. Koropp, W6YFW, 612; Jettie B. Hill, W6RFF, 487.

Southeastern Division, for Director: Frank M. Butler, Jr., W4RH, 3777; Carl D. Henson, WB4ZNH, 1345.

The new Directors and Vice Directors take office starting January 1, 1986. On that date, the following candidates, previously declared elected (see the August 28 Letter), also take office for two-year terms:

Atlantic Division Director Hugh Turnbull, W3ABC; Dakota Division Director Tod Olson, K0TO, and Vice Director Howard Mark, W0OZC; Delta Division Director Clyde Hurlbert, W5CH; Great Lakes Division Director George S. Wilson, W4OYI; Pacific Division Director Rodney J. Stafford, KB6ZV; Southeastern Division Vice Director Evelyn Gauzens, W4WYR.

In separate elections held in Canada, Thomas J. Atkins, VE3CDM, was elected without opposition as President, CRRL, and Harry MacLean, VE3GRO, was reelected without opposition as Vice President, CRRL. They will serve, therefore, as Director and Vice Director, respectively, of the Canadian Division, ARRL.

RADIOLOCATION ON 160 METERS BY MID-DECEMBER?

On November 8, FCC issued an Erratum correcting a few

glitches in its Report and Order in PR Docket 84-874 -- the action making Amateur Radio secondary to radiolocation at 1900-2000 kHz as of December 9, 1985. The corrected Report and Order states that radiolocation stations displaced from 1605-1705 kHz would not be able to apply for 1900-2000 kHz operation until July 1, 1987, giving us "virtually exclusive" (FCC phrasing) use of 1900-2000 kHz until then. Well, our dictionaries vary a bit in their definitions of "virtual," but "giving the appearance of but not actually being in fact" is pretty close. And that's the way it is with our virtual exclusivity at 1900-2000 kHz: we may have company there very soon but it may be hard to tell when we do!

"Fine print" in the text accompanying the actual Part 97 amendment had said: "Also, wideband systems can be authorized immediately in the 1900-2000 kHz band since relocating displaced systems from the 1605-1705 kHz band will not begin until July 1, 1987." Wow! Would we really be sharing 1900-2000 kHz as early as December 9, the date the 84-874 Report and Order goes into effect? Hq. staff had a hard time believing their eyes, and asked for clarification.

Yes. The Erratum states that " . . . as stated in paragraph 25 [of the Report and Order], wideband systems can be authorized immediately in the 1900-2000 kHz band and need not wait until the dates indicated for existing and new radiolocation systems . . . applications for wideband systems in this
band will be accepted beginning December 15,
1985. The thought-provoking part of this is whether we may be able to detect aurally the presence of wide-band radiolocation if it arrives at 1900-2000 kHz. "Wideband" here means "spread-spectrum," and it remains to be seen if such a signal would rise much above the high atmospheric and man-made noise levels at most QTHs.

LEAGUE REQUESTS PARTIAL RECONSIDERATION IN 30-DAY RETEST ISSUE; REQUEST FOR STAY DENIED

Effective November 8, applicants failing exams for Amateur Radio licenses were no longer required by FCC to sit out a 30-day wait before retesting -- in fact, FCC made it clear that a waiting period of any length was not required at all. (See the September 30 Letter.) ARRL quickly filed a Request for Partial Reconsideration on the grounds detailed below, following this with a Request for Stay of the November 8 date of effect, pending Commission study of the request for reconsideration. The Request for Stay was denied; as this is written, we're 12 days into the "no waiting period" period. The serious questions raised by ARRL as to what may happen to the integrity of Amateur Radio licensing without a retest waiting period remain.

In its Request for Partial Reconsideration, ARRL notes that FCC's decision to delete the 30-day wait was based on three premises: that the waiting period was a carryover of what had been merely an FCC administrative expedient; that there is no persuasive evidence that any given waiting period will result in better preparation by an applicant; and that adequate protection

against a candidate possibly being retested with exactly the same set of questions -- "the only remaining concern" in the Commission's view -- is satisfied in that the Commission's instructions to VECs require that the same set of questions not be used in successive exam sessions. The League points out that these premises fail in several respects to justify the deletion of any waiting period, and fail expecially to take into account the integrity of the Novice examination program, which is not part of the Volunteer Examination program.

Here's the flaw: with the 30-day wait formerly on the books, anyone sitting for an exam, Novice Class or higher, had to wait 30 days before retesting if an exam was failed.
With the 30-day wait blown away, and with the integrity of the exam process guaranteed only by the prohibition against successive identical exams in the Commission's Instructions to VECs, Novice applicants appear to be able to be able to take and retake the same exam because Novice exams are not given by VECs! A loophole, indeed! Said ARRL, "Such an absence of regulations insuring the integrity of the Novice examination program will potentially affect the Technician license class as well. Ap plicants for the latter are credited with having passed elements 1(A) and 2, so that the beginner's code test and basic law examination need not be retaken."

Since the 30-wait prevented rote memorization as a side benefit, FCC's statement that the waiting period had been initially intended to conserve Commission resources is "not particularly relevant," wrote ARRL. "A waiting period approaching a month actually was not a burden on nor a reduction in flexibility of the VEC program. Quite the reverse: it was a benefit because it permitted a VEC to offer examinations on a more-frequent-than-monthly basis without the added burden of changing the examinations for each session. The waiting period limited the individual's ability to take the same test but facilitated the examiner's ability to offer a smaller number of tests more often to more, different people."

The League believes that the elimination of the waiting period will actually reduce the number of available examination sessions in a particular locality to at least that increment of time necessary to prepare new examinations. The public should not be deprived of an opportunity to take an examination once a week because someone had failed that examination a day or week before and the VEC was unable to supply all new examinations in time for a subsequent session. Practically speaking, the League believes that there are insufficient checks and balances in the VE system to permit reliance on the instructions to VECs not to use the same question set in successive examination sessions. It's noteworthy that the Commission retains a section in Part 13 of its Rules requiring that applicants for commercial radio operator examinations wait two months before retesting a failed exam element. Isn't what's good for the goose good for the gander?

"THE POINT YOU MAKE IS A GOOD ONE" -- FCC

Though the League's Request for Stay in Docket 85-21 was denied (see previous item),
FCC has agreed that the integrity of the Novice exam process may be adversely affected by the deletion of the requirement for a waiting period before retests. In a November 13 letter to the League's Counsel, Robert S. Foosaner, Chief of FCC's Private Radio Bureau, wrote:

"We appreciate your bringing the matter of the integrity of the Novice examination program to our attention. The point you make, that instructions to the VEC's concerning examination retakes do not apply to examiners in the Novice program, is a good one. We are correcting this omission by revising PR Bulletin 1035 A (Element 2 Examination Questions) to address this matter. Future editions of that bulletin will instruct a volunteer examiner giving Novice examinations not to use the same questions or the same telegraphy test when retesting an appplicant.

"The rule amendments in PR Docket No. 85-21 became effective on November 8, 1985. The matters that you raise concerning the subject Report and Order will be considered when the Commission acts on your Petition for Partial Reconsideration."

W0ORE/CHALLENGER VIDEO AVAILABLE FROM HQ

What was accomplished when Tony England, W0ORE, operated SAREX, the Shuttle Amateur Radio Experiment, aboard Challenger this past summer? The first ever television exchange with manned a orbiting spacecraft, that's what! You can watch as well as listen to the action with the new SAREX video, produced by Bill Pasternak, WA6ITF, with Roy Neal, K6DUE -- and it's available from Publication Sales at ARRL Hq. Postpaid prices are $25.00 for VHS format, $35.00 for U-Matic.

SCRRBA ASKS FCC FOR F8E EMISSION ABOVE 928 MHz

As we gained access to the 902-928 MHz band September 28 (see the Letter for August 15, and September QST), we were also granted use of an emission not allowed the Amateur Radio Service previously: F8E. That's "F" for frequency modulation, "8" for two or more channels containing analog information, and "E" for telephony. F8E is the emission used by stereophonic FM broadcasting stations, but its uses don't stop there. The Southern California Repeater and Remote Base Association thought that 902 MHz was a good place for Amateur Radio to make use of F8E, and suggested this as FCC was considering what privileges should be allowed amateurs on the new band. The request paid off; we were granted F8E on 902.

In late October, SCRRBA petitioned FCC to allow F8E on all amateur frequencies above 928 MHz for the same reason advanced by FCC in granting its use at 902-928 MHz: its availability would " . . . permit amateur operators to experiment with a new transmission mode and to efficiently utilize the spectrum when

several different channels of information must be transmitted simultaneously from one location to another."

Why not F8E on lower frequencies? SCRRBA considers them too heavily utilized for such a bandwidth-consumptive emission, excepting perhaps the 420-450 MHz band. Concerning 420, the Association said it would " . . . prefer to wait until a little operating experience with the mode is achieved before considering including the 70 centimeter band within the authorization."

FULL-CARRIER DOUBLE-SIDEBAND AM PHONE LIMITED TO 1500W PEP OUTPUT AFTER MAY 1990

On July 22, 1983, the FCC adopted a Report and Order in PR Docket 82-624 replacing the former input-power-measurement standard in the Amateur Radio Service with a power-measurement standard based on peak-envelope-power output, with 1500 watts being the maximum allowable power. The Commission recognized that this would have an impact on AM double-sideband full-carrier radiotelephone (A3E) operation, typically limiting such operations to half of their previous maximum allowable operating power. The FCC grandfathered the input power measurement rules for AM DSB operations until June 1, 1990, to minimize the immediate impact of this rule change. ARRL had gone on record as favoring permanent grandfathering of the A3E output limitation, but FCC's response was that " . . . we cannot justify a permanent and continous expense in terms of equipment and training that would be necessary for us to be prepared to make a special power measurement for this class of operations."

Glenn Baxter, K1MAN, fought this change for A3E all the way up to the U.S. Court of Appeals, and the judgment of that court was issued October 15. The U.S. Court of Appeals for the District of Columbia Circuit upheld FCC's decision, and its judgment was accompanied by an unpublished memorandum opinion.

In his appeal, Baxter had argued that the new standard, which permits A3E
operators to continue to operate under the old standard (1000 W DC input, the output power of which might approach 3000 watts peak), would decrease the range and quality of his operations, thus reducing the educational and economic value of his equipment. While the court acknowledged the importance of public service that Amateur Radio operators render, it could find nothing on the record to indicate that the Commission had violated its legal duties in this matter. It also concluded that the FCC possessed technical knowledge and expertise which exceeded that of the court. Baxter has indicated his intent to take his case to the Supreme Court.

[Editor's comment: Hq. receives a small but steady stream of "stamp out spectrum-gobbling AM" letters. We hope it's not out of place to point out that the emissions used by most amateurs between 1.8 and 30 MHz are amplitude-modulated emissions. Full-carrier double-sideband AM phone (A3E) is just one of several. By "doing away with AM," we'd be blowing away SSB (J3E) and CW (A1A) emissions as well. FCC estimated in its 82-624 Report and

Order that "only approximately one percent of the licensed amateur operators use this mode." As attrition runs its course, this figure can be expected to diminish further still. Aside from the question of spectrum usage, perhaps a hidden issue is whether or not every last radio amateur has completed his or her experimentation with full-carrier double-sideband amplitude-modulated radiotelephone, as the license each of us holds is as much a technological learner's permit as it is a pass to the amateur fraternity. So -- "do away with AM?" Never! What would we do without CW and SSB? And A3E? That's for you to decide.]

JOB OPENING AT HEADQUARTERS

The Field Services Department has an immediate opening for the key position of ARRL Convention Program Manager. This is a highly visible position in the field, with the Board of Directors and with the large number of ARRL convention and hamfest committees around the country. It's a "people" position for a "people" person. The ARRL Convention Program Manager oversees the entire Hq. convention support function, and supervises one ARRL Convention Assistant. The successful Convention Program Manager takes the initiative in
developing plans and programs to better serve crucial ARRL convention and hamfest personnel in the field, and streamlining Hq. functions to increase our internal efficiency in shipment preparation and prize/consignment packaging. Qualifications include high school plus one year additional education in office skills, including word-processing and data-base management. One to three years office experience required. An Amateur Radio license is desirable, but is not required. Starting salary: $15,496. Contact Richard Palm, K1CE, at ARRL Hq.

$40,000 OF ILLEGAL ELECTRONIC EQUIPMENT SEIZED BY FCC'S SAN FRANCISCO OFFICE

On October 8 and October 17, U.S. Marshals and FCC investigators seized an estimated $40,000 worth of electronic equipment, including illegal RF amplifiers and modified CB transceivers, from two Northern California CB sales outlets. Search warrants were executed against Doc Holiday Communications of Santa Clara and Red Money Communications of Fresno. Initially, these firms were issued warning letters for marketing illegal CB equipment. Subsequent to the warning, further investigation showed that both businesses were continuing to market or sell illegal equipment.

*eof

From 5779321968424879190
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1f45a77508793f6d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-23 18:02:18 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Re: beacon stn g23b location?
Message-ID: <268@inuxi.UUCP>
Date: Sat, 23-Nov-85 21:02:18 EST
Article-I.D.: inuxi.268
Posted: Sat Nov 23 21:02:18 1985
Date-Received: Sun, 24-Nov-85 07:44:58 EST
References: <379@tekchips.UUCP>
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 16

> Does anyone know the location of a beacon station I heard on
> 1.830 mhz last night. The station id'ed as g23b. The beacon
> was giving wx info and was in for about 3 hours. Thanks in
> in advance
>
> w7ej   Jim Sullivan
> @Tektronix!tekchips!jims

I read about the following beacons...not sure this is what you are after,
but fyi.....

beacon	location	frequency
DHJ	w. germany	1830.5
OSN	belgium	1831
ZA01	albania	1837

From 8704142392867104879
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,262805b6d9df5cee
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-24 06:17:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site kitty.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!lll-crg!seismo!rochester!rocksanne!
sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.ham-radio
Subject: Re: Re: Re: Eavesdropping revisited [How's that again?]
Message-ID: <599@kitty.UUCP>
Date: Sun, 24-Nov-85 09:17:49 EST
Article-I.D.: kitty.599
Posted: Sun Nov 24 09:17:49 1985
Date-Received: Thu, 28-Nov-85 07:51:08 EST
References: <154@pyuxv.UUCP> <138@hydra.UUCP> <579@kitty.UUCP>

Distribution: net
Organization: Recognition Research Corp., Clarence, NY
Lines: 72

> > Congress has a measure under consideration that would
> >strengthen such privacy law requirements extending protection to
> >cellular and cordless telephones. Markup is expected, for both the
> >House and Senate versions of the bill, by early next year. There is a
> >possibility of enactment by the end of 1986.
>   I have always wondered why the cellular radio standard didn't
> include digital transmission under (optional?) encryption. Digital
> transmission would make cellular signals difficult to intercept with
> ...

Digital speech encoding was not used in the cellular telephone concept for reasons of practicability including, but not limited to:

1. The cellular telephone design concept was considered to provide sufficient security to deter the casual listener using consumer-grade `scanners', antennas, etc.  No attempt was even considered to deter a `serious' listener who could spend many thousands of dollars for antenna towers, sophisticated receiving equipment, etc.

2. The cellular telephone concept was intended to be LOW cost and be capable of independent multi-vendor support. Therefore, hardware had to be as simple as possible without employing any one vendor's proprietary technology. While Motorola pretty much developed the cellular concept, they never did it from the standpoint of monopolizing the cellular market - such a monopoly never getting cellular telephones off the ground. While Motorola has also pioneered digital speech encryption using CVSD modulation in their DVP radio systems, this was mostly proprietary technology which Motorola was hardly going to share with the world.

3. Had a digital encryption circuit been used as part of the cellular concept, there is NO practicable way for such a circuit to be kept out of the public's hands. There are at present at least 10 active vendors who manufacture cellular telephone apparatus, and no doubt there will be more. Any `potential' vendor would have to be given encryption circuit details and be sold any integrated circuits designed for this purpose.

4. Had a digital encryption scheme been used so that each cellular telephone had individual encryption keys, EACH receiving and transmitting site would have had to have a full database containing a unique cellular telephone identifier number and an encryption key. This same database would have to exist for hundreds and even thousands of sites - and be UPDATED. THIS is probably the single most important reason why encryption is not practicable at this time using the present cellular concept. (It would rather defeat the purpose of encryption if, say, the encryption key were transmitted in the clear prior to start of voice transmission, in case anyone thinks this is would eliminate a database requirement.)

5. Radio transmission is full-duplex, so that a monitor receiver would be able to hear only one side of the transmission. (Yes, I know one could use TWO monitor receivers, but how many people have that?)

6. Mobile/portable transmit power is LOW, and the ~900 Mhz frequencies are extremely line-of-sight in their propagation, thereby limiting the receiving range of a casual eavesdropper to only a few miles under most circumstances.

7. There are no identifier transmissions made between cellular telephones and base stations which would enable the casual listener - even if he could decode them - to learn the actual identity of the calling telephone.

8. Cellular channel assignment for working communications is random.

=== Larry Lippman @ Recognition Research Corp., Clarence, New York   ===
=== UUCP   {decvax,dual,rocksanne,rocksvax,watmath}!sunybcs!kitty!larry ===
=== VOICE   716/741-9185   {rice,shell}!baylor!/   ===
=== FAX   716/741-9635 {AT&T 3510D}   ihnp4!/   ===
===   ===
===   "Have you hugged your cat today?"
                ===

From -1670717614303887257
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58291fdd8bb359cc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-24 08:45:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: a few loggings from K9EUI
Message-ID: <21902@mgweed.UUCP>
Date: Sun, 24-Nov-85 11:45:15 EST
Article-I.D.: mgweed.21902
Posted: Sun Nov 24 11:45:15 1985
Date-Received: Mon, 25-Nov-85 07:27:08 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 40

Here are some interesting SW stations I have recently logged:

16474 USB Cruise ship "Norway" phone patches

18835 USB Comm test from Paris

17333 USB French Coastal marine station. Uses a musical
interlude as an identification aid.

17408.5 USB WECB, NOAA vessel "Mellville" working WWD
in La Jolla, CA.

5697 USB U.S. Coast Guard planes. Also use 6518.8, 6506.4,
6200, 8984, and 4430 kHz.

20873 LSB KFK92 Kitts Peak Observatory, Tuscon, AZ. working
another observatory, talking about lenses.

6100 AM Time sigs from Caracas, Venezuela

0.570 CW One per second time ticks with "RR" sent
on the 12th second.

7675 USB USAF traffic during shuttle launch

10295 TOR Interpol station CSJ25, Lisbon working ONA20
in Brussels

10494 USB FEMA net. test transmission ended at 1930z.

6683 USB Air Force 1

12000 AM VNG time sigs from Australia

8985 CW A4I sending tape "QSX 01/43/47"

9118 LSB Air Force 2

From -6701924849143660314
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aa08bb80fbb639c7,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1363ce,aa08bb80fbb639c7,start
X-Google-Attributes: gid1363ce,public
X-Google-ArrivalTime: 1985-11-24 09:31:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.auto
Subject: Travellers' Information Svc radio stations (update)
Message-ID: <702@ihu1h.UUCP>
Date: Sun, 24-Nov-85 12:31:40 EST
Article-I.D.: ihu1h.702
Posted: Sun Nov 24 12:31:40 1985
Date-Received: Mon, 25-Nov-85 07:26:52 EST
Distribution: net
Organization: AT&T Bell Laboratories

Lines: 290
Xref: watmath net.ham-radio:3587 net.auto:8742

x

Travellers' Information Service
Radio Stations

Bob Parnass, AJ9S

Here is an updated version of the two lists posted last March. There are several new entries from the FCC 1985 Master File.

The federal government also maintains radio stations for this purpose, coordinating allocations through IRAC. Unfortunately, IRAC allocations are no longer divulged to the public.

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Atlanta: Dept of Aviation, TIS, Fed Intst 85 & off ramp to Sylvan Rd, Atlanta Intl Apt
[Atlanta, GA]_____ 0.5300____WRD955 (govt recds)
CA: TIS, Area-op: Los Angeles Orange Cts, temporary base
[California]_____ 0.5300____KNEC996 (govt recds)
CA: TIS, DOT Maintenance Station, Nevada City, CA
[Truckee, CA]_____ 0.5300____KNEU564 (govt recds)
CA: TIS, xmtr located at DOT Maint. Station
[Placerville, CA]____ 0.5300____KNIG427 (govt recds)
Cleveland: TIS, Cleveland Hopkins International Apt
[Cleveland, OH]_____ 1.6100____KNEB723 (B. Parnass)
Columbus (OH): TIS, 4600 E 17th Ave
[Columbus, OH]_____ 0.5300____KQP833 (govt recds)
Cook County (IL): TIS, near south gate of Brookfield Zoo
[Brookfield, IL]_____ 1.6100____KNCC957 (B. Parnass)
Coronado: TIS, xtmr located Coronado PD, 578 Orange Ave
[Coronado, CA]_____ 0.5300____WNAG556 (govt recds)
Custer State Park, TIS, 15 miles SW of...
[Hermosa, SD]_____ 1.6100____KNDG614 (govt recds)
Denver, City and County of: TIS, Stapleton Intl Apt
[Denver, CO]_____ 0.5300____KNID798 (govt recds)
Dillard (GA): TIS, Int US441 & Bettys Creek immediately S of Dillard City limi t
[Dillard, GA]_____ 0.5300____KNGG752 (govt recds)
Foothill Deansa Community College Dist, TIS, xmtr located at 12345 Elmonte Rd
[Los Altos, CA]_____ 1.6100____KNIP553 (govt recds)
GA: TIS, 2000 feet east I-20 / SR70 Interchange

[Atlanta, GA]_____ 0.5300____WYG263 (govt recds)
GA: TIS, Farmers Market on Old 41 Hwy
[Forest Park, GA]____ 0.5300____WRD948 (govt recds)
GA: TIS, I-20 I-285 Interchange
[Decatur, GA]_____ 0.5300____WRD947 (govt recds)
GA: TIS, I-95 .4 miles S of US 84 at State Wel...
[Brunswick, GA]_____ 0.5300____WRD945 (govt recds)
GA: TIS, I-95 GA 99 Interchange
[Brunswick, GA]_____ 0.5300____WRD946 (govt recds)
GA: TIS, I75 I285 Interchange
[Smyrna, GA]_____ 0.5300____WRD944 (govt recds)
GA: TIS, in rest area of Welcome Ctr on Hwy I95 near Kingsland
[Kingsland, GA]_____ 0.5300____KNGU520 (govt recds)
GA: TIS, on Hwy 16 eastbound at last overpass before I95
[Garden City, GA]____ 0.5300____KNGU519 (govt recds)
GA: TIS, Stone Mountain Park
[Stone Mountain, GA]_ 0.5300____WXB219 (govt recds)
GA: TIS, W Welcome Ctr off Hwy 95
[Montieth, GA]_____ 0.5300____KNGU518 (govt recds)
Gatlinburg (TN): TIS, 1400 feet NE Rt 441 on Gatlinburg Go...
[Gatlinburg, TN]_____ 0.5300____WYZ272 (govt recds)
Gatlinburg (TN): TIS, 300 feet NW intersection Fed Inst 40 & Rt6
[Gatlinburg, TN]_____ 0.5300____WYZ274 (govt recds)
Gatlinburg (TN): TIS, approx 200 feet W of Bridge Crossing....
[Gatlinburg, TN]_____ 0.5300____WYZ273 (govt recds)
Gatlinburg (TN): TIS, approx 250 feet SE intersection of US 4
[Gatlinburg, TN]_____ 0.5300____WYZ271 (govt recds)
Gatlinburg: TIS, 300 feet NW Fed Interstate 40 & Rt 66
[Gatlinburg, TN]_____ 1.6100____WYZ275 (govt recds)
Hillsborough County Aviation Authority: TIS, Tampa International Airport
[Tampa, FL]_____ 1.6100____WYZ235 (govt recds)
IA: TIS, 5 miles w of Middle Road, Area-op: within .5 mile of Daven...
[Davenport, IA]_____ 1.6100____KJJ386 (govt recds)
IA: TIS_____[Walnut, IA]_____ 1.6100____WYR522 (govt recds)
ID: Bureau of Comm: TIS, Raft River Interchange I-86
[Raft River, ID]_____ 1.6100____KNAV733 (govt recds)
ID: Bureau of Comm: TIS, Register Rock State Park I-86
[American Falls, ID]_ 1.6100____KNAV734 (govt recds)
IL: TIS, I-94, median at Kil..
[Chicago]_____ 1.6100____KMB824 (B. Parnass)
IL: TIS, junction interstate 290 & Illinois Rt 5
[Chicago]_____ 1.6100____KNIG425 (others)
" [Chicago]_____ 1.6100____KNIG425 (others)
IL: TIS, SW corner junction 290 & Nordic Rd
" [Chicago]_____ 1.6100____KNIG426 (B. Parnass)
IL: TIS, SW corner Van Buren St & Des Plaines, 6A3 @ 1w
[Chicago]_____ 1.6100____KNAP828 (B. Parnass)
IL: TIS, West Frontage Rd I-94 .3 miles south of Winnetka Ave
[Northfield, IL]_____ 1.6100____KMH441 (B. Parnass)
IN: TIS, xmtr located at Brown County State Park office
[Nashville, IN]_____ 1.6100____KNIJ419 (govt recds)
Independence: TIS, US hwy 24 and Spring St
[Independence, MO]___ 1.6100____KNFA366 (govt recds)

Kansas City: TIS, Bern St & Cookingham
[Kansas City, MO]____ 1.6100____WQI284 (govt recds)
Kenton County Airport Board, TIS, Greater Cincinnati Apt
[Hebron, KY]_________ 1.6100____WZM835 (govt recds)
Kenton County Airport Board, TIS, Terminal A Greater Cincinnati Apt Room 228
[Cincinnati, OH]_____ 1.6100____WXT613 (govt recds)
Kingman: TIS, xtmr located at 3225 Shangrila Dr, control pt at Area Chamber of Commerce jct US Hwy 66 93
[Kingman, AZ]________ 0.5300____KNJX793 (govt recds)
KY: TIS, NE intersection US 264 IN NE on/off ramp
[Louisville, KY]_____ 0.5300____KRD772 (govt recds)
KY: TIS, SE Federal Int 65 Kennedy Bridge
[Louisville, KY]_____ 0.5300____KRD785 (govt recds)
KY: TIS_____[Clark County, IN]___ 0.5300____KRD779 (govt recds)
Los Angeles: TIS, control pt: 1 World Way, Los Angeles, 6A3 @ 20w
[Los Angeles, CA]____ 0.5300____WYZ301 (govt recds)
Los Angeles: TIS, El Marino Park Berryman Ave & Patom
[Culver City, CA]____ 0.5300____KRN984 (govt recds)
Los Angeles: TIS, xmtr located at intersection of 96th St and Skyway
[Los Angeles, CA]____ 0.5300____WYZ301 (govt recds)
Los Angeles: TIS, xmtr located at intersection of Century and Airport
[Los Angeles, CA]____ 0.5300____WYZ301 (govt recds)
Los Angeles: TIS, xmtr located at intersection of Sepulveda S of Century at base of lighted sign
[Los Angeles, CA]____ 0.5300____WYZ301 (govt recds)
MD: TIS, location unknown
[MD]_____ 0.5300____KNJX865 (govt recds)
" [MD]_____ 1.6100____KNJX865 (govt recds)
MD: TIS, xmtr located at Rt 70 and Rt 695, Baltimore
[Baltimore, MD]______ 0.5300____WNAL785 (govt recds)
MD: TIS, xmtr located at US Rt 50 Kent Island
[Kent Narrows, MD]___ 0.5300____WNAL786 (govt recds)
Minneapolis Saint Paul Metro Apts Commission: TIS, Wold Chamberlain Field, control pt: Blue Concourse Public Passenger Terminal
[Minneapolis, MN]____ 0.5300____KNHW885 (govt recds)
MN: TIS, along hwy I-35W
[Richfield, MN]______ 1.6100____WZM832 (govt recds)
MN: TIS, Lowry Hill Tunnel
[Minneapolis, MN]____ 0.5300____WQH716 (govt recds)
MN: TIS, Washington Ave Bridge
[Minneapolis, MN]____ 0.5300____WQH716 (govt recds)
MN: TIS, xmtr located at 1550 feet northeast of intersection of Main St & RM Railroad
[Calumet, MN]_____ 1.6100____WNAN941 (govt recds)
MN: TIS, xmtr located at Grand Rapids Visitors Center 1 NW 3rd Street
[Eveleth, MN]_____ 1.6100____WNAZ542 (govt recds)
MN: TIS, xmtr located at Hwy 169 0.5 miles SW....
[Chisolm, MN]_____ 1.6100____WNAN940 (govt recds)
MN: TIS, xmtr located at State Hwy 53 2.25 miles S...
[Eveleth, MN]_____ 1.6100____WNAZ542 (govt recds)
MO: TIS, adjacent to hwy 76, 6.75 miles nw of...
[Branson, MO]_____ 1.6100____KNEM463 (govt recds)
Mobile (AL): TIS, xmtr located at Bates Field Airport

[Mobile, AL]_________ 1.6100____WNBT743 (govt recds)
NC: TIS, intersection of I40 & US 421
[Winston-Salem, NC]__ 0.5300____WQX207 (govt recds)
NC: TIS, intersection of I40 US 158-421 & SR 2494
[Winston-Salem, NC]__ 0.5300____WQX207 (govt recds)
NC: TIS, Raleigh-Durham Apt
[Morrisville, NC]____ 1.6100____WGW849 (others)
NH: TIS, xmtr located at 0.5 miles north bound of exit 32 on I93
[Lincoln, NH]________ 1.6100____WNCF831 (govt recds)
NH: TIS, xmtr located at 2 miles south bound of exit 36 on I93
[Franconia, NH]______ 1.6100____WNCF832 (govt recds)
NJ: TIS, I80 milepost 28.97 westbound
[Roxbury, NJ]________ 0.5300____KNIE436 (govt recds)
Norfolk Port & Industrial Authority: TIS, xmtr located at Satellite Parking lo
t 400' north int Military Hwy & Robin Hood Rd
[Norfolk, VA]________ 0.5300____WNAZ307 (govt recds)
NY and NJ Port Authority: TIS, Port Authority Adm Bldg (141), JF Kennedy Intl
Apt
[New York, NY]_______ 0.5270____KNAA585 (govt recds)
Ohio State University: TIS, Howlett Hall 2001 Fyffe Court
[Columbus, OH]_______ 0.5300____WQF465 (govt recds)
OK: Dept of Transportation, TIS, 1.4 miles NW of town of ..., area-op:Tulsa
[Turley, OK]_________ 1.6100____WSQ964 (govt recds)
Peoria Park District, TIS, Wildlife Prairie Park
[Peoria, IL]_________ 0.5300____KTM232 (govt recds)
Phoenix AZ: TIS, 3400 Sky Harbor Blvd
[Phoenix, AZ]________ 1.6100____WXK790 (govt recds)
Port Authority of NY & NJ: TIS, lower level mid river turnaround George Washin
gton Bridge
[New York, NY]_______ 0.5300____WSB887 (govt recds)
Prince William County: TIS, xmtr located at 14500 Telegraph Rd
[Potomac Mill, VA]___ 0.5300____WNBZ973 (govt recds)
Raleigh Durham Airport Authority: TIS, xmtr located at Raleigh Durham Airport
[Morrisville, NC]____ 1.6100____WNBR326 (govt recds)
San Antonio: TIS, San Antonio International Apt
[San Antonio, TX]____ 1.6100____KNDX476 (govt recds)
Seattle, Port of: TIS, intersection of Macadam Rd I405 exit
[Seattle, WA]________ 0.5300____KNCL518 (govt recds)
St Petersburg, FL: TIS, 551 19th St N
[St Petersburg, FL]__ 1.6100____KNFH965 (govt recds)
Tacoma (WA): TIS, xmtr located at Port of Tacoma Road and I-5 interchange
[Tacoma, WA]_________ 1.6100____WNAN648 (govt recds)
Tacoma (WA): TIS, xmtr located at S 56th St & Interstate 5 interchange
[Tacoma, WA]_________ 0.5300____WNAN648 (govt recds)
The Dalles OR, Port of, TIS, West end of Port of The Dalles
[The Dalles, OR]_____ 1.6100____KNAX787 (govt recds)
TN: Dept of Transportation, TIS, Callahan exit of I-75N
[Knoxville, TN]______ 0.5300____WQI249 (govt recds)
TN: Dept of Transportation, TIS, Westhills exit of I-75/40
[Knoxville, TN]______ 0.5300____WQI250 (govt recds)
TN: TIS, 5th Avenue exit of I-75
[Knoxville, TN]______ 0.5300____WQI248 (govt recds)
TN: TIS, Andrew Johnson Hwy exit I-40

[Knoxville, TN]_____ 0.5300____WQI246 (govt recds)
TN: TIS, Cherokee Trail exit of 129/73
[Knoxville, TN]_____ 0.5300____WQI245 (govt recds)
TN: TIS, Pelissippi exit of I-75/40
[Knoxville, TN]_____ 0.5300____WQI247 (govt recds)
Tucson Airport Authority: TIS, Tucson Intl Apt Terminal
[Tucson, AZ]_____ 0.5300____KNDL647 (govt recds)
Twining Water & Sanitation Dist, TIS, Taos Ski Valley Fire Station
[New Mexico]_____ 1.6100____KCR538 (govt recds)
unidentified: TIS, near Baltimore, MD
[Reisterstowne, MD]__ 0.5300____call? (others)
Union County Apt Authority, TIS, xmtr located at 760 Clymer Rd
[Marysville, OH]_____ 1.6100____KNCK692 (govt recds)
Union County Apt Authority, TIS, xmtr located at Court St and W 5th St
[Marysville, OH]_____ 1.6100____KNCK692 (govt recds)
VA: TIS, 372832N 0772548W
[Richmond, VA]_____ 0.5300____WYR507 (govt recds)
VA: TIS, 373232N 0772657W
[Richmond, VA]_____ 0.5300____WYR509 (govt recds)
VA: TIS, 373319N 0772649W
[Richmond, VA]_____ 0.5300____WYR508 (govt recds)
VA: TIS, 373329N 0772455W
[Richmond, VA]_____ 0.5300____WYR510 (govt recds)
VA: TIS, Fed Intr 95 & Rt 637 near Stafford
[Quantico Marine Ba]_ 1.6100____KKG654 (govt recds)
VA: TIS, Washington National Apt
[Washington, DC]_____ 0.5300____call? (others)
VA: TIS, xmtr located at 609 Naval Base Rd
[Norfolk, VA]_____ 0.5300____WNAN682 (govt recds)
VA: TIS, xmtr located at Denbeigh Blvd I64 & Rt 173
[Newport News, VA]___ 0.5300____KNJR837 (govt recds)
VA: TIS, xmtr located at I64 Rt 258 Mercury Blvd
[Hampton, VA]_____ 0.5300____KNJR839 (govt recds)
VA: TIS, xmtr located at Old Oak Grove Rd at 168 Bypass
[Chesapeake, VA]_____ 0.5300____KNJR838 (govt recds)
VA: TIS, xmtr located at Providence Rd I64
[Virginia Beach, VA]_ 0.5300____KNJR840 (govt recds)
VA: TIS, xmtr located at Rt 44 Virginia Beach Toll Plaza Kentucky Ave
[Virginia Beach, VA]_ 0.5300____KNJR841 (govt recds)
Vail: TIS, 1 East Bale Mt & Frontage Rd, Control pt: Vail Resort Assn, 241E Me
adow Dr
[Vail, CO]_____ 0.5300____KNDC749 (govt recds)
Vail: TIS, 2 Middle Ford Park Tennis Shack, Control pt: Vail Resort Assn, 241E
Meadow Dr
[Vail, CO]_____ 0.5300____KNDC750 (govt recds)
Vail: TIS, 3 West 2077 North Frontage Rd, Control pt: Vail Resort Assn, 241E M
eadow Dr
[Vail, CO]_____ 0.5300____KNDC748 (govt recds)
Virginia (MN) Chamber of Commerce: CTIS, xmtr located at Mine View in the Sky,
4000 feet ESE of WHLB radio tower
[Virginia, MN]_____ 1.6100____WNAT488 (govt recds)
WA: TIS, 108 Highway Adm Bldg
[Snoqualmi Pass, WA]_ 1.6100____WQX206 (govt recds)

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WA: TIS, 15th Ave & Cherry St
                        [Olympia, WA]________   1.6100____KNHD261   (govt recds)
WA: TIS, Jct 1-5 & 93rd Ave SW Lathrop Rd
                        [Tumwater, WA]_______   1.6100____KNHD261   (govt recds)
WA: TIS, Jct 1-5 S SR510 Marvin Rd
                        [Lacey, WA]__________   1.6100____KNHD261   (govt recds)
WA: TIS, Jct SR101 & W Uncas Rd 1.3 miles S of ....
                        [Uncas, WA]__________   1.6100____KNHD262   (govt recds)
WA: TIS, Jct SR510 & Evergreen College Pky
                        [Olympia, WA]________   1.6100____KNHD261   (govt recds)
WA: TIS, NE 150th St interchange (Eastgate) on I-90
                        [Bellevue, WA]_______   0.5300____KNEZ393   (govt recds)
WA: TIS, NE 45th St interchange on I-5
                        [Seattle, WA]________   0.5300____KNEZ390   (govt recds)
WA: TIS, on I-90 1.5 miles W of ...
                        [Ellensburg, WA]_____   1.6100____KNEF687   (govt recds)
WA: TIS, Park & Ride Parking Lot Jct SR 504 & SR 505, control pt at Sequest Pa
                        rk Ranger Office
                        [Toutle, WA]_________   1.6100____KNFG751   (govt recds)
WA: TIS, Spokane St interchange on I-5
                        [Seattle, WA]________   0.5300____KNEZ391   (govt recds)
WA: TIS, SR 520 interchange (Northrup) on I-405
                        [Bellevue, WA]_______   0.5300____KNEZ392   (govt recds)
Winter Park, CO: TIS, 78846 US Hwy 40
                        [Winter Park, CO]____   1.6100____KNHB622   (govt recds)
Yakima WA: TIS, mobile fleet service roof 2003 E Viola
                        [Yakima, WA]_________   1.6100____KNHE983   (govt recds)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -716925273422299459
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d10804acd9d2f58
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-25 17:23:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-sem.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!lll-crg!seismo!brl-tgr!brl-sem!abc
From: abc@brl-sem.ARPA (Brint Cooper )
Newsgroups: net.ham-radio
Subject: ARRL
Message-ID: <549@brl-sem.ARPA>
Date: Mon, 25-Nov-85 20:23:12 EST
Article-I.D.: brl-sem.549
Posted: Mon Nov 25 20:23:12 1985
Date-Received: Thu, 28-Nov-85 08:14:11 EST
References: <2549@brl-tgr.UUCP> <19700019@hpfcmt.UUCP>
Organization: Ballistic Research Lab
Lines: 24

>
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> >
>
> Whoever said that the ARRL is the god of amateur radio? They seem to have
> put themselves in that position for the primary reasons of
> self-propagation. Afterall, the more unsophisticated amateurs there are,
> the more suckers there are likely to be who will send that good-for-nothing
> organization membership fees. I learned early, I quit after one year.
>
> Roger Jollis KU6I
> Fort Collins, Colorado

SURE! And when the big, commercial interests petition the FCC
for ever-increasing segments of the amateur spectrum, you can
hire your own lawyer at $100/hour and up to argue your right
before the Commission to keep your HF, 2M, 220, et al. Jusst
how much spectrum do you think we'd have left if there were no
ARRL? Or do you recommend do-it-yourself law, too?

--
Brint Cooper

ARPA: abc@brl.arpa
UUCP: ...{seismo,decvax,cbosgd}!brl-tgr!abc

From 4476724778839568337
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,254394339090f1f8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-25 17:49:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ucla-cs.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!lll-crg!ucdavis!
ucbvax!decvax!ittatc!dcdwest!sdcsvax!sdcrdcf!ucla-cs!wales
From: wales@ucla-cs.UUCP
Newsgroups: net.ham-radio
Subject: Comments on Heath's active antenna?
Message-ID: <7763@ucla-cs.ARPA>
Date: Mon, 25-Nov-85 20:49:08 EST
Article-I.D.: ucla-cs.7763
Posted: Mon Nov 25 20:49:08 1985
Date-Received: Fri, 29-Nov-85 11:06:25 EST
Reply-To: wales@ucla-cs.UUCP (Rich Wales/WA6SGA)
Distribution: net
Organization: UCLA Computer Science Department
Lines: 11

Can anyone comment on the performance (or lack thereof) of the new Heath
HD-1424 Active SWL Antenna (p. 6 of their most recent catalog)?

I live in an apartment and currently make do with a random-length long-
wire antenna on my SW receiver. (I don't transmit out of my apartment,
needless to say. :-})

--
Rich Wales // UCLA Computer Science Department // +1 213-825-5683
     3531 Boelter Hall // Los Angeles, California 90024 // USA
     ARPA: wales@LOCUS.UCLA.EDU -or- wales@UCLA-LOCUS.ARPA
     UUCP: ...!(ucbvax,ihnp4)!ucla-cs!wales

From -2853411632847920364
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f7e78256779a02a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-26 12:23:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ttidcc.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!lll-crg!seismo!cmcl2!philabs!ttidca!
ttidcc!sorgatz
From: sorgatz@ttidcc.UUCP (Avatar)
Newsgroups: net.ham-radio
Subject: current crrl proposal
Message-ID: <36@ttidcc.UUCP>
Date: Tue, 26-Nov-85 15:23:19 EST
Article-I.D.: ttidcc.36
Posted: Tue Nov 26 15:23:19 1985
Date-Received: Sat, 30-Nov-85 01:06:16 EST
Organization: TTI, Santa Monica, CA.
Lines: 27

< munch! gobble! chomp! chew! Why don't "THEY" fix this bug? >
 As an individual who is about to take the 5 wpm test and become a Novice
for the 1st time I am (understandably) interested in the tone of this
proposed license change and concerned about it's possible effect on the
format of Amateur licenses here in the US. It has long been proposed that
the FCC restructure the licenses so as to permit the operation of radio
equipment by individuals without Morse communications skills. The typical
hue and cry from the ARRL and the 'ranks has been; "What? then it'll be
just like CB radio out here! NO WAY!" ... this was what made me learn the
code. I've resigned myself to the fact that there is but one way to have
that ticket! As an aside, one of my friends asked a question, which I simply
couldnt answer: "Why don't they (the FCC) require a tough-technical exam,
and convey voice/data/etc privs. then if a person wanted to use A1,F1/etc
then require them to pass an exam on Morse code!" ...I couldnt answer him
because I was laughing too hard! (-|

-Avatar->
Erik K. Sorgatz
Transaction Technology Inc. (Citicorp's R/AD West)   ... .
3100 ocean Park Blvd. (zone V1)   . | |..|..| | .
Santa Monica, Ca. 90405 |.|....|....|.|
USENET path: {garfield,lasspvax,linus,cmcl2,seismo} |.|....|....|.|
          !philabs!ttidca!sorgatz | | ...|... | |
("..My poor Krel! Even they must have evolved up from the ..| | .|. | |..
  mindless primative..after a million years of shining sanity, they could
  hardly have known what power was destroying them!" -Dr. Morbius F.P.)

From 3900943351756371273
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aec2cf03ece26d7a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-26 20:27:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 31
Message-ID: <21979@mgweed.UUCP>
Date: Tue, 26-Nov-85 23:27:34 EST
Article-I.D.: mgweed.21979
Posted: Tue Nov 26 23:27:34 1985
Date-Received: Thu, 28-Nov-85 03:33:23 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 12

qst de k9eui
hr crrl bulletin nr 31 from crrl headquarters
london ont november 25, 1985
to all radio amateurs bt

information on the proposed restructuring of the canadian amateur service, including docs rationale and how to make comment, appears in december qst. official copies of the proposal will be available from doc regional and district offices in the next few weeks ar

From 8550168485579498172
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e89170b3baadb0ab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-26 20:28:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 47
Message-ID: <21980@mgweed.UUCP>
Date: Tue, 26-Nov-85 23:28:00 EST
Article-I.D.: mgweed.21980
Posted: Tue Nov 26 23:28:00 1985
Date-Received: Thu, 28-Nov-85 03:33:50 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 31

qst de k9eui
hr propagation forecast bulletin nr 47 from arrl headquarters
newington ct november 25, 1985
to all radio amateurs bt

as predicted last week, propagation was about as good as we will see in the next two years or so, especially as to dx on 21, 24 and 28 mhz. though the solar flux dropped steadily from a high of 86 on november 15 to 74 on the 24th, geomagnetic activity was below average, making for strong, steady signals on all dx frequencies. activity on 28 mhz was mainly in the lower latitudes and on transequatorial paths, but 21 mhz was in fine shape. this band was very good to japan and the south pacific from the writers florida gulf coast site november 23 and 24.

another good break is likely november 26 and 27, followed by a generally poor spell from about the 29th to december 2. predicting the solar flux range for the latter period is risky indeed. the best guess is that the decline underway at bulletin time will bring flux values in the high 60s by about december 1. some upward movement is expected after december 2, but not as much as (garbled) half of november.

users of 28 and 50 mhz will find some interesting e skip activity during december and early january. this is the major e skip season in the southern hemisphere. we will catch some too, but nothing to equal what we experienced during our early summer ar

From 8817280656712932985
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,65e9c78adad23840,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-27 10:03:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site mordor.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!lll-crg!mordor!wct
From: wct@mordor.UUCP (Bill Thompson)
Newsgroups: net.ham-radio
Subject: Icom R71A battery failures
Message-ID: <4548@mordor.UUCP>
Date: Wed, 27-Nov-85 13:03:16 EST
Article-I.D.: mordor.4548
Posted: Wed Nov 27 13:03:16 1985
Date-Received: Fri, 29-Nov-85 21:33:25 EST
Distribution: net
Organization: S-1 Project, LLNL
Lines: 25

Excerpted from "Monitoring Times", Vol. 4, No. 12, Dec., 1985

"Recently, ICOM has endured substantial criticism in the hobby
press regarding the consequences of a failed lithium backup
battery for the RAM (random access memory) microprocessor circuitry.

It is true that if the battery fails (they normally last at
least five to seven years), the receiver will have to be sent
back to ICOM for reprogramming. The entire cost to the customer
is $25 including battery replacement, reprogramming, full check out,
and return postage. But some preventitive maintenance can avoid
the consequence entirely. . . ."

(The article then proceeds to tell how to use a 5 volt supply to
retain the contents of memory while replacing the battery)

--
     William C. Thompson III (S-1 Project, Lawrence Livermore National Laboratory)
        U.S. Mail: LLNL, P.O. Box 5503, L-278, Livermore, Ca., 94550
        Phone: (415) 422-7287
     MILNET: wct@s1-c or s1-a   UUCP: ...!decvax!decwrl!mordor!wct

From -8658822709464643211
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ee3b498db8887352
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-28 17:24:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!mtunh!ky2d-2!ai2q
From: ai2q@ky2d-2.UUCP (Alex)
Newsgroups: net.ham-radio
Subject: Re: TS-430s and apartment antennas
Message-ID: <61@ky2d-2.UUCP>
Date: Thu, 28-Nov-85 20:24:13 EST
Article-I.D.: ky2d-2.61
Posted: Thu Nov 28 20:24:13 1985
Date-Received: Fri, 29-Nov-85 11:53:15 EST
References: <1046@lll-crg.ARpA>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 20

Milo:
We are also a cliff dweller, and although restricted in what we might
put up, the advantage of having the building height makes up for some
of the limitations. In the past I have very successfully used a Hustler
4BTV trap vertical but I modified the feedpoint with a large brass disk to
accommodate many, many #12 wire radials. As in your situation, this is

somewhat unwieldy (don't want the super tripping over a spiderweb of wires!)
The use of a vertical antenna invites some TVI as the majaority of TV
feedlines are also vertical. I am presently using a simple end fed wire, well
insulated with glass and steatite at all points and fed against ground at
the point where it enters the shack. The ground is a steam pipe! I use heavy
2-inch wide braid to make the counterpoise connection.
It works quite nicely on all bands 80 through 10 with a simple L-tuner made
from an old ARC-5 (remeber those?) roller coil and a xmtg varaible. the proof
of the proverbial pudding is that I often run my Argonaut at abt two or three
watts output and am having a ball. this setup works especially well on amtor and
my neighbors have no tvi whatsoever! Good luck with whatever you finally
get going there. By the way, am thinking of extending my simple end fed and
creating a full wave loop out of it.
Very 73 de Alex, Freeport, Long Island >>AR>>

From 3760068771412711539
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf6a39ae978771b9
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-29 07:10:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!lll-crg!gymble!umcp-cs!seismo!hao!
noao!terak!mot!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio
Subject: Re: Scanner antennas
Message-ID: <379@anasazi.UUCP>
Date: Fri, 29-Nov-85 10:10:54 EST
Article-I.D.: anasazi.379
Posted: Fri Nov 29 10:10:54 1985
Date-Received: Thu, 5-Dec-85 08:39:19 EST
References: <3484@brl-tgr.ARPA>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 43
Keywords: Scanners Battery-backup

In article <3484@brl-tgr.ARPA> wmartin@ALMSA-2.ALMSA (Will Martin -- AMXAL-RI)
writes:
>Not to beat a dead horse, but remember that the Icom R-7000 has the same
>bad design as the R-71, and other current Icom products, with a "dynamic"
>chip requiring continuous power to maintain the radio's basic operating
>system parameters and allow it to work at all. This means mandatory
>maintenance (replacing the backup battery, either by expensive service

It seems to me that replacing a backup battery is hardly a difficult
job. I replaced the one performing the same function on my Azden PCS-3000
and it took all of 10 minutes. Big deal.

>In addition to the sort of design faults mentioned before, reviews

I would like to hear from someone who has tested the R-7000 since I
am considering buying one. A friend purchased an FRG-9600 for his
communications company, and the RF quality was so bad that they
sent it back. Anyone with good experience with this?

>indicate that performance quality certainly doesn't seem to be good
>enough to justify the prices. I would give the technology a few more
>(If everybody realized this, and nobody bought these boxes, those remaining

It is true that the R7000, the FRG9600, and the SX-400 (with adapters
to make it wide coverage) are a bit expensive, but they do an awful lot
compared to the $289 class of scanner. The MX-5000 & MX7000, purchased
from mail order houses, are so inexpensive that this comment is completely
wrong.

>told that these were not selling because they just were not good enough,
>not that there was no market for such devices. Then they'd have an
>incentive to continue R&D and come up with something better to supply

Or decide that high performance scanning receivers simply don't
have a high enough demand, and drop the whole idea. Remember the
Bearcat which had computer control? It was dropped because no one
bought it. The manufacturer then concluded that computer control was
--
John Moore (NJ7E/XE1HDO)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
{hao!noao|decvax|ihnp4|seismo}!terak!anasazi!john
terak!anasazi!john@SEISMO.CSS.GOV
(602) 952-8205 (day or evening)
5302 E. Lafayette Blvd, Phoenix, Az, 85018 (home address)

From 82322567253937283
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,d7b1ce55fbd9d8e9,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,d7b1ce55fbd9d8e9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-29 10:56:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!mtuxo!mtunh!ky2d-2!ka2ugq
From: ka2ugq@ky2d-2.UUCP (Tom)
Newsgroups: net.ham-radio,net.ham-radio.packet
Subject: Re: packet interference with simplex communications
Message-ID: <62@ky2d-2.UUCP>
Date: Fri, 29-Nov-85 13:56:14 EST
Article-I.D.: ky2d-2.62
Posted: Fri Nov 29 13:56:14 1985
Date-Received: Tue, 3-Dec-85 07:56:44 EST
References: <60@ky2d-2.UUCP>
Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ

Lines: 32
Xref: watmath net.ham-radio:3612 net.ham-radio.packet:160

> I would like to
> throw up the topic of the excessive use of transmitter power
> by many NY/NJ/CT area packeteers. It seems I am getting a
> lot of feedback from my simplex friends about packets messing
> up 145.000 and how we are supposed to be the super techs so why
> are we messing up so badly etc. etc.? My own personal opinion
> is that as usual, the few are causing problems for the many. Are you
> running 160W to access the local mailbox or your friend down
> the block? If so, wise up! Are you running the proper audio
> level into your TNC? You don't know? Get it checked!

I agree with you as far as packet users running more power than is
needed to accomplish satisfactory communication. However, the fact
that nearby packet stations are interfering with simplex users of
frequencies near designated packet frequencies is different. As is
the case with almost any new and powerful mode of communication that
comes into being in Amateur Radio, packet has been assigned simplex
frequencies that were previously used by amateurs for a club
frequency or just simple chatting.

A while ago, our club (the New Providence Amateur Radio Club) had our
base frequency on 145.800 MHz. As you may know, that frequency is now
in use by the Oscar-10 and related satellites. We were forced to move
just as the simplex users of the packet designated frequencies will
have to move sooner or later.

> I am very impressed by the level of the commentary on this
> system. Please let's hear your views. Happy Thanksgiving!
> de Bob K2SK >>

Happy Thanksgiving to all (gobble-gobble)!
-Tom Brown KA2UGQ

From 3201593450226293660
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,d7b1ce55fbd9d8e9
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,d7b1ce55fbd9d8e9
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-29 13:45:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!mtuxo!mtunh!ky2d-2!ai2q
From: ai2q@ky2d-2.UUCP (Alex)
Newsgroups: net.ham-radio,net.ham-radio.packet
Subject: Re: Re: packet interference with simplex communications
Message-ID: <63@ky2d-2.UUCP>
Date: Fri, 29-Nov-85 16:45:45 EST
Article-I.D.: ky2d-2.63

Posted: Fri Nov 29 16:45:45 1985
Date-Received: Tue, 3-Dec-85 07:59:47 EST
References: <60@ky2d-2.UUCP> <62@ky2d-2.UUCP>
Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 40
Xref: watmath net.ham-radio:3613 net.ham-radio.packet:161

> > I would like to
> > throw up the topic of the excessive use of transmitter power
> > by many NY/NJ/CT area packeteers. It seems I am getting a
> > lot of feedback from my simplex friends about packets messing
> > up 145.000 and how we are supposed to be the super techs so why
> > are we messing up so badly etc. etc.? My own personal opinion
> > is that as usual, the few are causing problems for the many. Are you
> > running 160W to access the local mailbox or your friend down
> > the block? If so, wise up! Are you running the proper audio
> > level into your TNC? You don't know? Get it checked!
>
> I agree with you as far as packet users running more power than is
> needed to accomplish satisfactory communication. However, the fact
> that nearby packet stations are interfering with simplex users of
> frequencies near designated packet frequencies is different. As is
> the case with almost any new and powerful mode of communication that
> comes into being in Amateur Radio, packet has been assigned simplex
> frequencies that were previously used by amateurs for a club
> frequency or just simple chatting.
>
> A while ago, our club (the New Providence Amateur Radio Club) had our
> base frequency on 145.800 MHz. As you may know, that frequency is now
> in use by the Oscar-10 and related satellites. We were forced to move
> just as the simplex users of the packet designated frequencies will
> have to move sooner or later.
>
> > I am very impressed by the level of the commentary on this
> > system. Please let's hear your views. Happy Thanksgiving!
> > de Bob K2SK >>
>
> Happy Thanksgiving to all (gobble-gobble)!
> -Tom Brown KA2UGQ

*** REPLACE THIS LINE WITH YOUR MESSAGE ***
One of the problems all packeteers are going to encounter is the lack
of publicity that has surrounded the coordinated packet channels. many
of the simplex phone ops I've spoken with have stated "I've never seen anything
in writing." Why not send a message to your SM or the League alerting them
aboutthis problem so we see more references to 145.01 through 145.09 in our pub-
lications?
73, Alex, AI2Q

From -592502623443790181
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,df16a14224f4cbfe,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-29 13:53:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!mtuxo!mtunh!ky2d-2!ai2q
From: ai2q@ky2d-2.UUCP (Alex)
Newsgroups: net.ham-radio
Subject: Re: Re: Info on YAESU FT-757GX
Message-ID: <64@ky2d-2.UUCP>
Date: Fri, 29-Nov-85 16:53:52 EST
Article-I.D.: ky2d-2.64
Posted: Fri Nov 29 16:53:52 1985
Date-Received: Tue, 3-Dec-85 07:56:05 EST
References: <74@brl-tgr.ARPA>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 32

> -------
> Sir--I don't own an FT757 but I've used one, in particular on Field
> Day this past summer. That's a good test of a piece of gear!
>
> It's ultimately simple to use and has lots of goodies including the
> built in keyer. My only criticism is that since it's a fully
> synthesized rig, you can't tune "smoothly" across a signal, you go
> instead in 100 Hz steps. I suppose this is the wave of the future
> in ham rigs, but it gives a whole new meaning to VFOs! At least
> Yaesu still provides a "steering wheel" to move frequency instead
> of up-down keys as are found on most broadcast FM receivers these
> days.
>
> The receiver is good, the CW filters are nice and sharp, etc. etc.
>
>
> 73--Jim, K6ZH
> -------
>
>
> -------

Jim:
I wonder what you think of the Yaesu's QSK? Is it smooth? Does it
work well at 25 or 35 wpm? How do they accomplish it (keying relays,
solid state switching)? Also, I was wondering abt the built-in keyer; as
an afficianado of bug keying, I'm always somewhat surprised to see a built-in
keyer in a rig. Can you adjust the weight (dot-dash ratio). Is it self-compl-
eting, I wonder. Also, have you tried using the RS-232 programmability? Does
Yaesu offer any software or accessories that make use of the port? I do
appreciate your initial comments and would like to hear more. Many thanks,
73, Alex, Freeport, Long Island, NY

From -2371535128173439271

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,20f752d626744fb9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-29 19:21:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site sask.UUCP
Path: utzoo!utcsri!ubc-vision!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: Re: crrl bulletin nr 30 (digital license)
Message-ID: <303@sask.UUCP>
Date: Fri, 29-Nov-85 22:21:13 EST
Article-I.D.: sask.303
Posted: Fri Nov 29 22:21:13 1985
Date-Received: Sat, 30-Nov-85 08:09:29 EST
References: <78@brl-tgr.ARPA>
Organization: University of Saskatchewan, CANADA
Lines: 20

> Commenting on what the Canadians are doing may not be any of my
> business, but, I can't see why they are starting a code-free licese.
> Code free licenses already exist, it is called the citizen's band.
>
>   Joe N2XS
Joe:
     We already have a no-code license up here in VE-land. It is
called the digital license and it seems to have been an unqualified
failure. It was intended to stimulate interest in digital communications
and in packet radio in particular but very few licenses were issued (only
a few hundred, and many of those, like myself, already had the advanced
amateur license anyway).
It consists of three parts. Two parts are the regulations and theory exams
that are also given on the advanced amateur exam. The third part replaced
the code exam and was a written exam on aspects of digital communications
with emphasis on packet radio.

73
Pete ve5bel
ihnp4!sask!hardie

From -7929822076257100850
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f7e78256779a02a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-30 20:38:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!mtuxo!mtunh!ky2d-2!k2sk
From: k2sk@ky2d-2.UUCP (Bob)
Newsgroups: net.ham-radio
Subject: Re: current crrl proposal
Message-ID: <67@ky2d-2.UUCP>

Date: Sat, 30-Nov-85 23:38:44 EST
Article-I.D.: ky2d-2.67
Posted: Sat Nov 30 23:38:44 1985
Date-Received: Tue, 3-Dec-85 08:03:30 EST
References: <36@ttidcc.UUCP>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 70

> < munch! gobble! chomp! chew! Why don't "THEY" fix this bug? >
> As an individual who is about to take the 5 wpm test and become a Novice
> for the 1st time I am (understandably) interested in the tone of this
> proposed license change and concerned about it's possible effect on the
> format of Amateur licenses here in the US. It has long been proposed that
> the FCC restructure the licenses so as to permit the operation of radio
> equipment by individuals without Morse communications skills. The typical
> hue and cry from the ARRL and the 'ranks has been; "What? then it'll be
> just like CB radio out here! NO WAY!" ... this was what made me learn the
> code. I've resigned myself to the fact that there is but one way to have
> that ticket! As an aside, one of my friends asked a question, which I simply
> couldnt answer: "Why don't they (the FCC) require a tough-technical exam,
> and convey voice/data/etc privs. then if a person wanted to use A1,F1/etc
> _then_ require them to pass an exam on Morse code!" ...I couldnt answer him
> because I was laughing too hard! (-|
>
> -Avatar->
> Erik K. Sorgatz
> Transaction Technology Inc. (Citicorp's R/AD West)   ... .
> 3100 ocean Park Blvd. (zone V1)   . | |..|..| | .
> Santa Monica, Ca. 90405 |.|....|....|.|
> USENET path: {garfield,lasspvax,linus,cmcl2,seismo} |.|....|....|.|
>   !philabs!ttidca!sorgatz | | ...|... | |
> ("..My poor Krel! Even they must have evolved up from the ..| | .|. | |..
>   mindless primative..after a million years of shining sanity, they could
>   hardly have known what power was destroying them!" -Dr. Morbius F.P.)

Eric and Peter, I hardly know where to begin in answering your
question about the necessity for a code exam. except to say
that I have been a ham for 26 years and I can remember the issue
being as hotly debated when I started. The real answer as i see
it is that for some even the toughest technical exam is easy
because of professional training, more brain power or just being
still in school and practiced at studying. On the other hand,
a lot of potentially good hams would be screened out by such
tactThe technical exam should be (and is) just hard enough
to insure that new hams can handle the equipment without
danger or inconvenience to themselves or others and without
creating unnecessary interference with other radio services.
That part is tough enough for most. The code, in addition to
the obvious serves another purpose. It is a skill that one cannot
"cram" for. It is like learning to ride a bike or speak a
new language. It requires one to put in his time and there
is no real shortcut to its learning. It is a barrier which
tests ones determination to become licensed. In ham radio

we have a nearly century old proud tradition of community
service, self help and policing, strict adherence to the
FCC regs (no matter how arbitrary!) and a kind of "Can Do"
attitude which has served this country well in exchange
for the precious spectrum we borrow from it. The real
difference between us and CBers (it is foolish to
characterize them all as illiterate truckers) is that we
all had to WORK for our licenses and we CARE about the
hobby. We didn't just get a rig as an Xmas gift. I have been
giving the exams for just over a year now and I believe in the
system now more than ever for I see the people who pass and
those who fail. If you were in my place and with the power to
judge, you would probably fail a lot more of them! Of course
we do NOT have that power nor want it and we try to give
everyone every opportunity to pass. If as I believe we might,
the FCC bows to the pressure from within and without and
eliminates the CW requirement, it will be the beginning of
a process that will change Ham Radio beyond our recognition
and may even destroy it. In addition to all that, CW can be
very handy and (above about 25 or 30 wpm) useful and fun!
It may even save your life someday! Give it a try. 50,000
hams can't be all wrong! Thanks for wading throught this
wordy reply! 73 GL in your test! Bob K2SK >>

P.S. LOVED your Morbius quote!! - (old Robby the Robot fan!)

From -4991535499714803608
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,254394339090f1f8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-01 20:37:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!ky2d-2!ai2q
From: ai2q@ky2d-2.UUCP (Alex)
Newsgroups: net.ham-radio
Subject: Re: Comments on Heath's active antenna?
Message-ID: <69@ky2d-2.UUCP>
Date: Sun, 1-Dec-85 23:37:09 EST
Article-I.D.: ky2d-2.69
Posted: Sun Dec 1 23:37:09 1985
Date-Received: Tue, 3-Dec-85 07:43:02 EST
References: <7763@ucla-cs.ARPA>
Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 31

> Can anyone comment on the performance (or lack thereof) of the new Heath
> HD-1424 Active SWL Antenna (p. 6 of their most recent catalog)?
>
> I live in an apartment and currently make do with a random-length long-
> wire antenna on my SW receiver. (I don't transmit out of my apartment,

> needless to say. :-})
> --
> Rich Wales // UCLA Computer Science Department // +1 213-825-5683
>   3531 Boelter Hall // Los Angeles, California 90024 // USA
>   ARPA: wales@LOCUS.UCLA.EDU -or- wales@UCLA-LOCUS.ARPA
>   UUCP: ...!(ucbvax,ihnp4)!ucla-cs!wales

Rich:
hHaven't seen the heath active antenna unit yet, but have built very
small receiving antennas in the past, especially loops. The associated
amplifier was a six stage dc coupled broadband (video) amplifier. The
results were absolutely fantastic! I could hear as much on a three-ft.
diameter loop inside my apartment as with a G5RV located outside. To boot,
I was also able to null local man-made noise by rotating the loop. However,
what prompted me to answer your article was the fact you feel restrained
by cliff dwelling. You didn't say what floor you reside on, but my present
apartment QTH is on the third floor. I use a simple end-fed wire (black,
nearly invisible teflon #28) working against a steam pipe and fed via an
L-network using an ARC-5 roller coil. It's well insulated but close to
the stucture. Nevertheless, it works FB on all bands 80 through 10 meters.
I routinely use a Ten-Tec Argonaut At two or three watts and my log is
filled with QSOs on CW, AMTOR, and even SSB. When appropriate I run 125 watts,
but my neighbors rarely know when I'm xmtng. Good luck. I'd be curious to know
more abt your experienc with the Heath ant (or anyone else's).
73, Alex, AI2Q
Freeport, Long Island, new York >>AR>>

From -4153430902752380829
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9aa7801e8d379271,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-02 16:32:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Recently heard (pirates, BCB beacons, and more!)
Message-ID: <706@ihu1h.UUCP>
Date: Mon, 2-Dec-85 19:32:32 EST
Article-I.D.: ihu1h.706
Posted: Mon Dec 2 19:32:32 1985
Date-Received: Tue, 3-Dec-85 20:17:10 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 64

x
   1.6130   RAB_______beacon, mcw id="RAB", 11/29/85 @0433Z
                       [Rabinal, Guatemala] (B. Parnass)

   1.6150   KA83310___unidentified: beacon, cw id, not an FCC callsign, 11/30/

85 @0027Z
[location?] (B. Parnass)

1.6660 LAG_____beacon, mcw id="LAG", 11/30/85 @0437Z
[Lago Agrio, Ecuador] (B. Parnass)

1.6750 KA83828___unidentified: beacon, cw id, not an FCC callsign, 11/30/85 @0512Z
[location?] (B. Parnass)

1.6760 KA83984___unidentified: beacon, cw id, not an FCC callsign, 11/30/85 @0508Z
[location?] (B. Parnass)

4.5500 KOM85_____Aeronautical Radio Inc, working WKG7, a helicopter flying among offshore oil platforms, location: Block 154D Ship Shoal, 11/28/85 @2315Z
[offshore Guam] (B. Parnass)

6.2135 WGK_____St Louis Radio Ltd, sending traffic list to boats, usb, 11/24/85 @1941Z
[Granite City, IL] (B. Parnass)

6.2175 CLQ_____unidentified: cw marker, 11/24/85 @0416Z
[Havana, Cuba] (B. Parnass)

6.5188 WFN_____Amcom, Inc, marine coastal station calling the 'Cajun Hustler', usb, 11/22/85 @1739Z
[Jeffersonville, IN] (B. Parnass)

6.5932 call?_____unidentified: network of jovial, English speaking males, with Spanish, New York, and Slavic accents, exchanging 3 and 4 digit numbers. Mentioned boats, Acapulco, and phrases: "that's more than I can smoke", "you get to keep the dope". One said he had to go to "watch the Bears (Chicago)". No callsigns used. Identified by first names like Frankie, Batiste, Russ, Alvin, Louis, Tony. usb 11/21/85 @0105Z
[location?] (B. Parnass)

7.4200 call?_____pirate: Radio Free Freedonia, male announcer mentioned PopCom, asked listeners to call 312-682-7256 (DuPage County Sheriff's non-emergency number) for music requests, but played no music, 11/24/85 @0436Z-0439Z
[location?] (B. Parnass)

7.4220 WMTV_____pirate: pirate bdcst, played music from 0403-0414Z, played audio test record at 0414, then music again at 0419. gave address as PO 1945, Del Rae Beach, FL (305)838-4389, am, 11/25/85
[Florida] (B. Parnass)

7.4500 WMTV_____pirate: pirate bdcst, played music and simulated EBS tes

t, am, 11/29/85, 0524Z
[Florida] (B. Parnass)

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -7926426466410778358
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,311b5d808e8f1117,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-02 18:47:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 48
Message-ID: <22117@mgweed.UUCP>
Date: Mon, 2-Dec-85 21:47:24 EST
Article-I.D.: mgweed.22117
Posted: Mon Dec 2 21:47:24 1985
Date-Received: Thu, 5-Dec-85 04:20:32 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 42

qst de k9eui
hr arrl propagation forecast bulletin nr 48 from arrl headquarters
newington ct december 2, 1985
to all radio amateurs bt

september through november, normally a good time for hf dx in the northern hemisphere, provided almost textbook examples of the effects of solar activity on our dx bands. the september solar flux high was 73, and that on the first day. with an average of 69.5 the month was rough on the users of 21, 24 and 28 mhz. even 14 mhz was marginal most of the time.

early october was worse, with a flux average of 66.9 for the first 13 days, none of them above 69. funeral arrangements were being made for cycle 21, until it came alive on the 14th and the flux climbed steadily to 95 in the third week. the 21 mhz band was jumping by this time, and activity began to pick up on 24 and 28 mhz again.

november was quieter, but the flux was 75 or higher more than half of the time, reaching 86 at mid month. as predicted the last week of november brought low geomagnetic activity and exceptional signal levels on all frequencies (garble).

we enter december with the solar flux at 70, but with prospects for a gradual rise, peaking about the 12th. the area of the sun now facing earth has been giving us mostly good propagation, with only minor disturbances. the wwv k index should be watched closely this weekend and next. k values of 2 or lower particularly with a downward trend make for strong stable signals on high latitude paths. flux levels are not too critical at this season, except as they move into the low 70s or high 60s. even these low values will not wipe out 21 and 24 mhz entirely, but they limit 28 mhz coverage severely. the best of december is likely to be the 18th through the 24th.

watch 28 mhz and the vhf bands for signal bursts from the geminid meteors. peaking december 10 through 14, this is one of the more intense and reliable meteor showers. ar.

From -2465341423619585612
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,56320abe8b548331,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-02 18:48:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 102 (U.S. / Korea traffic)
Message-ID: <22118@mgweed.UUCP>
Date: Mon, 2-Dec-85 21:48:34 EST
Article-I.D.: mgweed.22118
Posted: Mon Dec 2 21:48:34 1985
Date-Received: Thu, 5-Dec-85 04:21:09 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 11

qst de k9eui
hr arrl bulletin nr 102 from arrl headquarters
newington ct december 2, 1985
to all radio amateurs bt

the usual agreement between the united states and korea to allow third party traffic between hl stations and u.s. amateurs will be in effect from 0001 utc december 20 until 2359 utc january 4 ar

From -6901759689855578489
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c90e8366d20622c3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-02 18:49:16 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 32
Message-ID: <22119@mgweed.UUCP>
Date: Mon, 2-Dec-85 21:49:16 EST
Article-I.D.: mgweed.22119
Posted: Mon Dec 2 21:49:16 1985
Date-Received: Thu, 5-Dec-85 04:21:21 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 12

qst de k9eui
hr crrl bulletin nr 32 from crrl headquarters
london ont december 2, 1985
to all radio amateurs bt

provincial societies, local clubs, special interest groups and
student or senior citizen amateur radio organizations can now
affiliate with crrl. contact crrl for further information.

doc's restructuring was officially released on november 15   ar

From 5192951720927850437
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6111902dffd1bf6b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-02 19:43:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site sask.UUCP
Path: utzoo!utcsri!ubc-vision!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: shuttle frequencies????
Message-ID: <305@sask.UUCP>
Date: Mon, 2-Dec-85 22:43:30 EST
Article-I.D.: sask.305
Posted: Mon Dec 2 22:43:30 1985
Date-Received: Tue, 3-Dec-85 00:31:25 EST
Distribution: net
Organization: University of Saskatchewan, CANADA
Lines: 6

A friend of mine would like to know frequencies are used between the shuttle
and ground stations. Please mail me if you know them ..... I've got the
WA3NAN rebroadcast frequencies but he wants the direct stuff!
Tnx + 73
Pete ve5bel
ihnp4!sask!hardie

From -7506484983244526307
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,280af0661799163c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-03 07:15:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 100 (elections)
Message-ID: <22132@mgweed.UUCP>
Date: Tue, 3-Dec-85 10:15:30 EST
Article-I.D.: mgweed.22132
Posted: Tue Dec 3 10:15:30 1985
Date-Received: Thu, 5-Dec-85 05:28:37 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 50

qst de k9eui
hr arrl bulletin nr 100 from arrl headquarters
newington ct november 20 1985
to all radio amateurs bt

the arrl committee of tellers met today to count ballots in the elections just concluded for director and vice director. the number of votes credited to each candidate is as follows. the first listed cndidate is declared elected for the next term of office.

division	office	candidates	votes
atlantic	vice director	james m. mozley...w2bch	2857
		vince h. bardslery...kb3om	2254
delta	vice director	lionel a. oubre...k5dpg	1246
		robert p. schmidt...w5ghp	656
greate lakes	vice director	allan l. severson...ab8p	3017
		carolyn s. elliott...ka4jmz	1305
midwest	director	paul grauer...w0fir	1808
		robers s. mccaffrey...k0cy	1075
	vice director	richard w. ridenour...kb0zl	1739
		dick l. eilers...w0yzv	1114
pacific	vice director	kip edwards...w6szn	1301
		cynthia delauney...w6pht	1061
		glenn e. koropp...w6yfw	612
		jettie b. hill...w6rff	487
southeastern	director	frank m. butler jr...w4rh	3777
		carl d. henson...wb4znh	1345

the new directors and vice directors take office starting january 1 1986. on that date the following candidates...previously declared

elected also take office for two year terms...

division	office	previously declared elected
atlantic	director	hugh turnbull...w3abc
dakota	director	tod olson...k0to
	vice director	howard mark...w0ozc
delta	director	clyde hurlbert...w5ch
great lakes	director	george s. wilson...w4oyi
pacific	director	rodney j. stafford...kb6zv
southeastern	vice director	evelyn gauzens...w4wyr

in separate elections held in canada...thomas b. j. atkins...ve3cdm... was reelected without opposition as president crrl...and harry maclean...ve3gro...was reelected without opposition as vice president crrl. they will serve therefore as director and vice director... respectively...of the canadian division arrl. ar

From 9201819331902790428
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,db73c150ba51077e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-03 13:31:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: NICAD battery question
Message-ID: <22136@mgweed.UUCP>
Date: Tue, 3-Dec-85 16:31:13 EST
Article-I.D.: mgweed.22136
Posted: Tue Dec 3 16:31:13 1985
Date-Received: Thu, 5-Dec-85 05:29:16 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 16

I have been told that recent changes in NICAD battery construction or materials has eliminated the memory effect problems. Is this true and if so, how recent were these changes?

Memory effect aside, it is still my experience that NICADS seem to be good for about 2-3 years at most. I am comparing my 10 year old Motorola H-T 200 to my present Kenwood 2500 which I have had since the middle of 1982. When I had the H-t 200, I used to leave the thing sit in the charger all the time with a 5ma current trickle on it. With the 2500, I charge it with the wall charger for 16 hours and take it off and do not charge it until the low battery indicator flashes. It seems to me that there has been no difference in life of these packs.

Bob K9EUI

From -6104903774782151821
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6f81f9a243e1aef,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-03 14:35:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!drutx!mtuxo!mtunh!ky2d-2!ka2ugq
From: ka2ugq@ky2d-2.UUCP (Tom)
Newsgroups: net.ham-radio
Subject: Russian Woodpecker Gets Company
Message-ID: <72@ky2d-2.UUCP>
Date: Tue, 3-Dec-85 17:35:12 EST
Article-I.D.: ky2d-2.72
Posted: Tue Dec 3 17:35:12 1985
Date-Received: Thu, 5-Dec-85 06:15:23 EST
Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 17

(Seen on AI2Q Packet Radio BBS in Freeport, LI)

There seems to be a new version of the Russian woodpecker operating on
20 meters! It is believed to be a new type of Russian over-the-horizon
radar and unlike earlier versions, seems to stay pretty much on 14 MHz.
The pulse-like noise is taking up approximately 30 kHz of spectrum.
There are 62 pulses per second and it sounds like a motor boat or a buzz
saw. It is a different type of sound entirely from the "woodpecker"
which is more like tapping.

The FCC has obtained some very good bearings on it and the fix seems to
be at 35 degrees 26 minutes north, and 27 degrees 2 minutes east. This
places it within a 1200-mile radius of Odessa, USSR, near the Black Sea.
The FCC case number of this is 85-WA295 and the Commission's Treaty
Division is in the process of lodging a complaint.

-Tom Brown KA2UGQ

From 6106229143049924873
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5567d5534adc2bc2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-03 16:34:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!price%marlin@nosc.ARPA
From: price%marlin@nosc.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: Re:: Info on YAESU FT-757GX
Message-ID: <276@brl-tgr.ARPA>

Date: Tue, 3-Dec-85 19:34:25 EST
Article-I.D.: brl-tgr.276
Posted: Tue Dec 3 19:34:25 1985
Date-Received: Sat, 7-Dec-85 15:40:16 EST
Sender: news@brl-tgr.ARPA
Lines: 24

Alex--

The QSK on the Yaesu seemed to work fine. Contests are a time of
essential need for break-in, and we were running QRP with the rig,
too! I recall it was good.

Can't speak to your other questions as I'm not that familiar with
the rig's guts. About the keyer, we used my programmable keyer in
FD due to its obvious advantages in contests. My friend who owns
the 757 says the built-in keyer works OK, but the speed control is
VERY sensitive. And the keyer controls are not readily accessible
being on top and quite small. He's been using his own keyer, too.

If you want some more info, you might want to call my friend who owns
the 757. Give me a call at (619) 225-2665 and I can provide his name,
number, etc.

The rig seemed like a nice one to use. Having been a ham for over
20 years, however, I find it hard to wean myself away from peaking
the grid and dipping the plate!

73--Jim, K6ZH

From -268964492402031587
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e5e270cc55ca1379,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-04 09:35:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site uiucuxa
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!uiucuxc!uiucuxa!ab364
From: ab364@uiucuxa.CSO.UIUC.EDU
Newsgroups: net.ham-radio
Subject: beginer needs help in starting up
Message-ID: <7000002@uiucuxa>
Date: Wed, 4-Dec-85 12:35:00 EST
Article-I.D.: uiucuxa.7000002
Posted: Wed Dec 4 12:35:00 1985
Date-Received: Fri, 6-Dec-85 07:02:32 EST
Lines: 18
Nf-ID: #N:uiucuxa:7000002:000:706
Nf-From: uiucuxa.CSO.UIUC.EDU!ab364   Dec 4 11:35:00 1985

I am considering getting into the ham-radio field as a hobby. My main reason
is that I would like to be able to communicate with a friend that lives in
Chicago (I live about 150 miles south of there) without paying ma-bells (MCI...)
expensive phone bills.

Since I know absolutely nothing about this area I am trying to gain some
information. What I specifically want is info on what magazines are good to
get, and also if my idea is in any way practical.

Please send this info by email, as I am sure that this sort of thing will be
very boring to most of you. I will post a summary if there is interest.

Thank you for any help.
         Achyutram Bhamidipaty.

ihnp4!uiucdcs!uiucuxc!uiucuxa!ab364

From 3913765636836465946
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f7e78256779a02a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-04 10:16:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ki4pv.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!hjuxa!petsd!peora!ucf-cs!ki4pv!tanner
From: tanner@ki4pv.UUCP (Tanner Andrews)
Newsgroups: net.ham-radio
Subject: Re: current crrl proposal
Message-ID: <7009@ki4pv.UUCP>
Date: Wed, 4-Dec-85 13:16:38 EST
Article-I.D.: ki4pv.7009
Posted: Wed Dec 4 13:16:38 1985
Date-Received: Fri, 6-Dec-85 07:13:24 EST
References: <36@ttidcc.UUCP>, <67@ky2d-2.UUCP>
Organization: CompuData South, DeLand
Lines: 14

As I recall, we are obligated by WARC to require a code test for
operation on the "low bands". This international treaty obligation
may be hard for the FCC to waive.

I don't believe that the obligation applies to 2-M and above, so
it is possible that a limited no-code ticket might be issued for
some limited set of bands (my advice: 220 and 1296), possibly for
data only.

                              tanner andrews, systems
                              compudata south, deland
--
<std dsclm, copies upon request>   Tanner Andrews, KI4PV

uucp: ...!decvax!ucf-cs!ki4pv!tanner

From 7133238864794031026
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,860d8055fb104df2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-04 15:45:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: US Radio Security Breached, Reagan Warned
Message-ID: <708@ihu1h.UUCP>
Date: Wed, 4-Dec-85 18:45:10 EST
Article-I.D.: ihu1h.708
Posted: Wed Dec 4 18:45:10 1985
Date-Received: Thu, 5-Dec-85 09:02:47 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 54

x

US Radio Security Breached, Reagan Warned

from November 24, 1985
Chicago Sun-Times

Chris Chrystal

WASHINGTON - Drug traffickers and international terrorists can tune in to supposedly secret radio frequencies used by the Secret Service, the FBI and even Air Force One, two members of Congress said.

Sen. Dennis DeConcini (D-Ariz.) and Rep. Glenn L. English (D-Okla.) said thousands of radio frequencies were found among evidence seized in a Florida drug bust Sept. 13.

English described the frequencies - some top secret, including those used by President Reagan's airplane and limousine - as "a very serious breach of communications security."

He and DeConcini asked Reagan to call for a National Security Council investigation of radio security compromises, and to ask the Drug Enforcement Policy Board to review civilian law enforcement communications.

"We don't know how much of our intelligence community may be monitored," DeConicini said.

The list of exposed frequencies shows the United States has "lagged far behind in communications security," they said.

"The technology is there, but the emphasis by the administration is not," DeConcini said, adding that if communications security isn't tightened, the president's own safety could be jeopardized.

Scrambling radio transmissions, an effective security tool, is not widely done because of the need for agencies to share information while still protecting their own, DeConcini said.

In February, 1980, federal agents in New Orleans seized a motor home outfitted with scanners monitoring 250 channels. Some were being used to transmit information on drug enforcement activities.

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -4814697407274523793
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b05ae6df1d6a0597,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-04 20:53:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: another Eavesdropping article mentioning hams
Message-ID: <709@ihu1h.UUCP>
Date: Wed, 4-Dec-85 23:53:45 EST
Article-I.D.: ihu1h.709
Posted: Wed Dec 4 23:53:45 1985
Date-Received: Fri, 6-Dec-85 06:30:01 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 74

x

Putting Ears to the Airwaves Rather Than the Ground

from November 11, 1985
New York Times

William J. Broad

Electronic eavesdropping - once the domain of Federal agents, foreign spies and a handful of amateurs with hours to spend tuning their ham radios - has come of age. Thanks to a new generation of sophisticated and often inexpensive hardare, the snoopers can sometimes be snooped upon, as two members of Congress disclosed last week in the case of a band of drug smugglers in Florida last month.

According to Federal agents, the gang had used the latest in off-the-shelf hardware and a knowledge of the Government's communications channels to keep track of law enforcement officers who were trying to keep track of them. Among the paraphernalia seized when investigators closed in was a 62-page list of transmission frequencies used by hundred of local, state, and Federal agencies, including the Customs Service, the Coast Guard and the Drug Enforcement Administration.....

.....Even the White House has reason to worry, according to Stewart Stogel, a television news technician in Mt. Vernon, N.Y., who spend his spare time scanning Federal frequencies with a ham receiver. He says he has tuned in on President Reagan's aircraft communications and eavedropped on unscrambled calls to Vice President Bush. On the day the President was shot in 1981, Mr. Stogel overheard a White House aide urging Mr. Bush to hurry back to Washington. The voice from Mr. Stogel's tape library advises, "The President is in surgery, and they're taking out the bullet." He said he once overheard the State Department privately helping Richard M. Nixon arrange a trip to Saudi Arabia.

Mr. Stogel added that one of his guides to knowing where to eavesdrop is something called the "Confidential Frequency List," a 304-page book sold for $15.95 by Gilfer Associates Inc. in Park Ridge, N.J.

Chief among the new snooping technologies is the computerized scanner. "Any housewife with $150 can go out and buy a scanner," said J. Michael Nye, a Hagerstown, Md. consultant who publishes a $75 guide called "Who, What, & Where in Communications Security." Scanners "quickly find radio traffic, so it's not like looking for a needle in a haystack," Mr. Nye said.

....[discussion of the vulnerability of mobile telephones]...

....The only way to insure confidentiality, according

to security experts, is to use scramblers and other encryption devices more frequently.....

"Most Government agencies are becoming aware that they're being monitored," said Rod O'Conner, an executive with the Motorola Government Electronics Group in Scottsdale, Ariz. "Rather than suddenly starting over from scratch, which would be enormously expensive, they're slowly changing over to secure equipment. It will take time, but this problem will largely take care of itself."

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5068805149607632719
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,20f752d626744fb9
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-05 01:28:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!lll-crg!seismo!harvard!talcott!
panda!genrad!decvax!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Re: crrl bulletin nr 30 (digital license)
Message-ID: <708@petrus.UUCP>
Date: Thu, 5-Dec-85 04:28:15 EST
Article-I.D.: petrus.708
Posted: Thu Dec 5 04:28:15 1985
Date-Received: Tue, 10-Dec-85 05:33:59 EST
References: <78@brl-tgr.ARPA> <303@sask.UUCP>
Organization: Bell Communications Research, Inc
Lines: 28

> > Commenting on what the Canadians are doing may not be any of my
> > business, but, I can't see why they are starting a code-free licese.
> > Code free licenses already exist, it is called the citizen's band.

> We already have a no-code license up here in VE-land. It is
> called the digital license and it seems to have been an unqualified
> failure.

Ohboyohboy...[rub hands with glee]...just what I've been waiting for,
a reopening of the old no-code debate!

I always find it amusing to compare the comments of those who oppose
the technical no-code license because it will create another CB out
of amateur radio with those who oppose the technical no-code license because
the Canadians tried it and nobody bothered to get one.

From what I've heard, knowledge of the code doesn't keep quite a few
people from jamming FM repeaters, but *lack* of knowledge of the code
DOES keep quite a few otherwise talented people from participating in
amateur packet radio development and other clearly worthwhile activites.

Sooner or later we *will* get a no-code "amateur" license in the USA.
The question is whether it will occur before or after the present amateur
service atrophies away from lack of both quality and quantity.
I much prefer the former over the latter, but you've got to have at least ONE
of those two factors to get and keep frequencies.

Phil

From -869900412716741821
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb0d598defa4b486,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-05 08:39:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!taylor.WBST@Xerox.ARPA
From: taylor.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Antenna for the winter
Message-ID: <350@brl-tgr.ARPA>
Date: Thu, 5-Dec-85 11:39:24 EST
Article-I.D.: brl-tgr.350
Posted: Thu Dec 5 11:39:24 1985
Date-Received: Sat, 7-Dec-85 15:52:03 EST
Sender: news@brl-tgr.ARPA
Lines: 10

     IT SOUNDS LIKE YOU HAVE A CRYING NEED FOR A GOOD SERIES-TUNED LOOP
ANTENNA. I WOULD START WITH ABOUT 50 FEET OF LARGE DIAMETER CONDUCTOR
IN A LOOP. FEED THE "NEAR" END AND RETURN THE "FAR" END THROUGH A
WIDE-SPACED VARIABLE CAPACITOR-- ABOUT 50 PF. MAX. FOR 75 METER BAND.
~1800 PF. MICA CAPACITOR ACROSS THE FEED POINT WILL HELP THE MATCH.

          GOOD LUCK!

               JIM (W2OZH)

From 1035635143091498790
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f7e78256779a02a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-05 14:39:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site iham1.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!iham1!jgpo

From: jgpo@iham1.UUCP (John, KA9MNK)
Newsgroups: net.ham-radio
Subject: Re: current crrl proposal
Message-ID: <486@iham1.UUCP>
Date: Thu, 5-Dec-85 17:39:13 EST
Article-I.D.: iham1.486
Posted: Thu Dec 5 17:39:13 1985
Date-Received: Fri, 6-Dec-85 07:47:51 EST
References: <36@ttidcc.UUCP>, <67@ky2d-2.UUCP> <7009@ki4pv.UUCP>
Organization: AT&T Bell Laboratories
Lines: 13

> As I recall, we are obligated by WARC to require a code test for
> operation on the "low bands". This international treaty obligation
> may be hard for the FCC to waive.

Correct me if I'm wrong, but I seem to remember reading somewhere that the
United States never signed the WARC treaty, so, as a result, the FCC can do
whatever they please.

John Opalko, KA9MNK
AT&T Bell Labs
Naperville, IL
...!ihnp4!iham1!jgpo

From 1585837931695113649
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fae0307b642b5ab7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-05 17:29:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Another article on eavesdropping mentioning hams
Message-ID: <710@ihu1h.UUCP>
Date: Thu, 5-Dec-85 20:29:56 EST
Article-I.D.: ihu1h.710
Posted: Thu Dec 5 20:29:56 1985
Date-Received: Fri, 6-Dec-85 07:49:29 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 75

x
       Putting Ears to the Airwaves Rather Than the Ground

                from November   11, 1985
                    New York Times

William J. Broad

Electronic eavesdropping - once the domain of Federal agents, foreign spies and a handful of amateurs with hours to spend tuning their ham radios - has come of age. Thanks to a new generation of sophisticated and often inexpensive hardare, the snoopers can sometimes be snooped upon, as two members of Congress disclosed last week in the case of a band of drug smugglers in Florida last month.

According to Federal agents, the gang had used the latest in off-the-shelf hardware and a knowledge of the Government's communications channels to keep track of law enforcement officers who were trying to keep track of them. Among the paraphernalia seized when investigators closed in was a 62-page list of transmission frequencies used by hundred of local, state, and Federal agencies, including the Customs Service, the Coast Guard and the Drug Enforcement Administration.....

.....Even the White House has reason to worry, according to Stewart Stogel, a television news technician in Mt. Vernon, N.Y., who spend his spare time scanning Federal frequencies with a ham receiver. He says he has tuned in on President Reagan's aircraft communications and eavedropped on unscrambled calls to Vice President Bush. On the day the President was shot in 1981, Mr. Stogel overheard a White House aide urging Mr. Bush to hurry back to Washington. The voice from Mr. Stogel's tape library advises, "The President is in surgery, and they're taking out the bullet." He said he once overheard the State Department privately helping Richard M. Nixon arrange a trip to Saudi Arabia.

Mr. Stogel added that one of his guides to knowing where to eavesdrop is something called the "Confidential Frequency List," a 304-page book sold for $15.95 by Gilfer Associates Inc. in Park Ridge, N.J.

Chief among the new snooping technologies is the computerized scanner. "Any housewife with $150 can go out and buy a scanner," said J. Michael Nye, a Hagerstown, Md. consultant who publishes a $75 guide called "Who, What, & Where in Communications Security." Scanners "quickly find radio traffic, so it's not like looking for a needle in a haystack," Mr. Nye said.

....[discussion of the vulnerability of mobile telephones]...

....The only way to insure confidentiality, according to security experts, is to use scramblers and other encryption devices more frequently.....

"Most Government agencies are becoming aware that they're being monitored," said Rod O'Conner, an executive with the Motorola Government Electronics Group in Scottsdale, Ariz. "Rather than suddenly starting over from scratch, which would be enormously expensive, they're slowly changing over to secure equipment. It will take time, but this problem will largely take care of itself."

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -6225327760578093409
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,80b6fc69fb18b810,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-06 06:18:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site ucbvax.BERKELEY.EDU
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!woodson
From: woodson@ucbvax.BERKELEY.EDU (Chas Woodson)
Newsgroups: net.ham-radio
Subject: ARRL, I like it
Message-ID: <11164@ucbvax.BERKELEY.EDU>
Date: Fri, 6-Dec-85 09:18:33 EST
Article-I.D.: ucbvax.11164
Posted: Fri Dec 6 09:18:33 1985
Date-Received: Sat, 7-Dec-85 20:16:23 EST
Organization: University of California at Berkeley
Lines: 3
Keywords: ARRL

I am a life member of ARRL and quite pleased to be.
Personally, I am more interested in technical matters.
I enjoy reading QST even though it was not designed just for me.

From 5487933524483183962
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6f81f9a243e1aef
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-06 07:17:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!gymble!umcp-cs!seismo!hao!noao!
terak!mot!anasazi!john
From: john@anasazi.UUCP (John Moore)

Newsgroups: net.ham-radio
Subject: Re: Russian Woodpecker Gets Company
Message-ID: <392@anasazi.UUCP>
Date: Fri, 6-Dec-85 10:17:17 EST
Article-I.D.: anasazi.392
Posted: Fri Dec 6 10:17:17 1985
Date-Received: Wed, 11-Dec-85 20:55:14 EST
References: <72@ky2d-2.UUCP>
Reply-To: john@anasazi.UUCP (John Moore)
Distribution: net
Organization: Anasazi, Phoenix Az.
Lines: 28

In article <72@ky2d-2.UUCP> ka2ugq@ky2d-2.UUCP (Tom) writes:
>(Seen on AI2Q Packet Radio BBS in Freeport, LI)
>
>There seems to be a new version of the Russian woodpecker operating on
>20 meters! It is believed to be a new type of Russian over-the-horizon
>radar and unlike earlier versions, seems to stay pretty much on 14 MHz.
>The pulse-like noise is taking up approximately 30 kHz of spectrum.
>There are 62 pulses per second and it sounds like a motor boat or a buzz
>saw. It is a different type of sound entirely from the "woodpecker"
>which is more like tapping.

So that's what that was! I heard it 10/28/85 at 1450-1501 UTC. It
was 20 over 9 in Phoenix, AZ, and covered the frequencies 14320-14344.
The edges of the signal were extremely sharp, going from S9+20 to
nothing an about 3 Khz. Other stations in the net in Detroit and
San Diego heard it at the same strength. Bearing for all was NE.

At the time I thought it was a military jammer, because it was clearly
designed to occupy a chunk of bandwidth, and because the ERP required to
cause S9+20 signals over 24 Khz over all of the US is enormous.

--
John Moore (NJ7E/XE1HDO)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
{hao!noao|decvax|ihnp4|seismo}!terak!anasazi!john
terak!anasazi!john@SEISMO.CSS.GOV
(602) 952-8205 (day or evening)
5302 E. Lafayette Blvd, Phoenix, Az, 85018 (home address)

From -7046299754285268217
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a790a35b84e287b8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-17 17:10:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!mtuxo!mtunh!ky2d-2!ai2q
From: ai2q@ky2d-2.UUCP (Alex)
Newsgroups: net.ham-radio

Subject: Re: Re: RIT for the HW-8 (Help!)
Message-ID: <46@ky2d-2.UUCP>
Date: Thu, 17-Oct-85 20:10:52 EDT
Article-I.D.: ky2d-2.46
Posted: Thu Oct 17 20:10:52 1985
Date-Received: Sat, 19-Oct-85 06:14:34 EDT
References: <2123@brl-tgr.ARPA>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 50

>
>
>   Ade Weiss' address is
>
>   c/o Milliwatt Books
>   833 Duke St., #83
>   Vermillion, SD 57069
>
>   His writeup costs $7.00 (proceeds used to support the
>   Milliwatt Trophy program). He also has a book out,
>   "The Joy of QRP: Strategy for Success" which costs
> $10.95 pp. I recommend both.
>
>   Fred Bonavita writes the QRP column for Worldradio,
>   and I got his address from the byline on his column.
>   Unfortunately, his column did not appear this month,
>   so here is his address from the callbook (hope it
>   is current !):
>
>   Box 12072 Capitol Station
>   Austin, TX. 78711
>
>   His "Hot Water Handbook" costs $5.00, and is well
>   worth it. I'm at home now, but I think I have an
>   old copy of Worldradio at work. I'll get back to
>   you if this address is not correct.
>
>
>   Good luck with your HW-8 ! I certainly enjoy mine,
>   and also use a (much modified) HW-7 and an Argonaut.
>
>
>   73,
>   Jeff Rininger
>   N6MNI

*** REPLACE THIS LINE WITH YOUR MESSAGE ***
Jeff, N6MNI, speaks the truth.
have been running a Ten-Tec Argonaut here over the past six years. Am
a cliff dweller so use a "Cliff Dweller's Special" hidden end-fed antenna
which runs from the bedroom where the shack is, out to the fire escape, and
thenacross the roof. results are absolutely fantastic! Can't tell you how many
really fine CW and SSB QSOs I've had. The most amazing operation, however, is

on AMTOR with a Model 100 lap-portable CMOS machine and a kantronics
8039-based "universal" T.U. So far have had FB error-free ragchews with forty
states and five countries. have DXCC worked with the lil Argo on CW also
(not confirmed, but they're in the logbook). We also work QRP Field Day
every year with N2RI and KQ2G. It's amazing how we do. Of course, for FD
we put up a Bobtail curtain, phased wire arrays on 20, and extended Zepps
on 80 and 40. Ade Weiss' Milliwatt trophy is to be supported!!
73, Alex, AI2Q

From -2431009879698158571
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5696bd9bfe11b816,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-18 07:44:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Re: Kenwood 2 meter rig problem
Message-ID: <253@inuxi.UUCP>
Date: Fri, 18-Oct-85 10:44:35 EDT
Article-I.D.: inuxi.253
Posted: Fri Oct 18 10:44:35 1985
Date-Received: Tue, 22-Oct-85 07:27:02 EDT
References: <21038@mgweed.UUCP>
Organization: AT&T Consumer Products, Indianapolis
Lines: 21

>
> I happened to think that I know of three Kenwood 7930's that have the
> same problem. They all have a frying/popping noise in the transmit
> audio. I believe that one of the 7950's around here has the same
> problem. Anyone else had this and know what the cause is?
>
> Bob, K9EUI

There is a Kenwood User's group in florida which has published a
newsletter for 5 years or so now. I have early versions, covering
up to the 930 introduction. If the 7930 would be in this era, would
be glad to look. If not, you might contact them, and see if they
have any info on this problem. When I last called them, they wanted
to know if i was a member before discussing problems at length, but
they have a net on saturdays which should be "free" access to
information. My experience with calling kenwood service directly
indicates that if they have seen this problem before, they can
probably tell you over the phone the fix, or send a tech bulletin
describing the fix. I have done both with the ts830 and its
infamous "frequency shifting" due to a poor ground on one of the
boards.

From -1288582975662425204
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a40819f2a75debf
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-18 09:39:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!d3unix!
jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: beverages
Message-ID: <2245@brl-tgr.ARPA>
Date: Fri, 18-Oct-85 12:39:44 EDT
Article-I.D.: brl-tgr.2245
Posted: Fri Oct 18 12:39:44 1985
Date-Received: Mon, 21-Oct-85 06:06:15 EDT
Sender: news@brl-tgr.ARPA
Lines: 24

He doesn't know what beverages are? Why, they are things that you drink!

There is a technical term also -- a Beverage antenna is a long, low,
highly directional traveling wave antenna.

According to the ARRL Antenna Handbook, anything over one wavelength is
effective, but the directionality and gain will improve if you make it
longer. A height of 10 to 20 feet above ground is about right. The far
end (in the favored direction) should be terminated in a resistor which should
ideally be equal to the characteristic impedance of the antenna, which acts
like an unbalanced transmission line. The ARRL book says 500 to 600 ohms is a
typical impedance. At the feedpoint, a matching network is needed to match
the 500 - 600 ohms to the feed line. Or else open wire line of this impedance
can be used to bring the signal to the receiver, but then a matching network
may be needed at that point.

The Beverage antenna is said to be very effective for DX reception from a
single direction. If you use it for transmitting, half the power is lost in
the terminating resistor, but you do get gain and directivity.

Having never used one, that's about all I know about it.

73,
John S., W3IKG

From 5647448504111737244
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c941af952ca3595
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-18 15:27:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!
Karz.Wbst@Xerox.ARPA
From: Karz.Wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Problems with new rigs - a comment
Message-ID: <2259@brl-tgr.ARPA>
Date: Fri, 18-Oct-85 18:27:14 EDT
Article-I.D.: brl-tgr.2259
Posted: Fri Oct 18 18:27:14 1985
Date-Received: Mon, 21-Oct-85 06:32:50 EDT
Sender: news@brl-tgr.ARPA
Lines: 26

Listening to everyone knocking the quality of ICOM gear, I would like to add a few comments about Kenwood equipment, particularly since the discussion so far gives the impression that Kenwood quality control is much better than ICOM.

I would start by stating that I like Kenwood HF gear. I own both a 930 and an 820 and I feel they both give excellent value. Nevertheless, the problems I've had are due entirely to carelessness on the Kenwood assembly line. My 820 developed a problem with its digital display when it was five years old that turned out to be unsoldered (not poorly soldered) connections on a PC board. Similarly, when the meter on my 930 ceased functioning, the problem was an unsoldered connection. In this case, however, there was solder on the meter lug only it was not where the wire was attached. A good friend of mine, W2AZX, has a 530 which failed to work properly out of the box (apparently they didn't even bother to try it out at the factory). Here the problem was the failure to insert one of the leads on a resistor into its hole in the PC board. All three of these problems could have been eliminated with a little more care during manufacturing.

ICOM certainly does not have a monoply on poor quality. Furthermore, Kenwood problems would appear from my limited experience to be not with their parts suppliers but rather with themselves.

Bob
K2OID

From -2266318007767536535
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7591c5770b001b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-19 13:07:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 41
Message-ID: <21085@mgweed.UUCP>

Date: Sat, 19-Oct-85 16:07:36 EDT
Article-I.D.: mgweed.21085
Posted: Sat Oct 19 16:07:36 1985
Date-Received: Mon, 21-Oct-85 03:45:28 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 49

qst de k9eui
hr dx bulletin nr 41 from arrl headquarters
newington ct october 18, 1985
to all radio amateurs bt

thanks to k1xm, w1trc and the southern new england dx association for the following dx information.

sao tome. a west german group has been very active from sao tome, using the callsigns dj9on/s9 and dk9kx/s9. they have been on daily, on 14195 khz listening between 14200 and 14215 khz at 2100z, on 7001 khz from 2200z on, on 21025 khz at 1300z and on 3501 khz at 0001z.

kerguelen. ft8xa and ft8xb have been active on 7008 khz at 0130 and 1100z. also, ft8xb has been on 3795 khz from 0100 to 0130z.

uganda. 5x5gk has been on 21358 khz at 1830z. qsl to dj5rt.

diego garcia. vq9yr has been worked on 14257 khz at 1900z.

st. helena. zd7xy, a yl, has been active on 14214 khz at 1900z.

rwanda. 9x5wp has been active on 14219 khz at 2000z.

comoros. d68wb has been on 14257 khz at 1900z.

guinea bissau. j5wad has been worked on ssb on 14209 khz at 2100z and has also been active on 7045 khz.

chad. n7df/tt8 is rumored to be active on 1830 khz at 0220z. his signals have been extremely weak in new england.

galapagos. a group is going to galapagos and plans to begin operation on october 22 on all bands, 160 through 6 meters. operation will be mostly cw and rtty until the contest begins on the 26th. each participant will sign his own call /hc8. during the contest the call hc8x will be used. on their way home, some of the group will operate from the ecuadorian mainland. qsl hc8x to k8cw. qsl the american amateurs to their own callbook addresses.

4u1itu. k4iif plans to operate 4u1itu on all bands during the

cq ww contest. qsls go to leo haijsman, w4ka, 1044 se 43rd st., cape coral, fl 33904 ar

From -8091761512133967892
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ca110bba730153e,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,9ca110bba730153e,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 10cb58,9ca110bba730153e,start
X-Google-Attributes: gid10cb58,public
X-Google-ArrivalTime: 1985-10-19 14:39:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sphinx.UChicago.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!gargoyle!sphinx!west
From: west@sphinx.UChicago.UUCP (Steve Westfall)
Newsgroups: net.ham-radio,na.forsale,net.wanted
Subject: Ham Radio Station For Sale - cheap!
Message-ID: <1212@sphinx.UChicago.UUCP>
Date: Sat, 19-Oct-85 17:39:33 EDT
Article-I.D.: sphinx.1212
Posted: Sat Oct 19 17:39:33 1985
Date-Received: Mon, 21-Oct-85 03:49:11 EDT
Organization: U. Chicago - Computation Center
Lines: 29
Xref: watmath net.ham-radio:3410 na.forsale:250 net.wanted:7422

For Sale: Ham Radio Station

PRICE SLASHED (again!)

Icom IC-720A transceiver with narrow CW filter
Icom PS-15 power supply
Icom IC-SM5 desk microphone
Icom hand-held microphone (not used for mobile operation)
Hustler vertical antenna (80, 40, 20, 15, 10 meters)

The transceiver is in very good condition and has never been used for mobile operation.

You can have the whole package for $700.00 plus shipping (if you're in reasonable driving distance I'll drive it over).

Call me at 312-231-6054 (Mon - Fri, 8:30am - 4:30 pm CST) or 312-852-1271 (Mon - Fri, 5:30 pm - 10:00 pm CST, or all day on weekends).

--
Steve Westfall, WA5MZI Uucp: ihnp4!gargoyle!sphinx!west

General Manager, InfotronX, Inc. Mailnet: staff.westfall@UChicago.Mailnet
159 W. Roosevelt Road   Bitnet: west%sphinx@UChicago.Bitnet
West Chicago, Illinois 60185
(312) 231-6054

From 6651121170296304249
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,95a7382c8b0da4b2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-19 18:47:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: $Revision: 1.6.2.13 $; site hpuslma.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!we53!busch!wucs!wuphys!hpuslma!scott
From: scott@hpuslma.UUCP
Newsgroups: net.ham-radio
Subject: Re: Radioing India
Message-ID: <671000001@hpuslma.UUCP>
Date: Sat, 19-Oct-85 21:47:00 EDT
Article-I.D.: hpuslma.671000001
Posted: Sat Oct 19 21:47:00 1985
Date-Received: Tue, 22-Oct-85 05:00:18 EDT
References: <5042@amdcad.UUCP>
Lines: 19
Nf-ID: #R:amdcad:-504200:hpuslma:671000001:000:891
Nf-From: hpuslma!scott   Oct 19 20:47:00 1985

I definitely think that amateur radio is a good way to communicate with your friend in India. 80, 40, and 20 meter bands should easily offer you the frequencies to do just that. I just recently obtained my Technician class license after letting my General license expire many years ago, and one of my intentions is to be able to talk to other countries.

A good way to begin is to buy some of the ARRL license manuals and radio handbooks and some of the monthly magazines like QST, Ham Radio, etc. These documents will give you a feel for the events, equipment, and requirements for licensing. You can also find most of these items in local libraries too.

By the way, I am a Sales Eng. for Hewlett Packard here in St. Louis. What are you busy pursuing in the San Francisco area? Also, if I can provide further assistance on your Ham endeavors, please let me know.

Jim
N0GLP
:x

From 4831516461967092027
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b71c5742bb5a36ab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-19 20:09:13 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!
Michael.Chepponis@C.CS.CMU.EDU
From: Michael.Chepponis@C.CS.CMU.EDU (Mike Chepponis)
Newsgroups: net.ham-radio
Subject: Kenwood TR-2500 rig problems
Message-ID: <2272@brl-tgr.ARPA>
Date: Sat, 19-Oct-85 23:09:13 EDT
Article-I.D.: brl-tgr.2272
Posted: Sat Oct 19 23:09:13 1985
Date-Received: Mon, 21-Oct-85 06:21:22 EDT
Sender: news@brl-tgr.ARPA
Lines: 18

Indeed, I have been experiencing a frying/popping noise in the transmit audio
on my TR-2500, most likely very similar to Bob, K9EUI's noise on his 7930/7950.
I have ripped out way too much circuitry for such a "simple" problem, but it
still hasn't gone away. The noise appears only intermittently, and never has
it been > 1 KHz deviation. So I live with it.

Since we're discussing rigs, I'd like to put in a strong plug for Ten Tec. I
have owned both the Triton 4 and now the Corsair and I have never had ANY
problems with the rigs - NEVER! OK, the Corsair doesn't have a general
coverage RX, or as many spiffy features as the Kenwood TS-940S, but as far as
I can tell, the Corsair is a superior CW rig compared with the '940, although
on SSB the 940 has an edge with all of its bells & whistles. I chose Ten Tec
because of all the HF rigs I was looking at at the time, only Ten Tec gear
looked like it could be fixed by an average ham...Peek into one of those
other HF rigs & say something nice about serviceability!

-Mike, K3MC

From -6456493003825786174
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a40819f2a75debf
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-20 05:49:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site decwrl.UUCP
Path: utzoo!linus!decvax!decwrl!dec-rhea!dec-manana!dm_johnson
From: dm_johnson@manana.DEC
Newsgroups: net.ham-radio
Subject: beverages
Message-ID: <922@decwrl.UUCP>
Date: Sun, 20-Oct-85 08:49:24 EDT
Article-I.D.: decwrl.922
Posted: Sun Oct 20 08:49:24 1985
Date-Received: Mon, 21-Oct-85 07:08:32 EDT
Sender: daemon@decwrl.UUCP
Organization: Digital Equipment Corporation

Lines: 12

Probably the reference to Beverages is to a beverage antenna. It is
usually used in low freq ranges, is a coupld of wavelengths long and
low to the ground and terminated. Provides some directional characteristics
gain and reduced noise. You need lots of room although I do remember seeing
an article by a Pacific ham who used a short variation on 40 meters to
communicate back to the states. He oriented the antenna to knock out a
broadcast station in Japan or so. The claim was effective for the money
involved.

Denny
ka1bqz

From 4779002349082067544
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f16e65b171555ae1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-20 13:59:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!tekcrl!teklabs!rafaeld
From: rafaeld@teklabs.UUCP (Rafael De Arce)
Newsgroups: net.ham-radio
Subject: wanted: rm76 for a kenwood tr-7600
Message-ID: <3235@teklabs.UUCP>
Date: Sun, 20-Oct-85 16:59:12 EDT
Article-I.D.: teklabs.3235
Posted: Sun Oct 20 16:59:12 1985
Date-Received: Tue, 22-Oct-85 05:52:32 EDT
Organization: Tektronix, Beaverton OR
Lines: 6

i am looking for a rm76 control unit for
my kenwood tr-7600. please respond via
e-mail or lookup my call in the book.

de wd6cmx... tnx & 73.

From -6262888773730963748
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ee76464d58dab4d8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-20 18:42:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)

Newsgroups: net.ham-radio
Subject: recent SWL loggings
Message-ID: <683@ihu1h.UUCP>
Date: Sun, 20-Oct-85 21:42:13 EDT
Article-I.D.: ihu1h.683
Posted: Sun Oct 20 21:42:13 1985
Date-Received: Wed, 23-Oct-85 06:40:48 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 51

```
   0.1940    TUK_______US: FAA, radiolocation beacon, mcw w/voice broadcast, 10
                        /17/85 @ 0115Z
                        [Nantucket, MA] (B. Parnass)

   0.2245    WRLB2392__Henderson City-County Air Board, radiolocation beacon, 2
                        5w, mcw id="GVA", 10/17/85 @0142Z
                        [Henderson, KY] (B. Parnass)

   0.4320    NMG_______US: Coast Guard, bulletin for mariners, cw, 10/19/85 @ 0
                        121Z
                        [New Orleans, LA] (B. Parnass)

   3.2870    CKN_______Canada: Canadian Forces Maritime Radio, NAWS (Notice to
                        all Allied War Ships), cw, 10/21/85 @ 0108Z
                        [Vancouver, BC] (B. Parnass)

   5.3750    CCS_______Chile: Chilean Navy, cw marker using fsk, 10/21/85 @ 002
                        0Z
                        [Santiago, Chile] (B. Parnass)

   7.6520    KKN44_____US: State, embassy, cw marker, 10/20/85 @ 2358Z
                        [Monrovia, Liberia] (B. Parnass)

   7.7060    NMN_______US: Coast Guard, cw marker, note had AC ripple, 10/21/85
                         @ 0004Z
                        [Pungo, VA] (B. Parnass)

  14.3685    call?_____unidentified: piccolo mode, encoding into musical tones,
                         10/16/85 @ 2138Z
                        [location?] (B. Parnass)

  14.4540    CLP33_____Cuba: Cuban embassy, test msg, cw 10/15/85 @ 1838Z
                        [Addis Ababa, Ethiopia] (B. Parnass)

  14.4550    call?_____US: NASA, 'Ames' in contact with '706', apparently testi
                        ng a closed circuit video link, usb, 10/18/85 @1726Z
                        [Ames, IA] (B. Parnass)

             NA4XAR____US: NASA, barge Orion calling NASA barge Poseiden during
                         landing of Space Shuttle Atlantis on its first military
                         mission, usb, 10/7/85 @ 1715Z
```

[location?] (B. Parnass)

14.6060 CUW20_____US: Air Force MARS, attempting phone patch with unknown
station, usb, 10/18/85 @ 1742Z
[Lajes Field, Azores] (B. Parnass)

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -8938384983474396175
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e45845f69c8f91a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-20 19:24:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site copper.UUCP
Path: utzoo!linus!decvax!tektronix!teklds!azure!copper!edm
From: edm@copper.UUCP (Ed Morin)
Newsgroups: net.ham-radio
Subject: Re: ham radio emergency procedures and related matters
Message-ID: <116@copper.UUCP>
Date: Sun, 20-Oct-85 22:24:50 EDT
Article-I.D.: copper.116
Posted: Sun Oct 20 22:24:50 1985
Date-Received: Tue, 22-Oct-85 07:30:04 EDT
References: <2188@brl-tgr.ARPA>
Reply-To: edm@copper.UUCP (Ed Morin)
Organization: Tektronix, Beaverton OR
Lines: 10
Summary:

I too think that it is important for us hams to get out and do some public
service once in a while. I have worked the Portland Rose Parade several
years and had a blast doing it. Sometimes we had jerks for net control
and post operators, but better to learn how to make a net successful when
its all for fun rather than when its for lives. Besides, if you plan a
mass pizza party afterwards, it makes for even more fun...

'73,
Ed Morin (WB7UBD)
decvax!tektronix!azure!edm

From -6097955616986242269
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-Thread: 11e8b6,fa6183a5d92ea925,start
X-Google-Attributes: gid11e8b6,public

X-Google-Thread: 15d222,fa6183a5d92ea925,start
X-Google-Attributes: gid15d222,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-Thread: 1197bb,fa6183a5d92ea925,start
X-Google-Attributes: gid1197bb,public
X-Google-ArrivalTime: 1985-10-21 00:18:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 (MC840302); site ecrcvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!
mcvax!unido!ecrcvax!pete
From: pete@ecrcvax.UUCP (Pete Delaney)
Newsgroups: net.dcom,net.video,net.ham-radio,net.politics,net.jokes,net.followup
Subject: Re: Satellite viewing "freedoms"
Message-ID: <162@ecrcvax.UUCP>
Date: Mon, 21-Oct-85 03:18:03 EDT
Article-I.D.: ecrcvax.162
Posted: Mon Oct 21 03:18:03 1985
Date-Received: Wed, 23-Oct-85 06:15:58 EDT
References: <779@vortex.UUCP> <262@mot.UUCP> <293@unccvax.UUCP> <ssc-bee.372>
<144@ecrcvax.UUCP> <unc.99> <ecrcvax.150>
Reply-To: pete@ecrcvax.UUCP (Pete Delaney)
Organization: ECRC, D-8000 Muenchen 81, W. Germany
Lines: 15
Xref: watmath net.dcom:1393 net.video:1616 net.ham-radio:3427 net.politics:11629
net.jokes:14559 net.followup:5361

I fear we seem to be helpless at stoping this system from devoring us.
President Regean said he was against stoping the red ink if it cut's into
the Star Wars project. What's the sense in this madness?

Yet another tear shed for our lost liberty. I wish my county loved us
as much as we love it.
--

Pete Delaney - Rocky Mnt. Unix Consultant Phone: (49) 89 92699-139
European Computer-Industry Research Center   UUCP: mcvax!unido!ecrcvax!pete
ArabellaStrasse 17   UUCP Domain: pete@ecrcvax.UUCP
D-8000 Muenchen 81, West Germany   X25: (262)-45890040262
CSNET:pete%ecrcvax.UUCP@Germany.CSNET   Login: <to be provided?>

From 6251338875997010707
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eb06cbee330a9a13,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 06:43:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)

Newsgroups: net.ham-radio
Subject: DX: T77C (San Marino)
Message-ID: <255@inuxi.UUCP>
Date: Mon, 21-Oct-85 09:43:55 EDT
Article-I.D.: inuxi.255
Posted: Mon Oct 21 09:43:55 1985
Date-Received: Wed, 23-Oct-85 05:34:10 EDT
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 4

Anyone needing San Marino on CW should check 20 or 15 meters on
weekends, between 1500 and 1700 UTC. I have heard him on
consistently on weekends, roughly between 20 and 30 KHz up on the cw
band. He QSL's very fast if you go direct with a green stamp.

From -4508004261885033353
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cce0297b78041881,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 07:15:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Interference problem from cordless fone
Message-ID: <21117@mgweed.UUCP>
Date: Mon, 21-Oct-85 10:15:17 EDT
Article-I.D.: mgweed.21117
Posted: Mon Oct 21 10:15:17 1985
Date-Received: Wed, 23-Oct-85 04:06:36 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 16

One problem that I have encountered is interference from older cordless
phones on the ham bands. There are some that do operate in the 160 meter
band, although they are in the minority. last week I heard two cordless
phones in the 30 meter band! Turns out that it was the 6th harmonic and
both were S-9 signals.

I don't know what can be done about this situation. I am sure that people
would not willingly junk their phone just because it interferes with a ham.
Has anyone else had experience with this type of interference or know what
the FCC's reaction is? In the last few cases of interference to the amateur
service I have had (caused by commercial transmitters) the FCC wanted us
to solve the problem.

Bob K9EUI

From 5122062864151909101
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a40819f2a75debf
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 07:21:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!mtunh!ky2d-2!ai2q
From: ai2q@ky2d-2.UUCP (Alex)
Newsgroups: net.ham-radio
Subject: Re: beverages
Message-ID: <48@ky2d-2.UUCP>
Date: Mon, 21-Oct-85 10:21:26 EDT
Article-I.D.: ky2d-2.48
Posted: Mon Oct 21 10:21:26 1985
Date-Received: Tue, 22-Oct-85 05:53:05 EDT
References: <2203@brl-tgr.ARPA>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 17

>
> What does the term "beverages" mean? Is this some type of equipment or what?
> I have never heard that term before.
>   Jim
>   KA3OKP

*** REPLACE THIS LINE WITH YOUR MESSAGE ***
Hi Jim:
The term is a proper noun as it is the name of an antenna named after an
engineer called Beverage. The antenna is very long, highly directive,
exhibits exceptional gain, and is noted for its low height above ground.
Beverage antennas are often used by serious longwave and 160 meter
enthusiasts. You do have to be careful however so you don't trip over
then while out inspecting the antenna farm. They're usuallly only a few
feet above the ground and, by the way, work best over sandy or rocky
terrain. I have detailed info here somewhere; let me know if you want
more poop. Until then, very 73 de Alex, AI2Q, Freeport, Long Island >>AR>>

From 3409071966559158447
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aa4b6c728e634b09,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 10:21:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: VLF antennas
Message-ID: <21120@mgweed.UUCP>
Date: Mon, 21-Oct-85 13:21:22 EDT
Article-I.D.: mgweed.21120

Posted: Mon Oct 21 13:21:22 1985
Date-Received: Wed, 23-Oct-85 04:06:50 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 12

My favorite antenna for general tuning around on VLF, LF and HF is an active whip antenna (untuned). It is basically a J-FET follower direct coupled into a PNP. My whip is about 3 feet long (anything much longer and I get broadcast overload).

I once tried a large untuned shielded loop by throwing a length of RG-58 coax over the house roof. The ends were brought in a window and properly connected to the rcvr. This antenna worked quite well, too.

Bob, K9EUI

From 8733117176806823309
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69a9c9a18f68c87a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 13:55:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!d3unix!
jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: Kenwood TR-2500 rig problems
Message-ID: <2297@brl-tgr.ARPA>
Date: Mon, 21-Oct-85 16:55:17 EDT
Article-I.D.: brl-tgr.2297
Posted: Mon Oct 21 16:55:17 1985
Date-Received: Wed, 23-Oct-85 07:33:32 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

Could the noises be the same old "Kenwood Crunchies" that used to plague the TR-2400? As I recall, this was caused by the PC board to chassis ground becoming intermittent. Tightening up the PC board mounting screws and maybe soldering one of them in place cured the problem. Putting a lockwasher under one of them would seem a less drastic way of ensuring good contact.

I hope it's that easy.

73,
John S., W3IKG

From -8818414891761427524
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,89310336b69c8805,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 18:40:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 92 (U.S. - U.K. 3rd party agmt.)
Message-ID: <21129@mgweed.UUCP>
Date: Mon, 21-Oct-85 21:40:08 EDT
Article-I.D.: mgweed.21129
Posted: Mon Oct 21 21:40:08 1985
Date-Received: Wed, 23-Oct-85 04:22:42 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 19

qst de k9eui
hr arrl bulletin nr 92 from arrl headquarters
newington ct october 21, 1985
to all radio amateurs bt

this is a correction to arrl bulletin nr 91. the federal communications commission announces an agreement effective october 14 with the united kingdom department of trade and industry to permit third party communications between amateurs in the united states and special events stations in the uk having the prefix gb only, except that gb3 stations are not included. three conditions apply. (a). communications are limited to conversations or messages of a technical or personal nature too unimportant for a commercial message. (b). no compensation direct or indirect. (c). communications must accord with regulations for amateurs in each country. note that agreement applies only to gb stations other than gb3 ar

From 7207333340232402613
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,baffd0c3303a06d4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 18:40:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 93 (W1AW time change/ new RTTY svc)
Message-ID: <21130@mgweed.UUCP>
Date: Mon, 21-Oct-85 21:40:48 EDT
Article-I.D.: mgweed.21130
Posted: Mon Oct 21 21:40:48 1985
Date-Received: Wed, 23-Oct-85 04:22:55 EDT
Organization: AT&T Information Systems - Montgomery Illinois

Lines: 15

qst de k9eui
hr arrl bulletin nr 93 from arrl headquarters
newington ct october 21, 1985
to all radio amateurs bt
with the change to standard time on october 27, all regularly scheduled w1aw code practice and bulletin transmissions will be one hour later in utc. if you have been on daylight time, continue to tune in w1aw at the same local times.

a new w1aw service will begin on saturday, november 2, when keplerian data for amateur satellites will be sent, on baudot only, at 2330 utc. transmissions will be on a biweekly schedule ar

From -1406433373818182660
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a5d30413a446a411,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 18:41:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 25
Message-ID: <21131@mgweed.UUCP>
Date: Mon, 21-Oct-85 21:41:03 EDT
Article-I.D.: mgweed.21131
Posted: Mon Oct 21 21:41:03 1985
Date-Received: Wed, 23-Oct-85 04:23:09 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 26

qst de k9eui
hr crrl bulletin nr 25/26 from crrl headquarters
london ont october 18, 1985
to all radio amateurs bt

doc has announced that all commercial users of the 18 mhz band have been removed. the process for amending the regulations to permit amateur use of the 18 mhz band is now under way. doc also announced that most commercial users of the 24 mhz band have been removed. the remainder will be removed soon so the process for amending the regulations to permit amateur use of the 24 mhz band in canada can begin.

cnib, the canadian national institute for the blind, is updating its amateur radio program. for information, contact

fred roberts, ve3afa, at the cnib national office, 1931 bayview ave, toronto, on m4g 4c8.

representatives of crrl and carf will be meeting with doc in ottawa on october 25 to discuss three areas of concern, an imminent doc proposal for deregulation of mode subbands, an imminent doc proposal for restructuring the canadian amateur service, likely to include provisions for some form of novice license, and special prefix callsigns ar

From 2197851409277354331
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e8aa0820762ee34d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 18:41:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 42
Message-ID: <21132@mgweed.UUCP>
Date: Mon, 21-Oct-85 21:41:27 EDT
Article-I.D.: mgweed.21132
Posted: Mon Oct 21 21:41:27 1985
Date-Received: Wed, 23-Oct-85 04:23:23 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 36

qst de k9eui
hr propagation forecast bulletin nr 42 from arrl headquarters newington ct october 21, 1985
to all radio amateurs bt

in a special midweek bulletin we reported a solar flux rise that began october 13. from 67 it rose to 80 by the 20th, the highest flux reading since early july. the 21 mhz band has been open over much of the world in the past few days, and 10 meter beacons z21and and zs6pw have been heard in northern usa for the first time in more than a year. over the past weekend 10 meter occupancy was the highest in many months.

as of sunday night we were coming out of a week of generally poor conditions, the result of above average geomagnetic field activity. things should improve october 21 through 23, but absorption and fading will be bad again october 26 to 30. another major disturbance is expected early in november.

the main source of the higher solar flux is a fairly large spot area that came around the east limb october 15. its influence will decline as it moves westward this week, and the flux will

slide downward if, as seems likely, no major new areas replace it. the main propagation factor for the next few days however will be magnetic field activity. the a index is low as this is written and it is dropping lower, but not for long. there should be a longer favorable period later this week, but a major disturbance will be with us by november 1. we are in the best weeks of the entire year for propagation in the northern hemisphere, in any case, and with enough solar activity to keep things interesting through this week.

american sunspot numbers for october 10 to 16 were between 0 and 17 with a mean of 4.3 ar

From 5522335778769381851
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,5b082900c8cb4cc4,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,5b082900c8cb4cc4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 19:38:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!mot!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio,net.ham-radio.packet
Subject: HF Packet Questions(TAPR)
Message-ID: <315@anasazi.UUCP>
Date: Mon, 21-Oct-85 22:38:43 EDT
Article-I.D.: anasazi.315
Posted: Mon Oct 21 22:38:43 1985
Date-Received: Fri, 25-Oct-85 07:29:24 EDT
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 18
Keywords: HF Packet, TAPR
Xref: linus net.ham-radio:2820 net.ham-radio.packet:91

Having tinkered a bit with 2-meter packet, I am now interested in going HF.
However, a bit of information would be helpful to me:
(1) Does everyone on HF run 300bd? Is it 103 modem tones?
(2) What hacks do I need to make to my HD-4040 (Heath TAPR clone) in order to set it up for HF.
(3) What are good HF frequencies to operate on? How about gateways, BBS'?

Any information would be helpful.
Facts are even more useful.

--
John Moore (NJ7E)
{decvax|ihnp4|hao}!noao!terak!anasazi!john

{hao!noao|decvax|ihnp4|seismo}!terak!anasazi!john
(602) 952-8205 (day or evening)
5302 E. Lafayette Blvd, Phoenix, Az, 85018 (home address)

From -8385764193979305799
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,fe2667089e858633,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,fe2667089e858633,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 19:47:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!mot!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio.packet,net.ham-radio
Subject: Kantronix in Mexico - Help! + FLAME
Message-ID: <316@anasazi.UUCP>
Date: Mon, 21-Oct-85 22:47:00 EDT
Article-I.D.: anasazi.316
Posted: Mon Oct 21 22:47:00 1985
Date-Received: Fri, 25-Oct-85 07:29:40 EDT
Reply-To: john@anasazi.UUCP (John Moore NJ7E/XE1HDO)
Organization: Anasazi, Phoenix Az.
Lines: 28
Xref: linus net.ham-radio.packet:92 net.ham-radio:2821

During the Mexico City earthquake disaster, we tried to get a Kantronix packet interface going in Mexico City for health and welfare traffic. Unfortunately, during the short time we had to test it, we couldn't get it to receive anything. The manual was singularly uninformative about troubleshooting. It appears that the FSK work is all done by a magic chip which has no description in the book and a custom part number. We couldn't find any pin that appeared to have the FSK demodulator output.

Does anyone know how to tune this beast up with a scope, rather than just using the frequency counts? Does this thing work? Is it any good? Does anyone at Kantronix know how to write a technical manual?

+++FLAME ON+++
We wasted several hours of valuable disaster net time due to the sorrowful documentation on this product!
+++FLAME OFF+++

What should I tell Carlos (XE1HC)? Should he throw the thing away or is there a rational way to get it to work?

--
John Moore (NJ7E/XE1HDO)
{decvax|ihnp4|hao}!noao!terak!anasazi!john

{hao!noao|decvax|ihnp4|seismo}!terak!anasazi!john
(602) 952-8205 (day or evening)
5302 E. Lafayette Blvd, Phoenix, Az, 85018 (home address)

From -201485354764065306
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,99915b16895e18d6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-21 23:49:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!decwrl!dec-rhea!dec-utrop1!beekman
From: beekman@utrop1.DEC
Newsgroups: net.ham-radio
Subject: VERON Space shuttle propag. experiment
Message-ID: <959@decwrl.UUCP>
Date: Tue, 22-Oct-85 02:49:52 EDT
Article-I.D.: decwrl.959
Posted: Tue Oct 22 02:49:52 1985
Date-Received: Wed, 23-Oct-85 23:58:11 EDT
Sender: daemon@decwrl.UUCP
Organization: Digital Equipment Corporation
Lines: 70

VERON Jubilee Spacelab Propagation Experiment.

Introduction.

The flight schedule for the next Space Shuttle with the three astronauts/radio-hams on board is still at 30 October 17.00 UT
The dutch VERON propagation experiment,carried out by Wubbo Ockels PE1LFO,is incorporated in the german operational working modes.

Experiment in short on 145.575 MHz.

In a 2 mtr FM propagation experiment,(145.575 MHz),Wubbo Ockels PE1LFO in the Spacelab will transmit an unique series of codewords,with regular intervals, transmitting each 15 sec a new code of three letters from the intern. spelling-alphabet.
The position of Spacelab each time,is fixed with spacings of approx. 100 Km.
Radio-amateurs on earth will only listen and hopefully they will report as many codewords as they have heard plus their own IARU gridlocator.The elaboration reports will give a picture of the propagation in the used communication-channel.
Reports will be confirmed with a special VERON-QSL card.

Reporting.

The observation reports of the experiments correspond with the normal reports in the radio-amateurs logbook,but instead of one line per station there is now one line per code.
Please report your observation as follows:

Nr. Date,Time(UT/GMT),Receiving code,RST,Freq/QRG and remarks.

Also of very importance is the data of the receiving station,like call,name, address,receiver description,antenna used and the IARU grid-locator.

Please send your logbook to:

VERON Space Experiment or Veron Space Experiment
B.C. Caron PE0BCC Dutch QSL Bureau
Colijnlaan 11 P.O. Box 330
NL 2181 XJ Hillegom NL 6800 AH Arnhem
The Netherlands The Netherlands.

Trajectory.

We hope, the Veron experiment will be executed once or twice in a 20 minute trajectory from New Foundland,West-Europe,The Netherlands to the Middle East.
Another route is Mid Atlantic,Azores,West-Europe,The Netherlands to Russia.
The orbits are such that between 09.00 and 20.00 UT,there are six more or less favourable trajectories over Western Europe.
The lauch at Cape Kennedy at 17.00 UT corresponds with an equator crossing at 16h 55m 44s UT at 261.269 degrees East.
Orbit alt. 324 Km,inclination 57 degrees,period 1h 30m 57.3 sec.

More information will be given by:

DF0VR Oberpaffenhofen (DL2MDE Thomas Kieselbach)
DF0LRK Cologne (DL9MH Horst Ellgering)

18.15 (MET) DF0VR- RTTY on 3.695 MHz
18.30 (MET) DF0VR or DF0LRK phone news on 3.695 MHz

Beste '73

B.C. Carom PE0BCC
W.M. Beekman PA3AGZ (typing this message)

From 5617774541957490934
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,40bfe807c086a98a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-22 07:07:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site biomed.UUCP
Path: utzoo!linus!philabs!cmcl2!harvard!talcott!wjh12!biomed!lagasse
From: lagasse@biomed.UUCP (Robert C. Lagasse)

Newsgroups: net.ham-radio
Subject: Kenwood TR-7950
Message-ID: <137@biomed.UUCP>
Date: Tue, 22-Oct-85 10:07:23 EDT
Article-I.D.: biomed.137
Posted: Tue Oct 22 10:07:23 1985
Date-Received: Thu, 24-Oct-85 05:47:44 EDT
Organization: Mass. Gen. Hosp. - Dept. Biomed. Engineering
Lines: 52

.....As the proud owner of a Kenwood TR-7950 I have experienced several intermittent type problems, most of which I believe I have permanently fixed. It would be interesting to see if other people have experienced identical failures:

1) All of a sudden, the transmit power (which is displayed by a bar of LEDs) drops from a full set of LEDs (7 I believe) to one or two which flicker. The hi-lo power switch has no effect. The antenna VSWR was checked and this was not changing. Smacking the radio brought back a full set of LEDs and also full output power on an inline wattmeter. After tapping on the transmit board with a non-metallic diddle stick and unplugging and plugging several pc board connectors, and checking the RF drive to the final amp with a scope and also the hi-lo switch logic, it was determined that the problem was poor grounding of the final amplifier board to the aluminum heat sink. Scraping some flux residue away from the mounting hole locations and also scraping the contact area of the cast mounting bosses for the final amp board has cleared up the problem, hopefully forever.

2) When the radio is just sitting there, turned on, squelched receive mode, without the automobile engine running, scratchy noise comes and goes from the speaker. The sound is like someone turning a dirty volume pot back and forth. This problem was cleared up by playing with all of the connectors when looking for problem 1. It has not occured since.

3) When transmitting, the people listening at the other end would complain of haering my first few words loud and clear, and then my audio would fade out to about 30 percent in about three or four seconds. DTMF tones would also fade out and become distorted and unusable for an autopatch. Again, this problem has not occured since looking for problem 1.

All three problems used to come and go independently, which made things difficult. They all occured within six months of being a new set. I did not send it to the factory for repair since I already felt guilty for buying a ready made store bought set, never mind not trying to fix the problem myself first. (That's what ham radio is all about, isn't it?) All systems are GO now, and I would be curious to hear if others have had the same problems.

P.S. I just remembered, when first looking at the rear heat sink assembly, there is a strange phillips screw about 1 to 2 inches long, screwed in from the rear of the heat sink. The shaft of this screw is threaded for only about a half inch and the rest of the length is smooth.

On the inside of the radio a solid wire, #16 I believe, soldered at the DC power connector minus terminal, was just WRAPPED around this smooth screw, obviously trying to provide a ground from the DC power connector to the heat sink assembly. This wire was promptly soldered to the screw, but it did not seem to make any difference when searching out the problem in #1 above. I assumed that somone forgot to solder this solid wire at the factory. Maybe they did not want it soldered, by I can see no reason why.

Bob Lagasse   N1/ALG

From 7111138083530161662
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,41ba0c0c78bdc3ac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-22 07:16:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!hoffmann%marie@mit-mc.mit.edu
From: hoffmann%marie@mit-mc.mit.edu (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: PCS 2000 tuning problem
Message-ID: <2322@brl-tgr.ARPA>
Date: Tue, 22-Oct-85 10:16:14 EDT
Article-I.D.: brl-tgr.2322
Posted: Tue Oct 22 10:16:14 1985
Date-Received: Thu, 24-Oct-85 05:46:36 EDT
Sender: news@brl-tgr.ARPA
Lines: 22

Speaking of Azden PCS 2000s; (I know, you'd rather not)
I discovered a peculiar problem with mine that I'd like
help in tracing down.

A couple of weeks ago when the meteor-scatter packet-radio
experiment was proposed during the Giacobini Zinner (sp?)
pass-by I tried to set my station up on 145.09 to participate.
I noticed a large amount of activity on the channel. Closer
monitoring revealed that I was in fact still on 145.01.

I switched back and forth several times to verify this and
found it to be, sadly, the truth. I have never noticed any
other abnormalities in the tuning of the rig and don't know,
offhand, how to ferret out the problem. Anybody have any
suggestions?

73 de Ron, WA2EYC

PS: Sorry if you get this twice but I have posted it to both
    Info-hams and Packet-radio. rmh-eyc

From -4192630312987079163
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69a9c9a18f68c87a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-22 07:30:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: Kenwood TR-2500 rig problems
Message-ID: <2323@brl-tgr.ARPA>
Date: Tue, 22-Oct-85 10:30:19 EDT
Article-I.D.: brl-tgr.2323
Posted: Tue Oct 22 10:30:19 1985
Date-Received: Thu, 24-Oct-85 05:46:48 EDT
Sender: news@brl-tgr.ARPA
Lines: 12

Other possibilities for excessive crunchy noise are bad transistors (high
1/f or "flicker" noise), electrolytics installed with wrong polarity, or just
bad electrolytics (usually the reversed ones come back to life if installed
properly), or DC running through the wiper arm of a pot. The latter condition
can be caused by leaking electrolytics, by the way. Also loose connectors,
dirty transistor sockets, or dirty switch contacts.

I know, soak the whole radio in a sulphuric acid bath for about 24 hours, and
I guarantee you the noise will be the least of your problems.

73,
John S., W3IKG

From 5216936718314826705
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,46f0fa1e1501c323,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-22 08:23:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: care and (mostly) feeding of end-fed antennas
Message-ID: <2324@brl-tgr.ARPA>
Date: Tue, 22-Oct-85 11:23:35 EDT
Article-I.D.: brl-tgr.2324
Posted: Tue Oct 22 11:23:35 1985
Date-Received: Thu, 24-Oct-85 05:48:46 EDT
Sender: news@brl-tgr.ARPA
Lines: 53

Hot off the presses (or perhaps just reinvented):

We at the MITRE-Bedford Amateur Radio Club (MBARC) wanted to feed a 160-meter half-wave at the end supported by our tower, to avoid draping feed lines across a parking area. We came up with the following scheme, which can be adapted to other bands by the obvious scaling of dimensions.

We observed that an end-fed antenna exhibits a high impedance, which our antenna gurus here at MITRE say should be maybe 1200 to 1800 ohms, and of course it would be purely resistive if the antenna is exactly resonant. The exact resistance depends on height above ground and other factors. Anyway, we noted that a quarter wave transformer to match 1800 ohms to 50 ohms needs to have a characteristic impedance of exactly 300 ohms. (In general, the square root of the product of the given impedance and the desired impedance.) So we made up a special cable consisting of a convenient length of RG-8/U soldered to a quarter wavelength of "Radio Shack's Finest" black foam-filled TV twinlead, which incidentally, I have had good luck with even when running the full legal limit through it at high VSWRs. The hot side went to the end of the half-wave antenna and the "ground" side we connected via a water-pipe ground clamp to a cross leg of our Rohn tower. We figured that at 160 meters this was more or less "ground". Purists would want to add a 1:1 balun at the coax-to-twinlead junction, I suppose.

We fired the thing up and voila! a match of 1.5 to 1 or better was had over much of the 160-meter band, though it did get up to 3:1 at 2 MHz. Presumably this could be tweaked in to cover the band segment of interest, and of course it would work fine with a tuner even at 3:1. Signal reports have been outstanding.

In summary, a quarter wave transformer made of 300 ohm twinlead seems to work well as a matching network for end-feeding a half-wave antenna. A balun between the coax and the twinlead appears to be unnecessary. Soldering the twinlead directly to the coax and covering the joint with a heavy wrap of electrical tape makes a mechanically satisfactory connection, though shrink tubing (I like to call it psychiatrist tubing) would doubtless be more permanent. Take care to connect the twinlead correctly so that the coax shield goes to ground and the coax center lead goes to the antenna. Of course if you use a balun this is not a concern. Hint: Crimp-on "butt" connectors seem to work well for attaching more durable wires to the fragile #20 or whatever is in the twinlead.

If you use this idea, take care to keep the twin lead away from metal objects as much as possible. We used rope tied around the twinlead to support the top end, and rope to support it clear of metal objects at the bottom end just before the coax. Twinlead is not as strong as coax and should not be subjected to unnecessary tension.

One final note: The antenna ought to work reasonably well also at half the design frequency, with maybe a 2:1 VSWR, easily handled with a tuner.

73,
John S., W3IKG

From 3527473039565601146
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e45845f69c8f91a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-22 08:59:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!mot!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio
Subject: Re: ham radio emergency procedures and related matters
Message-ID: <318@anasazi.UUCP>
Date: Tue, 22-Oct-85 11:59:13 EDT
Article-I.D.: anasazi.318
Posted: Tue Oct 22 11:59:13 1985
Date-Received: Fri, 25-Oct-85 07:30:27 EDT
References: <2188@brl-tgr.ARPA>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 47

In article <2188@brl-tgr.ARPA> jhs@mitre-bedford.ARPA writes:
>Incidentally, I have found that people recognize the term "ham radio" as
>something different than CB, whereas the seemingly more dignified "Amateur
>Radio" is more often confused with CB or perhaps pirate broadcasting.
>I was pleased to note that the newscasters IMMEDIATELY mentioned ham radio
>as a possible link to Mexico City after the recent earthquake. We are getting
>some serious recognition these days, usually under the name "ham radio".

I strongly agree! We must use the term "ham radio" (or radio afficionados - sp)
if we want the public to know who we are. The term "amateur" is presumably
used to indicate "not an avocation", but most folks interpret it as
"incompetent". So unless we want to be known as "incompetent radio operators"
we should use another term.

>
>A final plug: All you hams out there in Net-land please consider your
>responsibility to do at least a little public service work from time to time.

Even if you don't get satisfaction out of these activities (and they are
usually lots of fun), you should recognize that our $500 BILLION worth
of spectrum is justified to a large extent by our public service and
emergency activities. Ignoring these responsibilities means that the
next time someone wants to ban our antennas or snatch our frequencies
or impose quiet hours, we don't have much of an argument. DXing or rag-chewing
or experimenting do not by themselves justify the priviledges that we have.

I also recommend that if you participate in these activities, do your best
to get publicity and written thanks for your efforts. These will come in handy
the next time you get into a fight over your priviledges. Don't be shy or think
that it's crass - just look how hard the Red Cross, Sal Army, etc work to get

publicity for their efforts - they even run advertisements on TV.
They know that without publicity they cannot continue doing their good work.
We should feel the same way.

I think that the Mexico City disaster showed the best of ham radio, and also
got us more favorable publicity than any event in recent memory. If we want
to be able to continue to help in the future like we did in Mexico, we
need to keep the public aware of our efforts in order to maintain our
priviledges.
         73,

--
John Moore (NJ7E/XE1HDO)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
{hao!noao|decvax|ihnp4|seismo}!terak!anasazi!john
(602) 952-8205 (day or evening)
5302 E. Lafayette Blvd, Phoenix, Az, 85018 (home address)

From 595075907709468733
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f37dc54601d70d06,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-22 11:03:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!carpenter@nbs-vms.ARPA
From: carpenter@nbs-vms.ARPA (CARPENTER, ROBERT)
Newsgroups: net.ham-radio
Subject: Re: care and (mostly) feeding end-fed antennas
Message-ID: <2325@brl-tgr.ARPA>
Date: Tue, 22-Oct-85 14:03:27 EDT
Article-I.D.: brl-tgr.2325
Posted: Tue Oct 22 14:03:27 1985
Date-Received: Thu, 24-Oct-85 05:48:58 EDT
Sender: news@brl-tgr.ARPA
Lines: 28

If you are old enough (I admit it), you may find a similar feed method
which is the J antenna. It is described in ARRL handbooks from the late
30s to perhaps the early 50s - as a VHF antenna.

I've seen another way of feeding 160 meter verticals. BAck in the late
50s Ev Dillard, W3BKO, got an AM broadcast license for Wheaton, MD.
It just so happened that his FM station, WASH, had its transmitter in
Wheaton. He tried all kinds
Wheaton. Of course the FM tower was solidly grounded at the bottom, with
no leg insulators - it is a self-supporting tower. He tried all the normal
shunt-feed systems, connecting a little way up the tower, but the impedance
was awful. Finally someone pointed out that the tower was about a half-wave
on 1540 kHz and deeper though was necessary. The least-trouble solution

turned out to be to drive four posts in the ground, perhaps ten feed outside the tower base and run wires from them to a point a quarter-wave up the tower. they were then firmly attached to the tower up there. The bottoms of the wries were connected together and fed as a high impedance end fed half-wave. The wires formed a quarter-wave stub insulator with the tower. This system was used for perhaps 15 years. Dillard eventually sold WDON (AM), and it now uses another loction, sharing a tower with a station on 1050 kHz.

Sorry for rambling.....

Bob, W3OTC

From -7106616202342755667
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63ca9bf60a677be1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-23 11:37:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <2357@brl-tgr.ARPA>
Date: Wed, 23-Oct-85 14:37:28 EDT
Article-I.D.: brl-tgr.2357
Posted: Wed Oct 23 14:37:28 1985
Date-Received: Fri, 25-Oct-85 07:18:29 EDT
Sender: news@brl-tgr.ARPA
Lines: 17

In reply to:
 (quote) I fear we seem to be helpless at stoping this system from devoring us.
President Regean said he was against stoping the red ink if it cut's into
the Star Wars project. What's the sense in this madness?

Yet another tear shed for our lost liberty. I wish my county loved us as much as we love it. (unquote)

Without Starwars you'll be shedding a lot more tears, and they wont be for your lost liberty. I guess you are another American that has succummed to the millions the Russians are spending in this country to stop Starwars, because the Russians know it will work because they are already ahead of us.

joe N2XS

From 7768525261293693177
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba0e6b7ef300182b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-23 18:52:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!mtunh!ky2d-2!jak
From: jak@ky2d-2.UUCP (Jim kutsch)
Newsgroups: net.ham-radio
Subject: DX (HC8 DXpedition heard)
Message-ID: <49@ky2d-2.UUCP>
Date: Wed, 23-Oct-85 21:52:02 EDT
Article-I.D.: ky2d-2.49
Posted: Wed Oct 23 21:52:02 1985
Date-Received: Fri, 25-Oct-85 02:14:21 EDT
Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 5

The DXpedition to Galapagos for the CQ WW contest has been on the air. I worked n2ic/hc8 tonight (10/23) at 2225z on 21.023. I also heard another station signing /hc8 just below 14.025 around the same time.

73, Jim ky2d

From -2420726203766684233
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3636f0f9f42127b6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-24 05:23:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!gymble!umcp-cs!seismo!brl-tgr!tgr!
FAC0395%UOFT01.BITNET@WISCVM.ARPA
From: FAC0395%UOFT01.BITNET@WISCVM.ARPA (Joe Feustle)
Newsgroups: net.ham-radio
Subject: San Marino
Message-ID: <2376@brl-tgr.ARPA>
Date: Thu, 24-Oct-85 08:23:15 EDT
Article-I.D.: brl-tgr.2376
Posted: Thu Oct 24 08:23:15 1985
Date-Received: Sat, 26-Oct-85 07:42:25 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

By all means, if you work Tony -T77C, do include a greenstamp. I believe that his QSL's are the sole source of income for the entire island.

N8AAT

From 577113718995227059
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9dcf91ab23637a2a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-24 08:02:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!
WMartin@SIMTEL20.ARPA
From: WMartin@SIMTEL20.ARPA (William G. Martin)
Newsgroups: net.ham-radio
Subject: VLF Info Source
Message-ID: <2383@brl-tgr.ARPA>
Date: Thu, 24-Oct-85 11:02:04 EDT
Article-I.D.: brl-tgr.2383
Posted: Thu Oct 24 11:02:04 1985
Date-Received: Sat, 26-Oct-85 07:43:09 EDT
Sender: news@brl-tgr.ARPA
Lines: 23

To those who are interested in VLF:

There is a club devoted specifically to that subject. If you are planning
to get involved in low-frequency listening or experimentation, it would be
worthwhile to join, or at least send for a sample issue of their
newsletter. They might have some books or pamphlets available, also, or
reprints from back issues of their bulletin.

They are:
The Longwave Club of America
45 Wildflower Rd.
Levittown, PA 19057

The newsletter is called "The Lowdown", mailed First Class. Membership
costs $10.00 per year. I would think you can get a sample issue for $1.00.

(I don't belong to this club, but I have been aware of it for many years
[it isn't a fly-by-night newly-formed group]. This address is from a
reference to it in the October Popular Communications, so it should be
current and correct. It is also listed in the club directory in the WRTH.)

Regards, Will

From -8919250863283970315
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63ca9bf60a677be1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-24 09:30:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!
stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <2386@brl-tgr.ARPA>
Date: Thu, 24-Oct-85 12:30:39 EDT
Article-I.D.: brl-tgr.2386
Posted: Thu Oct 24 12:30:39 1985
Date-Received: Sat, 26-Oct-85 07:43:25 EDT
Sender: news@brl-tgr.ARPA
Lines: 3

I agree, but remember YOU started the star wars part of this debate.

JOE

From 7963464894836950643
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63ca9bf60a677be1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-24 10:50:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!
stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <2387@brl-tgr.ARPA>
Date: Thu, 24-Oct-85 12:50:25 EST
Article-I.D.: brl-tgr.2387
Posted: Thu Oct 24 12:50:25 1985
Date-Received: Sun, 27-Oct-85 06:34:51 EST
Sender: news@brl-tgr.ARPA
Lines: 4

Cancel last message, I got the names mixed up. I agree with you, but I
counld't sit back and watch the pro communist line go over the net.

Joe

From 4296312168327167217
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a33fbbaed080264c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-24 20:33:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!vax135!cornell!uw-
beaver!tektronix!hplabs!pesnta!amd!amdcad!amdimage!prls!philabs!cmcl2!seismo!brl-

tgr!tgr!hoffmann%marie@mit-mc.mit.edu
From: hoffmann%marie@mit-mc.mit.edu (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Politics and Religion
Message-ID: <2418@brl-tgr.ARPA>
Date: Thu, 24-Oct-85 22:33:52 EST
Article-I.D.: brl-tgr.2418
Posted: Thu Oct 24 22:33:52 1985
Date-Received: Wed, 30-Oct-85 03:50:16 EST
Sender: news@brl-tgr.ARPA
Lines: 11

Well folks, the seeds of a certain nameless discussion
reminded me of something I read in the ARRL operating
manual when I first got involved in ham radio. Beware
that this is not an exact quote.

They cautioned against discussions of both politics and
religion (sometimes inseparable) on the air, as these
topics frequently lead to unfriendly exchanges, which,
of course, have no place in our operating practices.

Enough said. 73, Ron WA2EYC

From 3912140102244070146
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1197bb,fa6183a5d92ea925
X-Google-Attributes: gid1197bb,public
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15d222,fa6183a5d92ea925
X-Google-Attributes: gid15d222,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-Thread: 11e8b6,fa6183a5d92ea925
X-Google-Attributes: gid11e8b6,public
X-Google-ArrivalTime: 1985-10-24 21:49:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!genrad!panda!talcott!
harvard!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.dcom,net.video,net.ham-radio,net.politics,net.jokes,net.followup
Subject: Re(FLAME): Satellite viewing "freedoms"
Message-ID: <319@anasazi.UUCP>
Date: Fri, 25-Oct-85 00:49:22 EDT
Article-I.D.: anasazi.319
Posted: Fri Oct 25 00:49:22 1985
Date-Received: Sat, 26-Oct-85 19:24:43 EDT
References: <779@vortex.UUCP> <262@mot.UUCP> <293@unccvax.UUCP> <ssc-bee.372>

<144@ecrcvax.UUCP> <unc.99> <ecrcvax.150> <162@ecrcvax.UUCP>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 15
Xref: watmath net.dcom:1405 net.video:1625 net.ham-radio:3444 net.politics:11694
net.jokes:14636 net.followup:5379

In article <162@ecrcvax.UUCP> pete@ecrcvax.UUCP (Pete Delaney) writes:
>I fear we seem to be helpless at stoping this system from devoring us.
>President Regean said he was against stoping the red ink if it cut's into
>the Star Wars project. What's the sense in this madness?
+++FLAME ON+++
What is this junk doing in net.ham-radio? It ought to be posted to
net.politics or net.jokes only. Ham radio is internationally NON-POLITICAL!
+++FLAME OFF+++

--
John Moore (NJ7E/XE1HDO)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
{hao!noao|decvax|ihnp4|seismo}!terak!anasazi!john
(602) 952-8205 (day or evening)
5302 E. Lafayette Blvd, Phoenix, Az, 85018 (home address)

From -5317903981427596155
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9640912fa6b9f49f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-24 22:33:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!vax135!cornell!uw-
beaver!tektronix!hplabs!pesnta!amd!amdcad!amdimage!prls!philabs!cmcl2!seismo!brl-
tgr!tgr!Morton Jim@LLL-MFE.ARPA
From: Morton Jim@LLL-MFE.ARPA
Newsgroups: net.ham-radio
Subject: FEEDBACK IN HT
Message-ID: <2420@brl-tgr.ARPA>
Date: Fri, 25-Oct-85 00:33:25 EST
Article-I.D.: brl-tgr.2420
Posted: Fri Oct 25 00:33:25 1985
Date-Received: Wed, 30-Oct-85 03:52:27 EST
Sender: news@brl-tgr.ARPA
Lines: 9

  One possibility for Adam Epsteins howling is a microphonic active
component. One way to find these is to tap various components with
a non conducting whacker untill you either try all the parts or
find one that makes noise in the speaker when you tap the component.
 Typically the noise in the speaker will be somewhat like the sound
of hitting the component.

73 Jim WA6FWW

From -1605235919268575368
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,35e1306c2305c7d2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-25 06:34:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hounx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!hounx!nd2k
From: nd2k@hounx.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: Jersey Shore Ham/Computer Fest
Message-ID: <384@hounx.UUCP>
Date: Fri, 25-Oct-85 09:34:30 EDT
Article-I.D.: hounx.384
Posted: Fri Oct 25 09:34:30 1985
Date-Received: Sat, 26-Oct-85 05:29:07 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 24

Announcing the 4th annual Jersey Shore Ham/Computer Fest

Where: Neptune City Shopping Center (Rt. 35)

When: Nov. 3 (9am-3pm)

Admission: $3

Vendors: $6/table $3/tailgating

Talk-in: 147.045 +600 and 146.52 simplex

Spaces by advanced payment and SASE to:

Jersey Shore Ham Fest
P.O. Box 192
West Long Branch, NJ 07764
Phone: (201) 222-3009

Probably best to call if you want a table; time kinda short going the SASE route.

From -1795130021177326847
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a9fe3746ab6185c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-25 09:24:39 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site whuts.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuts!wrc
From: wrc@whuts.UUCP (CLEGG)
Newsgroups: net.ham-radio
Subject: Kenwood TR8400
Message-ID: <336@whuts.UUCP>
Date: Fri, 25-Oct-85 12:24:39 EDT
Article-I.D.: whuts.336
Posted: Fri Oct 25 12:24:39 1985
Date-Received: Sat, 26-Oct-85 08:15:33 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 18

Since a discussion has been started regarding the quality of
ham rigs from Kenwood and Icom, I thought I would add my
findings on a brand new Kenwood TR8400 just out of the box.
The first symtom was during transmit in the 10 watt position.
Only about 5 of the 7 LED lights would come on and after a
short time the last two would flicker and die away. I think
this may have been due to a low voltage condition at the
radio, but from the discussions about loose ground connections
and circuit boards, I am not sure that this was the case.
The open circuit voltage at the radio was 11.9 volts and
the wires were about 14 gauge, so that will have to be more
closely looked at.
    The more important problem, however, is with the receiver.
I measured the receiver sensitivity as -87.9 dBm for 12 dB SINAD.
That's approximately 9 microvolts. No wonder I couldn't hear
anything !!!! I don't know what is causing the problem but
if it is anything interesting I will post my findings.

From -7556182909849238746
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63ca9bf60a677be1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-25 10:47:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!tektronix!hplabs!sdcrdcf!sdcsvax!dcdwest!ittatc!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!KOHNEN.wbst@Xerox.ARPA
From: KOHNEN.wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <2434@brl-tgr.ARPA>
Date: Fri, 25-Oct-85 12:47:11 EST
Article-I.D.: brl-tgr.2434
Posted: Fri Oct 25 12:47:11 1985
Date-Received: Wed, 30-Oct-85 05:24:55 EST

Sender: news@brl-tgr.ARPA
Lines: 13

I'm a member of the ham radio dl because I'm a ham and because I enjoy
the ham radio related discussions whether they be about problems with
solid state rigs, antennas, or dx. I can only speak for myself but i am
getting extremely tired of these "Satellite viewing freedoms/Starwars"
messages which are being sent to the entire dl.

I'm not picking on you in particular, Joe, it's just that I've heard
enough. This stuff isn't remotely related to ham radio and it just
doesn't belong here. Can't you all call it quits or move to another dl
with it?

    73,
    Lou, K2ANC

From 4897450342337250908
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,54cbde8913b74fc4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-25 13:25:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tektronix!
hplabs!pesnta!greipa!decwrl!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!
ACardenas.ES@Xerox.ARPA
From: ACardenas.ES@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Kantronix in Mexico Help
Message-ID: <2438@brl-tgr.ARPA>
Date: Fri, 25-Oct-85 15:25:41 EST
Article-I.D.: brl-tgr.2438
Posted: Fri Oct 25 15:25:41 1985
Date-Received: Wed, 30-Oct-85 05:12:23 EST
Sender: news@brl-tgr.ARPA
Lines: 54

This is a dear john letter... Re: "Kantronix in Mexico..."

Dear John:

I have a Kantronics Packet Controler and mine works just fine... and
right out of the box! It's performance has been simply flawless.

Please note the manual supplied is a USERS manual, NOT a
TECHNICAL/SERVICE manual. The manual is complete with full detailed
descriptions of commands and control. It's internal memory can be
pre-set so the controler powers-up in the opreators favorite modes or
ready-state.

I DID have to remove the front cover once (two screws, phillips) to reset a pin jumper to agree with my C-64 format... it was set for RS232 from the factory. With all of the software/firmware theft/copy efforts; I can hardly fault Kantronics for not providing more specifics on internal operations. If a technical manual is offered from Kantronics, the data you seek may be there.

The fact that you wasted several hours during a critical emergency net time only shows how important it is to be prepaired! Participate in RACES {or some other emergency net/effort} and assure yourself that the equipment you intend to depend on is in top shape and tested.

The syndrome was "...we couldn't get it to receive anything."; perhaps the problem was a shorted audio mini-jack? Dead/inop AC outlet/power supply? Not enough receive level/audio? Incomplete/inop software? I try the EXTERNAL fixes BEFORE I drag out the scope, schematics and soldering iron! In other words, If it ain't broken, don't fix it! Besides, I beleive I have a one year warranty on mine.

Other dear readers:

I think the Kantronics is one of the finest new adventures in the amature spectrum! A special sale price of $219 makes it well within the budgets of most hams. A low cost/used VIC-20 (Commodore) (aprox.$50), a TV and tranceiver! Even if you are NOT a 'computer-type' or can type just 10 WPM! A line or two (of type) is typed first , you see it before you send it, then the send command... It almost appears that you can type 60WPM! It's been super to see Las Vegas to LA/San Diego/SF/Arizona traffic and hamming every day! Very soon the 'network' will be international!

Respectfully,
Tony Cardenas
WA6IGJ
QA Auditor
6085 Project.ES

From 6507680833307946707
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63ca9bf60a677be1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-25 13:57:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tektronix!
hplabs!pesnta!greipa!decwrl!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!
stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA

Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <2439@brl-tgr.ARPA>
Date: Fri, 25-Oct-85 15:57:56 EST
Article-I.D.: brl-tgr.2439
Posted: Fri Oct 25 15:57:56 1985
Date-Received: Wed, 30-Oct-85 05:13:00 EST
Sender: news@brl-tgr.ARPA
Lines: 5

NO. I did not start it and I am not going to sit by and watch
procommunist propaganda go unanswered over any net no matter what the
net is called.

                    Joe

From 167853924031301184
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,262805b6d9df5cee,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-25 19:12:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pyuxv.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!pyuxww!pyuxv!craig
From: craig@pyuxv.UUCP
Newsgroups: net.ham-radio
Subject: Eavesdropping revisited [How's that again?]
Message-ID: <154@pyuxv.UUCP>
Date: Fri, 25-Oct-85 22:12:31 EDT
Article-I.D.: pyuxv.154
Posted: Fri Oct 25 22:12:31 1985
Date-Received: Sat, 26-Oct-85 08:29:27 EDT
Organization: RB Craig @ Bellcore, Piscataway, NJ
Lines: 29

Speak up, my surveillance device can't hear you clearly
The Friday, October 25, 1985 Communications Daily reports that the
US Office of Technology Assessment has issued a report holding that
cellular and cordless telephone calls and other forms of new
communication devices are not sufficiently protected under the 1968
wiretap law. Congress has a measure under consideration that would
strengthen such privacy law requirements extending protection to
cellular and cordless telephones. Markup is expected, for both the
House and Senate versions of the bill, by early next year. There is a
possibility of enactment by the end of 1986.

With regard to wiretapping, USA Today says that 35 federal agencies
use, or have plans to use, new electronic surveillance equipment
that is not controlled by the 1968 law. The article further reports
that domestic US agencies have 288 million files on 114 million people
and that computerized recording devices could improperly monitor
innocent citizens.

- -
..!ihnp4!pyuxv!craig (RB Craig @ Bell Communications Research)
                                Piscataway, NJ 08854-1300
If you don't like the world as it is
you may need to learn to like more things.
--
- -
..!ihnp4!pyuxv!craig (RB Craig @ Bell Communications Research)
                                Piscataway, NJ 08854-1300

Technology... wouldn't that cork your bobber?

From 3446155445943917948
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2b1d3647439f6a0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-25 21:06:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site
lumiere.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!decvax!tektronix!lumiere!lfarr
From: lfarr@lumiere.UUCP
Newsgroups: net.ham-radio
Subject: DX
Message-ID: <1330@lumiere.UUCP>
Date: Fri, 25-Oct-85 23:06:50 EST
Article-I.D.: lumiere.1330
Posted: Fri Oct 25 23:06:50 1985
Date-Received: Mon, 28-Oct-85 03:21:39 EST
Sender: lfarr@lumiere.UUCP
Organization: Tektronix, Beaverton OR
Lines: 5

Worked, 10/25, 2000 UTC 14.03 Mhz. T77C, Tony in San Marino. He was calling
USA and working both coasts.

gud dx, Larry Farr, N7EYM. tektronix!lfarr   Portland, OR.

From 91959414075274710 35
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,84931305e18cb2c1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-26 07:47:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site kitty.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!rocksanne!sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.ham-radio
Subject: Re: Re: Quality of ICOM radios

Message-ID: <532@kitty.UUCP>
Date: Sat, 26-Oct-85 09:47:27 EST
Article-I.D.: kitty.532
Posted: Sat Oct 26 09:47:27 1985
Date-Received: Thu, 31-Oct-85 22:23:03 EST
References: <2089@brl-tgr.ARPA>
Organization: Recognition Research Corp., Clarence, NY
Lines: 28

> ...
> Apparently the problem was built-in... foil lifting from the PWBA! The
> repair was called a "jumper-job"... It cost me $65 plus time and
> postage. I feel an honest company would have stood behind the product
> and repaired the problem without cost.
>
> Much like the issue with the Kenwood VHF Power Modules... If the arrl
> really had it's stuff together, they would have brought a class action
> against Kenwood on behalf of all American Radio Operators... A
> strong message to all ham radio manufactures that we are fed up with
> poor design/engineering and won't take it any more!

    Aw, come on... Didn't anyone ever wonder why ham-quality gear cost an order of magnitude less than commercial-quality gear? And TWO orders of magnitude less than military-quality?

    You get what you pay for. Period. I have looked at so-called commercial versions of hand-held radios made by ICOM, Wilson, etc., and that stuff is real trash compared to GE, Motorola, Repco, etc. - of course, it costs a lot less, too.

=== Larry Lippman @ Recognition Research Corp., Clarence, New York   ===
=== UUCP   {decvax,dual,rocksanne,rocksvax,watmath}!sunybcs!kitty!larry ===
=== VOICE   716/741-9185   {rice,shell}!baylor!/   ===
=== FAX   716/741-9635 {AT&T 3510D}   syr!buf!/   ===
=== TELEX   69-71461 ansbak: ELGECOMCLR {via WUI} ihnp4!/   ===
===   ===
===   "Have you hugged your cat today?"
               ===

From -4911616761265093208
X-Google-Language: FRENCH,ASCII-7-bit
X-Google-Thread: 119e09,2d00e0f3e999bb2c,start
X-Google-Attributes: gid119e09,public
X-Google-Thread: 151e61,2d00e0f3e999bb2c,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,2d00e0f3e999bb2c,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 14596d,2d00e0f3e999bb2c,start
X-Google-Attributes: gid14596d,public
X-Google-Thread: 13372f,2d00e0f3e999bb2c,start
X-Google-Attributes: gid13372f,public
X-Google-Thread: 15f443,2d00e0f3e999bb2c,start

X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1985-10-26 23:09:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 from ihnp4 4.3bsd-beta 6/6/85; site chinet.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!ihnp4!chinet!madmonk
From: madmonk@chinet.UUCP (William M. Fischer)
Newsgroups: net.analog,net.astro,net.ham-radio,net.space,net.tv,net.wanted
Subject: Want info on Satellite Television
Message-ID: <186@chinet.UUCP>
Date: Sun, 27-Oct-85 01:09:02 EST
Article-I.D.: chinet.186
Posted: Sun Oct 27 01:09:02 1985
Date-Received: Wed, 30-Oct-85 03:45:13 EST
Reply-To: madmonk@chinet.UUCP (William M. Fischer)
Organization: chinet, Public Access UN*X, Chicago IL
Lines: 18
Xref: watmath net.analog:500 net.astro:1083 net.ham-radio:3452 net.space:4693
net.tv:3426 net.wanted:7475

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

I am interested in finding out more about satellite tv, especially about the
construction of home earth stations. I am a complete newcomer to this field,
 and
would appreciate any help comments, sources, whatever.

Thanks to all in advance.

madmonk@chi-net.UUCP

Bill Fischer
Madmonk Systems

 public"

From 7027219519088446430
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,262805b6d9df5cee
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-27 11:58:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!decvax!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Re: Eavesdropping revisited [How's that again?]
Message-ID: <657@petrus.UUCP>

Date: Sun, 27-Oct-85 14:58:15 EST
Article-I.D.: petrus.657
Posted: Sun Oct 27 14:58:15 1985
Date-Received: Mon, 28-Oct-85 04:19:30 EST
References: <154@pyuxv.UUCP>
Organization: Bell Communications Research, Inc
Lines: 28

> Congress has a measure under consideration that would
> strengthen such privacy law requirements extending protection to
> cellular and cordless telephones.

I see this as a very unfortunate development. Once again, the lawyer types think they can simply wish away a problem with an unenforceable law. Has anybody told them that cordless telephones can be intercepted with any cheap AM radio? Or that under the proper circumstances cellular phone conversations can be overheard with an ordinary UHF TV set?

Naturally, one major effect of such a law would be to hassle us hams. No doubt there'd be an effort to ban the sale of general coverage receivers (either of the traditional HF type or the new VHF/UHF types like the Yaesu FRG-9600 or the Icom R-7000). Bad guys still intent on monitoring cellular phone would still be able to build their own receive converters with little trouble, and unless we repeal the 4th amendment and allow arbitrary police-state searches of private residences for listening gear, the law won't stop them. Worse, the mere existence of the law will give the users of cordless and cellular phones a false sense of privacy, and nothing is more dangerous when dealing with communications security.

The cellular radio operators should be required to inform their customers that their conversations can be overheard (as cordless phone users already are). Customers should be made to understand that they are responsible for their own communications security and encouraged to obtain voice scrambling devices should they wish greater privacy. I see no practical alternative.

Phil

From -368447637805584072
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,20f752d626744fb9
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-06 08:01:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!lll-crg!seismo!brl-tgr!tgr!
taylor.WBST@Xerox.ARPA
From: taylor.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: crrl bulletin nr 30 (digital license)
Message-ID: <391@brl-tgr.ARPA>
Date: Fri, 6-Dec-85 11:01:35 EST
Article-I.D.: brl-tgr.391

Posted: Fri Dec 6 11:01:35 1985
Date-Received: Tue, 10-Dec-85 05:55:48 EST
Sender: news@brl-tgr.ARPA
Lines: 13

Phil, I agree with you. I appears that we have two ways of screening ham radio for "quality" of operators: (1) By a tough technical exam; (2) By a tough code axam.

Citizens Band had neither-- therefore, a complete lack of "quality" screening.

It seems to me that the chief challenge for the hobby now is how we can best attract the most of the best young innovators. I just don't see a code requirement of over, say, 5 or 10 wpm as contributing to this end.

73 Jim (W2OZH)

From -1793415953883125512
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,793560a6cf053104
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-06 21:04:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!lll-crg!seismo!harvard!think!mit-eddie!cybvax0!frog!hydra!die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio
Subject: Re: Prankster disrupts radio broadcasts
Message-ID: <143@hydra.UUCP>
Date: Sat, 7-Dec-85 00:04:16 EST
Article-I.D.: hydra.143
Posted: Sat Dec 7 00:04:16 1985
Date-Received: Tue, 10-Dec-85 06:35:26 EST
References: <701@ihu1h.UUCP>
Reply-To: die@hydra.UUCP (David I. Emery)
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 88
Keywords: Vulnerable, Spoofing, Validation bitstream.
Summary: Society is vulnerable

In article <701@ihu1h.UUCP> parnass@ihu1h.UUCP (Bob Parnass, AJ9S) writes:

> CHICAGO - A pirate broadcaster has been treating Chi-
> cago area radio listeners to some unscheduled program-
> ming by transmitting on the microwave studio-to-
> transmitter links of area AM radio stations.

It is surprising that this sort of thing hasn't happened sooner. There are so many links out there, most of which use very low power (a watt or two) that it is a testament to the basic civility and sense of order in our society that this electronic vandalism hasn't happened more often.

In any case my heart goes out to the chief engineers at the stations involved. A surprising number of both AM and FM stations have unattended transmitters controlled from the studio via the STL link. There are shutoff circuits to shut the transmitter down if the link is lost but essentially no protection whatsoever against someone simulating the signal. And I suspect in at least some cases, there is only limited backup capability to shutdown the transmitter by phone lines so a spoofer might have several minutes of air-time before the transmitter could be manually shut down.

Years ago I used to wonder why radicals (yes, I'm from that generation but not of that political persuasion) didn't try to take over the microwave TV relay backbone routes used until recently to distribute network programming to local affiliates to run 15 or 30 second anti-establishment commercials during some major TV event. Parking near a hilltop At&T site with a VCR, a 4 Ghz TWT power amplifier (available as surplus) and small dish would be as effective a means of getting media attention as blowing up a building. And as far as I know some care in simulating the real longlines video format would probably suffice to ensure that automatic protection channel switchovers didn't take one off the air.

Today taking over a TV network feed would require generating enough RF EIRP to be a couple of db's above the network's uplink transmitter at the satellite. This would involve hundreds of watts and a moderately large dish. It would, however, require the resources of the defense department to find such a bogus uplink with no more indication of it's location then that it was somewhere in or near the continental US or Canada or Mexico. I doubt if the required special resources are set up to handle a random and unexpected 15 second uplink during say the Superbowl. And of course, if one happens to live near the ground sites (mostly Long Island, and LA) that uplink the network feeds, it might be possible to take over a local microwave link feeding the uplink.

And of course if the ambitions of the group involved were less than national even a toy source of 3.7-4.2 or 12 ghz (NBC) rf would do quite nicely if located near the satellite dish that served a local TV station as satcom signals are so very weak. I suspect the local oscillator out of a TVRO would do the trick.

But more sinister than the few seconds of direct media access such a caper might gain, is the implications for other more critical things that are controlled by RF links. For example, in the area where I live the power companies use microwave links to monitor and control their distribution network. I suspect a clever and somewhat more sophisticated spoofer

could issue commands to remote switching stations that would cause a great deal of havoc. Doing so would require some cleverness since the RF links are mostly multichannel fm-fdm-ssb, but since the equipment is quite possibly only equiped with loss of carrier and pilot alarms, it might be possible to spoof with simple enough systems to be within the reaches of a terrorist organization.

In any case all of this ought to make those of us who design systems think in terms of how we might make them less vulnerable. One method that works remarkably well in controlling vulnerability to spoofing is to transmit the information digitially and encipher the resultant bit stream. A spoofer would have to know the code to transmit anything meaningful. It is not even necessary to encode the information just as long as there is some form of data integrity checking that involves a secret key that the spoofer cannot obtain by monitoring the channel.

A method that would work for radio and TV links is transmission of a validation bit stream on a subcarrier. I suspect this could be accomplished with a $50-100 dollar microprocessor and VCO. I doubt that anyone could argue that something that cheap wasn't worth considering ...

David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.
uucp: decvax!frog!die

From 8410678755309015945
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a549a476710c13e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-07 02:29:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ucf-cs.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!akguc!codas!peora!ucf-cs!notes
From: notes@ucf-cs.UUCP
Newsgroups: net.ham-radio
Subject: TR-2400 explodes
Message-ID: <2181@ucf-cs.UUCP>
Date: Sat, 7-Dec-85 05:29:15 EST
Article-I.D.: ucf-cs.2181
Posted: Sat Dec 7 05:29:15 1985
Date-Received: Sun, 8-Dec-85 03:27:56 EST
Sender: notes@ucf-cs.UUCP
Organization: Univ. of Central Florida, Orlando
Lines: 36
Nf-ID: #N:ucf-cs:54600001:000:1710
Nf-From: ucf-cs!hawkins Nov 25 22:16:00 1985

Subject: Kenwood TR-2400 Blown UP!

When I got my TR-2400 (used) I received a few "Weak Modulation"

signal reports and so I proceded to turn up the mike gain pot
that was clearly marked on the schematic and was easily found
on the circuit board. I figured that such a slight change could
not possibly get me in to trouble. I was wrong. Upon putting
the radio back together I asked for a signal report to see if
my modulation was up. It was.

I thought I had it licked until a few days later I tried to access
the local autopatch. It completely ignored me. Hmmm, I thought,
let me turn this little pot over here that increases the voltage
from the touch-tone chip. That didn't work. I had better look at
this on the scope, I thought. I probed around with the comparatively
large scope probe and blew out a coil.

The coil is made of a fine wire wound on a resistor. Its purpose is
to act like a fuse. The only problem is that the resistor still conducts.
Not aware of this at this time, I pluged it in to a 10 amp 12vdc supply.
The radio worked. Unplugged it, and it didn't. Figured the battery was
shot.

I tested the battery and found that it was good and figured that
there may be something wrong with something between it and the
circuit. So as an experiment I wired the battery in through the
external voltage connector to see if it would work. It didn't,
it blew up instead. I had connected it backwards. Several of the
transistors literally exploded, and some didn't. I still haven't
figured out where all the non-exploded bad transistors are.

Has anybody faced such a problem with this rig, or is it just me.
If anyone has any contructive comments I would appreciate them.

Dennis Hawkins / N4MWD

From -7511476417917076516
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,694d540195001c66,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-07 19:03:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Some Russian freqs
Message-ID: <711@ihu1h.UUCP>
Date: Sat, 7-Dec-85 22:03:59 EST
Article-I.D.: ihu1h.711
Posted: Sat Dec 7 22:03:59 1985
Date-Received: Sun, 8-Dec-85 07:02:21 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 48

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USSR: Aeroflot, commercial flights to Cuba, cw
                      [Cuba]_____________  15.0240____COL       (B. Parnass)
              "       [Cuba]_____________   8.8420____COL       (B. Parnass)
USSR: Agentstwo Petschato Novosti (press), F7B emission, 15kw
                      [Moscow]___________   6.9400____RAN74     (purported)
USSR: Embassy_________[Dublin, Ireland]____  11.1480____RLX       (purported)
              "       [Dublin, Ireland]____  12.2110____RLX       (purported)
              "       [Dublin, Ireland]____  14.4260____RLX       (purported)
              "       [Dublin, Ireland]____  17.5280____RLX       (purported)
              "       [Dublin, Ireland]____   4.8930____RLX       (purported)
              "       [Dublin, Ireland]____   4.9030____RLX       (purported)
              "       [Dublin, Ireland]____   5.1810____RLX       (purported)
              "       [Dublin, Ireland]____   5.7440____RLX       (purported)
              "       [Dublin, Ireland]____   6.8420____RLX       (purported)
              "       [Dublin, Ireland]____   9.2170____RLX       (purported)
              "       [Dublin, Ireland]____   9.8420____RLX       (purported)
              "       [Luanda, Angola]_____  20.6880____D3M74     (purported)
              "       [Madrid, Spain]______  13.9650____AND8      (purported)
              "       [Warsaw, Poland]_____  11.1520____RXO       (purported)
              "       [Warsaw, Poland]_____  12.0300____RXO       (purported)
              "       [Warsaw, Poland]_____   4.5300____RXO       (purported)
              "       [Warsaw, Poland]_____   5.4100____RXO       (purported)
              "       [Warsaw, Poland]_____   6.9725____RXO       (purported)
              "       [Washington, DC]_____  10.9225____KNY31     (purported)
              "       [Washington, DC]_____  12.0675____KNY31     (purported)
              "       [Washington, DC]_____  14.9125____KNY31     (purported)
              "       [Washington, DC]_____  16.2420____KNY31     (purported)
              "       [Washington, DC]_____  20.5275____KNY31     (purported)
              "       [Washington, DC]_____   5.8560____KNY31     (purported)
USSR: Ministry of Foreign Affairs
                      [Moscow, USSR]_______  11.1650____RCF       (purported)
              "       [Moscow, USSR]_______  16.0950____RCF       (purported)
USSR: Russian Navy, calling RMIL, wkg URLI who was xmitg numbers in fast clean
                       cw
                      [Santiago, Cuba]_____   5.2850____CMU967    (B. Parnass)
USSR: Russian Navy, Khiva Naval, cw
                      [Uzbek SSR]__________  10.5097____RIW       (B. Parnass)
USSR: Russian Navy, Khiva Naval, telling station UCBV 'QSA no QSX QWK1 ZBR', c
                     w, 11/02/85, @1915Z
                      [Uzbek SSR]__________  14.5560____RIW       (B. Parnass)
USSR: Russian Navy, xmitg numbers in fast clean cw
                      [Santiago, Cuba]_____  11.1140____CMU967    (B. Parnass)
USSR: Salyut 7 Space Station beacon
                      [location?]__________  20.0080____call?     (purported)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From 2479866879842634629
X-Google-Language: ENGLISH,ASCII-7-bit
```

X-Google-Thread: 151e61,793560a6cf053104
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-08 23:25:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!linus!decvax!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Re: Prankster disrupts radio broadcasts
Message-ID: <744@petrus.UUCP>
Date: Mon, 9-Dec-85 02:25:22 EST
Article-I.D.: petrus.744
Posted: Mon Dec 9 02:25:22 1985
Date-Received: Wed, 11-Dec-85 20:49:42 EST
References: <701@ihu1h.UUCP> <143@hydra.UUCP>
Distribution: net
Organization: Bell Communications Research, Inc
Lines: 23

Just recently (Thanksgiving weekend) I saw an AP wire story reporting that one of the satellite uplink operators had filed a formal complaint with the FCC alleging that deliberate interference (several hours of unmodulated carrier) had occurred to one of their signals. They went on to suggest that the interference might have been an attempt to retaliate against the use of video encryption devices. However, the FCC seemed unconvinced that the possibility of accidental interference caused by a sloppy operator at another legitimate uplink site had really been ruled out.

I guess the day you see HBO's signal pre-empted by a crude B&W slide that says (in true ransom-note fashion):

ThiS StAYs oN uNTil tHe SCRamBleR GoES oFF!

you will know for sure that deliberate jamming has begun. The only practical way to find such a jammer (who could be anywhere in the CONUS, Cuba, northern Mexico or southern Canada) would be with a low earth orbiting ELINT (electronic intelligence) satellite, and if the DoD has such a beast they are unlikely to "compromise intelligence sources and methods" by using it to solve a mere civilian problem (except perhaps by phoning an anonymous tip into the FCC...)

Phil

From -6513400379074138717
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd91b6f2ea7519b0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-09 06:55:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site joevax.UUCP
Path: utzoo!decvax!bellcore!petrus!magic!joevax!mcg
From: mcg@joevax.UUCP (Mark Germain)

Newsgroups: net.ham-radio
Subject: HF Transceiver for Mobile Operation
Message-ID: <105@joevax.UUCP>
Date: Mon, 9-Dec-85 09:55:03 EST
Article-I.D.: joevax.105
Posted: Mon Dec 9 09:55:03 1985
Date-Received: Mon, 9-Dec-85 20:08:50 EST
Distribution: na
Organization: Bell Communications Research Inc., Morristown, NJ
Lines: 17

I looking for feedback from anyone who has had direct experience with
either ICOM or Kenwood HF transceivers in a mobile environment. I'm
currently using an ICOM IC-720A for dedicated mobile use which has been
in my vehicle for the past three years. Although the front end of the
720A is very good, the noise blanker, under crowded band conditions as
for example on 20m, or 40m, or in the presence of moderately strong
carriers, is virtually ineffective.

The problem is one of a basic design flaw in the noise blanker and its
associated circuitry. If there is anyone who has first-hand experience
with an HF transceiver in a mobile environment which has a EFFECTIVE
noise blanker under both crowded band conditions and in the presence of
strong carriers, please contact me.

Mark, KB2IF
201 829 4538
joevax!mcg

From 1833558000752117192
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,80b6fc69fb18b810
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-09 07:32:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ptb@mitre-bedford.ARPA
From: ptb@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: ARRL, I like it
Message-ID: <415@brl-tgr.ARPA>
Date: Mon, 9-Dec-85 10:32:04 EST
Article-I.D.: brl-tgr.415
Posted: Mon Dec 9 10:32:04 1985
Date-Received: Wed, 11-Dec-85 09:49:49 EST
Sender: news@brl-tgr.ARPA
Lines: 7

I like your comment of reading QST "even though it was not designed
for just me", as you put it. That's something to remember,...., the
ARRL has to care for a lot of people; so the magazine will have a
little bit of everything in it, and hopefully something good for

everyone.

73 de wa1snh

From 5840091020933515083
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,793560a6cf053104
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-09 12:57:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!linus!decvax!bellcore!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: Prankster disrupts radio broadcasts
Message-ID: <866@vortex.UUCP>
Date: Mon, 9-Dec-85 15:57:33 EST
Article-I.D.: vortex.866
Posted: Mon Dec 9 15:57:33 1985
Date-Received: Wed, 11-Dec-85 20:40:43 EST
References: <744@petrus.UUCP>
Organization: Vortex Technology, Los Angeles
Lines: 24

First of all, the person who suggested that digital subcarriers
might prevent persons from "taking over" STL's and uplinks is correct--
they could stop people from actually transmitting their material through
the main broadcast facilities. However, such systems would not
prevent jammers from simply disrupting communications by interfering
with or capturing out the feed channels, even if they couldn't get
their material "on the air" in a "big" way.

Locating illicit uplinks would indeed be tricky. I suspect that if
the broadcasters went to DoD and pointed out that what happened to
them could happen to portions of telephone service, etc., DoD might
be forced by public opinion to help in the search. Another possibility
is that the broadcasters might get together and launch their OWN
low orbit "tracker" satellite just to deal with such situations
when they pop up.

My guess is that the current problems aren't intentional jamming, but
are rather inept ground crews: "Oh, gee, you said one three FIVE degrees;
sorry about that!" But this doesn't mean that the real jamming won't
come along eventually.

--Lauren--

From -6923666019731222291
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,fc5ee5a54f1a3558,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-09 19:08:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 49
Message-ID: <22238@mgweed.UUCP>
Date: Mon, 9-Dec-85 22:08:09 EST
Article-I.D.: mgweed.22238
Posted: Mon Dec 9 22:08:09 1985
Date-Received: Wed, 11-Dec-85 03:06:50 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 54

qst de k9eui
hr propagation forecast bulletin 49 from arrl headquarters
newington ct december 9, 1985
to all radio amateurs bt

between november 27 and december 8, the solar flux curve followed that for the same days of the previous solar rotation almost exactly. it held at 70 or 71 until december 4, then rose gradually to 75 on the 8th. if this tracking continues as expected, the flux will peak about december 13, then slide back to near quiet sun levels by the 24th. when solar activity is low and day to day chamges are small, geomagnetic activity is usually low and propagation is mostly good, but with low muf. we are likely to see a lot of this sort of thing for at least another year. even 14 mhz goes quiet early in the evening, but both 14 and 21 mhz can work well in the winter months. openings on 24 and 28 mhz are brief and widely scattered, unless the flux moves into the high 70s or higher. there is likely to be some improvement in the length and geographical distribution of dx on all 4 bands this week, but the shortening hours of daylight in the northern hemisphere work against major improvement.

somewhat higher geomagnetic activity is expected this week. it will be most harmful in our more northerly states and in canada. transequatorial circuits may even work better at such times, especially on 21, 24 and 28 mhz. even 50 mhz should not be ruled out.

one plus factor for the higher frequencies is the annual geminids meteor shower, peaking this week. this is no ragchewing mode, but it can pay off with fast vox or break in cw.

the propagation charts published monthly in qst provide the

best information on the most likely times for conventional dx work on the amateur bands. the actual muf for a given time, on a given day, may vary markedly, depending on the solar flux and the level of geomagnetic activity. the peak times are accurate, because they depend on the position of the sun with respect to the path in question.

there was an error in the address recently given for the conductor of this column. the correct address is,

edward p. tilton, w1hdq
p.o. box 5529
spring hill, fl 33526

american sunspot numbers for november 21 through 27 were between 0 and 11 with a mean of 2.7. there were no sunspots visible for the week november 28 to december 4 ar

From 869167032920613163
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6805b923b2e68117,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-09 19:08:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 104 (W1AW will qso Dec 28 & 29)
Message-ID: <22239@mgweed.UUCP>
Date: Mon, 9-Dec-85 22:08:51 EST
Article-I.D.: mgweed.22239
Posted: Mon Dec 9 22:08:51 1985
Date-Received: Wed, 11-Dec-85 03:07:02 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 16

qst de k9eui
hr arrl bulletin nr 104 from arrl headquarters
newington ct december 9, 1985
to all radio amateurs bt

over the weekend of december 28 and 29, arrl hq staffers will put w1aw on the air on all hf bands for general contacts. the regularly scheduled biweekly transmission of keplerian data at 2330 utc on saturday will be sent, but other scheduled transmissions may be preempted as activity warrants. operation will begin at approximately 1300 utc each day. all qsls received for this operation will be answered with the distinctive w1aw qsl, including a commemorative 350 years of connecticut sticker ar

From 1061370369721319212
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e5a925911733ab2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-09 19:10:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 103 (elections)
Message-ID: <22240@mgweed.UUCP>
Date: Mon, 9-Dec-85 22:10:15 EST
Article-I.D.: mgweed.22240
Posted: Mon Dec 9 22:10:15 1985
Date-Received: Wed, 11-Dec-85 03:07:15 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 11

qst de k9eui
hr arrl bulletin nr 103 from arrl headquarters
newington ct december 9, 1985
to all radio amateurs bt

the following have been elected without balloting as section
managers for their respective sections. north carolina k4swn
pacific ah6p san francisco na6t and virginia w3atq.   those
elected begin their new terms of office april 1, 1986 ar

From 4810407259252181983
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ad78eb3886a37cbf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-11 16:48:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ukma!psuvm.bitnet!psuvax1!burdvax!sdcrdcf!
sdcsvax!dcdwest!ittatc!decvax!ucbvax!ucdavis!lll-crg!lll-lcc!dual!ptsfa!qantel!
ihnp4 !ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Recent SWL loggings (USAF scrambler tests, barges, etc.)
Message-ID: <713@ihu1h.UUCP>
Date: Wed, 11-Dec-85 19:48:48 EST
Article-I.D.: ihu1h.713
Posted: Wed Dec 11 19:48:48 1985
Date-Received: Wed, 18-Dec-85 06:46:22 EST
Distribution: net
Organization: AT&T Bell Laboratories

Lines: 60

4.2500 XFL_____Mazatlan Radio, coastal station cw marker, 12/07/85 @0312Z
[Mazatlan, Mexico] (B. Parnass)

4.2660 PPL_____Belem Radio, coastal station cw marker, 12/07/85 @0316Z
[Belem, Brazil] (B. Parnass)

4.2680 LPD68_____General Packeco Radio, cw marker, 12/07/85 @0317
[Don Bosco, Argentina] (B. Parnass)

4.2750 HPP_____unidentified: likely in Panama, coastal station cw marker, 12/07/85 @0330Z
[location?] (B. Parnass)

4.3290 GKT26_____Portishead Radio, usb, 12/07/85 @0253Z
[Portishead, England] (B. Parnass)

4.7220 MVU_____Great Britain: RAF, Upavon Air Base, wx report, 12/10/85 @0232Z, usb
[W Drayton, England] (B. Parnass)

6.5220 WHF763____Ingram Barge Company, usb, 12/04/85 @1816Z
[Nashville, TN] (B. Parnass)

WIX_____Indiana & Michigan Electric Co, maritime station wkg "the Ned Sheetz", usb, 12/05/85 @1744
[Lakin, WV] (B. Parnass)

WNE_____Peavey Company, maritime station wkg a barge inland, usb, 12/05/85 @1737
[Alton, IL] (B. Parnass)

6.8120 call?_____US: Air Force, Andrews AFB wkg aircraft 7000 on this freq while testing teleprinter on another ckt, mentioned AF2, lsb, 12/05/85 @1829Z
[Andrews AFB, Washington DC] (B. Parnass)

11.2140 call?_____US: Air Force, Tactical Air Command, 'Dragnet India' wkg 'Dragnet Golf', testing time-varying speech inversion scramblers using preambles. This freq used by AWACS aircraft, usb, 12/11/85 @1840Z
[location?] (B. Parnass)

14.4700 NNN0CRW___US: Navy, MARS station aboard ship wkg MARS station NNN0NIM, usb, 12/05/85 @1732Z
[USS Guam] (B. Parnass)

NNN0CUV___US: Navy, MARS station aboard ship wkg MARS station NNN0NIM, usb, 12/05/85 @1730Z
[USS Comte De Grasse] (B. Parnass)

NNN0NIM___US: Navy, MARS station at USMC installation wkg NNN0CRW
aboard USS Guam and NNN0CUV aboard USS Comte De Grasse,
usb, 12/05/85 @1732Z
[Gulfport, MS] (B. Parnass)

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -8145261943614764933
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3166f1f820ace2fc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-12 05:52:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site pedsgo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!hjuxa!petsd!pedsgd!
pedsgo!johnd
From: johnd@pedsgo.UUCP (J Decatur)
Newsgroups: net.ham-radio
Subject: Re: shuttle frequencies????
Message-ID: <117@pedsgo.UUCP>
Date: Thu, 12-Dec-85 08:52:06 EST
Article-I.D.: pedsgo.117
Posted: Thu Dec 12 08:52:06 1985
Date-Received: Fri, 13-Dec-85 08:37:48 EST
References: <274@brl-tgr.ARPA>
Organization: Perkin-Elmer DSG, Tinton Falls, NJ
Lines: 30

>
> Actually, I don't know the WA3NAN rebroadcast frequency and I would appreciate
> someone's posting them here.
>
> Thanks - Bruce K1FFX

Dec 11 liftoff? or the 18th.
Qst had the 11th i believe and net.columbia had the 18th?
But as you know all can change.

As Requested:
~~~~~~~~~~~~~
Frequencies for shuttle are:

7185 KHZ 40Meter Band - Lower Side Band
3860 KHZ 80Meter Band - Lower Side Band
14.295 MHZ 20Meter Band - Upper Side Band
147.45 MHZ 2Meter Band -FM (wash. dc area)
147.00 MHZ 2Meter Band -FM (new york,new jersey,conn.)
(rumor has it it can be found on 20.1983 also)
~~~~~~~~~~~~~

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 ============================================================
 435.003 mhz and 145.972 are in my notes as "direct"
 frequencies for the flight, unfortunately i didnt
 write much else. hi hi
     Mission 24/61-C   12/18/85 (launch date)
 ============================================================

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UUCP: {ucbvax,decvax,ihnp4}!vax135!petsd!pedsga!johnd  --KA2QHD--


From 5097781719775635322
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,185a7e8d584ba513,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-13 07:56:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: SWL loggings (USAF scrambler test, barges, etc.)
Message-ID: <715@ihu1h.UUCP>
Date: Fri, 13-Dec-85 10:56:50 EST
Article-I.D.: ihu1h.715
Posted: Fri Dec 13 10:56:50 1985
Date-Received: Sat, 14-Dec-85 07:59:17 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 60


   4.2500    XFL_______Mazatlan Radio, coastal station cw marker, 12/07/85 @031
                       2Z
                       [Mazatlan, Mexico] (B. Parnass)

   4.2660    PPL_______Belem Radio, coastal station cw marker, 12/07/85 @0316Z
                       [Belem, Brazil] (B. Parnass)

   4.2680    LPD68_____General Packeco Radio, cw marker, 12/07/85 @0317
                       [Don Bosco, Argentina] (B. Parnass)

   4.2750    HPP_______unidentified: likely in Panama, coastal station cw marke
                      r, 12/07/85 @0330Z
                       [location?] (B. Parnass)

   4.3290    GKT26_____Portishead Radio, usb, 12/07/85 @0253Z
                       [Portishead, England] (B. Parnass)

   4.7220    MVU_______Great Britain: RAF, Upavon Air Base, wx report, 12/10/85
                        @0232Z, usb
                       [W Drayton, England] (B. Parnass)
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   6.5220    WHF763____Ingram Barge Company, usb, 12/04/85 @1816Z
                       [Nashville, TN] (B. Parnass)

             WIX_______Indiana & Michigan Electric Co, maritime station wkg "th
                       e Ned Sheetz", usb, 12/05/85 @1744
                       [Lakin, WV] (B. Parnass)

             WNE_______Peavey Company, maritime station wkg a barge inland, usb
                       , 12/05/85 @1737
                       [Alton, IL] (B. Parnass)

   6.8120    call?_____US: Air Force, Andrews AFB wkg aircraft 7000 on this fre
                       q while testing teleprinter on another ckt, mentioned AF
                       2, lsb, 12/05/85 @1829Z
                       [Andrews AFB, Washington DC] (B. Parnass)

  11.2140    call?_____US: Air Force, Tactical Air Command, 'Dragnet India' wkg
                        'Dragnet Golf', testing time-varying speech inversion s
                       cramblers using preambles. This freq used by AWACS aircr
                       aft, usb, 12/11/85 @1840Z
                       [location?] (B. Parnass)

  14.4700    NNN0CRW___US: Navy, MARS station aboard ship wkg MARS station NNN0
                       NIM, usb, 12/05/85 @1732Z
                       [USS Guam] (B. Parnass)

             NNN0CUV___US: Navy, MARS station aboard ship wkg MARS station NNN0
                       NIM, usb, 12/05/85 @1730Z
                       [USS Comte De Grasse] (B. Parnass)

             NNN0NIM___US: Navy, MARS station at USMC installation wkg NNN0CRW
                       aboard USS Guam and NNN0CUV aboard USS Comte De Grasse,
                       usb, 12/05/85 @1732Z
                       [Gulfport, MS] (B. Parnass)

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================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -6972910746414378327
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,60bed5f3a4fb52dc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-14 08:30:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 11/08/85; site unccvax.unccvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!mcnc!
unccvax!dsi
From: dsi@unccvax.UUCP (Dataspan Inc)
Newsgroups: net.ham-radio
Subject: Re: Transmitting tube cost
Message-ID: <389@unccvax.unccvax.UUCP>
```

Date: Sat, 14-Dec-85 11:30:15 EST
Article-I.D.: unccvax.389
Posted: Sat Dec 14 11:30:15 1985
Date-Received: Mon, 16-Dec-85 03:55:40 EST
References: <683@brl-tgr.ARPA>
Organization: UNC-Charlotte
Lines: 56

> >Most of the ceramic metal tubes are more fragile, and much more
> >expensive (I think the 8875 is on the order of $250 each, and the 8877
> >is around $500!). Paul Young, K1XM
>
> Anybody have any data on just what makes these tubes cost so much? The

> [WRNO] explained the length of downtime to the fact that they
> couldn't afford to stock spare tubes at $10,000 each (!) and that was
> what failed, and they had to wait for replacements.
>
> As for ham type transmitting tubes, what contributes to the cost?

I can believe that WRNO's final amplifier(s) cost $10,000 or more. They are probably water cooled Eimacs which aren't really made new, but instead are remanufactured. This is the case with most broadcasting tubes in the nonexpendable class.

I'm a broadcast engineer in my spare time, and have found that spares are not unreasonable:

4CX250F	$67.75
4-400C (Amperex)	$59.00
833A	$65.00
845	$85.00
4CX5000	$375 rebuilt, $875 new from Varian/Eimac

The problem that many hams face is not the cost of "real" RF tubes, but the cost of some "typical" ham tubes used at HF. Four 6JS6C/6KD6 horizontal sweep tubes can eat the best part of a $100 bill. Not everyone has the plate transformers lying around to operate a 4-400C or 4CX250, nor the air system sockets and chimneys required. As for the cost of the other ceramic-metal tubes cited, try CeCo or another broadcasting tube vendor.

Stay away, though, from the CeCo house brand tubes (although the 833's I have in my BTA-1E modulator are still working) as they are usually made in countries still using a lot of 'em. I've heard horror stories about the Chinese inability to perform a proper pin or terminal-to-glass seal. The 807's (made in the USSR) I had almost took out my high voltage supply in the RCA transmitter (because the modulator grids are direct coupled and the tube was badly shorted out of the box).

In two Collins 831F2 FM transmitters, the remanufactured tubes have lasted longer, according to the chief engineer of WPEG Concord, NC... much longer. However, there probably aren't a lot of hams using a 4CX5000 (or

whatever, I think the type number is wrong - you know, ceramic-metal, bigger than a football).

Spares aren't that hard to come by, but when you purchase them from the local place which carries Sams' Photofacts and that ilk, you are going to get royally reamed. Your best bet is a broadcast supply house for "real" RF tubes (not sweep tubes, however). I don't know where one would get 6JS6C's anymore without parting with $25.

David Anthony
DataSpan, Inc.

From -7670736324066974163
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,f61adf54c14113e3,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,f61adf54c14113e3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-14 09:23:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 11/08/85; site unccvax.unccvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!mcnc!unccvax!dsi
From: dsi@unccvax.UUCP (Dataspan Inc)
Newsgroups: net.analog,net.ham-radio
Subject: Help !!!!
Message-ID: <391@unccvax.unccvax.UUCP>
Date: Sat, 14-Dec-85 12:23:01 EST
Article-I.D.: unccvax.391
Posted: Sat Dec 14 12:23:01 1985
Date-Received: Mon, 16-Dec-85 03:56:18 EST
Distribution: net
Organization: UNC-Charlotte
Lines: 58
Xref: watmath net.analog:560 net.ham-radio:3668

Folks, I've a real problem ...

I, for better or worse, inherited a Cetec-Sparta SS1000 MW transmitter to be retuned from 1590 to 1210 kHz. This is an early all-solid-state bipolar AM transmitter.

Well, I set the impedance at the input of the output filter to 130 ohms, plugged in the crystal for 1210, turned it on, and promptly blew 48 output transistors in the final amplifier. Yes, I had a 50 + j0 ohm dummy load connected to the transmitter output.

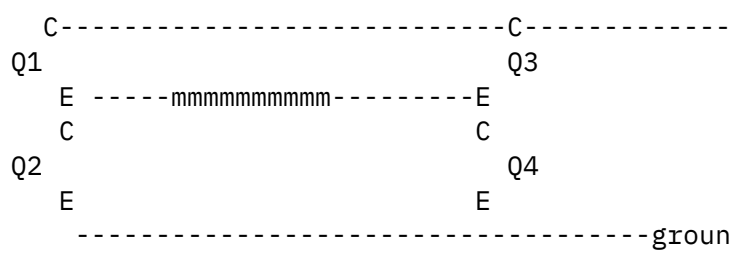
The output transistors were made by TRW, type PT 9122. According to the TRW RF Products division, this isn't even an "rf" transistor but a "power" device sold by the Opto division. They were trying to get the data on this power transistor, when I finally got fed up with this approach, I

called Elcom-Bauer (who supposedly bought Cetec-Sparta). They suggested that TRW said that type SVT-350-5 would work.

A quick check of my Motorola book crosses this device over to another with a storage time of 3 microseconds. Isn't this a wee bit long?

My question is:

The output stage consists of four identical bridged PA sections which are transformer coupled through a wideband ferrite device. Each PA section consists of two quasi-complementary NPN transistor stages, which is switched in opposite phase by a driver transformer (square wave drive)... see below



mmmmm represents the transformer winding which couples that particular PA section to the output transformer. The drive is arranged such that the transistor Q1 and Q4 conduct, then Q3 and Q2 on the opposite phase. There are various diodes in these leads to prevent undershoot, and to "remove the effects of storage time."

What this transmitter really seems to amount to is a giant switching power supply.

If you were selecting output stages for this, wouldn't one want to get output transistors which had the fastest possible switching time? What are my chances for converting this device to HEXFET's (tm)?

If you have the data for the PT9122, SV3-350-5, or any help at all, let me know. I've got to get this thing on the air before the end of the year (or face a quick rebuild of a 25 year old 10 kw Collins transmitter).

David Anthony
Chief Engineer
DataSpan, Inc
(704) 597-8317 days, 535-8292 nites

From 4393218038202846386
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,830840177d61e854,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-14 22:47:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site copper.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!tektronix!teklds!copper!michaelk

From: michaelk@copper.UUCP (Michael Kersenbrock)
Newsgroups: net.ham-radio
Subject: Re: QST (really QEX)
Message-ID: <151@copper.UUCP>
Date: Sun, 15-Dec-85 01:47:39 EST
Article-I.D.: copper.151
Posted: Sun Dec 15 01:47:39 1985
Date-Received: Mon, 16-Dec-85 04:38:46 EST
References: <453@brl-tgr.ARPA>
Reply-To: michaelk@copper.UUCP (Michael Kersenbrock)
Organization: Tektronix, Beaverton OR
Lines: 32
Summary:

In article <453@brl-tgr.ARPA> jhs@mitre-bedford.ARPA writes:
>I too am a subscriber to QST. I often wonder, however, why they have to
>charge us an additional fee for QEX (which I don't get) when the content
>of QST (aside from paid ads) is so skimpy. I would prefer to see the
>content of QEX thrown in free in QST, making it a MUCH more interesting
>publication, more comparable to Ham Radio or 73. As it is, there is
>very little in each issue that (in my opinion) is worth keeping.
>
>If I had a choice I would take QEX instead of QST. Maybe they could
>offer that as a membership option.
>
>   -de W3IKG

I've been a life member of ARRL for about 10 years or so (so, my QST is
now "free" sort of). I subscribed to QEX a little after it got going,
thinking I'd get more of a Ham Radio technically oriented publication.
I was very dissappointed, and let my subscription drop upon expiration.
QEX was more like "amateur elementary electronics". The death of Mr. Fisk
(W1HR) at HR was sadly the end of good, consistant technical amateur radio
publication. Alas.

                          -de WB4IOJ (very ex- KH6FON)

P.S. - In a couple weeks it will be the 20th birthday of my WH6FON
       novice licence. I knew you'd be thrilled to hear it. :-)

--

Mike Kersenbrock
Tektronix Software Development Products
Aloha, Oregon

From 5265787929048309425
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,61dc4aa4df295f00,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-16 05:18:22 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxa.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!houxa!593aac
From: 593aac@houxa.UUCP (S.JOHNSON)
Newsgroups: net.ham-radio
Subject: 2 Meter FM Mobile Available
Message-ID: <868@houxa.UUCP>
Date: Mon, 16-Dec-85 08:18:22 EST
Article-I.D.: houxa.868
Posted: Mon Dec 16 08:18:22 1985
Date-Received: Tue, 17-Dec-85 04:28:24 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 10

I've gone back into my bored with 2 Meter FM phase. If anyone is
interested, I have the following:

    Yaesu CPU-2500R 25 watt synthesized mobile with keypad
    microphone in good condition.

    Hustler 5/8 wave trunk mount antenna.

If interested call Steve, N2FT at (201) 949-5593 (days) or
(201) 577-0271 (eves).

From -9181116562424729180
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,be95ee5c37124cd9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-16 16:01:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!cuae2!ltuxa!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 105 (AMSAT USERS = PSE READ)
Message-ID: <22374@mgweed.UUCP>
Date: Mon, 16-Dec-85 19:01:53 EST
Article-I.D.: mgweed.22374
Posted: Mon Dec 16 19:01:53 1985
Date-Received: Tue, 31-Dec-85 03:44:38 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 19

qst de k9eui
hr arrl bulletin nr 105 from arrl headquarters
newington ct december 16, 1985
to all radio amateurs bt

the marshall amateur radio club experiment, marce, will orbit
with shuttle columbia this week. amsat requests no oscar 10

use during attempts to relay marce telemetry through it on mode
b. listen only during relay attempts,

     dec 18 2340 utc to dec 19 0730 utc
     dec 19 2010 utc to dec 20 8245 utc
     dec 20 1900 utc to dec 21 0100 utc

the frequency through oscar 10 is 145.972 mhz,plus or minus 3
khz.   record on cassette and send to amsat for possible award
ar

From -2331706194420297430
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f7095e1b834cdf58,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-16 16:02:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!cuae2!ltuxa!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 34
Message-ID: <22375@mgweed.UUCP>
Date: Mon, 16-Dec-85 19:02:29 EST
Article-I.D.: mgweed.22375
Posted: Mon Dec 16 19:02:29 1985
Date-Received: Tue, 31-Dec-85 03:44:50 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 13

qst de k9eui
hr crrl bulletin nr 34 from crrl headquarters
london ont december 16, 1985
to all radio amateurs bt

initial reactions to docs proposal for restructuring the
amateur service in canada seem mostly favorable. there is
strong feeling that the examination for the entry level
certificate a be substantial, and that doc should offer a slow
code certificate that, in conjunction with certificate a, would
give cw privileges on the hf bands ar

From -55384426656446220
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f9c5ca7c97fd3583,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-16 16:03:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!cuae2!ltuxa!mgnetp!mgweed!rjr

From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 50
Message-ID: <22376@mgweed.UUCP>
Date: Mon, 16-Dec-85 19:03:24 EST
Article-I.D.: mgweed.22376
Posted: Mon Dec 16 19:03:24 1985
Date-Received: Tue, 31-Dec-85 03:45:06 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 43

qst de k9eui
hr propagation forecast bulletin nr 50 from arrl headquarters
newington ct december 16, 1985
to all radio amateurs bt

through the middle of the month, the solar flux curve for december follows that that for four weeks earlier quite markedly. combined with the beginning of the short winter season for sporadic e skip on the higher frequencies, this made for an exciting arrl 10 meter contest on december 14 and 15. there was more visible activity on the sun in the past few days than we have seen in quite some time. the solar flux peak of 83 on the 15th could hardly have been better timed. the flux curve is expected to move lower this week, but we should not see really quiet sun conditions again before about december 24.

recurrent geomagnetic disturbances are expected about december 17 and 27. generally good propagation is likely otherwise, with gradually lower muf, through the years end. there should be another slow rise in sola in solar activity during the first week of january.

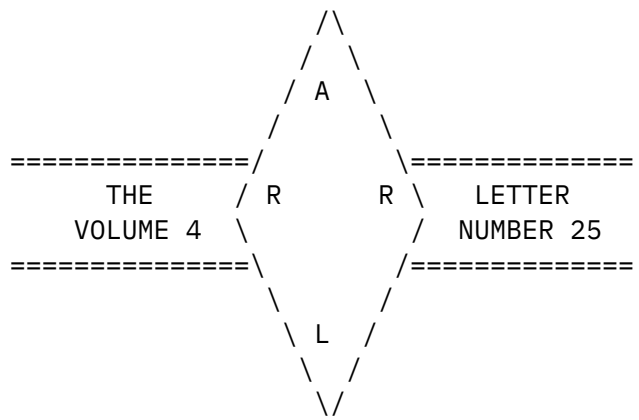
for a long time prior to late october, solar activity was averaging lower than would have been expected, with at least two years remaining in solar cycle 21. what we hae experienced in these eight weeks or so is probably a fair example of what lies ahead for at least the rest of the northern hemisphere winter.

the author of these bulletins is interested in the usefulness of the international ten meter beacons during the years of lowest solar activity. if you look for beacon stations frequently, we would appreciate receiving a list of beacons heard during 1985. please send your list to,

ed tilton, w1hdq
p.o. box 5529
spring hill, fl 33526

american sunspot numbers for december 5 through 11 were between 2 and 12 with a mean of 7.6 ar

From 5207044949461282671
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a2fbb0cdc12ed50,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-16 20:01:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL LETTER VOL 4, #25
Message-ID: <270@inuxi.UUCP>
Date: Mon, 16-Dec-85 23:01:41 EST
Article-I.D.: inuxi.270
Posted: Mon Dec 16 23:01:41 1985
Date-Received: Wed, 18-Dec-85 02:29:35 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 352



December 05, 1985

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In this issue:

o U.S. Korea Third Party Holiday Traffic OK

o Will Canada Restructure Its Amateur Radio?

o Spread-Spectrum Communications In Amateur Radio

o ...and much more!

WILL CANADA RESTRUCTURE ITS AMATEUR RADIO?

Canada's Department of Communications recently released a paper outlining proposed amendments to the regulations, policies and procedures concerning radio amateurs. If implemented, the new policies would update the requirements for becoming a radio amateur given today's technology and operating environment.

DOC's paper addresses amateur examination and certification from its inception in 1914 to the present, the regulation of the amateur service, and cur-rent issues affecting amateur operation in today's environment. Touched upon are amateur certification without knowledge of Morse code, incorporation of digital/computer technology in amateur equipment and their effects upon amateur practices and procedures, the trend toward experimenting with different modulation techniques and the trend away from home- built equipment.

DOC proposes a new practice of certifying individuals as Amateur Radio operators. The examination for a basic certificate will shift from the current emphasis on technical knowledge to the practical knowledge required to operate a modern amateur station. A knowledge of the regulations governing the amateur service would still be required. The new basic certificate would allow the individual to operate a 250-watt station on frequencies above 30 MHz. Anyone wishing to use frequencies below 30 MHz would require another certificate, obtained by passing a Morse code test at 12 words per minute. A third certificate, which would allow the individual to operate with a "home built" transmitter and with a maximum power of 1000 watts, is also proposed.

The Department of Commerce is asking for comments from the general public, especially those who are not yet amateurs but would like to become one. A copy of the DOC paper, "Discussion Paper on a Possible Restructuring of the Amateur Radio Service in Canada," is available from any regional or district office of the Department or by writing to: Director General -- Radio Regulatory Branch, Department of Communications, Journal Tower North, 300 Slater St, Ottawa ON Canada K1A 0/C8.

Detailed DOC Proposals for a Restructured Amateur Radio Service in Canada (extract)

The examination to certify a candidate for the operation of a basic, modern amateur station (Certificate "A") would consist of:

1) installation and operation of modern amateur stations; including proper interpretation of meter readings such as Automatic Limiter Circuit [sic] (ALC) and Standing Wave Ratio (SWR) and the adjustments necessary to prevent interference; proper grounding techniques; and correct installation practices from transceiver to antenna, including auxiliary devices such as low-pass filters and antenna tuners;

2) basic electronic theory, safety practices when working with simple circuits; tracing and correcting interference problems such as audio rectification and receiver front-end overload;

3) antenna and propagation theory, including types of antennas, feedlines and characteristics of propagation phenomena; and

4) international and domestic regulations applicable to the amateur service.

It is estimated that approximately 40 hours of instruction would be required to obtain the basic knowledge necessary to pass this examination. Successful candidates would be issued Amateur Certificate "A" and would have the following privileges and restrictions:

1) the transmitter portion of the station, from the microphone or keying input of the transmitter to the final output, would have to be commercially built and marketed specifically for use on the amateur frequencies. All other components of the station, such as the receiver, filters, antennas, computer interfaces, etc., could be home-built;

2) no emissions would be permitted below 30 MHz, but all would be permitted above 30 MHz;

3) stations would be limited to a maximum power input of 250 watts d.c.; and

4) licensees would be limited to operating stations under their physical control, but not repeaters or remote base stations.

The examination to certify a candidate for operation in the spectrum below 30 MHz (Certificate "B") would consist of a Morse code examination at a speed of 12 words per minute.

Successful candidates would receive Amateur Certificate "B" and, providing they held Certificate "A", would operate under the same conditions as those granted by that certificate, except that

they would be allowed all types of emission on any amateur band.

The examination to certify a candidate to construct and operate any station or to be the licensee of a repeater or other non-standard station (Certificate "C") would consist of:

1) advanced electronic theory, to augment that required for Amateur Certificate "A", with a degree of difficulty somewhere between the present Amateur and Advanced Certificates.

This would accommodate the many amateurs who are more technically oriented and wish to construct their own stations. Successful candidates would be given Amateur Certificate "C" and, provided they held Certificate(s) "B", or "A" and "B", would be permitted to:

1) construct their entire stations;

2) sponsor and operate repeaters and remote base stations; and

3) operate their stations with a maximum of 1000 watts d.c. input

Implementation

Candidates writing examinations under this structure would be allowed to write any or all of them at one sitting. However, the minimum qualification for a station license would be Amateur Certificate "A".

Existing amateurs holding either an Amateur Radio Operator's Certificate or Amateur Radio Operator's Advanced Certificate would be deemed by regulation to have all the privileges of the three proposed certificates, and those holding the Amateur Digital Operator's Certificate would be deemed to have all the privileges for Amateur Certificates "A" and "C".

SPREAD-SPECTRUM COMMUNICATIONS IN AMATEUR RADIO

When we go on the air with conventional AM and FM emissions, the energy in each resultant signal is concentrated narrowly around a center frequency. Signal bandwidth increases with information rate. The hassle with such compact signals is that they're quite vulnerable to other similar signals at or near the same center frequency. (We bet you've already experienced somebody else calling CQ, or a "test pest," right atop the station you're working, for example.)

Spread-spectrum signals don't follow this rule of concentrating signal energy around a center frequency. Their bandwidth is not necessarily tied to data rate. The whole idea of spread-spectrum work is the intentional spreading of signal energy over such a wide bandwidth -- both in frequency and over time -- that the signal's energy isn't very great in any one place for very long. What's the point? Great immunity to non-

spread signals -- like CW, SSB, RTTY -- for one thing, and little likelihood of "collision" with other spread-spectrum signals spread according to differing binary sequences. And these techniques really work: spectrum-spreading is a popular anti-jamming technique used by the military, for instance, because it's hard for anyone to interfere with a spread-spectrum signal who doesn't have its binary-sequence "key."

Radio amateurs are going to have their shot at spread-spectrum work as of June 1, 1986. That's when the rule amendments specified in FCC's Report and Order in GEN Docket 81-414, "Amendment of Parts 2 and 97 of the Commission's Rules and Regulations to authorize spread-spectrum techniques in the Amateur Radio Service," go into effect.

FCC had some ticklish questions to address in allowing us spread-spectrum operating privileges. For instance, since one of the main uses of spread-spectrum techniques has so far been the hiding of signals (implicit in the anti-jamming use of spread-spectrum techniques by the military), we couldn't just bring up our spread-spectrum rigs under present rules without transgressing prohibitions against use of codes and ciphers. FCC has specified the methods to be used in amateur spread-spectrum work closely enough so that the Commission is assured of being able to perform its monitoring and enforcement duties even when an amateur spread-spectrum station might be inaudible to those of us listening with "conventional" receivers. We will have to reaquaint ourselves with our old friend the logbook; FCC wants complete documentation of how and what we'll be doing.

There was also the concern that since authorized spread-spectrum signals might appear as broadband noise, spread-spectrum work should be limited to amateur bands offering plenty of "wide-open spaces," to keep intra-service interference possibilities to a minimum -- especially while we're getting our feet wet with the new techniques. FCC concurred, and limited spread-spectrum work to bands 420 MHz and above.

We'll still have to identify our spread-spectrum transmissions with narrowband emissions, as FCC puts it, "so that CW, SSB and/or narrow-band FM receivers, which might be victims of interference, can receive the station identification." Frequencies used for such IDs will have been chosen to minimize interference to, while facilitating identification by, other operators.

Right off, spread-spectrum work will be limited to domestic communication (not international work), as other national administrations will have had to satisfy themselves of the achievement of proper safeguards against encryption and intra-service interference before their amateurs jump into the spread-spectrum swim.

This is really new ground for Amateur Radio -- so new, in fact, that we have a number of decisions to make about exactly how to go about spread-spectrum work in ways guaranteeing station-to-station compatibility (see "Interoperability," below). FCC has not limited our choice of spread-spectrum options so narrowly that we can just press the button and go, although the

final rules limit spreading methods to frequency hopping and direct sequence only. This does offer the opportunity for a modern jibe, though: when spread-spectrum really takes off, the bands will be jumping!

Part 97 updates relating to amateur use of spread-spectrum techniques will appear in a subsequent Letter.

AD HOC COMMITTEE ON SPREAD-SPECTRUM INTEROPERABILITY

At Minute 50 of its July meeting in Hartford, the ARRL Board of Directors authorized an Ad Hoc committee to write the necessary interoperability standards for spread-spectrum operation in the Amateur Radio Service. In granting amateurs spread-spectrum privileges (see previous item), FCC specified only what it thought necessary to guarantee its ability to monitor such transmissions, and to avoid encryption. Standards to be considered by the committee include: frequencies of opera tion, chip rate, the code, code rate, spreading function, transmission protocol(s) including the method of achieving synchronization, modulation type, type of information transmitted, and method/frequency(ies) for identification.

The seven members of the committee, chosen by ARRL President Larry Price, W4RA, are: David W. Borden, K8MMO, Chairman; Hal Feinstein, WB3KDU; William J. Howard, K1LNJ; John R. (Dick) Bingham, W7KWR; William E. Sabin, W0/IYH; Frank Butler, W4RH, Board Liaison Member; and Charles Hutchinson, K8CH, Staff Liaison Member.

FCC CLOSES LOOPHOLE IN THIRD-PARTY PARTICIPATION

On November 20, the Commission released a Report and Order PR Docket 85-51, amending the amateur rules to prohibit amateurs who have had their operator licenses suspended and station licenses revoked from participating in Amateur Radio communications as third parties. The Commission said that without such an amendment, a former licensee could continue to engage in the types of communications that had necessitated enforcement in the first place if permitted by operate as a third party by a current licensee. It is important to note that the amendment does not change present rules provisions pertaining to third-party participation. It simply precludes disqualified persons from attempting to circumvent enforcement sanctions by participating in third-party communications.

To update your copy of the FCC Rule Book, amend Section 97.79 of the Rules for Amateur Radio Service by deleting paragraph (d). Section 97.114 ("Third-party traffic") is revised to read as follows:

a) Subject to the limitations specified in paragraphs (b) and (c) of this section, an amateur radio station may transmit third-party traffic.

b) The transmission or delivery of the following third-party

traffic is prohibited:

(1) International third-party traffic except with countries which have assented thereto;

(2) Third-party traffic involving material compensation, either tangible or intangible, direct or indirect, to a third party, a station licensee, a control operator or any other person;

(3) Except for emergency communications as defined in this part, third-party traffic consisting of business communications on behalf of any party.

(c) The licensee of an amateur radio station may not permit any person to participate in traffic from that station as a third party if:

(1) The control operator is not present at the control point and is not continuously monitoring and supervising the third-party participation to ensure compliance with the rules;

(2) The third party is a prior amateur radio licensee who license was revoked; suspended for less than the balance of the license term and the suspension is still in effect; suspended for the balance of the license term and
relicensing has not taken place; surrendered for cancellation following notice of revocation, suspension or monetary forfeiture proceedings; or who is the subject of a cease and desist order which relates to amateur operation and which is still in effect.

PROPER CREDITS FOR THE CHALLENGER VIDEO

If you heard W0ORE's signals transmitted from the Space Shuttle Challenger last August, you'll want to see the videotape on SAREX, the Shuttle Amateur Radio Experiment. Executive Producer/Writer, Roy Neal, K6DUE; Producer/Editor, Frosty Oden, N6ENV; Field Producer/Technical Supervisor, Bill Pasternak, WA6ITF; Production Assistant, Paul Courson, WA3VJB. The 18-1/2-minute SAREX videotape documents all the excitement of this history-making Ham-in-Space mission, including the slow-scan pictures Tony England transmitted to Earth during the mission. It's available from the ARRL Publication Sales Department; postpaid prices are $25 for VHS format and $35 for U-matic, and it's available on loan to anyone who can have it shown to an audience of prospective hams -- ask for VT-36 from the ARRL Film Library.

US/KOREA THIRD-PARTY HOLIDAY TRAFFIC OKAY

The usual US/Republic of Korea agreement to allow phone patches from HL stations to the US will be in effect from 0001Z 20 December 1985 until 2359Z 4 January 1986.

CLUBS SOUGHT TO SPONSOR DX TEST PLAQUES

Your club should consider sponsoring a plaque for the 1986 ARRL International DX Contest -- sponsorships in several

categories are still available. Here's an excellent chance to publicize your club's commitment to DX and contesting in the pages of QST. Contact the ARRL HQ Contest Branch for details.

From 6302254438741924291
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6029697fb599e693,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-17 02:16:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ucf-cs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!ariel!mtunh!akguc!codas!peora!ucf-cs!notes
From: notes@ucf-cs.UUCP
Newsgroups: net.ham-radio
Subject: Gunnplexers,packet, and the ARRL
Message-ID: <2189@ucf-cs.UUCP>
Date: Tue, 17-Dec-85 05:16:31 EST
Article-I.D.: ucf-cs.2189
Posted: Tue Dec 17 05:16:31 1985
Date-Received: Sat, 21-Dec-85 06:39:31 EST
Sender: notes@ucf-cs.UUCP
Organization: Univ. of Central Florida, Orlando
Lines: 4
Nf-ID: #N:ucf-cs:54600002:000:176
Nf-From: ucf-cs!hawkins Dec 16 19:57:00 1985

Can someone please tell me how often the ARRL newsletters are placed in this notesfile. Also is there another notesfile somewhere that deals with packet radio or gunnplexers?

From -1121235215430107390
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ae7b45a7e4126c06,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-17 05:26:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxd.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: RE:QEX
Message-ID: <825@inuxd.UUCP>
Date: Tue, 17-Dec-85 08:26:11 EST
Article-I.D.: inuxd.825
Posted: Tue Dec 17 08:26:11 1985
Date-Received: Wed, 18-Dec-85 03:11:08 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 11

I am also dissappointed in QEX and the few articles that are published could easily fit in QST and make it a better magazine. The real problem is probably that very few people submit articles to QEX and no-one is to blame but those of us that have some good technical background and don't take time to share it with others (myself included). Maybe the ARRL needs to assign volunteers to look into different areas of design and theory and publish more articles in the QEX??? Don't know the cure but I am ready to let my subscription drop but first I have to evaluate why I haven't submitted anything.

73 and Holiday Wishes
de KN9K

From 3663342806800155006
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,beb8adcf474ed7d4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-18 08:54:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!mcnc!philabs!cmcl2!seismo!brl-tgr!tgr!price%marlin@nosc.ARPA
From: price%marlin@nosc.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: Address info
Message-ID: <823@brl-tgr.ARPA>
Date: Wed, 18-Dec-85 11:54:10 EST
Article-I.D.: brl-tgr.823
Posted: Wed Dec 18 11:54:10 1985
Date-Received: Sat, 21-Dec-85 05:14:42 EST
Sender: news@brl-tgr.ARPA
Lines: 9

To the person who needed WB7RFA's address:

My '85 Callbook shows--Craig Maxey, P.O. Box 8585, Portland, OR 97207.

If that's not right, the '86 Callbooks are now out, too.

73--Jim, K6ZH

From 6537908482527724003
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9daae9c254863620,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-22 12:26:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!akguc!
mtunh!ky2d-2!k2sk

From: k2sk@ky2d-2.UUCP (Bob)
Newsgroups: net.ham-radio
Subject: Re: Transmitting tube cost
Message-ID: <82@ky2d-2.UUCP>
Date: Sun, 22-Dec-85 15:26:06 EST
Article-I.D.: ky2d-2.82
Posted: Sun Dec 22 15:26:06 1985
Date-Received: Wed, 25-Dec-85 01:04:30 EST
References: <683@brl-tgr.ARPA>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 22

I believe that the answer to the question is simply the other
side of the success of the solid state device industry. Tubes
which at the end of the second world war were at their zenith are not relatively
rare and not commonly made in the U.S. Most
of the tubes we get now are from Taiwan and such. Special
purpose tubes such as UHF transmitting tubes are made virtually
by hand on small labor intensive assembly lines. Their cost
reflects their nature: small volume, high cost of materials
hand manufacture. Although the insides are not platinum, there
are many costly materials, precision must be high, and the
product subjected to temperature, voltage, current, etc. extremes which we are not
used to in our solid state world.
If you take to trouble to look up W2SUE an OT who was a
vacuum tube engineer during the war (and developed the
all metal vacuum tube) he can tell you the details.
All in all, having become a ham at the end of the golden
age of tubes and having experienced three and 1/2
generations of logic I count myself lucky to have been around
for the experience. I cannot believe that tubes will continue
much longer for even the highest power amateur
applications (I remember when a 2n35 put out a few mw and cost
$35 "real" dollars!) Even the $10,000 Eimac monsters may
one day become HPCMOS or some such! Another way to put it:
All rare antiques are expensive! - Bob K2SK >>

From 8087138198526644983
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a62948e0fe746d0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-23 08:44:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1e.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1e!k9un
From: k9un@ihu1e.UUCP (j w ague)
Newsgroups: net.ham-radio
Subject: Need Info On HF Beacons
Message-ID: <593@ihu1e.UUCP>
Date: Mon, 23-Dec-85 11:44:45 EST
Article-I.D.: ihu1e.593
Posted: Mon Dec 23 11:44:45 1985

Date-Received: Wed, 25-Dec-85 01:09:48 EST
Organization: AT&T Bell Laboratories
Lines: 12

My son is doing a science project on hf propogation. He is
currently using WWV and CHU as reference signals. Does anyone
have a list of any other beacons that could be used?
We would prefer something in geographic locations other than
Colorado and Eastern Canada. Are there any signals that could
be used in the Pacific and in Eurasia?

He is trying to show that the sun affects radio propogation.

Wes Ague - k9un
ihu1e!k9un
(312)979-7604

From -692306618036830978
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: f9911,91a22f5c438d4150
X-Google-Attributes: gidf9911,public
X-Google-Thread: 151e61,bc4cf6918dcccd29,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-23 18:10:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!cuae2!ltuxa!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: TUBES and broadcast equipment comments
Message-ID: <22395@mgweed.UUCP>
Date: Tue, 17-Dec-85 12:47:57 EST
Article-I.D.: mgweed.22395
Posted: Tue Dec 17 12:47:57 1985
Date-Received: Tue, 31-Dec-85 03:45:22 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 40

I also was in broadcasting and most of my experience with tubes involved
Eimac 4-400 types. In 5 different transmitters, I naver had to replace
one due to failure of any kind. One time, within a 2 year period, I did
swap some around to better balance the currents in the plate modulator
pair. At one FM station I was at, The idiot owner had shorted out the
air sensor switch and had installed toggle switches to turn on the
blower and exhaust fan. One morning (after a very late night out) I
forgot to turn on the air switches when I fired up the transmitter
and it ran for 6 hours without air coolong at all. These 4-400A's were
operating at 3825 volts at 325ma and the plate color was close to white,
but even after the no-air episode, those tubes were still functioning
properly 18 months later when I quit the job. On the other hand, the
driver stage consisted of a push-pull pair of 6146B's and even though

they were loafing along, I had to replace them every 3 weeks!
(The B's lasted a week longer than the A's).

With the good experience I had over the years with Eimac tubes, I would
not use anything else in my higher power ham gear. They should last a
lifetime in amateur service on HF.

The only "bad" experience I had with tubes in broadcast equipment was
with the 5879 pentodes used in the preamps in a Gates "Dualux" console.
These tubes were so noisy that I had to hand-pick them to get the board
to pass the proof-of-performance test. RCA boards I worked with used
12AY7 dual triodes and always were quiet and reliable.

(An interesting thing happened when doing a proof test on the previously
mentioned FM station when the hum level was too high. We had to end up
cutting the lacing cord on a wiring harness in the Gates "Level Devil".
This unit is a compressor/expander. The idiot designers had put the
115 volt AC wiring in the same harness as the unbalanced input level
control wires behind the front panel!)

I always advise ham friends that replace tubes in their equipment to
test all tubes in a good (Hickock) transconductance tester first.
One time when I bought a pair of RCA 6146's and a 12BY7 for my Kenwood
820, One 6146 was shorted and the 12BY7 was gassy. Never trust a new
tube these days (the big transmitting ones are an exception).

From 5844465396293255627
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,66c309fd1bb52b05,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-25 17:12:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site nmtvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!linus!philabs!cmcl2!lanl!unm-la!unmvax!nmtvax!wildstar
From: wildstar@nmtvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Common carrier for remote control
Message-ID: <913@nmtvax.UUCP>
Date: Wed, 25-Dec-85 20:12:36 EST
Article-I.D.: nmtvax.913
Posted: Wed Dec 25 20:12:36 1985
Date-Received: Sat, 28-Dec-85 01:32:56 EST
References: <274@brl-tgr.ARPA> <>
Reply-To: wildstar@nmtvax.UUCP (Andrew Fine)
Organization: New Mexico Tech, Socorro
Lines: 26
Summary:

It seems I found an ideal location for placing in a 5000 foot Beverage

receiveing antenna, the only problem being that it is a quarter mile
away from my dorm, and that I cannot string coax across or above the street
directly adjacent. Even if I could, there are a number of adjoining
properities whose owners refuse to even hear about even any connections
whatsover, even IR beams, crossing thier property line.

I have an Advanced Class license, and I am primarily interested in working
80 and 20 meters on relatively low power, hence the tremendous possiblities
raised by such an extreme length antenna. The problem is that I need some
means of relaying by radio the control signals to tune a local receiver
hooked up to the antenna, but that I do not want to violate either repeater
regulations or cross-service regulations. For instance, suppose I use the
AM band at less that 100 milliwatts power, 10 foot antenna length, which
are the FCC's maximums for unlicensed operation; to relay control signals to
and resulting audio from the antenna site. Would I be violating cross-service
regulations due to the retransmission of amateur traffic on AM, even though
the power and antenna restrictions for citizen use are conserved?

If other bands in amateur service or common carrier are acceptable, or if
the strategy I outlined is acceptable, in that no rules (especially part 97!)
are violated or even bent, I would like to know. Please advise.

Andrew Jonathan Fine

From 2884158159102149342
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,43fedac338ba3c2f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-26 07:51:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!carpenter@nbs-vms.ARPA
From: carpenter@nbs-vms.ARPA (CARPENTER, ROBERT)
Newsgroups: net.ham-radio
Subject: HF Beacon stations
Message-ID: <1049@brl-tgr.ARPA>
Date: Thu, 26-Dec-85 10:51:09 EST
Article-I.D.: brl-tgr.1049
Posted: Thu Dec 26 10:51:09 1985
Date-Received: Sat, 28-Dec-85 01:42:13 EST
Sender: news@brl-tgr.ARPA
Lines: 14

Regarding K9UN's request for HF beacon station listings, I suggest
the World Radio Handbook (Billboard Publications - from Holland) which
lists hundreds of HF broadcast stations and frequencies, etc. While not
exactly beacons, and using directional antennas, HF BC stations still provide
a way to infer MUF, etc. Note that the BBC, Radio Moscow simulcast on a number\
of frequencies for the same target area - compare the signal strengths....

73,

Bob, W3OTC

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From -4919618120666382869
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,54b8ad1b30c781d9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-26 08:53:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
FAC1466%UOFT01.BITNET@WISCVM.WISC.EDU
From: FAC1466%UOFT01.BITNET@WISCVM.WISC.EDU
Newsgroups: net.ham-radio
Subject: mobile antennas
Message-ID: <1053@brl-tgr.ARPA>
Date: Thu, 26-Dec-85 11:53:29 EST
Article-I.D.: brl-tgr.1053
Posted: Thu Dec 26 11:53:29 1985
Date-Received: Sat, 28-Dec-85 01:42:24 EST
Sender: news@brl-tgr.ARPA
Lines: 2

Does anyone have any comments on quality, performance of various brands
of HF mobile antennas? Tnx 73 Cliff Smith (KF8K)

From 8308373874994575112
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6b6dcde8f707876a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-29 20:01:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site techsup
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!pur-ee!
uiucdcs!convex!techsup!mikey
From: mikey@techsup
Newsgroups: net.ham-radio
Subject: Proposal (LONG!!!)
Message-ID: <-27771447@techsup>
Date: Sun, 29-Dec-85 23:01:00 EST
Article-I.D.: techsup.-27771447
Posted: Sun Dec 29 23:01:00 1985
Date-Received: Sat, 4-Jan-86 04:38:49 EST
Lines: 644
Nf-ID: #N:techsup:-27771447:000:31232
Nf-From: techsup!mikey   Dec 29 22:01:00 1985

The folowing is the text of a letter sent to the FCC. It has been assigned an RM number, I just don't have it now. I'm posting this to see what kinds of comments are generated, personally, I'm slightly favorable to the proposition, but time and arguements will tell. Responses can be sent to me at trsvax!techsup!bbimg!mikey or to Mr. Stoner, who was the author of the article.

Any mail sent to me will just be forwarded to Mr. Stoner at his Compuserve address.

Just for info, the responses on HAMNET of Compuserve have been very positive, the only concerns seriously addressed as of this posting have been about 6 meters and model airplane people.

Anyway, the text follows

mikey N1DVJ
trsvax!techsup!bbimg!mikey

---------- tear here ----------

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554
In the matter of
)
)
Creation of a new radio class
)
and allocation of spectrum for
)
the owners of personal computers
)
)
TO: The members of the Commission)

PROPOSAL FOR THE CREATION OF THE PUBLIC DIGITAL RADIO SERVICE

FILED BY
Donald L. Stoner, W6TNS
October 20 1985

SUMMARY OF PETITION

This petition is to identify the need for a new class of radio service. This radio service is described in the petition as the PUBLIC DIGITAL

RADIO SERVICE.

The petition shows that creation of the service and the allocation of spectrum is in the public interest, convenience and necessity.

Presently, computer-to-computer communication by the general public is confined to the telephone network. Millions of computer owners find that it is increasingly expensive to utilize this network to satisfy their communication needs.

Establishment of the PUBLIC DIGITAL RADIO SERVICE would permit the owners of personal computers to communicate by radio. Instead of a traditional channelized scheme, the petition describes a radio Local Area Network (LAN). The PUBLIC DIGITAL RADIO SERVICE permits an infinite number of local area radio networks to be interconnected into a national packet radio network.

The PUBLIC DIGITAL RADIO SERVICE would allow computer owners to exchange messages, bulletins, computer programs and other information by radio, and at no cost.

The petition describes how the Commission could create the PUBLIC DIGITAL RADIO SERVICE, which will adequately serve the needs of the public for at least the remainder of this century.

BACKGROUND OF PETITIONER

I have been a radio amateur (W6TNS) since 1954. A large part of my career has been devoted to the field of writing. For an extended period, I was the Novice and Technician editor of CQ Magazine. I have written hundreds of articles and authored several books on the subject of amateur radio and computer communications. I was also responsible for the idea which grew to become the OSCAR satellite, and I was able to make useful contributions to the program during its early stages. I have been an educator and taught at Chaffey College in Southern California.

This experience provided an opportunity to observe and study personal motivation, goals, effort versus reward, and so on. During the 70's I was involved in the manufacturing of Citizens Band communictaions equipment. Thus, I was able to write about CB initially and then participate in its "self destruction". The experience afforded the opportunity to see what "went wrong" and, with hindsight, to realize how to avoid these mistakes in the future.

In 1983, I made a reply comment to PR Docket No. 83-28. This was the controversial "No-Code" document. As part of my reply, I proposed "THE CREATION OF A COMPUTER HOBBYIST LICENSE CLASS".

It was (and is) my contention that this license class would have brought in literally millions people into amateur radio. However, the amateur fraternity decided that no amateur radio licenses should be granted, under any circumstances without a Morse code examination.

Clearly, the proposal for a "computer radio band" received considerable attention on the part of the Commission. In its decision relative to Docket 83-28, the Commission left open the possibility of a radio service for computer hobbyists. However, radio spectrum was not allocated for such a service.

It is the purpose of this document to further amplify the need for such a service, to make a recommendation on spectrum allocation, and to outline technical specifications which will ensure the successful introduction and usage of the PUBLIC DIGITAL RADIO SERVICE.

The accumulated knowledge of the writer has provided certain insights, many of which have contributed to the preparation of this document. A careful and serious consideration of my petition by the Commission is sincerely appreciated

THE PETITION

Why Is A Computer Radio Band Needed? The increasing popularity of personal computing is well known. There are presently more than 18 million of these devices in the hands of the public. Today, a computer can be purchased for less than $100. Thus any American, rich or poor, can afford to own a personal computer. Many experts feel there will be a ten-fold increase in the acquisition of computers by the end of this decade.

The Commission is aware of the popularity of computers. High frequency digital circuits produce radio and television interference. The Commission recognized the growth in the personal computer market and regulated interference levels before an untenable situation occurred.

The Commission is also aware of the popularity of computer communications via the telephone network. As a result of the "Carterphone Decision", there has been an enormous increase in type acceptance applications for telephone modem devices. According to Creative Strategies International, a Cupertino Calif., research firm, the modem market will reach $555 million by the end of 1985 and is expected to top $1.5 billion by 1988. The bulk of these telephone modem sales are to the owners of personal computers. It is presently possible to purchase an FCC approved modem for as little as $29.95. If one assumes an average price of $100.00, there will be 15 million modems in use by the end of this decade.

Why do owners of personal computers utilize modems? The desire to communicate with others having like interests does not diminish with the acquisition of a computer. Computer owners like to play interactive games, exchange messages and software, assist others having like computers, and so on. This desire to communicate has provided the basis for a number of national information utilities such as The Source, CompuServe, PlayNet, Delphi and The Shuttle. These organizations allow computer owners to interconnect and exchange all manner of information via the national telephone network. These

services are extremely popular. CompuServe, for example, claims to have 250,000 members.

The exchange of information between computer owners is not free, however. These information utilities charge hourly fees varying between $3.00 and $20.00, depending on time of access and the data rate.

More relevant to this discussion is the cost for the transport medium, the telephone network. In the previous decade, the cost of a computer was relatively high while telephone costs were relatively low. In this decade the situation has reversed. Telephone companies are begining to implement charges based on time and distance for local calls. Thus the cost to the public for computer communications will increase significantly.

Recently, a number of telephone companies attempted to impose a surchage on those using modems. Some modem users have added an expensive second telephone line. Without this alternate path, the telephone is essentially out-of-service while the user is on-line with the computer. Thus the user is unable to receive emergency calls. At the slow data rates prevalent on telephone networks, these periods can be quite lengthy.

It should be stressed that much of the existing and future computer communications could be handled by suitable radio devices. Recently there has been a significant increase in the interest and use of radio waves to transport computer data. The trade press regularly mentions companies trying various approaches which avoid the use of telephone lines for data communications. The most common activity seems to be the use of FM subcarriers for point-to- multipoint networks.

Motorola has been a leader in the area of point-to-point data communications. They offer a wireless data system which allows portable-computer owners (possessing Motorola cellular-radio telephones) to transmit data at speeds up to 1200 baud.

Motorola has also supplied a hand-held terminal for IBM field engineers. It allows two-way communication with a central tranmitter and computer.

Finally, Motorola has recently petitioned the Commission to share satellite frequencies in the 1.7 gHz. range to create local area business radio networks.

All of the above products benefit the business community. They are designed to make businesses more profitable, productive and/or efficient by transmitting computer data via radio.

None of the products described above are intended to benefit the general public. The PUBLIC DIGITAL RADIO SERVICE can make personal computers more useful, interesting and/or productive to the general public. It is in the public interest, convenience and necessity that

the public also have access to this precious resource called the radio spectrum.

While modem communications will continue to be popular, an alternate cost-free communication path should be available to the computer public.

This document describes such a service, called the PUBLIC DIGITAL RADIO SERVICE. It petitions the Commission to create such a service with suitable regulations and to allocate sufficient spectrum to insure the success of the service.

TYPE OF SERVICE PROPOSED

In the past, there has been some discussion of permitting computer communications on the Citizens Band. CB usage and channel loading is currently a fraction of what it was during the previous decade. Four additional CB frequencies, formerly used for the remote control of objects, are virtually unused. Other bands (in particular, 49 and 72 mHz) could accomodate computer communications.

In the above examples, a channel scheme is implied. The use of communnication channels, however, leads to ham type operations ("send the data to me on channel X"). Channelized operation and shared services would probably not work for the PUBLIC DIGITAL RADIO SERVICE. The users of this service will expect operation and performance similar to that of a telephone modem. Telephone modems do not have channels.

The computer public is not interested in the radio aspects of communication other than as a means to an end. Thus there is no need or desire for voice communications as part of an equivalent radio modem. This precludes the "chit-chat" type of operation which was destructive on the Citizens Band.

Sharing frequencies with voice communication (such as on CB) would be unacceptable. Interference, caused by frequency sharing, would garble the received data. Since the interference is transparent, the typical user will assume that data errors are caused by equipment faults. Thus, it is essential that the frequency allocation for the PUBLIC DIGITAL RADIO SERVICE not be shared with any other service.

Channelized plans inevitably lead to a further problem. If the service becomes popular, there will ultimately be a need for more channels. This is exactly the situation which occurred on the Citizens Band. The Commission is well aware of the problems which resulted from the disruption of adding additional CB channels.

The alternative to a channelized scheme is to send the data at high rates using packet technology. A single wideband channel can be thought of as a digital highway with addressed packets entering and leaving the route in a highly organized manner (see "What Is A Packet Radio Network?").

AN ALLOCATION OF SPECTRUM FOR
THE PUBLIC DIGITAL RADIO SERVICE

A wideband digital channel can only be accomodated within the VHF band or higher frequencies. To keep the cost of equipment low, a band between 30 and 300 mHz is ideal. Some readers may feel that a service as described should be placed in the UHF or SHF range. This might be true if a suitable allocation within the 30-300 mHz band did not exist.

However, within this frequency range there is a band, 2 mHz in width, which is virtually unoccuplied and therefore unused. I refer to the spectrum between 52 and 54 mHz. Radio amateurs are permitted to operate on frequencies between 50 and 54 mHz (the six meter band). For a number of reasons, this band is "underoccupied".

It is estimated that out of 400,000 radio amateurs in the United States, less than 1,000 are active on the six meter band.

Due to the potential for inteference with adjacent television channel 2 (54-60 mHz), virtually all six meter users operate between 50 and 52 mHz. For all practical purposes the radio spectrum between 52 and 54 mHz is wasted.

The radio spectrum is a precious natural resource much the same as our beaches and national parks. The public access to the radio spectrum resource is severely limited. The entry fee is an amateur radio license. This can be justified in instances where the resource is severely limited or where national security is involved. It cannot be justified by any stretch of the imagination when the beach or park is totally deserted!

POTENTIAL FOR TV INTERFERENCE

The Cause of Interference- Radio amateurs have not used the 52.0- 54.0 mHz portion of the six meter band due to the high risk of television interference. This interference problem occurs through no fault of the amateur or the transmitting equipment.

A typical ham six meter transmitter can induce several volts of radio frequency energy in a nearby television antenna. The induced voltage can be thousands of times stronger than the television station being received. Thus, the strong signal from the ham station can overload the TV receiver.

This effect is called crossmodulation and can cause interference on all channels. The level of interference can vary in intensity from "crosshatching" to a total loss of the picture.

Radio amateurs have access to many bands of frequencies throughout the radio spectrum. None of the other bands share the close proximity to television channels as does the six meter band. Clearly, amateurs have resolved the problem of television interference simply by not using this portion of the six meter band.

To date, no one has addressed the problem of using these frequencies in a manner which will not cause television interference.

This portion of the spectrum could be utilized by reducing the power output of the transmitter below the point where television interference can occur.

Eliminating Interference- It is the opinion and experience of the writer that no televison interference can occur from a radio modem operating in the 52.0- 54.0 mHz band if the following conditions are met:
1. The signal strength of the TV station being received exceeds 100 uvolts.
2. The effective radiated power of an adjacent radio modem does not exceed one watt.
3. The separation between the radio modem antenna and the television antenna exceeds 8 meters.
4. The radio modem antenna is vertically polarized with respect to the horizontally polarized TV receiving antenna.
5. All modulation and spurious products which fall outside the authorized bandwidth conform to the FCC 43 plus 10 log10 rule.

If these conditions are met, the 52.0- 54.0 mHz band will be suitable for the PUBLIC DIGITAL RADIO SERVICE and no significant television interference will occur.

WHAT IS A PACKET RADIO NETWORK?

The reader may be familar with the term "local area network" (LAN). In this system a limited number of computers are connected together by cable in a manner which permits intercommunication. A packet radio network is an infinite number of LAN's connected together by radio waves.

A packet radio network may be thought of as a digital equivalent of the U.S. Postal Service. The information to be sent to another computer is equivalent to a letter. The letter is placed in an envelope which includes a destination address. This is called the packet. This packet is sent along with those of other users into the network, which acts like a mailbag.

The packet address also includes something like a postal zip code. The postal analogy varies somewhat in the handling of messages. Each radio modem connected to the network is a destination mailbox. At the same time it can also act as a "post office" for others connected to the network.

Each user is considered to be a "node" in the PUBLIC DIGITAL RADIO SERVICE. These stations or nodes constantly monitor the transmissions (mailbags), looking for packets (envelopes) which are addressed to them. If a message addressed to the node is detected, it is held in memory (the recipients mailbox).

The message may be intended for a nearby node as indicated by the "zip code". In this case, the node "mailbox" does not activate. Rather, the node becomes a "post office" and passes the message to one or more other nodes. The reply from the destination computer is handled in the same manner but the direction is reversed.

Packet radio transmission (movement of the "mailbags") can occur at very high speed. In fact, the speed is only limited by the bandwidth of frequencies alloted to the network. This petition requests a band of frequencies 2 mHz in width. This is sufficent to handle data rates in excess of 1 million bits per second. When one considers that the typical rate of data transmission on a telephone network is 300 bits per second, it can be seen that the PUBLIC DIGITAL RADIO SERVICE can handle a large number of simultaneous users.

Unlimited Users- Actually, the number of simultaneous users is unlimited due to an advantage of FM radio transmission called the "capture effect". Each node will "hear" (or capture) only the strongest stations in the immediate area of the node. More distant stations will be inaudible and will not cause interference. Thus users in two adjacent cities (for example) can communicate within the cities without interference from users in the adjacent city. Of course, if it is desired to send a message to a user in the adacent city, the appropriate nodes will repeat the message until it reaches the destination and triggers a delivery acknowledgement. Other messages, not addressed to the adjacent city, will be ignored.

WHAT IS A RADIO MODEM?

The device to control the node (see previous section) functions similar to a ham radio "digipeater" but at a much higher speed. Since the the term "digipeater" has no significance to the general public, the node controller is refered to as a "radio modem".

What is it?- Technically speaking, the radio modem is a non-persistent, carrier sense, multiple access with collision avoidance device. In practice, the radio modem consists of a small box, whip antenna and coaxial cable. The unit contains a receiver and transmitter, in addition to an RS-232 computer interface.

In addition to acting as a transceiving device, the radio modem is also capable of repeating received packets on the basis of a stored algorithm. In other words, it will receive, store and retransmit messages along the addressees route. Note that it is capable of acting as a repeater even if it is not connected to a computing device.

Training- Upon activation, the radio modem executes a stored training sequence. When first installed, the radio announces its presence and digital address in the network. The radio modem transmits its position with respect to other units, determines the digital address of other nearby units and finally, adjusts its power output to the minimum required to maintain communications with the other nearby units. This

power can vary from 1 milliwatt for densely populated areas to the 1 watt maxiumum in rural areas. It is essential that the radio modem transmit only sufficient energy to maintain contact with other nearby radio modems (nodes).

Training the radio modem for power output insures that a minimum signal level is radiated by the antenna. The purpose is to minimize the possiblilty of television interference. Some readers may point out that one watt is simply not enough power for rural areas. However, it is not the purpose of the PUBLIC DIGITAL RADIO NETWORK to duplicate the elaborate trunks of the public telephone network. There are bound to be areas which cannot pass messages. Under no circumstances should consideration be given to increased power output in these instances. If a high power mode is available, it will be abused.

A COMPARISON WITH CB RADIO

Those reviewing this petition may have a tendency to make comparisons with the introduction, usage and the degeneration of the 27 mHz Citizens Radio band.

The following points are presented with this comparison in mind. No one, including the petitioner, would like to see the PUBLIC DIGITAL RADIO SERVICE meet the same fate as the 27 mHz Citizens Band.

There is a major reason for the chaos which developed on the 27 mHz Citizens Band. The licensees of this service did not feel it was in their interests to abide by the Rules and Regulations. We can learn from this experience by designing a service where Rule compliance is in the interests of the user.

MODULATION- There must be no provision for voice communications in the PUBLIC DIGITAL RADIO SERVICE. Users of radio modems wish to exchange digital data, not the spoken word.

IDENTIFICATION- Enactment of a PUBLIC DIGITAL RADIO SERVICE will not affect the licensing workload of the Commission. Services which are essentially self-regulating (such as the remote control of objects, garage door openers, etc.) do not require the use of call letters. Inherent in the addressability of the radio modem, is a built-in aid to compliance and enforcement. Each radio modem has its own unique identification code, that is, its packet address. This is both the serial number and digital address of the unit. This code also identifies the manufacturer and the physical location of the radio modem. Violations of technical requirements can be easily be correlated by manufacturer. In other words, if a significant number of units are observed to be defective, the manufacturer can be immediately determined by serial number correlation.

If a unit is found to be non-complying, a message can be addressed to that radio modem advising the user of the problem. The Commission personnel sending the message receives the customary delivery acknowledgement of the message. Thus there can be no question that the

user received the Notice of Violation.

POWER OUTPUT- A major contributing factor to the "CB problem" was the addition of power amplifiers to CB radios in an effort to increase the talk range.

Adding a power amplifier to a radio modem will produce no increase in performance. The unit will "retrain" to reduce its power output to maintain the nominal signal level at nearby radio modems. Thus, the power delivered to the antenna might be 50 milliwatts (as an example), with or without the power amplifier.

ANTENNA- To further increase transmitting range, high gain, directional antennas were connected to CB radios. If the same type of antenna were connected to a radio modem, it would result in a "negative improvement". There would be no increase in range, since the radio modem would retrain to produce the nominal signal strength at nearby nodes. More important, the radio modem connected to a directive antenna could miss messages arriving from directions other than the antenna principal gain lobe. By the same token, raising the elevation of the antenna would cause no noticable increase in communication range.

OFF FREQUENCY OPERATION- Illegal out-of-band operation caused sizable headaches for the Commission enforcement personel. This will never be the case with the PUBLIC DIGITAL RADIO SYSTEM however. There is only one "channel" or band. If, by some means, the frequency of a radio modem were lowered, the data would be destroyed by amateur radio transmissions. If it were raised, video information from TV channel 2 would do the same thing.

TECHNICAL SPECIFICATIONS

The "radio modem" (node controller) to be used in the PUBLIC DIGITAL RADIO SERVICE shall meet the following specifications:

FREQUENCY BAND- Equipment authorized to operate in the PUBLIC DIGITAL RADIO SERVICE shall be capable of receiving and transmitting data within the band from 52.0 to 53.999 mHz.

MODULATION- The data shall frequency modulate the carrier in a frequency shift keyed scheme. Under no circumstances will equipment authorized for use in the PUBLIC DIGITAL RADIO SERVICE have provision for voice modulation or detection.

MODULATION AND SPURIOUS PRODUCTS-

The data rate (see Note 1), waveform and signal processing shall be such that all products which fall outside the authorized bandwidth be suppressed by 43 plus 10 log10 (mean output power, in watts) decibels.

POWER OUTPUT- The power delivered by the final amplifier stage into a 72 ohm load shall not exceed 1.0 watts. Further, the radio modem (node

controller) shall have an initial powerup "training" mode. Upon powerup, the power output will be 1 milliwatt.

The power will increase during "training" in 3 db. steps until contact is established with nearby radio modems (node controllers). This value is stored in memory and becomes the nominal power output for the radio modem.

ANTENNA- The antenna shall consist of a vertical radiator which does not exceed one-quarter wavelength. The antenna shall exhibit no gain or directional characteristics. The antenna shall be supplied with a nominal length of coaxial cable.

TRANSMITTER IDENTIFICATION- Each radio modem shall have an imbedded identification which is transmitted as part of its packet address. The address will be used to identify the manufacturer, the serial number and the routing code of the equipment.

PACKET CONSTRUCTION- The packet and destination address will be contained in the header. The header will be constructed to limit the number of destination addresses. This is done to specifically preclude the transmission of "junk mail".

REMUNERATION- Users of the PUBLIC DIGITAL RADIO SERVICE shall be specifically prohibited from receiving any form of remuneration or compensation, either in the form of funds, goods or services, for handling data on the PUBLIC DIGITAL RADIO SERVICE (see Note 2).

TYPE ACCEPTANCE- Type acceptance procedures, similar to those for Citizens Band equipment, will be required. This insures that commercially manufactured equipment used in the PUBLIC DIGITAL RADIO SERVICE meets the specified technical requirements for this service.

NOTE 1- No data rate is given in these proposed specifications. It should be left to industry to determine the data rate. Schemes, unknown to the writer or Commission, may permit higher rates within the authorized bandwidth than conventional theory would dictate.

NOTE 2- The purpose of this provision is to prevent the use of the PUBLIC DIGITAL RADIO SERVICE for the benefit of common carriers. The restriction should not be construed to preclude the use of the PUBLIC DIGITAL RADIO SERVICE for business applications. For example, the radio modem would be extremely useful within buildings to avoid the need for local area network cabling. It is likely the signals of an office radio LAN would not connect to the external PUBLIC DIGITAL RADIO SERVICE.

The reader might envision that the service would be usurped by the business community. This is not likely, however, due to the self-regulating nature of the PUBLIC DIGITAL RADIO SERVICE. Businesses are used to the near instantaneous response of telephone data communications.

In comparison, the message response of a packet radio network is relatively slow. Only small businesses would find these delays tolerable. These are the same business which can least afford the increase in telephone rates.

There is an analogy in the use of the Citizens Band. Numerous channels are available and the equipment is quite inexpensive. Even so, this band is seldom used for business purposes. There are simply too many disadvantages for the business community.

CONCLUSION

In response to this petition, the Commission may point out that there has been no popular "groundswell" to create a computer radio service. Likewise, there was no public interest in the creation of a television service in the 30's. However, in 1932, the Commission recognized the significance of television and allocated two bands for development of this new technology.

By the same token, the Commission recognized the impact that FM radio broadcasting would have on sound reproduction. In 1941 they allocated an eight mHz band to bring high fidelity sounds to the public.

In either case, there was very little awareness that such technologies were possible when the allocations were made.

The creation of a PUBLIC DIGITAL RADIO SERVICE is another instance where the Commission could take the initiative and create a new service in keeping with current technology.

International Regulations- Since the allocation is above 50 mHz, it appears that no international treaties would be involved in making the proposed allocation. Rather, it is likely that other countries would develop a similar service for their citizens.

Amateur Radio Opposition- It is safe to assume there will be sizable opposition to this petition by amateurs. The writer has been a radio amateur for 30 years. During this period, no permanant allocation has been "taken away" from the amateur radio fraternity.

However, there can be no defense by amateurs of the inactivity on 6 meters. A reallocation of the frequencies requested would benefit the majority at virtually no expense to the minority.

Amateur Radio Colaboration- The principal purpose of this petition is to obtain an allocation for a public computer communication band. The writer would not object if this goal could be achieved as part of the Radio Amateur Service. The computer public would accept an administrative fee in return for access to the radio spectrum. However, they would never accept any sort of "testing" to achieve this goal.

The writer would like to thank the Commission for the opportunity to

submit this petition. Further, the writer appreciates the consideration this petition will receive by the members of the Commission.

Signed 20 October, 1985

Donald L. Stoner, W6TNS
6014 E. Mercer Way
Mercer Island, Wa. 98040
(206) 232-6968

From 2344163567500903423
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e1615404125c7872,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-30 01:59:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site convexs
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!pur-ee!uiucdcs!convex!convexs!hosking
From: hosking@convexs.UUCP
Newsgroups: net.ham-radio
Subject: 148-174 Mhz Xmitter info wanted
Message-ID: <6800001@convexs>
Date: Mon, 30-Dec-85 04:59:00 EST
Article-I.D.: convexs.6800001
Posted: Mon Dec 30 04:59:00 1985
Date-Received: Wed, 1-Jan-86 00:40:00 EST
Lines: 26
Nf-ID: #N:convexs:6800001:000:1280
Nf-From: convexs.UUCP!hosking   Dec 30 03:59:00 1985

My parents are involved in a volunteer fire department in an Austin suburb. They have mobile transmitters (148-174 Mhz) for their cars, but often find that a hand held unit would be more useful. (You can't fight fires very well from your car...) They're looking for something which is:

rugged and reliable   (is likely to be used under sub-optimal conditions)
reasonably priced   (not necessarily cheap, just good value for the $)
reasonable to service (hopefully never needed, but....)

Transmission and reception quality are obviously important, too. A design which would allow easy operation with gloves on would be desirable. Most of the use would be for on-site communications, so high power isn't a huge consideration, though it would certainly be a nice bonus.

A local dealer is trying to get them to buy the Maxon line. I've never heard of this company, and would be very interested to hear any comments you might have about their products. Comments, favorable or unfavorable, about Maxon or other brands would be appreciated. Thanks in advance for any help. Since this isn't likely to be of general interest, it's probably best to

respond to this via email.

Doug Hosking
Convex Computer Corp.
Richardson, TX
{ihnp4, allegra, uiucdcs}!convex!hosking

From 4077964517066759867
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,62a3bd4c1ab5e34,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-30 11:34:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site decwrl.DEC.COM
Path: utzoo!linus!decvax!decwrl!dec-rhea!dec-pipa!biro
From: biro@pipa.DEC
Newsgroups: net.ham-radio
Subject: reply to k9un beacon info
Message-ID: <194@decwrl.DEC.COM>
Date: Mon, 30-Dec-85 14:34:00 EST
Article-I.D.: decwrl.194
Posted: Mon Dec 30 14:34:00 1985
Date-Received: Tue, 31-Dec-85 01:03:33 EST
Sender: daemon@decwrl.DEC.COM
Organization: Digital Equipment Corporation
Lines: 36

Regarding K9UN's request for HF beacon station listings, there are
20m beacons used in a worldwide network sponsored by a big DX assoc.
(Northern Calif or some such.)
They are at: (slot #, location)

```
     0 New York    1 San Francisco        2 Hawaii
     3 Tokyo       4 Israel      5 Helsinki
     6 Madiera Isl.     7 Johannesburg, S. Af.  8 Buenos Aires
     9 Medillin, Columbia
```

Each transmits for 1 minute at all times which end with the slot #,
thus NY at hh00 hh10 hh20 hh30,hh40,and hh50;
Tokyo at hh03,hh13,hh23 etc. The system is on continuously.

After CW ID they give tones for a few seconds each at 100w output,
10w, 1w and .1w., then a final ID. They operate on 14100 khz, and
all are within about 50 hz or so, the CW pitch changes just a little
as they cycle through. The start and stop times seem to be controlled
to within about 2 seconds of nominal. If one sets a well calibrated
HAM receiver with a narrow filter at 14100.0, normally one will hear
several of the 10 at just about any time. The South American stations
in slots 8 and 9 are new, may not yet be on air.

I also have a FORTRAN program that predicts when you should be able to
receive them base on the solar_flux. It is a program written by Mort,
KA1IU, based on the MINMUF program for predicting the best time of

the day from your location to receive these beacons. One mode of the program calculates the MUF for the beacon locations, along with a number of other locations (a total of 21), including WWV in Colorado. The output is in tabular form for hourly time intervals at a selected solar flux level. I tried to send this directly but must have your electronic mailing address wrong.

73,

John, K1KSY

From -1189171077666914966
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,beb8adcf474ed7d4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-30 20:17:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Re: Address info
Message-ID: <272@inuxi.UUCP>
Date: Mon, 30-Dec-85 23:17:02 EST
Article-I.D.: inuxi.272
Posted: Mon Dec 30 23:17:02 1985
Date-Received: Wed, 1-Jan-86 00:26:56 EST
References: <823@brl-tgr.ARPA>
Organization: AT&T Consumer Products, Indianapolis
Lines: 13

> -------
> To the person who needed WB7RFA's address:
>
> My '85 Callbook shows--Craig Maxey, P.O. Box 8585, Portland, OR 97207.
>
> If that's not right, the '86 Callbooks are now out, too.
>
> 73--Jim, K6ZH
> -------

1986 callbook has the same info

73 de steve, ku9c

From 5696532594495963179
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7e32819dc56a5f98,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-12-30 20:20:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: P43A qsl manager
Message-ID: <273@inuxi.UUCP>
Date: Mon, 30-Dec-85 23:20:00 EST
Article-I.D.: inuxi.273
Posted: Mon Dec 30 23:20:00 1985
Date-Received: Wed, 1-Jan-86 00:27:13 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 4

sorry for posting this to the net, but someone was looking for p43a
route from cqww contest. a recent dx bulletin shows qsl to w3evw

73 de ku9c

From 9045144678639540323
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,74a522916c949108,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-01 10:31:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site joevax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!magic!
science!joevax!mcg
From: mcg@joevax.UUCP (Mark Germain)
Newsgroups: net.ham-radio
Subject: ICOM IC-735 HF Transceiver
Message-ID: <109@joevax.UUCP>
Date: Wed, 1-Jan-86 13:31:27 EST
Article-I.D.: joevax.109
Posted: Wed Jan 1 13:31:27 1986
Date-Received: Thu, 2-Jan-86 03:32:17 EST
Distribution: net
Organization: Bell Communications Research Inc., Morristown, NJ
Lines: 25

In the January,86 issue of QST, the ICOM IC-735 HF transceiver was
'reviewed' in their Product Review section. Specifically designed
for mobile/portable operation, QST's 'review' of the IC-735 failed
to address substantive issues, even the most fundamental
mobile/portable-specific operational features of the IC-735 which
either enhance or degrade it's application to this unique subset
of amateur radio.

For the past four years I have been using an IC-720A, in a dedicated
mobile environment, which, at the time it was purchased, was considered
to be the 'top-of-the-line' of the ICOM offerings. In practice, however,
even the most basic features, such as adequate undistorted audio output,

or even more importantly, an effective noise blanker for the mobile environment, were not, in my opinion, considered adequately in the design of this transceiver. A thorough product review would have provided at least substantive guidelines so that in its application to a particular operating environment, a knowledgeble choice could be made.

I am once again searching for another HF transceiver for dedicated mobile operation. If anyone can identify a sound product review with substantive information, addressing the noise blanker, selectivity, and certainly, mobile ergometrics, I would greatly appreciate your effort.

Mark, KB2IF

From -1583273911465340145
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eeeb81d2cf6bb976,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-01 18:47:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site vax135.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!vax135!hpk
From: hpk@vax135.UUCP (Howard Katseff)
Newsgroups: net.ham-radio
Subject: Broadband noise problem resolved
Message-ID: <1255@vax135.UUCP>
Date: Wed, 1-Jan-86 21:47:13 EST
Article-I.D.: vax135.1255
Posted: Wed Jan 1 21:47:13 1986
Date-Received: Thu, 2-Jan-86 06:17:51 EST
Organization: AT&T Bell Labs, Holmdel, NJ
Lines: 23

Back in November, I posted a message in this newsgroup about broadband noise (ranging from about 2 to 12 MHz) that would ruin my shortwave reception. I would like to thank the many people who responded.

As a number of people suggested, I drove in my car with a portable receiver looking for the source. I was able to track the noise to a power company transformer sitting on one of their poles about a kilometer from my house. If I stood near the pole, I could hear it buzzing with the identical noise pattern that I heard from my receiver.

I called the JCP&L (the local power utility) trouble number and reported the problem, giving the pole number (attached to the pole) and its location. Surprisingly, they came and fixed it that day.

My conclusion is that JCP&L is indeed responsive to fixing these problems. Doing a bit of their work myself, by determining where the problem was, probably helped speed things up.

Howard Katseff
AT&T Bell Laboratories
Holmdel, NJ
201 949-5337

From 5231636355018607428
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6b6dcde8f707876a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-03 13:10:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Re: Proposal (LONG!!!)
Message-ID: <791@petrus.UUCP>
Date: Fri, 3-Jan-86 16:10:12 EST
Article-I.D.: petrus.791
Posted: Fri Jan 3 16:10:12 1986
Date-Received: Sat, 4-Jan-86 05:45:42 EST
References: <-27771447@techsup>
Organization: Bell Communications Research, Inc
Lines: 36

What follows are my initial reactions to the Stoner proposal for creation
of a Public Digital Radio Service. Since I do not have access to Compuserve,
I'd appreciate it if somebody forwarded this note to Don Stoner.

I agree that the time has come for such a service. As involved as I am in
the development of amateur packet radio, I can see plenty of legitimate
applications for low cost, personal digital radio communications that
properly lie outside the scope of the Amateur Service (e.g., business use,
need for encryption, etc). Further, the need for such a service is enhanced
by the amateur community's continuing opposition to any form of "no code"
license, an irrational attitude that will surely prevent packet radio from
ever reaching its full potential in the Amateur Service.

Having said this, however, I must take issue with the details of Stoner's
proposal, in particular his frequency and bandwidth recommendations. As a
radio amateur, I instinctively resist the "giving away" of any amateur
allocation, even one as lightly used as 52-54 Mhz. I am also not convinced by
Stoner's contention that an inexpensive radio modem, particularly one with
an emission bandwidth of 2 megahertz, could be operated without interference
to nearby TV receivers tuned to Channel 2. At the very least, I would like
to see the results of any tests he has conducted to reach this conclusion.

Another problem I forsee with such a large allocation, which apparently would
be used for a single, wideband RF channel, is multipath dispersion.
The DARPA packet radio community has found that packet radios operating
in a typical urban or suburban environment are effectively limited to
data rates of 100 to 400 kilobaud because of the intersymbol interference

caused by multipath propagation effects. Only when a strong line-of-sight signal component fully captures the receiver is it possible to operate at higher speeds. Therefore, it is clearly not necessary to allocate such a wide portion of spectrum if the intent is only to provide a single RF channel.

I think that Mr. Stoner's proposal would be an excellent one once he finds another, smaller, piece of spectrum outside the amateur bands to use.

Phil Karn, KA9Q

From -7823985649376525633
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd8b2438ac25b049,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-03 18:59:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site nyit.UUCP
Path: utzoo!decvax!linus!philabs!nyit!bp
From: bp@nyit.UUCP (Bruce Perens)
Newsgroups: net.ham-radio
Subject: TV set ruins shortwave reception
Message-ID: <165@nyit.UUCP>
Date: Fri, 3-Jan-86 21:59:22 EST
Article-I.D.: nyit.165
Posted: Fri Jan 3 21:59:22 1986
Date-Received: Sat, 4-Jan-86 20:48:37 EST
Distribution: na
Organization: NYIT Computer Graphics Lab., Old Westbury, N.Y.
Lines: 15

Hi,

Is there anything that can be done to reduce the RF hash radiated
by TV sets (usually color)? Some of the local SWLs and I are bothered
by TV sets in our own homes. Moving the SW antenna is sometimes helpful.
Has anyone tried extra bypass capacitors in the TV receiver? Is this
hash radiated through the power line or TV antenna?

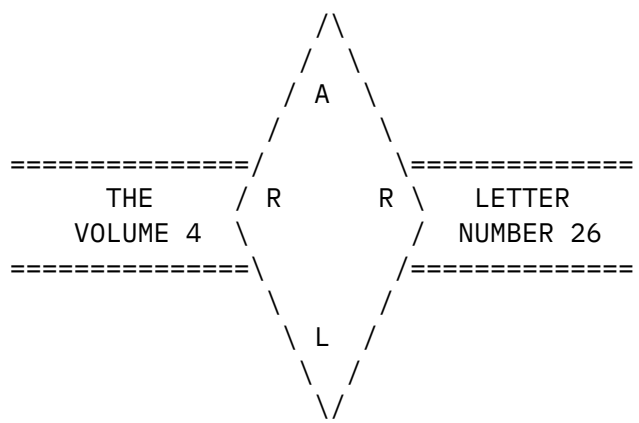
Please DO NOT post your responses. Mail them to me and I will summarize
to the net.

Thank You

Bruce Perens
decvax!philabs!nyit!bp
nyit!bp%suny-sb.Csnet@Csnet-Relay.Arpa

From 5172733113959289281
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69b074ad6b1a6d85,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-04 15:46:40 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL LETTER vol. 4, #26
Message-ID: <274@inuxi.UUCP>
Date: Sat, 4-Jan-86 18:46:40 EST
Article-I.D.: inuxi.274
Posted: Sat Jan 4 18:46:40 1986
Date-Received: Sun, 5-Jan-86 04:49:39 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 344



December 19, 1985

The ARRL Letter is published bi-weekly by the Information Services Department of the American Radio Relay League, 225 Main St., Newington, CT, 06111; (203) 666-1541. Larry E. Price, W4RA, President; David Sumner, K1ZZ, Executive Vice President; Dave Newkirk, AK7M, Editor; Debra Chapor, Circulation Manager.

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In this issue:

o PRIVACY ACT DOES NOT TARGET PHONE PATCHES

o LEAGUE OPPOSES LOW-POWER 902 MHz VIDEO LINKS

o NEW THIRD PARTY AGREEMENT WITH 4U1VIC

o ...and much more!

PRIVACY ACT DOES NOT TARGET PHONE PATCHES

We first mentioned the Electronic Communications Privacy Act of 1985 in the November 7 Letter. Here's more. This League Lines item is preprinted from January 1986 QST and is copyright (C) 1985 by the American Radio Relay League, Inc:

In communications to ARRL and to their representatives in Congress, amateurs are running up verbal "hurricane warning" flags regarding the Electronic Communications Privacy Act of 1985, S. 1667 and H.R. 3378. "Small craft warnings" would be far more appropriate: The bill indeed requires some attention from the amateur community, but it poses far less threat to amateurs than some people think. More next month, but for now be assured that: (1) the bill does not propose to outlaw phone patches; (2) it would not make possession (by anyone) of any kind of equipment illegal; (3) the bill can't possibly reach the House (or the Senate) for a vote before February or later; and (4) ARRL is working closely and personally with Committee staff to smooth out rough spots.

ARRL had been asked to testify at a December 5 hearing scheduled by the House Subcommittee on Courts, Civil Liberties and the Administration of Justice on the Electronic Communications Privacy Act of 1985, but that hearing will probably be rescheduled to January 29 or 30 of next year. Whenever, ARRL will be there. Why was the hearing rescheduled? It was preempted by the Chairman of the full Judiciary Committee, Peter W. Rodino, Jr, D-New Jersey. The Judiciary Committee had received a 1400-page report on doings at the Environmental Protection Agency, and on a procedural point it was insisted that the entire report be read! Wrote ARRL's Washington Area Coordinator:

"Part way through the reading, after an hour or so, however, a compromise was struck, waiving the reading . . . so some useful purpose could be accomplished by the hearing. None of this is germane to our work; I mention it because I was fascinated, and also to show that the cancellation of the hearing on the Privacy Act was not part of solows:

(cc) Spread spectrum transmission. An information bearing transmission in which information is conveyed by a modulated RF carrier and where the bandwidth is significantly widened, by

means of a spreading function, over that needed totransmit the information alone.

Add a new Section 97.71, Spread spectrum communications, as follows:

(a) Subject to special conditions in paragraphs (b) through (i) of this section, amateurlows:

(cc) Spread spectrum transmission. An information bearing transmission in which information is conveyed by a modulated RF carrier and where the bandwidth is significantly widened, by means of a spreading function, over that needed totransmit the information alone.

Add a new Section 97.71, Spread spectrum communications, as follows:

(a) Subject to special conditions in paragraphs (b) through (i) of this section, amateur stations may employ spread spectrum transmissions to convey information containing voice, teleprinter, facsimile, television, signals for remote control of objects, computer programs, data, and other communications including communication protocol elements. Spread spectrum transmissions must not be used for the purpose of obscuring the meaning of, but only to facilitate transmission.

(b) Spread spectrum transmissions are authorized on amateur frequencies above 420 MHz.

(c) Stations employing spread-spectrum transmissions shall not cause harmful interference to stations of good engineering design employing other authorized emissions specified in the table. Stations employing spread spectrum must also accept all interference caused by stations of good engineering design employing other authorized emissions specified in the table. (For the purposes of this subparagraph, unintended triggering of carrier operated repeaters is not considered to be harmful interference. Nevertheless, spread spectrum users should take reasonable steps to avoid this situation from occurring.)

(d) Spread spectrum transmissions are authorized for domestic radio communication only (communication between points within areas where radio services are regulated by the U.S. Federal Communications Commission), except where special arrangements have been made between the United States and the administration of any other country concerned.

(e) Only frequency hopping and direct sequence transmissions are authorized. Hybrid spread-spectrum transmissions (transmissions involving both spreading techniques) are prohibited.

(1) Frequency hopping. The carrier is modulated with unciphered information and changes at fixed intervals under the direction of a high speed code sequence.

(2) Direct sequence. The information is modulo-2 added to a high-speed code sequence. The combined information and code are then used to modulate a RF carrier. The high speed code sequence dominates the modulating function, and is the direct cause of the wide spreading of the transmitted signal.

(f) The only spreading sequences which are authorized must be from the output of one binary linear feedback shift register (which may be implemented in hardware or software).

(1) Only the following sets of connections may be used:

Number of stages in shift register	Taps used in feedback
7	[7,1]
13	[13,4,3,1]
19	[19,5,2,1]

(The numbers in brackets indicate which binary stages are combined with modulo-2 addition to form the input to the shift register in stage 1. The output is taken from the highest numbered stage.)

(2) The shift register must not be reset other than by its feedback during an individual transmission. The shift register must be used as follows.

(i) For frequency hopping transmissions using x frequencies, n consecutive bits from the shift register must be used to select the next frequency from a list of frequencies sorted in ascending order. Each consecutive frequency must be selected by a consecutive block of n bits. (Where n is the smallest integer greater than log2 x.)

(ii) For a direct sequence transmissions using m-ary modulation, consecutive blocks of log2 m bits from the shift register must be used to select the transmitted signal during each interval.

(g) The station records shall document all spread spectrum transmissions and shall be retained for a period of one year following the last entry. The station records must include sufficient information to enable the Commission, using the information contained therein, to demodulate all transmissions. The station records must contain at least the following:

(1) A technical description of the transmitted signal.

(2) Pertinent parameters describing the transmitted signal including the frequency or frequencies of operation, and, where applicable, the chip rate, the code, the code rate, the spreading function, the transmission protocol(s) including the method of achieving synchronization, and the modulation type;

(3) A general description of the type of information being conveyed, for example, voice, text, memory dump, facsimile, television, etc.;

(4) The method and, if applicable, the frequency or frequencies used for station identification.

(5) The date of beginning and the date of ending use of each type of transmitted signal.

(h) When deemed necessary by an Engineer-in-Charge of a Commission field facility to assure compliance with the rules of this part, a station licensee shall:

(1) Cease spread spectrum transmissions authorized under this paragraph;

(2) Restrict spread spectrum transmissions authorized under this paragraph to the extent instructed;

(3) Maabove; narrow band identification transmissions must be on only one frequency in each band being used. Alternatively, the station identification may be transmitted while in spread spectrum operation by changing one or more parameters of the emission in a fashion such that CW or SSB or narrow band FM receivers can be used to identify the sending station.

NEW THIRD PARTY AGREEMENT WITH 4U1VIC

United Nations Vienna and the US government have concluded a thirdabove; narrow band identification transmissions must be on only one frequency in each band being used. Alternatively, the station identification may be transmitted while in spread spectrum operation by changing one or more parameters of the emission in a fashion such that CW or SSB or narrow band FM receivers can be used to identify the sending station.

NEW THIRD PARTY AGREEMENT WITH 4U1VIC

United Nations Vienna and the US government have concluded a third-party traffic agreement, effective January 2, 1986. The call sign at the Vienna International Centre is 4U1VIC, operated by the Vienna International Amateur Radio Club.
The usual third-party-traffic guidelines in Section 97.114 of our Rules apply.

JOB OPENING AT ARRL HQ

ARRL HQ is looking to fill a vacancy in the Regulatory Information Branch Manager position. Primary responsibilities

include editing The ARRL Letter and writing the Happenings and League Lines columns for QST, as well as updating The FCC Rule Book. The RIB Manager also answers phone and letter inquiries on a wide variety of regulatory matters, including antenna ordinances and FCC rules interpretations.

Applicants must have a General Class or higher amateur license; good writing ability and experience are required. A broad background in Amateur Radio and some supervisory experience would be helpful. Annual salary range $18,226-$25,506. If you feel you're qualified for this position, call Bob Halprin or John Lindholm at 203-666-1541.

LEAGUE OPPOSES LOW-POWER 902-MHz VIDEO LINKS

In the November 7 Letter we covered a petition by Jerry Iggulden of Valencia, California, requesting that FCC allow unlicensed operation of low-power video transmitters at 902-928 MHz. The idea behind the petition (RM-5193) is the operation of such transmitters to link video sources, such as VCRs, to television sets without the bother of interconnecting wires. Unlicensed low-power communication devices operate at quite a few places in the radio spectrum, it's true -- but this proposal would plunk strong video sources smack dab in our new 902-MHz band!

"Ungood," is ARRL's response. "The consumer would be ill-served by the proposal. The largest potential market for such consumer devices would be for use in single- or multiple-family dwellings in or near major metropolitan areas. The highest concentration of Amateur Radio stations also can be found in single- or multiple-family dwellings in or near major metropolitan areas." Such unlicensed devices must not interfere with any licensed services on any frequency -- and the projected 902-MHz devices would provide quite a front-end-full: "Calculations by the League's Technical Staff indicate that a radiated signal of the permitted intensity (50,000 microvolts-per-meter at 30 meters) would produce a voltage of over 540 microvolts at the receiver input of a good amateur station at a distance of 1 kilometer . . . at 10 kilometers, the predicted signal would be 54 uV/m. The amateur receiving such interference at ranges of over 10 kilometers would face the problem of indentifying one or multiple interference sources; calling on all neighbors within that range to determine which one(s) had installed such a video transmitter (a continuous-duty-cycle device when operated); and the difficult or impossible chore of convincing the consumer that the device should not be operated."

"Neither the Commission nor the manufacturers of garage-door openers should have forgotten the problems which arose when those devices were operated on frequencies adjacent to voice frequencies in the Citizens Radio Service and on frequencies assigned to the Aviation Radio Service . . . it would appear . . . that Part 15 Rules as presently stated sufficiently provide for the type of device proposed by Petitioner (on frequencies other than those assigned to the Amateur Radio Service), provided that all technical rules are observed."

ARRL's Comments in Opposition to Petition for Rule Making in RM-5193 end there, but we'll add something you already know: say such devices were allowed, did sprout all over the 902-928 MHz band in metro areas (although with the projected signal levels at 10km and beyond, rural amateurs would be hit with this, too) -- who would be blamed when your licensed amateur signal messed up someone's unlicensed video link, the video link that's supposed to accept harmful interference and not cause any? The answer's in your mirror: you.

CQ HOLIDAYS DE W1AW

Over the weekend of December 28 and 29, ARRL HQ staffers will put W1AW on the air on all HF bands for general contacts. The regularly scheduled biweekly transmission of Keplerian data at 2330 UTC on Saturday will be sent, but other scheduled transmissions may be preempted as activity warrants. Operation will begin at approximately 1300 UTC each day. All QSLs received for this operation will be answered with the distinctive W1AW QSL, including a commemorative "350 Years of Connecticut" sticker.

REACTION TO CANADIAN RESTRUCTURING

Last Letter's lead covered the Department of Communications' proposal for restructuring Amateur Radio in Canada. Initial reaction seems mostly favorable. There is strong feeling that the examination for the entry level Certificate A be substantial, and that DOC should offer a "Slow Code" certificate that, in conjunction with Certificate A, would give CW privileges on the HF bands.

CLOSE, BUT NO CIGAR

We correct two glitches in the last Letter:

In "Ad Hoc Committee on Spread-Spectrum Interoperability," page 3, the callsign of committee member Dick Bingham is W7WKR. Re the US/Korea holiday traffic (page 4), the traffic is limited to amateur stations in the Republic of Korea with the prefix HL9. Once again, this temporary third-party agreement is in effect for the period 0001 UTC December 20, 1985, to 2359 UTC January 4, 1986.

AND, AT YEAR'S END,

Speaking of holiday traffic: peace and enjoyment for the holiday season are wished you by the entire HQ staff.

From -7765724420880317397
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cabd739dc3131b0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-04 18:33:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1g.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1g!parnass
From: parnass@ihu1g.UUCP (Bob Parnass, AJ9S)

Newsgroups: net.ham-radio
Subject: Libyan freqs for SWLs
Message-ID: <751@ihu1g.UUCP>
Date: Sat, 4-Jan-86 21:33:07 EST
Article-I.D.: ihu1g.751
Posted: Sat Jan 4 21:33:07 1986
Date-Received: Sun, 5-Jan-86 05:44:14 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 59

x

Here are some Libyan frequencies collected over the
past 2 years from various sources. I've not monitored
any of them. K9EUI posted the press frequencies before.

```
Arab Gulf Oil Company__[Tobruk,  Libya]______  16.9630____5AL
          "          [Tobruk,    Libya]______   4.2410____5AL
          "          [Tobruk,    Libya]______   8.4800____5AL
Benghazi Radio_________[Benghazi, Libya]____  12.6600____5AB
          "          [Benghazi, Libya]____  13.1928____5AB
          "          [Benghazi, Libya]____  17.2918____5AB
          "          [Benghazi, Libya]____   2.5130____5AB
          "          [Benghazi, Libya]____   2.5160____5AB
          "          [Benghazi, Libya]____  22.6983____5AB
          "          [Benghazi, Libya]____   4.4225____5AB
          "          [Benghazi, Libya]____   6.5188____5AB
          "          [Benghazi, Libya]____   8.4500____5AB
          "          [Benghazi, Libya]____   8.8057____5AB
Libya: Embassy_________[Aden, Yemen]________  11.1250____70B452
          "          [Aden, Yemen]________  11.9850____70B452
          "          [Brussels, Belgium]__  11.5080____ONN42
          "          [Brussels, Belgium]__  20.6825____ONN42
          "          [Brussels, Belgium]__  20.7325____ONN42
          "          [Brussels, Belgium]__  20.9325____ONN42
          "          [Havana,    Cuba]_______  11.5080____CME406
          "          [Prague,    Czechoslov]_  11.5080____OMZ30
          "          [Prague,    Czechoslov]_  14.3870____OMZ30
          "          [Prague,    Czechoslov]_  18.2975____OMZ30
          "          [Prague,    Czechoslov]_  20.6825____OMZ30
          "          [Prague,    Czechoslov]_   4.5000____OMZ30
Libya: Jamahiriyaha News Agency, press,   rtty 50  baud 425Hz rev 1629-1840Z
               [Tripoli, Libya]_____  20.5600____call?
Libya: Jamahiriyaha News Agency, press
               [Tripoli, Libya]_____  10.5180____call?
          "          [Tripoli, Libya]_____  12.1860____call?
          "          [Tripoli, Libya]_____  15.4620____call?
Libya: resident   airlines
               [location?]__________   6.5745____call?
          "          [location?]__________   6.6930____call?
Tripoli  Air___________[Tripoli, Libya]_____   2.8220____5AF
          "          [Tripoli, Libya]_____   5.6440____5AF
```

```
Tripoli  Radio__________[Tripoli, Libya]_____  12.2639____5AT
          "          [Tripoli, Libya]_____  12.6800____5AT
          "          [Tripoli, Libya]_____  13.1070____5AT
          "          [Tripoli, Libya]_____   2.1970____5AT
          "          [Tripoli, Libya]_____   2.3200____5AT
          "          [Tripoli, Libya]_____   2.4180____5AT
          "          [Tripoli, Libya]_____  22.6332____5AT
          "          [Tripoli, Libya]_____   4.4132____5AT
          "          [Tripoli, Libya]_____   4.4318____5AT
          "          [Tripoli, Libya]_____   6.5064____5AT
          "          [Tripoli, Libya]_____   6.5126____5AT
          "          [Tripoli, Libya]_____   8.5150____5AT
          "          [Tripoli, Libya]_____   8.7716____5AT

--
================================================================================
                               Ignore path in the header, use:
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From 777982772028852888
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,76d7fdc2a9369258,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-04 19:30:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site rocky2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!ucbvax!ucdavis!lll-crg!seismo!cmcl2!rna!rocky2!matt
From: matt@rocky2.UUCP (Matt Blaze)
Newsgroups: net.ham-radio
Subject: Re: Request for recommendations
Message-ID: <150@rocky2.UUCP>
Date: Sat, 4-Jan-86 22:30:18 EST
Article-I.D.: rocky2.150
Posted: Sat Jan  4 22:30:18 1986
Date-Received: Tue, 7-Jan-86 03:41:24 EST
References: <523@sdchema.sdchema.UUCP>
Organization: Rockefeller Univ., N.Y.C. 10021
Lines: 25
Keywords: receivers, SWL

Although I don't yet own one myself, I have had a brief
opportunity to play with the new Sony ICF-2020 (ICF-2001D
outside the US) and was very impressed.  It covers 150kHz-
30MHz am and ssb plus 88-136MHz FM (which includes BC and
aircraft).  It has all sorts of features, including 32
memories, a scanner, keyboard and manual tuning, alarm
clock/time, a synchrophase detector for automatic ECSS
enhancement of am signals (and it really works, too), and
it actually has a good rf section, too.

The list price is something like $289, although 47 Street
```

Photo (a local discount house) has it in their latest
catalog for $249.95. You may want to look at the
lastest (1986) issue of the World Radio/TV handbook,
which I understand has a review of this (and other)
receivers. (Despite the $17.50 price, this book is a
necessity for anything but the most casual SWLing, so
your friend should probably buy the book anyway).

Matt Blaze, WB2SRI
rocky2!matt (uucp)
matt@rockefeller.arpa
matt@rockvax.bitnet

(Oh, yes: The above opinions represent no one's.)

From 6676259409789947474
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,62a3bd4c1ab5e34
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-04 20:14:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site techsup
Path: utzoo!linus!decvax!bellcore!petrus!scherzo!allegra!ulysses!mhuxr!mhuxn!
ihnp4!inuxc!pur-ee!uiucdcs!convex!techsup!kenb
From: kenb@techsup
Newsgroups: net.ham-radio
Subject: Re: reply to k9un beacon info
Message-ID: <-27771446@techsup>
Date: Sat, 4-Jan-86 23:14:00 EST
Article-I.D.: techsup.-27771446
Posted: Sat Jan 4 23:14:00 1986
Date-Received: Wed, 8-Jan-86 20:06:24 EST
References: <194@decwrl.DEC.COM>
Lines: 8
Nf-ID: #R:decwrl.DEC.COM:194:techsup:-27771446:000:288
Nf-From: techsup!kenb   Jan 4 22:14:00 1986

john, with regards to your response to k9un, i would really like to
have a copy of your FORTRAN program. Would it be possible to mail
me a copy. i tried mailing this request to you, but two attempts
failed. sorry to post this to the net.

thanks, kenb
UUCP: ihnp4!sys1!techsup!kenb

From -8320451560211791363
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,724e2e1f5ffa962f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-06 08:53:57 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site nmtvax.UUCP
Path: utzoo!linus!philabs!cmcl2!lanl!unm-la!unmvax!nmtvax!wildstar
From: wildstar@nmtvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Mil Surplus
Message-ID: <925@nmtvax.UUCP>
Date: Mon, 6-Jan-86 11:53:57 EST
Article-I.D.: nmtvax.925
Posted: Mon Jan 6 11:53:57 1986
Date-Received: Wed, 8-Jan-86 20:58:06 EST
References: <>
Reply-To: wildstar@nmtvax.UUCP (Andrew Fine)
Distribution: net
Organization: New Mexico Tech, Socorro
Lines: 8
Summary:

I have a BC-348-R Signal Corps military surplus receiver. I have been going
crazy trying to find a schematic for it, or at the very least, what kind of
power and where to apply it to get it working. Please don't let this noble
rig go to waste.

73's

Andrew Jonathan Fine

From -6524092352323728922
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,d9d6264d8355562f,start
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,d9d6264d8355562f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-06 14:06:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio,net.video
Subject: Galaxy 1 jamming
Message-ID: <1294@brl-tgr.ARPA>
Date: Mon, 6-Jan-86 17:06:34 EST
Article-I.D.: brl-tgr.1294
Posted: Mon Jan 6 17:06:34 1986
Date-Received: Fri, 10-Jan-86 06:38:43 EST
Distribution: net
Organization: USAMC ALMSA, St. Louis, MO
Lines: 10
Xref: linus net.ham-radio:3107 net.video:1811

A couple weeks ago (I'm backlogged on my postings!) Glenn Hauser, in his
weekly "World of Radio" program, mentioned that he had received a

report, sort of third or fourth-hand, that the Galaxy 1 satellite signal was being jammed in or from a source in Arkansas. This was supposed to be a threat against some or all of the premium pay-video services to not scramble their signals. I have heard nothing else about this before or since. Anybody have any info on this subject, have seen anything in writing about it, or have comments to offer?

Will

From -4961890322799812310
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,32e585dd766cb15c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-06 14:23:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ittral.UUCP
Path: utzoo!linus!decvax!ittatc!ittral!yakamavi
From: yakamavi@ittral.UUCP (Vincent J. Yakamaviich)
Newsgroups: net.ham-radio
Subject: XMTR TUBES -- "PULLS"
Message-ID: <235@ittral.UUCP>
Date: Mon, 6-Jan-86 17:23:50 EST
Article-I.D.: ittral.235
Posted: Mon Jan 6 17:23:50 1986
Date-Received: Wed, 8-Jan-86 07:50:45 EST
Distribution: net
Organization: ITT Telecom B&CC Eng. Group, Raleigh, NC
Lines: 23

A while back, several articles discussed obtaining commercial broadcast "pulls" for use in linears....

1. Where does one find these things (I assume you don't simply call the local AM station es say "hi, I'd like your old tubes!".

2. What types of stuff are currently used/available?? Like everyone else, I'm interested in the 1.8 - 30 mHz SSB/CW/RTTY applications.

Finally, any one have any thoughts on "up-grading" a SB-220 for 1.5KW?? I was toying with the idea of throwing away the existing power supply (or atleast remoting it out of the cabinet) to make room for perhaps another (pair) of 3-500Z's es a something like a 4-400 driver.

Any thoughts?? Would I be better off to throw away the existing 3-500s es go with a single 8877? Anybody have a source (price) on 8877s?

I appreciate any input!!

73,

Vince, AA4MY

From -8122693646344089818
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a937b2797e27f32,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-06 15:02:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site kvue.UUCP
Path: utzoo!linus!decvax!decwrl!pyramid!ut-sally!im4u!oakhill!kvue!sparks
From: sparks@kvue.UUCP (Ed Sparks)
Newsgroups: net.ham-radio
Subject: What kind of keys do you like?
Message-ID: <244@kvue.UUCP>
Date: Mon, 6-Jan-86 18:02:21 EST
Article-I.D.: kvue.244
Posted: Mon Jan 6 18:02:21 1986
Date-Received: Wed, 8-Jan-86 08:25:51 EST
Distribution: net
Organization: KVUE-TV, Austin, Tx.
Lines: 17

All you Brass Pounders out there, please help!

What type of keys/keyers/paddles do you like? I've been using a J-38 straight key for years, and also an old Heathkit HD-1510 keyer.

But now, having used a friend's Bencher for a few weeks, I'm ready to look for a better key! Both the Bencher and the Vibroplex Iambic look like fine choices, and both are about the same price. But each has its strengths and weaknesses. I will eventually try both, side by side... but until I can (there's no Vibroplex dealer in Austin) I would welcome your comments and recommendations!

73,
Ed

Edward Sparks, WA5ZEG KVUE-TV Austin, TX (sparks@kvue.uucp)
{asci1,ihnp4,seismo,gatech,harvard,ctvax,ucbvax}!ut-sally!kvue!sparks

From 277585479166278244
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2329025eb45bee5a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-06 16:11:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Uniden/Bearcat 800XLT Scanner owner's report
Message-ID: <731@ihu1h.UUCP>

Date: Mon, 6-Jan-86 19:11:55 EST
Article-I.D.: ihu1h.731
Posted: Mon Jan 6 19:11:55 1986
Date-Received: Tue, 7-Jan-86 04:15:07 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 211

x

Owner's Report: Uniden/Bearcat 800XLT Scanner

Bob Parnass, AJ9S

Manufactured in Taiwan, the 800XLT is the first programmable Uniden/Bearcat scanner to cover a portion of the 800 MHz band. Covering 40 channels in 2 banks the 800XLT is specified to receive in the following ranges:

TTTTAAAABBBBLLLLEEEE 1111.... 800XLT Frequency Coverage

29	-	54	fm
118	-	135.975	am
136	-	174	fm
406	-	512	fm
806	-	912	fm

Only a portion of the new 902-928 MHz ham band is covered.

Differs From Past Models

There are several differences between this scanner and its Bearcat predecessors.

- There is only a single scan/search speed: fast!

- 800XLT channel banks contain 20 channels, not 10 as in previous models. Although we should be thankful for the inclusion of a channel bank feature, doubling the number of channels in a bank is a step backwards.

- Scan delay, channel lockout, and priority enable are indicated by separate, colored LEDs rather than the numeric display, making a colorful light show.

- Both the selectable scan delay and the priority sampling period are 3 seconds vs. 2 seconds in the older scanners. Although a matter of personal preference, I like the 3 second scan delay, but would opt for a 1 or

2 second priority sampling period.

- Despite claims on the 800XLT box to the contrary, a 2 digit channel counter is displayed while scanning, as in the BC350, rather than "rolling zeroes" of the BC210/220/250/300. This is unfortunate, as rolling zeroes make it easier to discern what channels are locked out from scanning without having to step through each one manually.

- The keyboard has a good feel, although quite different from the "chicklet" keyboards on Bearcat 250 and 300 scanners. Keys travel further, with less of a positive click. The 800XLT keyboard is much easier to read, as each key has its function printed right on the keytop, rather than labeled above it on an inlay.

- The 800XLT seems to lack "window detection" circuitry, so the scanner may stop prematurely (off frequency) in the SEARCH mode.

- There is no date of manufacture stamped on the cabinet.

- Mobile DC power cord is optional, but is supplied as standard equipment with other Bearcat scanners.

Inside Appearance Pleasing

The inside of the 800XLT consists of 3 circuit boards:

1. a main receiver board, containing vhf/uhf front ends, IF stages, audio amplifier,

2. a feature board, containing microprocessor and key-board logic, and

3. an 800 MHz front end board, which uses surface mount components.

The boards appear very neat, and it is obvious that computer aided design and automated component insertion techniques were used. What a welcome change from the chaos inside a hand assembled BC250!

No schematic diagram is furnished. Whereas the identity of many of the ICs in earlier Bearcat scanners was obscured by the use of "house numbers", the ICs in my 800XLT are clearly marked with their original designations (e.g. National LM382). This makes repair easier, as one may obtain parts

from several sources rather than being forced to buy from Uniden.

Side-by-Side Performance Comparison

Side-by-side tests were performed, switching a Butternut SC3000 tri-band antenna at 20 feet among 3 scanners: the 800XLT, a new Bearcat 260, and an old Bearcat 300 workhorse. The test equipment used was a pair of human ears, which we all use when scanning.

As the following table shows, the 800XLT was more sensitive on some frequencies, but suffered much more overload from strong signals. This is important if the 800XLT will be used with an outdoor antenna. The 800XLT had fewer annoying birdies than the other models tested.

TTTTAAAABBBBLLLLEEEE 2222.... Performance of Bearcat 800XLT vs. 260 vs. 300

Band	Bearcat 800XLT	Bearcat 260	Bearcat 300
30-37 MHz	more sensitive	more sensitive	less sensitive
	weak birdies	moderate birdies	moderate birdies
	overloaded by paging, police mobile phones	no overload detected	no overload detected
37-50 MHz	equally sensitive	equally sensitive	equally sensitive
	overloaded by paging, police mobile phones	no overload detected	no overload detected
vhf aircraft	more sensitive	N/A	less sensitive

vhf-hi	slightly more sensitive	slightly more sensitive	slightly less sensitive	
	overloaded by paging	no overload detected	no overload detected	
	heard 162.55 wx on 147.19 and elsewhere			
uhf	more sensitive	less sensitive	less sensitive	
	overloaded by paging	no overload detected	no overload detected	

On the 800 MHz band, several police, business and cellular telephone stations were received using the supplied 3" antenna. Clear reception of a repeater used to dispatch Chicago Tribune photographers was possible from 50 miles distant.

The 800XLT audio output is clean and strong, with little synthesizer whine.

Early Problem Fixed: Memory Loss

My 800XLT lost its memory contents when unplugged from 117VAC, even though loaded with a fresh pair of alkaline AA batteries. The problem was traced to a metal contact, installed backwards in the battery holder. Repair required desoldering a red wire, repositioning the contact, then resoldering the wire. No further memory problems have been encountered.

Too Much Hysteresis in Squelch

There is too much "free play" in the stock 800XLT squelch control, the same affliction designed into Radio Shack scanners. The remedy consists of replacing the

860K ohm resistor on pin 14 of the MC3359P IC with a 2.2M ohm resistor.

Not As Selective as Older Bearcats

At -55 dB @ +- 25 KHz, the 800XLT IF selectivity is not as good as the BC350 and BC300, which are rated at -60 dB @ +- 25 KHz. The wider selectivity causes the scanner to stop prematurely in the SEARCH mode, and makes it difficult to determine, for example, if a station is transmitting on 855.2500 as opposed to 855.0125 MHz.

Since the 800XLT tunes in 12.5 KHz steps on the 800 MHz band, the wider selectivity is handy when scanning telephone cell sites, which are on channels spaced on 30 KHz apart.

Overall Evaluation

The 800XLT is the most conventional and easiest to operate of the new 800 MHz-capable scanners. It is plagued neither with the slow scan/search rate of the Regency MX7000, the low audio output of the MX4000, nor the unfriendliness of the Yaesu scanning algorithms.

The 800XLT's tendency to overload on strong signals and awkward squelch action detract from an otherwise good performance.

--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -6078378241483444973
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eeeb81d2cf6bb976
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1986-01-07 09:01:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.10 $; site techsup
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!convex!techsup!mikey
From: mikey@techsup
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <-27771445@techsup>
Date: Tue, 7-Jan-86 12:01:00 EST
Article-I.D.: techsup.-27771445
Posted: Tue Jan 7 12:01:00 1986

Date-Received: Fri, 17-Jan-86 02:18:44 EST
References: <1255@vax135.UUCP>
Lines: 15
Nf-ID: #R:vax135.UUCP:1255:techsup:-27771445:000:624
Nf-From: techsup!mikey   Jan 7 11:01:00 1986

I think you'll find that most power companies will respond fairly
soon to a 'noisy' transformer. From what I was told by a power company
official, a 'noisy' transformer is a failure getting ready to happen.
Not only could the power company open up a can of worms if there
was a problem with loss of property or life from a failure that was
known to be imminent, but I'm sure a 'noisy' transformer is not as
effecient as a correctly functioning one. Also, the cost of rewinding
a transformer before it blows and damages the core is considerably less
than after the failure.

mikey N1DVJ
trsvax!techsup!bbimg!mikey

From 7761096476324974767
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5df7e9d5b1e7297a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-27 15:48:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
FAC0395%UOFT01.BITNET@WISCVM.ARPA
From: FAC0395%UOFT01.BITNET@WISCVM.ARPA (Joe Feustle)
Newsgroups: net.ham-radio
Subject: HC8X
Message-ID: <2490@brl-tgr.ARPA>
Date: Sun, 27-Oct-85 18:48:35 EST
Article-I.D.: brl-tgr.2490
Posted: Sun Oct 27 18:48:35 1985
Date-Received: Thu, 31-Oct-85 08:22:21 EST
Sender: news@brl-tgr.ARPA
Lines: 8

To whom do we QSL the HC8X dxpedition for contacts during the CQ-WW?
I remember a K1 on this net who said he was gg to be part of the team.

HS0A was looking for callers Saturday at 1400 GMT on 20 ssb. BY1PK
and BY4AA were both Q5 at 2400 Friday and Saturday. No luck making
a contact. Gee, they always ask the fatal question: "Any more 4's?"

N8AAT

From 8250776320877613197
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,be252e4d5f820168,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-28 04:39:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!decwrl!dec-rhea!dec-cheers!burden
From: burden@cheers.DEC (Dave Burden -- 381-2559)
Newsgroups: net.ham-radio
Subject: broadcast in Russian on 1330kHz?
Message-ID: <1095@decwrl.UUCP>
Date: Mon, 28-Oct-85 07:39:54 EST
Article-I.D.: decwrl.1095
Posted: Mon Oct 28 07:39:54 1985
Date-Received: Wed, 30-Oct-85 05:47:43 EST
Sender: daemon@decwrl.UUCP
Organization: Digital Equipment Corporation
Lines: 9

Last night (10-27) I was scanning the AM freqs and at 1330kHz I picked up a
fairly strong broadcast in Russian. It was at 01:18 GMT. Anybody have any
clues as to who it might have been?

Dave Burden   decvax!decwrl!dec-rhea!dec-cheers!burden
603-881-2559   Nashua, NH
              42 42' 48.8'' N
              71 27' 23.7'' W

From -8503356041197506208
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f922049c87586bd0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-28 05:00:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 alpha 4/15/85; site tapa.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!tapa!larry
From: larry@tapa.UUCP (Larry Pajakowski)
Newsgroups: net.ham-radio
Subject: Scanner antennas
Message-ID: <124@tapa.UUCP>
Date: Mon, 28-Oct-85 08:00:52 EST
Article-I.D.: tapa.124
Posted: Mon Oct 28 08:00:52 1985
Date-Received: Wed, 30-Oct-85 04:07:28 EST
Organization: Pata Systems, Deerfield, IL
Lines: 3

I am considering the purchase of a Yaesu FRG-9600 and would like to hear
others thoughts on broadband antennas for the 60-900mhz. coverage of the
Yeasu receiver.

From -2846856274465960976
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58466d1a182b854b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-28 06:28:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!rachiele@NADC
From: rachiele@NADC
Newsgroups: net.ham-radio
Subject: various subjects of discussion on INFO-HAMS
Message-ID: <2503@brl-tgr.ARPA>
Date: Mon, 28-Oct-85 09:28:08 EST
Article-I.D.: brl-tgr.2503
Posted: Mon Oct 28 09:28:08 1985
Date-Received: Thu, 31-Oct-85 22:25:53 EST
Sender: news@brl-tgr.ARPA
Lines: 7

"I might agree with what you have to say, but I will defend to the death
my right not to have to listen to you say it."
- or something like that.

Jim
KA3OKP

From 2119816117900026576
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ceb51230926f9cc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-28 08:03:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: WWVB info comments from K9EUI
Message-ID: <21272@mgweed.UUCP>
Date: Mon, 28-Oct-85 11:03:53 EST
Article-I.D.: mgweed.21272
Posted: Mon Oct 28 11:03:53 1985
Date-Received: Wed, 30-Oct-85 04:15:55 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 20

Looks like most of those that wanted my WWVB info got it OK. This past
weekend, I dug into my rcvr and noted that there are some errors in the
drawings. If anyone is going to build it per my drawings, I will furnish

the changes.

I removed my crystal filter and replaced it with a mechanical filter which
has a 6dB bandwidth of about 80Hz. No real difference in performance was noted.
So I would say there is no reason to get fanatic about super minimum bandwidth.

I also threw together a board to decode and display the time code, including
seconds, minutes, hours, and days. The circuit is "discrete" using "LS" type
IC's and has 14 chips not counting the readouts (which include the decoders
and latches). It works OK when the signal is not corrupted by other crap.
However, the minutes display is a minute behind. The literature says that
they send the "anticipated minute" so I would assume it should be correct
at the start of the next minute but looks like this is not so for some reason.

Bob K9EUI

From 1956523745680796710
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1e76eb06b260eaf7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-28 09:23:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: broadband antenna for scanner
Message-ID: <21275@mgweed.UUCP>
Date: Mon, 28-Oct-85 12:23:50 EST
Article-I.D.: mgweed.21275
Posted: Mon Oct 28 12:23:50 1985
Date-Received: Wed, 30-Oct-85 04:18:00 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 5

One broadband antenna that I can think of is the discone.

Bob, K9EUI

From 2232159290981950594
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e38d752435d2e77,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-28 12:50:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site joevax.UUCP
Path: utzoo!decvax!bellcore!petrus!magic!joevax!mcg
From: mcg@joevax.UUCP (Mark Germain)
Newsgroups: net.ham-radio
Subject: The Efficacy of ICOM HF Transceivers for Mobile Operation

Message-ID: <102@joevax.UUCP>
Date: Mon, 28-Oct-85 15:50:36 EST
Article-I.D.: joevax.102
Posted: Mon Oct 28 15:50:36 1985
Date-Received: Mon, 28-Oct-85 23:25:42 EST
Distribution: na
Organization: Bell Communications Research Inc., Morristown, NJ
Lines: 16

For the past four years I have used a dedicated IC-720A in a mobile
environment and while it's reliability has been excellent, severe
design problems with the noise blanker significantly degrades the
receiver performance under conditions of crowded bands, presence
of moderately strong carriers. The problem is apparently due to
back-biasing if the noise detection diode, related to time constants
which are too long in the presence of strong signals in the wide passband of
first IF. For example, in the presence of strong broadcast carriers on
forty meters, even 500 KHz away, ignition pulses to pass through the
noise blanker almost completely intact.
I am currently looking for another transceiver more suitible for mobile
applications, one with a significantly better-designed noise blanker.
Does anyone have experience with the more recent ICOM's or the Kenwood
line, eg. IC-751, IC-735, 430S ?

Mark, KB2IF

From -2531057241638239874
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a1c8f8af393df8b7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-28 13:35:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: 154.6 MHz - "Welcome to McDonalds..."
Message-ID: <686@ihu1h.UUCP>
Date: Mon, 28-Oct-85 16:35:22 EST
Article-I.D.: ihu1h.686
Posted: Mon Oct 28 16:35:22 1985
Date-Received: Wed, 30-Oct-85 04:22:13 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 46

x

"Welcome to McDonald's. May I take your order
please?"

That's what you'll hear if you monitor 154.600 MHz near
Yorkville or Montgomery, Illinois. As my article pos-

ted last April described, McDonalds restaurants in this area have been using radios to communicate with customers at the drive-up windows [see article below].

Although low power transmitters are used, I can monitor the McDonalds restaurant about 2 miles away using a Butternut SC3000 antenna at 20 feet. So far, I can hear only the waitress side of the conversation. The customer side of the conversation may be conducted over a closed circuit intercom.

Articles in the November 1985 issue of "Monitoring Times" claim the McDonalds operation to be nationwide on 154.6 and on 35.02 MHz in Barberton, OH, although the latter frequency has not been confirmed here.

> From postnews Sun Apr 14 11:07:26 1985
> Subject: McDonalds begins using walkie-talkies
> Newsgroups: net.ham-radio
> Distribution: net
>
> McDonalds Using Two-Way Radios
>
> The local McDonalds restaurant is modernizing: counter
> workers are now using two-way radios
to communicate
> with the cooks.
>
> Each worker wears a lightweight headset/microphone
> wired to a small, white plastic box on the front of a
> belt worn on the waist. One of the two black pushbut-
> tons on the box is a push-to-talk control. What
> appears like a large white battery pack is fastened to
> the rear of the belt. .....
> ...
> Anyone have more information?

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6912832643876299060
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82c6232009342160,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-28 14:04:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxa.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!mhuxt!houxm!houxa!593aac
From: 593aac@houxa.UUCP (S.JOHNSON)
Newsgroups: net.ham-radio

Subject: Cordless Phones and Simulated Cat Howls
Message-ID: <830@houxa.UUCP>
Date: Mon, 28-Oct-85 17:04:04 EST
Article-I.D.: houxa.830
Posted: Mon Oct 28 17:04:04 1985
Date-Received: Wed, 30-Oct-85 04:23:03 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 6

My Uniden cordless phone has recently taken to emitting sporadic
"synthesized cat howls?", kind of whooping noise, which is quite
loud; we've turned off the phone in response. Changing the channel
has no effect. I doubt it is an intermittent in the set, but what
could be transmitting these howls? Any ideas?
              Steve, N2FT

From 6245565369174822965
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,92401378224e41fb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-28 19:44:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!brosen@BBN-SPCA.ARPA
From: brosen@BBN-SPCA.ARPA (Bruce L. Rosen)
Newsgroups: net.ham-radio
Subject: RTTY on C64
Message-ID: <2543@brl-tgr.ARPA>
Date: Mon, 28-Oct-85 22:44:29 EST
Article-I.D.: brl-tgr.2543
Posted: Mon Oct 28 22:44:29 1985
Date-Received: Fri, 1-Nov-85 00:38:08 EST
Sender: news@brl-tgr.ARPA
Lines: 7

Any recommendations/user experience out there on RTTY (not AMTOR or packet)
programs for the Commodore 64? Any advantage for ROM-based (a la packages from
AEA) packages as opposed to disk-based programs?

Any comments appreciated.

Bruce - K1FFX

From 4564161738942636613
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,af6f50af5b16cc9e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-28 20:00:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!karz.wbst@Xerox.ARPA

From: karz.wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: HC8X QSL Manager
Message-ID: <2545@brl-tgr.ARPA>
Date: Mon, 28-Oct-85 23:00:44 EST
Article-I.D.: brl-tgr.2545
Posted: Mon Oct 28 23:00:44 1985
Date-Received: Fri, 1-Nov-85 00:38:33 EST
Sender: news@brl-tgr.ARPA
Lines: 14

When I worked HC8X yesterday in the CQ contest he was giving his QSL
manager as k8cw.

I suspect there are many on the net in addition to n8aat who worked him
as well. It was nice having decent conditions for a change. I forgot
how good 15 meters can be for dx.

Does anyone know the QSL mamager for JG1FVZ/5N25?

Tnx es 73

Bob
K2OID

From 131342203395981952
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47f455699ca9b192,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-28 21:43:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
FAC0392%UOFT01.BITNET@WISCVM.ARPA
From: FAC0392%UOFT01.BITNET@WISCVM.ARPA (Len Brady)
Newsgroups: net.ham-radio
Subject: GEE WHIZ, FELLERS
Message-ID: <2549@brl-tgr.ARPA>
Date: Tue, 29-Oct-85 00:43:34 EST
Article-I.D.: brl-tgr.2549
Posted: Tue Oct 29 00:43:34 1985
Date-Received: Fri, 1-Nov-85 00:44:28 EST
Sender: news@brl-tgr.ARPA
Lines: 18

My pleas of several months back having been completely ignored, I
take terminal in hand to write again. In my first message of this
type, I implored the TVRipOff boys (and girl) to start their own
info-net, to be called surveillance-net or eavesdrop-info, and to
leave that inappropriate trash off of the HAM RADIO NET.

Tonight, I had to delete messages dealing with cordless telephones
being overheard by television sets, AM radios and CIA-home-built
converters. For Pete's sake, that has nothing to do with HAM RADIO!

If you eavesdroppers, peekers and snoopers have any interest in HAM
RADIO, why don't you turn on your rigs and get on the air? If you
have no interest in HAM RADIO, why don't you stop cluttering up the
INFO-HAMS net?

73 to the hams reading this.

Len KF8J

From 606711155506098726
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a33fbbaed080264c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-29 00:14:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!linus!decvax!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Re: Politics and Religion
Message-ID: <659@petrus.UUCP>
Date: Tue, 29-Oct-85 03:14:09 EST
Article-I.D.: petrus.659
Posted: Tue Oct 29 03:14:09 1985
Date-Received: Thu, 31-Oct-85 23:43:35 EST
References: <2418@brl-tgr.ARPA>
Organization: Bell Communications Research, Inc
Lines: 17

> Well folks, the seeds of a certain nameless discussion
> reminded me of something I read in the ARRL operating
> manual when I first got involved in ham radio. Beware
> that this is not an exact quote.
>
> They cautioned against discussions of both politics and
> religion (sometimes inseparable) on the air, as these
> topics frequently lead to unfriendly exchanges, which,
> of course, have no place in our operating practices.
>
> Enough said. 73, Ron WA2EYC

To the foregoing should probably be added the topic of packet radio
protocols. Of course, they could conceivably fall in either (or both)
of these categories...

Phil

From -3448699246399419854
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47f455699ca9b192
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-29 06:14:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ptb@mitre-bedford.ARPA
From: ptb@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: GEE WHIZ, FELLERS
Message-ID: <2558@brl-tgr.ARPA>
Date: Tue, 29-Oct-85 09:14:33 EST
Article-I.D.: brl-tgr.2558
Posted: Tue Oct 29 09:14:33 1985
Date-Received: Fri, 1-Nov-85 00:54:38 EST
Sender: news@brl-tgr.ARPA
Lines: 6

I agree with you, Len. Why dont we call it info-snoop or some such....

Seriously, Do we have any volunteers for someone to set up such a distribution
list and segregate the traffic from info-hams?

- Peter, WA1SNH

From -1247235694608579356
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,df3eb69fa9c4e7b8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-29 06:21:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site
lumiere.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tektronix!
lumiere!lfarr
From: lfarr@lumiere.UUCP
Newsgroups: net.ham-radio
Subject: SAN MARINO
Message-ID: <1337@lumiere.UUCP>
Date: Tue, 29-Oct-85 09:21:47 EST
Article-I.D.: lumiere.1337
Posted: Tue Oct 29 09:21:47 1985
Date-Received: Sat, 2-Nov-85 02:18:52 EST
Sender: lfarr@lumiere.UUCP
Organization: Tektronix, Beaverton OR
Lines: 10

> By all means, if you work Tony -T77C, do include a greenstamp. I
> believe that his QSL's are the sole source of income for the
> entire island.

In fact, one quarter of San Marino's (not an island - it's land locked in Italy) income is from the sale of unique postage stamps. You can do this when your country is only 38 square miles small.

Larry Farr N7EYM.

From -8917539975133605386
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fe2667089e858633
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-29 06:29:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ptb@mitre-bedford.ARPA
From: ptb@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: Kantronix in Mexico - Help! + FLAME
Message-ID: <2559@brl-tgr.ARPA>
Date: Tue, 29-Oct-85 09:29:53 EST
Article-I.D.: brl-tgr.2559
Posted: Tue Oct 29 09:29:53 1985
Date-Received: Fri, 1-Nov-85 00:55:09 EST
Sender: news@brl-tgr.ARPA
Lines: 6

This has to be at least the third time I have seen this message...

Is there something wrong with your mailer?

- Peter, WA1SNH
(ptb@mitre-bedford)

From 8070637206986847861
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63ca9bf60a677be1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-29 06:47:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Denver Mods 7/26/84) 6/24/83; site drutx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!drutx!bray
From: bray@drutx.UUCP (BrayJM)
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\" A PLEA
Message-ID: <387@drutx.UUCP>
Date: Tue, 29-Oct-85 09:47:47 EST
Article-I.D.: drutx.387
Posted: Tue Oct 29 09:47:47 1985
Date-Received: Wed, 30-Oct-85 06:46:41 EST
References: <2439@brl-tgr.ARPA>
Organization: AT&T Information Systems Laboratories, Denver

Lines: 12

please (eat this you line-eating monster)

hey group. *PLEASE* let's *NOT* get into one of those awful witch-hunts for either "reds" or "facists". as soon as we start throwing labels around, we loose all the good things about networking.

john, kb6ql

uucp: ...!ihnp4!drutx!bray

From -2021544904826376960
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e5e582daf649431b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-29 11:54:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 43
Message-ID: <21300@mgweed.UUCP>
Date: Tue, 29-Oct-85 14:54:26 EST
Article-I.D.: mgweed.21300
Posted: Tue Oct 29 14:54:26 1985
Date-Received: Wed, 30-Oct-85 07:30:54 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 35

qst de k9eui
hr propagation forecast bulletin nr 43
from arrl headquarters newington ct
october 28 1985
to all radio amateurs bt

since the middle of july the solar flux has been so consistently near the quiet sun level that some observers felt the end of cycle 21 to be imminent. but on october 13 a major new active area came around the east limb of the sun and the solar flux curve turned upward. from 67 the flux rose to 95 by october 22. it was back to 80 by the 27th, but the curve appeared to be flattening out. an active area that produced a slight flux peak on october 3 is returning to view this week. it could keep the flux above minimum levels through november 1 at least.

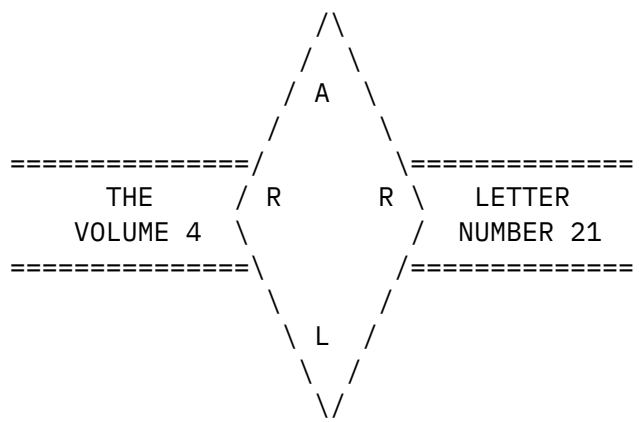
occasional peaks of solar activity had been expected with cycle

21 still less than nine-and-one-half years old. this one came at the right time of year for maximum effect on the higher dx frequencies. worldwide dx brought a rush of activity back to the 21 mhz band and 24 and 28 mhz pulled back from almost total quiet for a few days at least.

though solar activity is falling again, conditions will be mostly favorable through october 30 at least. higher geomagnetic activity october 31 through november 4 will tend to restrict dx activity to the lower latitudes and transequatorial circuits. best overall conditions for early november should be with us about the 5th to 7th.

american sunspot numbers for october 17 to 23 were between 15 and 53 with a mean of 32.6. ar

From -3841607932393446247
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a330194d2e7e01f2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-29 19:15:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL LETTER V4 #21
Message-ID: <258@inuxi.UUCP>
Date: Tue, 29-Oct-85 22:15:11 EST
Article-I.D.: inuxi.258
Posted: Tue Oct 29 22:15:11 1985
Date-Received: Fri, 1-Nov-85 23:59:46 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 358



October 10, 1985

The ARRL Letter is published bi-weekly by the Information Services Department of the American Radio Relay League, 225 Main St., Newington, CT, 06111; (203) 666-1541. Larry E. Price, W4RA, President; David Sumner, K1ZZ, Executive Vice President; Dave Newkirk, AK7M, Editor; Debra Chapor, Circulation Manager.

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In this issue:

o FCC PREPARES TO NAIL RADIO PIRATES

o ARRL FILES COMMENTS ON PR 85-22

o ANOTHER HAM IN SPACE

o ...and much more!

PERIMETER PROTECTION SYSTEMS ON 6 METERS?

In turning a Canadian company's petition for operation of a perimeter protection system into a Notice of Proposed Rulemaking, FCC appears to have deflected a potential threat to the Amateur Radio Service at 50-54 MHz. In the NPRM, General Docket 85-231, FCC responded to a request for a waiver of Part 15 at 50-88 MHz by proposing 54-88 MHz instead.

It all began with a bit of alphabet soup called "CTLFDS" and ended up "GUIDAR." "CTLFDS" stands for "coupled transmission line field disturbance sensor." Control Data Canada, Ltd. (CDC), developed one and called it GUIDAR. It's a system that can be used to provide security surveillance for prisons, and to protect high-risk sites such as nuclear power stations from terrorism, theft and vandalism. GUIDAR operates on a principle of guided radar whereby a detection zone is created between "leaky" or ported coaxial cables deployed around the protected area. The present GUIDAR system employs two parallel cables buried approximately five feet apart and nine inches below the ground.

An RF pulse is transmitted into one cable; some of this energy is coupled via the ports (holes) in the outer conductor of this cable into the ground and air near the cable. Some of this energy is reflected by objects in the ground and discontinuities in the soil, and is coupled into the second, or receiving, cable. When a human or other large object crosses between the cables, the change in RF coupled from cable to cable is detected and triggers an alarm. Such systems may cover a perimeter up to 2 miles long.

On June 24, 1984, CDC asked FCC for a waiver of Part 15 of its rules to allow the operation of GUIDAR at 50-88 MHz. (Part 15 is that part of the FCC Rules governing operation of unlicensed low-power communication devices. Familiar Part 15 devices include cordless telephones, 49 MHz walkie-talkies, garage-door openers, etc. Such devices must not interfere with any other service; they must tolerate interference from other services.)

Why did CDC make a run at 50-88 MHz? The aim was improved performance of its GUIDAR. CDC indicated that the ability of the system to detect actual intrusions and to ignore objects that could cause false alarms is affected by the frequency of operation. Below 30 MHz, sensitivity of the system to humans drops dramatically. Operation above 100 MHz increases the system's sensitivity to small animals, resulting in numerous false alarms; also, above 100 MHz, signal loss in the cable is significant. CDC stated that such systems must operate somewhere between 30 and 100 MHz.

CDC stated that the present rules in Part 15, Subpart F, allowing perimeter protection systems to operate in the range 40.66 to 40.70 MHz, do not allow for effective operation of a system such as GUIDAR. GUIDAR uses a pulsed signal with a bandwidth of 2.5 MHz. A pulsed signal is employed to allow determination of the exact location along a perimeter where intrusion has occurred.

CDC proposed 50-88 MHz for GUIDAR. This range includes the amateur 6-meter band, TV channels 2-6 and radio astronomy and avigation at 72-76 MHz. CDC contends that its perimeter protection systems can operate in the 50-88 MHz range without causing interference to radio services on those frequencies.

In the NPRM, FCC said that CDC's reasons for selecting 50-88 MHz, rather than 30-50 or 88-100 MHz, were "unclear." Yet, "In view of the public benefits to be derived from improved security at facilities such as prisons and nuclear plants, we find it appropriate to accommodate such systems to the extent possible." Operation of CTLFDS on vacant VHF TV channels sits well with the Commission. But what about 6 meters? Said FCC, "We have reservations about also permitting these systems to operate in the 50-54 MHz amateur radio band because these systems could

extend for considerable distance around a large facility, thereby increasing the likelihood that an amateur transmitter could come in close proximity to some part of the system."

What has been proposed by the Commission is a set of standards for perimeter protection systems allowing for operating at 40.68 MHz, 54-72 MHz and 76-88 MHz. For systems operating between 54 and 88 MHz, strength of emissions is not to exceed 10 microvolts per meter at a distance of 30 meters -- the same limitation placed on computers for use in residential areas. FCC carved 50-54 MHz and 72-76 MHz from CDC's original proposal: "Permitting operation on TV channels 2 through 6 should be more than sufficient, since this ensures that in any given area there will be at least two vacant TV channels on which a perimeter protection system could be set to operate."

Comments on General Docket 85-231 were due by October 11, 1985, with the League to file in support of FCC's decision to keep these devices out of the 6-meter band. Reply Comments are due on or before November 12.

FCC PREPARES TO NAIL RADIO PIRATES

The Federal Communications Comission's monitoring network is continuing to investigate and fine illegal radio operators on a number of frequencies. Through long-distance direction finding, unlicensed "pirate" radio operations have been identified near these cities: Richmond, Charlottesville and Staunton, VA; Youngstown, OH; Miami and Orlando, FL; Minneapolis, MN; Washington, DC; Louisville, KY; Waterbury, CT; Newark, DE; Grand Rapids and Lansing, MI; San Francisco, CA; Arkansas City, KS, and Fort Smith, AR.

The operation of unlicensed radio stations is in direct violation of FCC Rules and Regulations. Their operation may endanger life and property by causing harmful interference to licensed radio operations.

One such pirate station, "KRZY" of Arkansas, was located and inspected on March 9, 1985. As a result of the inspection, a $1000 Notice of Apparent Liability was issued for unlicensed and out-of-band operation. The same operator soon returned to the air, and on August 9, 1985, U.S. Marshals, accompanied by an agent from the FCC District Office in Dallas, served a warrant and seized transmitting equipment
used by the radio operator. The search and seizure resulted from a close-in DF to his residence on August 16, 1985, at which time the station was identifying itself as "KBBR" on 7440 kHz.

If convincted of operating an unlicensed radio station, the operator faces a maximum penalty of one year imprisonment, a fine up to $10,000 and a possible forfeiture of radio equipment to the U.S. government.

Persons having information that would assist the FCC in its effort to locate and close down pirate radio stations should contact: Engineer in Charge, FCC, P.O. Box 1588, Grand Island, NE 68802-1588; telephone (308) 382-4296.

NEW ADDRESSES FOR TWO FCC OFFICES

FCC's Anchorage District Office has moved to 6721 West Raspberry Road, Anchorage, AK 99502, telephone (907) 243-2153. The Honolulu Office has moved shop as well; their address is Waipio Access Road, Next to the Ted Makalena Golf Course, P.O. Box 1030, Waipahu, HI 96797. The telephone there is (808) 677-3318.

Both offices are open from 8 A.M. to 4:30 P.M. Public inquiries concerning telecommunications matters, complaints of electronic interference and schedules of commercial radio operator examinations should be directed to these addresses.

THAT THIRTY-DAY RULE ISN'T GONE YET

From the ARRL/VEC office comes this reminder for all ARRL-accredited Volunteer examiners: don't forget that the thirty-day wait rule remains in force until November 8. Don't risk your license by breaking the rule while it is still on the books. After November 8, each VEC entity may set its own waiting period. Once the ARRL Board has determined the cost impact of this rules change, ARRL/VEC VEs will be advised as to what the ARRL/VEC retest policy will be.

COHERENT CW ON LONGWAVE

Have you heard of the 1750-meter band? It spans 160-190 kHz, and U.S. experimenters there are allowed unlicensed operation with no more than 1 watt DC input and a 15-meter antenna. (Don't get out your calculators; that's like having QSOs on 80 meters with a wire just a hair longer than two feet!) It is possible to make electromagnetic hay on 1750, though -- especially if you jump into the experimental spirit of the band and its users. More and more 1750-meter experimenters, or LOWfers, as they're nicknamed, are turning to uncommon technologies in their quest to span greater distances on the band. One such technology is coherent CW (CCW). What's coherent CW? There's quite a bit on the technique on pages 21-9 to 21-12 of the The ARRL 1985 Handbook for the Radio Amateur. Simplistically put, it's a method wherein transmit and receive frequencies, keying speed, and receiver bandwidth are synchronized, allowing something like a 20dB improvement in signal-to-noise ratio at 12 WPM over non-coherent CW systems at similar signalling rates. From the September issue of QEX, the ARRL Experimenter's Exchange, comes this report on 160-190 kHz CCW:

"Mike Mideke, WB6EER, and I have been experimenting with coherent CW in the 1750-meter experimental band. My CCW beacon is located in Morro Bay, California, transmitting 10-baud CCW, while Mike is receiving with a Petit PCF-3 coherent CW filter (QST, May 1981). A digital dot is precisely 0.1 second, while dashes, space and blanks between elements are 0.3 second long. A 32-bit memory is used, making the entire ID 10.7 seconds. All experiments have been conducted on 176 kHz, as sufficient RF stability occurs with ordinary crystal control. 166.66667 kHz was planned, but carrier accuracy is far less stringent than first thought!

"Phase-locking to 10-MHz WWV was discarded after the discovery that 100-kHz LORAN C signals were received while tranmitting on the same antenna, using a simple 100-kHz tuned circuit. A basic 100-kHz receiver is now needed with only a sample and hold output such that a phase lock can be achieved with a 1-MHz crystal. A commercial LORAN C unit was used for this initial try.

"It is becoming more apparent that stabilities and complexities first thought necessary are not required when the communication experiment lasts for a few hours, or can be optimized by the operator on the spot. Both Mike and I are now look-ing for an experimenter in, say, the Hawaiian islands, to show what coherent CW and one watt of power can really do" -- Cliff Buttschardt, W6HDO, 950 Pacific St., Morro Bay CA 93442.

ARRL FILES COMMENTS IN PR DOCKET 85-22

In response to rising interference in the repeater subbands, FCC released a Notice of Proposed Rulemaking on repeater coordination, PR Docket 85-22, in January of this year. FCC intends to add to Part 97 the definitions of "coordinated repeater," "harmful interference" and "frequency coordinator" -- and a new paragraph (h) to Section 97.85 reading, in part, that "where one repeater is coordinated and the other is not the station with the non-coordinated repeater has primary responsibility to resolve the interference." This was really bringing the question of whether or not one should coordinate one's machine home to roost! Further, the NPRM included a moratorium on new repeater operation in some large metropolitan areas; this moratorium was lifted in February as a result of a Request for Partial Reconsideration filed at near-light speed by the League. Another aspect of the moratorium had quickened pulses in the field when the fine print of 85-22 was read as defining "new" repeaters as those that would not be listed in the new edition of the ARRL Repeater Directory -- unless other proof of pre-operation was available. The result was a scramble to list repeaters in the Directory just as the book was in its final editing stage. The original deadline for the filing of comments had been July 1, but this was extended at ARRL request to August

15, 1985: the League's Board of Directors wished that maximum time be allowed for it to consider input from those concerned. And "those concerned" were legion.

The gist of the League's August 15 filing in Docket 85-22 was succinctly put at Minute 74 of the Board's July meeting in Hartford (see September 1985 QST, page 57):

1) Preferred status in instances of harmful repeater-to-repeater interference should be granted to amateur repeater operators who have implemented the recommendation of their local or regional frequency coordinator and are thereby coordinated.

2) Frequency coordination should be strongly urged for all amateur stations in repeater or auxiliary operation in any geographical area that is served by a frequency coordinator.

3) The FCC should not consider alternatives to frequency coordination nor mandate methods of coordination.

4) The use of modern technological innovations, such as those cited in the NPRM, should be encouraged, but not substituted for frequency coordination.

5) The FCC should not recognize a single entity, such as a National Frequency Coordinator, for amateur repeater operation. Such coordination activities should be performed by local or regional frequency coordinators with appropriate support to these coordinators to be provided by the ARRL.

6) The ARRL also recommends that the scope of frequency coordination include all Amateur Radio stations in repeater or auxiliary operation.

7) The ARRL further recommends that consideration of the procedural framework within which frequency coordinators are recognized and conduct their operations be subject to a future FCC proceeding.

Next on the agenda: reply comments, which were due by September 30. More on the League's filing in November QST; watch there, and here, for more on lively 85-22.

It's almost November 1 -- that's the deadline to register your repeater with Hq. for the 1986-87 Repeater Directory. Hint...

AMERICANS ON THE AIR IN JAPAN

Nineteen days after the U.S.-Japan reciprocal operating agreement took effect, September 26 saw five individual-station licenses issued to U.S. amateurs, effective October 1: 7J1AAA was issued to AH0/A, 7J1AAB to NA2Y, 7J1AAC to KH2AC, 7J1AAD to

WA4PRF, and 7J1AAE to AI0/D. Full information for operating in Japan under the new arrangement is available from ARRL Headquarters.

ANOTHER HAM IN SPACE IN 1986

NASA has announced that Ron Parise, WA4SIR, is scheduled to be a member of the crew for the Astro 1 shuttle mission, 61E, in March 1986. Astro 1 is the first of three related astronomy missions. Ron is an active AMSAT member, and there is a possibility of Amateur Radio operation from the shuttle once again being approved by NASA.

"I GUESS YOU HAD TO BE THERE..."

The best-told jokes sometimes elicit that response . . . usually after an ego-crushing pause. But it also applies to HF propagation. Sure, we're in the depths of a solar minimum, but there's good use to be made of the HF bands yet -- if you're there when the band opens, making your presence known. And this is equally important at VHF/UHF. W1HDQ put it well in a recent W1AW propagation forecast: "We are moving into the best months of the year, but activity is the key. Nobody ever worked DX with a receiver."

From 3207812642034979366
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3cec3526fa697d65,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-29 19:22:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: More recent SWL loggings
Message-ID: <687@ihu1h.UUCP>
Date: Tue, 29-Oct-85 22:22:23 EST
Article-I.D.: ihu1h.687
Posted: Tue Oct 29 22:22:23 1985
Date-Received: Wed, 30-Oct-85 07:49:14 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 68

x

3.4130 call?_____Shannon Aeroadio, volmet wx broadcast, usb, 10/22/85 @0245Z
[Shannon, Ireland] (B. Parnass)

3.8925 FDY_______France: French Air Force, cw marker, 10/30/85 @0156Z
[Orleans, France] (B. Parnass)

4.2320 HWN_____France: French Navy, cw marker, 10/25/85 @0120Z
[Houilles, France] (B. Parnass)

4.2335 Y5M_____East Germany: Ruegen Radio, cw, 10/25/85 @0127Z
[location?] (B. Parnass)

4.2350 VAI_____Canada: Canadian Coast Guard, marker, cw, 10/25/85 @0218
Z
[Vancouver, BC Canada] (B. Parnass)

4.2440 WKM_____unidentified: cw marker, 10/25/85 @0132Z
[location?] (B. Parnass)

4.6154 IDR2_____Italy: Italian Navy, cw marker, 10/30/85 @0150Z
[Rome, Italy] (B. Parnass)

4.8650 CFW_____Remote Radiotelephone Network, phone patches to "Taliomi
". Network of common carriers used for communication wit
h remote logging camps and mines, usb, 10/29/85 @0246Z
[Vancouver, Canada] (B. Parnass)

4.8860 KKN44_____US: State, embassy, cw marker, 10/29/85 @0245Z
[Monrovia, Liberia] (B. Parnass)

5.1680 call?_____unidentified: several minutes of slow, encrypted cw in 5
figure groups, sounds similar to FEMA broadcasts but wi
thout station id, 10/30/85 @0230Z
[location?] (B. Parnass)

5.6160 KEA5_____Aeronautical Radio Inc, JFK Airport, id="New York", wkg
TWA flight 904, usb, 10/30/85 @0242Z
[New York, NY] (B. Parnass)

9.0500 NMO_____US: Coast Guard, weather bulletin, cw, 10/29/85 @0100Z
[Honolulu, HI] (B. Parnass)

11.1760 call?_____US: Air Force, in-flight aircraft, usb, 10/29/85 @2254Z
[Albrook AFB, Panama Canal Zone] (B. Parnass)

14.3844 CIW701____Canada: Canadian Forces Amateur Radio Network, net contr
ol, wkd "VXN9", then conducted phone patch, usb, 10/21/8
5 @1726Z
[location?] (B. Parnass)

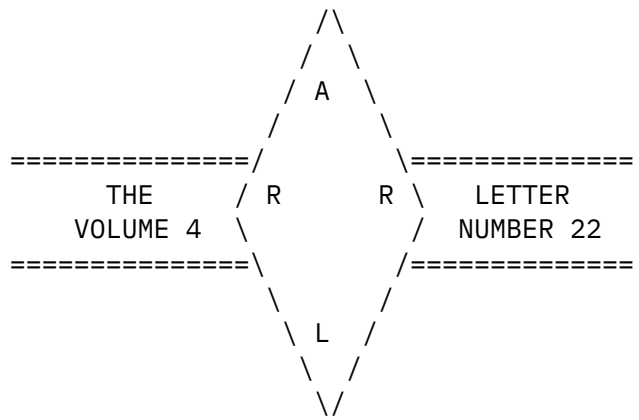
VXN9_____Canada: Canadian Forces Amateur Radio Network, wkd net c
ontrol CIW701, usb, 10/21/85 @1726Z
[Nicosia, Cyprus] (B. Parnass)

14.4585 CIW605____Canada: Canadian Forces Amateur Radio Network, wkg "202"
, usb, 10/21/85 @1720Z
[location?] (B. Parnass)

14.8868 WGY912____US: FEMA, slow speed encrypted cw in 5 character groups, purported to be a VIP relocation site in times of emergency, 10/21/85 @1735Z
[Mt Weather, VA] (B. Parnass)

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5971038779217176546
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8abd41c0af06ddd2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-29 19:24:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL LETTER v4, #22
Message-ID: <259@inuxi.UUCP>
Date: Tue, 29-Oct-85 22:24:34 EST
Article-I.D.: inuxi.259
Posted: Tue Oct 29 22:24:34 1985
Date-Received: Sat, 2-Nov-85 00:00:10 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 574



October 24, 1985

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In this issue:

o THIRD PARTY TRAFFIC OK WITH UK

o MORE ON HAMS IN SPACE

o AMATEUR RADIO BROADCASTING

o ...and much more!

AMATEUR RADIO, NEWSGATHERING AND BROADCASTING

"The Commission's Rules generally permit rebroadcasts of transmissions of stations in non-broadcast radio services, but prohibit the use of stations in services not allocated for broadcast purposes to transmit communications intended for broadcasting."

Such was one of the many comments read out by FCC in last June's Report and Order terminating the proceeding in BC Docket 79-47. It seems straightforward enough. The heading for 79-47 reads "In the Matter of Amendment of Parts 73 and 97 of the Commission's Rules Concerning Rebroadcasts of Transmissions of Non-Broadcast Radio Stations"; the intent of the proceeding was to clarify what use could be made of non-broadcast radio by broadcast users of radio (and television!). Has it?

Some say yes and some say no. FCC was pretty sure it had covered all the bases. In the text accompanying the rules changes ordered in 79-47, FCC touched upon broadcasting, Amateur Radio, General Mobile and CB interests. The Commission related how it had dealt with a request from the National Association of Broadcasters for the amendment of the rules to permit broadcast stations to rebroadcast CB emergency transmissions and to permit amateur stations to transmit emergency and public safety information for broadcast and broadcast-related purposes. Congress had modified Section 605 of the Communications Act of

1934 to eliminate the statutory proscriptions on the unauthorized interception of Amateur Radio and CB transmissions. Another modification of 605 in October 1984 did nothing to alter matters relating to privacy or rebroadcasts of Amateur Radio and CB communications. FCC had decided to undertake "a comprehensive review and revision of its regulations with respect to rebroadcasts of transmissions of non-broadcast radio stations." Another log on the fire was the interaction between the broadcast media and Amateur Radio when the U.S. invaded Grenada in October, 1983. What about cooperation between Amateur Radio and the National Weather Service -- the collection of weather data, the spotting of tornadoes and their associated severe storm systems? It all had to be dealt with comprehensively in BC Docket 79-47. The outcome was the 18-page document released by FCC on June 13, 1985. The Report and Order revised several sections of Part 97, the Rules for the Amateur Radio Services; these revisions were covered briefly in August 1985 QST's Happenings, and in greater detail in Washington Mailbox, September QST. The full text of these revisions follows this piece.

Glossed, the revisions to Part 97 redefine "emergency communications," add a prohibition of broadcasting to the rules pertaining to repeater operation, and slightly alter the text of the rule prohibiting business communications. There is great expansion on the theme of Section 97.113 ("Broadcasting and broadcast-related activities prohibited"): what was a two-sentence paragraph was revised to detail in nine paragraphs the dividing line between Amateur Radio and broadcast work. In paragraph 20 of the discussion accompanying these revisions, the Commission says that "we are revising the amateur rules and including specific provisions to prohibit use of amateur stations for broadcast news gathering or production purposes as proposed. These rules will prohibit use of an amateur radio station as a remote pickup or auxiliary link broadcast service facility. Such uses of an Amateur Radio station as forwarding weather reports or providing commuter traffic reports for use in any broadcast context will continue to be expressly prohibited." That seemed to nail things down pretty well.

Some customers weren't satisfied -- ARRL, for one. The League took exception to the narrowing of the definition of "emergency communication" as set forth by the Report and Order (see "Petition for Reconsideration," below). The original Notice of Proposed Rulemaking in 79-47 hadn't proposed such a revision, and the original definition was adequate. Inconsistencies between the letter of the Part 97 revisions and the preceding comments by FCC might require "snap judgments" on the part of amateur operators as to the legality of a given communication.

The National Association of Broadcasters (NAB) and the Radio-Television News Directors Association (RTNDA) were similarly concerned with discrepancies between the revised amateur rules and FCC comment. "The Commission should permit

amateur radio operators to cooperate with broadcast journalists to gather and report news during broadly defined emergency situa tions . . . the danger is that the black-letter rules . . . can be read narrowly as restricting significantly the ability of broadcasters and amateur radio operators to provide information of vital interest to the public during periods when such information cannot be transmitted in a timely fashion by other means of communication."

The National Weather Service wasn't satisfied. Interpretations of the revised Part 97 in the 79-47 Report and Order from some sources in the Amateur Radio media had participation in severe weather spotting nets drying up. Couldn't Amateur Radio relay reports of threatening weather to NWS, or did it have to wait for actual tornadoes to drive actual straws through actual fence posts (or houses, or people) before reacting to an "emergency"? Could Amateur Radio report on a cracked dam that hadn't broken?

The cracked dam broke, so to speak, on September 19, 1985, when the first of several terrific earthquakes struck Mexico. Print and electronic news media descended on ham shacks in force. There was raw newsgathering in the ham bands. Perhaps worse, amateur frequencies were used for the passing of business traffic many observers say went beyond what was called for by the earthquake emergency. What, in the language of the final Report and Order in BC Docket 79-47, could have allowed this?

It will go down in amateur history as "the rule of reason." The black-and-white revisions of Part 97 in the Order prohibit newsgathering right enough. But there was something else -- something ARRL had questioned in its July Petition for Partial Reconsideration. It had raised eyebrows at NAB and RTNDA as well. In paragraph 22 of the discussion preceding those revisions in the Order, FCC had opined:

"We note that a rule of reason applies when interpreting this emergency exception to the broadcast prohibitions in the Amateur Radio Service. Thus, conveying news information directly relating to an unforeseen event which involves the safety of human life or the immediate protection of property falls within this rule of reason, if it cannot be transmitted by any means other than amateur radio because of the remote location of the originating transmission or because normal communications have been disrupted by earthquake, fire, flood, tornado, hurricane, severe storm or national emergency . . ."

Boom. There it is. That was the loophole. That's what was behind the newsgathering and questionable business traffic you may have heard on amateur frequencies during the Mexican earthquake disaster. The clinker is that the letter of the rules prohibited much of what went on, no matter what related opinion in the 79-47 document had to say. Informal comment from FCC

subsequent to all this has indicated that such use of amateur frequencies wasn't what they'd had in mind at all! But informal comment is just that: non-binding, unofficial. And what of the National Weather Service's plaint: shrinking participation in spotting and reportage of tornadoes, hurricanes and other severe weather on the part of radio amateurs who wish to continue their tradition of serving the public interest the best they know how -- while sticking to the rules? Official clarification on a number of points in Docket 79-47 may be in order.

To update your copy of The FCC Rule Book, revise paragraph (d) of Section 97.3 (Definitions) to read as follows:

(w) Emergency communication. A non-directed request for help or a distress signal directly relating to the immediate safety of human life or the immediate protection of property.

Paragraph (d) of Section 97.85 (Repeater operation) is revised to read as follows:

(d) A station in repeater operation shall be operated in a manner ensuring that it is not used for broadcasting (see Section 97.113).

Section 97.91 (One-way communications) is removed and reserved.

Section 97.110 (Business communications prohibited) is revised to read as follows:

The transmission of business communications by an amateur radio station is prohibited except for emergency communications (see Section 97.3[w]).

Section 97.113 (Broadcasting prohibited) is revised to read as follows:

Section 97.113 Broadcasting and broadcast related activities prohibited.

(a) An amateur station shall not be used to engage in any form of broadcasting, that is, the dissemination of radio communications intended to be received by the public directly or by intermediary relay stations.

(b) An amateur station may not be used for any activity directly related to program production or news gathering for broadcast purposes.

(c) An amateur station shall not retransmit programs or signals emanating from any class of radio station other than amateur, except for emergency communications (see Section 97.3[w]).

(d) The following one-way amateur transmissions are not considered broadcasting:

(1) Beacon or radio control operation;

(2) Information bulletins consisting solely of subject matter relating to amateur radio;

(3) Transmissions intended for persons learning or improving proficiency in the international Morse code; and

(4) Emergency communications (see Section 97.3[w]).

(e) Round table discussions or net operations where more than two amateur stations are in communication with one another are not considered broadcasting.

ARRL WOULD LIKE THE EVIDENCE

The cooperative emergency communications work between amateurs, "served agencies" and the media which occurred following the Mexican earthquakes in September was generally outstanding, an excellent example of service in the public interest, convenience or necessity. At the same time, there were some instances in which media personnel stretched the "Rule of Reason" to the breaking point by using Amateur Radio for business rather than communications. In order to reduce the chances of abuse next time there is a widespread disaster, League Hq. would appreciate receiving (in the next week or two) tapes or other firm evidence of misuse by the media which can be used in a low-key way to correct the problem.

ARRL COMES DOWN HARD ON ATTEMPT TO USE AMATEUR FREQUENCIES FOR BROADCAST PURPOSES

What's new under the sun? The proverbial rejoinder might be that there's nothing new except what's been forgotten. Let's take a peek into the 1933 edition of The Radio Amateur's Handbook:

"...A hotel on the Pacific Coast offered an amateur radio club a fine meeting place with free light, power and heat -- provided the amateurs would establish an amateur station and relay messages for guests of the hotel. A certain newspaper planned to 'organize an amateur radio club' and establish a 'net' for the collecting of amateur news for the paper. It offered the amateurs a club room and the facilities of a powerful station that it would install as 'net control station' in return for the things it could gain by making amateurs violate their amateur status!"

What's new? It's been called PRB-2. On August 13, 1985, Lee Shoblom, N6ADA, President and General Manager of London

Bridge Broadcasting, Inc., filed a request for waiver of the amateur rules to permit him to use Amateur Radio in newsgathering for broadcast purposes. He requested that he be able to use 434 MHz for gathering news of community interest for broadcast on his low-power television station. Hmmm. Wasn't this just a fancy way of proposing the use of Amateur Radio in "remotes" (remote pickups) for "electronic news gathering" (ENG)?

ARRL thought so. One of the decisions taken at the August meeting of the ARRL Board's Executive Committee was that Counsel be ordered to file comments opposing "in the strongest possible terms" the unwarranted intrusion of broadcasting into an amateur band. Here are some of those comments:

"The League is frankly at a loss to understand how this request merits establishment of a pleading cycle for public comment. Even had London Bridge attempted to meet its burden to justify a waiver, the issue raised therein -- use of Amateur Radio for broadcast purposes -- has just been addressed directly in a full notice and comment proceeding. Report and Order, Docket 79-47 [see above - editor] . . . the solicitation of comment has caused a great deal of misunderstanding on the part of responsible broadcasters and amateurs. It has further confused the process of determining the reasonable parameters of cooperation in emergencies between the two types of licensees. The pleading cycle should be terminated immediately and the waiver request denied.

"When an applicant seeks waiver of a rule it must plead with particularity the facts and circumstances which warrant such action and give affirmative reasons to justify the grant of the waiver and the public interest . . . London Bridge has not even attempted to meet this burden. The sole justification stated in the request is that:

`I'm well aware that this is a most unusual request, but I feel it is right in line with the many recently lifted FCC restrictions, amateur and commercial, allowing better service to the community, more efficiency in our operations and a more reasonable approach to rules and regulations.'

"Such a general hearts-and-flowers approach fails utterly to justify a waiver of whatever Amateur Radio Service Rules London Bridge wishes to have waived. The request is procedurally inadequate and must be denied.

" . . . London Bridge's request . . . apparently seeks waiver of both Sections 97.110 and 97.113 of the Rules, which prohibit . . . business communications (except emergency communications) and broadcast-related activities. Specifically, Section 97.113(b) of the Rules directly prohibits use of an amateur station 'for any activity related to program production or news gathering for broadcast purposes.' This is, of course, exactly what London Bridge wishes to do with amateur station K6ADA.

" . . . The broadcast services are adequately served by remote pickup broadcast service facilities for remote transmissions of the type sought by London Bridge . . . it is obvious that the basis for London Bridge's request is that amateur television equipment is significantly less expensive than type-accepted broadcast remote-pickup transmitters and associated equipment and is of high enough video quality to be used for TV auxiliary use . . . London Bridge more appropriately should have sought a waiver of type-acceptance requirements for TV auxiliary stations under Part 74 to allow use of non-type-accepted hardware on broadcast auxiliary frequencies . . .

"Commercial use of Amateur Radio is antithetical to the basis and purpose of the Service, as understood both nationally and internationally. Use of amateur frequencies for newsgathering and other broadcast-related purposes is expressly prohibited by the Rules, and has uniformly been so prohibited since the advent of the Service . . . the instant waiver request is a blatant intrusion into the non-commercial nature of Amateur Radio with no explanation even attempted. With vast spectrum allocations available to TV auxiliary use in the area of Lake Havasu City, the absurdity of the request is apparent."

Reply Comments in PRB-2 were to have been filed by October 28. It's hoped that FCC's answer to the London Bridge request will be succinct. The same old question deserves the same old answer: broadcast use of amateur frequencies is not Amateur Radio. But that's nothing new.

ARRL'S PETITION FOR PARTIAL RECONSIDERATION
IN BC DOCKET 79-47

As mentioned above, ARRL has asked for partial reconsideration in 79-47. Here are some of the finer points:

1) As noted above, prior to the effective date of its Report and Order, Section 97.3(w) of the Rules defined emergency communications as "any amateur communication directly relating to the immediate safety of life of individuals or the immediate protection of property" This definition has adequately served to inform amateurs of what constitutes emergency communications and what does not, from the point of view of exceptions to the prohibitions of one-way communications and of business communications.

2) The original Notice of Proposed Rulemaking in 79-47 did not suggest revision of the definition of emergency communications. It did propose the elimination of the authority to transmit one-way "emergency communications including bona fide emergency drill practice transmissions" address to amateur stations. The League's comments objected to the deletion of express authority to engage in one-way emergency communications and to make such transmissions in bona fide simulated emergency preparedness tests in which amateurs are

engaged routinely.

3) No good reason can be found to justify the extremely narrow and restrictive definition of emergency communications cast upon the Amateur Service for the first time in the Report and Order in 79-47.

4) The "rule of reason" noted in the Report and Order is no substitute in this instance for a rule which is sufficiently broad on its face to allow amateurs the flexibility to exercise their own demonstrated reasonableness in emergency communications situations. Licensees should not have to make snap decisions on the legality of a communication under emergency conditions; the rule itself should provide sufficient flexibility.

5) The old definition of "emergency communications," or one less restrictive than the former, should be adopted.

421-430 MHZ GOES TO LAND MOBILE

Effective November 4, 1985, FCC has allocated portions of the band 421 to 430 MHz to the Land Mobile Service in the vicinities of Detroit, Cleveland and Buffalo. This has been undertaken to reduce Land Mobile channel congestion near these cities. Because 420 to 430 MHz was removed from the Amateur Service North of Line A as of September 28, the use of 421-430 MHz by Land Mobile operations is expected to have minimal impact on amateur use of the 70 cm band. Amateurs south of Line A, but within interference range of these cities, must avoid interfering with the primary Land Mobile Service.

THIRD PARTY TRAFFIC OK WITH U.K.

The Federal Communications Commission announced an agreement, effective October 14, with the United Kingdom's Department of Trade and Industry, permitting third-party communications between amateurs in the United States and special events stations in the U.K. This applies only to U.K. special event stations using the prefix GB, but note that GB3 stations are excluded. Three conditions apply: 1) Communications are limited to conversations or message of a technical or personal nature too unimportant for a commercial message. 2) No compensation, either direct or indirect, may be received for the passing of such traffic. 3) Communications must accord with regulations for amateurs in each country.

REPEATER COORDINATION AND HAMS IN SPACE AT THE ARRL NATIONAL CONVENTION IN LOUISVILLE

4000 radio amateurs attended the ARRL National Convention in Louisville, Kentucky, over October 4-6 -- were you there? Some of the highlights:

Astronaut Tony England, W0/ORE, presented the ARRL with a black-and-gold ARRL pennant and Spacelab 2 mission patch -- both items may have been available terrestrially, but this particular pair were flown aboard the Space Shuttle Challenger during Mission STS 51-F. Accepting these high-flying mementos for ARRL was Executive Vice President Dave Sumner, K1ZZ. They're inscribed: "In appreciation of your efforts in the Shuttle Amateur Radio Experiment (SAREX) flown aboard the Space Shuttle Mission 51-F."

Repeater coordinators conducted a meeting to report on progress since their Dayton meeting. This productive session was under the aegis of the Ohio and Michigan Area Repeater Councils. Co-chairing were John Hackman, WB4VVA, of Michigan, and George Waldie, W8JRL, of Ohio. Steve Mendelsohn, WA2DHF, ARRL Hudson Division Vice Director, reported on the first issues of the Repeater Coordinators' Newsletter, of which he is the editor. The RCN helps keep coordinating lines of communication open, and has been well received. Concerning a national repeater database, WB4VVA enumerated the requirements for such, which include (1) allowing each coordinator to update his or her file only; (2) allowing anyone to read the file; (3) that the system be "stand-alone" with WATS line accessibility; and (4) that there be adequate backup. WA2DHF reported on the progress of ARRL's study of the provision of such a database. There was some difference of opinion as to whether such a system would be under the "control" of Hq. or the coordinators.

Concerning coordinated vs. uncoordinated repeaters, how do you recognize a legitmate coordinator when you see one? FCC must be able to identify them. Ray Kowalski of the Commission indicated that, in his opinion, FCC would accept a regional coordinating body to certify individual coordinators under its geographical jurisdiction. In cases of conflict, the consensus of those assembled was that the League should play a role in "unmasking" who are the "real" coordinators. This could be done through the League directors in the affected areas.

PIRATE BROADCASTERS FINED

As related in the last Letter, FCC has been drawing the net tighter around unlicensed broadcasters. Here's more on those activities. On August 19, 1985, U.S. Marshals, accompanied by an investigator from the Dallas District Office of the FCC, served a warrant and seized radio transmitting equipment utilized by Russell E. Rierson of Boonesville, Arkansas. Rierson had been operating an unlicensed "pirate" radio station on various frequencies in the 6 MHz shortwave broadcast band and the vicinity of the 7 MHz amateur band. Close-in direction-finding by FCC personnel from the Dallas Office revealed that the station, located at Rierson's residence, was operated on August 16, 1985, using a frequency of 7440 kHz and identifying as "KBBR."

Investigators from the Dallas Office had previously located Rierson's unlicensed station, then identified as "KRZY" and "Captain Crazy," on March 9, 1985. Those illegal operations resulted in Rierson's payment of a $1,000 administrative fine.

In another case, an investigator from FCC's Kansas City District Office located an unlicensed broadcast station operated by Liam P. Ryan in Kirkwood, Missouri (a suburb of St. Louis). Mr. Ryan's unlicensed broadcast activity was terminated on August 9, 1985, just one week after his operation was first detected by the FCC monitoring network. Mr. Ryan was operating on a frequency in the 7 MHz region. The Kansas City Office has issued a $1,000 Notice of Apparent Liability to Ryan for his unlicensed operation.

Operation of an unlicensed broadcast station is a serious matter. Persons operating an unlicensed broadcast station are subject to administrative fines or prosecution in U.S. District Court. And unlicensed broadcast operation by holders of other types of FCC licenses may result in the loss of those licenses for those concerned.

WATCH THAT FORM 610 AFTER JANUARY 1

On October 17, FCC released a Public Notice alerting Amateur Radio Service applicants that editions of Form 610 prior to that of June 1984 would no longer be acceptable for filing Effective January l, 1986, only the June 1984 and later editions of FCC Form 610 may be used to obtain an Amateur license. Applying on earlier editions of the form after January 1 will delay issuance of your license: your application will be returned without action and you will be required to refile on a current form.

MORE PRIVILEGES FOR CANADIAN AMATEURS

Canada's Department of Communications had good news for Canadian amateurs at the Radio Society of Ontario's convention in London, Ontario, at the end of September. Effective Friday, September 27, Canadian amateurs were allowed CW and phone at the maximum legal power on the entire 160-meter band, 1.8-2 MHz. Repeater use at 10 meters was authorized. And for video experimenters came the news that amateur television with a 6-MHz bandwidth was authorized -- and slow-scan television operation no longer requires a special endorsement. Congrats! DOC declined to comment on the restructuring of the Amateur Service, which is likely to propose a Canadian novice license. DOC did indicate its intention to proceed with the proposal for deregulation of mode subbands, which would allow Canadian amateurs to operate any mode anywhere in their amateur allocations, relying only on voluntary adherence to recommended band plans.

MORE ON EUROHAMS IN SPACE

The September 12 Letter detailed more upcoming Amateur Radio from Spacelab -- DP0/SL, to be operated by German science astronauts DG2KM and DD6CF. But liftoff time and date weren't known then. Radio Netherlands' "Media Network" carried the news just before our presstime that the launch was set for Wednesday, October 30, at around 1700Z. The shuttle is now reported as being Challenger, not Columbia. "For the first time, mission control of the payload will be carried out in Europe at the German operations control center near Munich, instead of from the Johnson Space Center in Houston." Monitor W1AW for further details.

SECURITY

Finally, once again from "Media Network," this comment on data security. Seems a group of Dutch "under 19's" were on a computing field trip to England. During a visit to a Royal Air Force base, they were given official permission to take a crack at the base computer. Could they hack their way in? Yeah. Took seven minutes.

From 3531478627112709071
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,faf0a1da8e3b4f46,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-29 21:08:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site tekcbi.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tektronix!tekcbi!jeffg
From: jeffg@tekcbi.UUCP (Jeff Glover)
Newsgroups: net.ham-radio
Subject: computer controlled receivers
Message-ID: <386@tekcbi.UUCP>
Date: Wed, 30-Oct-85 00:08:08 EST
Article-I.D.: tekcbi.386
Posted: Wed Oct 30 00:08:08 1985
Date-Received: Sat, 2-Nov-85 02:22:48 EST
Distribution: net
Organization: Tektronix, Beaverton OR
Lines: 61
Keywords: computer-controlled receiver scanners

Bear with me as I pour my thoughts out to the terminal...
(I thought that this might be of interest to amateurs in general, thus the posting to net.ham-radio.)

> I have had a desire to do a user interface for a computer controlled receiver for some time now, and now that I have both a computer controlled receiver and a computer to control it I would like to start planning how this thing will work. I have had a few

sessions with paper and pencil trying to brainstorm features, but have run out of ideas. Anybody have any suggestions? Here are a few of the better ones I have thought of...

1. extensive logging features, i.e. one key, printer, log book styles

2. external hardware support. While I cannot know what will be installed, I can always allow for external compilation and installation of device drivers. Allowing for extra displays and functions will be a design requirement. For example, my receiver has a relative signal level output, but is analog. I plan to serialize this data and bring it in the serial port continuously, ignoring data overruns, and average it for the squelch and S-meter functions.

3. database-style memories. This means a relational database to store and retrieve frequencies as well as to generate lists of frequencies for scanning. An example of its use would be:

```
xtmp = select FREQ in AMATEURS
```

xtmp now contains a list of all the frequencies in the AMATEURS database. Scanning could proceed by stating:

```
scan (xtmp)
```

or perhaps you would like to limit the search:

```
friends = select FREQ outof xtmp where (CITY=="local")
```

then

```
scan (select FREQ outof friends where (TYPE=="repeater"))
```

as you can see this could be powerful, especially augmented with a hard-disk full of national frequency lists, and a pointer-oriented user interface. These features may be done using an existing package (RBASE & MS Windows).

4. script files for running the system in a "BATCH" mode.

5. duplex mode -- transmission ends on one frequency, and reply is on another. Computer control could follow this very well given a digitized signal level reading.

...

Please reply to me *directly* and I will summarize to the net and to each individual that asks.

BTW, does anything similar exist?

--
Jeff C. Glover, Tektronix, Inc. PO Box 500, MS Y6-546, Beaverton, OR 97077
{ decvax, allegra, hplabs, ihnp4 } tektronix!tekcbi!jeffg (503) 627-8438

From -1864206008390292258
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,358e10bc2297ba05,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-30 09:12:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!price%marlin@nosc.ARPA
From: price%marlin@nosc.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: QSL manager info, please
Message-ID: <2611@brl-tgr.ARPA>
Date: Wed, 30-Oct-85 12:12:15 EST
Article-I.D.: brl-tgr.2611
Posted: Wed Oct 30 12:12:15 1985
Date-Received: Fri, 1-Nov-85 02:33:41 EST
Sender: news@brl-tgr.ARPA
Lines: 16

Worked a couple of new ones on QRP during CQ WW DX contest this last
weekend, and would like QSL manager info (if any) for:

        VP2MW   TI2CF

Any help? Tnx--

Jim Price, K6ZH, PRICE@NOSC.ARPA

P.S. Can we order band conditions like last weekend for CQ WW Phone,
too, please?

From 1178685682971184968
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47f455699ca9b192
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-30 10:25:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site ius2.cs.cmu.edu
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!pt.cs.cmu.edu!ius2.cs.cmu.edu!
ralphw
From: ralphw@ius2.cs.cmu.edu (Ralph Hyre)
Newsgroups: net.ham-radio
Subject: Re: GEE WHIZ, FELLERS
Message-ID: <224@ius2.cs.cmu.edu>
Date: Wed, 30-Oct-85 13:25:47 EST

Article-I.D.: ius2.224
Posted: Wed Oct 30 13:25:47 1985
Date-Received: Sun, 3-Nov-85 07:28:35 EST
References: <2558@brl-tgr.ARPA>
Organization: Carnegie-Mellon University, CS/RI
Lines: 24

Part of the problem is postings from the usenet side, I imagine.
A lot of news reading software posts messages to all groups included
in the original message, which actually may have had some relevance
to amateur radio issues (and therefore info-hams and net.ham-radio)

There was a net.tvro for a while, but it went away. Perhaps a new group
(say, called mod.telecom.home-sat) could be created for tvro users
If there is too much tvro traffic for this group, and we complain enough
about it (to the right people), then there may be some relief.
Accoring the the usenet 'rules', one criterion for creating
a new group is sufficient volume in a current newsgroup to
justify spinning it off into a separate one.
--
                    - Ralph
Internet: ralphw@c.cs.cmu.edu (cmu-cs-c.arpa)
Usenet: ralphw@mit-eddie.uucp
Fidonet: Ralph Hyre at Fido #385 Pitt-Bull (or maybe Net 129, node 0)
Snail Mail: don't bother
--
                    - Ralph
Internet: ralphw@c.cs.cmu.edu (cmu-cs-c.arpa)
Usenet: ralphw@mit-eddie.uucp
Fidonet: Ralph Hyre at Fido #385 Pitt-Bull (or maybe Net 129, node 0)
Snail Mail: don't bother

From -5829894474393313800
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,11042d4f93712a94,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-30 12:40:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: HAM frequencies/emissions list updated
Message-ID: <21320@mgweed.UUCP>
Date: Wed, 30-Oct-85 15:40:33 EST
Article-I.D.: mgweed.21320
Posted: Wed Oct 30 15:40:33 1985
Date-Received: Sat, 2-Nov-85 01:29:03 EST
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 286

This list has not been updated for some time. If there are any errors or suggestions, please let me know. I take no responsibility for errors!

Changes reflected in this issue include new modes on 160 meters and the opening of the 12 meter band.

K9EUI

/-/-/-

144.1 - 148.0 A0, A1, A2, A3, A4, A5, F0, F1, F2, F3, F4, F5

The "Considerate Operators Frequency Guide"
(Frequencies generally recognized for certain activities)

1800 - 1825	cw only	14.08 - 14.10	RTTY
1825 - 1830	dx window	14.23	SSTV
1850 - 1855	dx window	21.09 - 21.10	RTTY
3610 - 3630	RTTY	21.34	SSTV
		24.92 - 24.93	RTTY
3637.5	AMTOR	28.09 - 28.10	RTTY
3845	SSTV	28.68	SSTV
7090 - 7100	RTTY	29.30 - 29.50	SATELLITES
7171	SSTV	29.52 - 29.58	RPTR inputs
10.14-10.15	RTTY	29.60	FM simplex
14.075	AMTOR	29.62 - 29.68	RPTR outputs

DIGITAL COMMUNICATIONS: (F1, 3.5-28 MHz)(A2, F1, F2 above 28 MHz)

BAUDOT: (International Alphabet #2)
A2, F1, F2: Maximum frequency shift = 1000 Hz.
A2, F2: Highest modulating frequency = 3000 Hz.
Maximum speed = 100 wpm (75 baud).

ASCII: Maximum baud rates:
3.5 - 28 MHz = 300 baud
28 - 50 MHz = 1200 baud
50 - 220 MHz = 19600 baud
220 - up = 56000 baud

AMTOR: TOR specifications are found in CCIR Rec. 476-2.
(100 baud, Block rep rate 2.222/sec.)

NOTE: Above 50 Mhz, the frequency shift in Hz shall not exceed the sending speed, in baud, or 1000 Hz, whichever is greater.

OTHER DIGITAL CODES: (ABOVE 50 MHZ ONLY):
Any other digital code may be used above 50 MHz in the domestic U.S. (Except where A1 only is permitted). A description of the code and modulation technique must be kept in the log.

Bandwidth limitations:
50 - 220 MHz = 20 kHz max.
220 - 1215 MHz = 100 kHz max.
1215 and up = any Bw if in accordance with

97.63(b) and 97.73(c).

NOTE: When using digital communications, CW or phone ID is no longer required after June 15, 1983. The ID may be given using Baudot, ASCII, or AMTOR.

FACSIMILIE and TELEVISION:

Below 50 MHz the bandwidth of A4, A5, F4, F5 must not exceed that of an A3 SSB signal.

50 to 225 MHz:
The bandwidth of A4 and A5 SSB emissions must not exceed that of A3 SSB emissions.

The bandwidth of A4 and A5 DSB emissions must not exceed that of A3 DSB emissions.

Type F4 and F5 emissions shall be limited to a peak deviation of 5 KHz with a maximum modulating frequency of 3 KHz. Alternatively, the bandwidth shall be no greater than 20 KHz.

Below 225 MHz, type A4 and A3 or type A5 and A3 emissions are allowed simultaneously on the same frequency if the bandwidth is no greater than type A3 DSB.

Note: Fast Scan television transmissions may be identified using "readily legible characters when A5 emissions are used".

The present complete emission types are given in the format: "Numeral, Letter, Numeral, Letter". The first numeral indicates the bandwidth of the signal. This is often not shown (and really should be for an accurate description). The first letter shows the type of main carrier modulation. The second numeral indicates the type of modulating signal (voice, TV, CW, etc). The suffix letter, also not always shown, basically indicates carrier and sideband type information (full carrier or supressed, SSB or DSB etc). The following list is not complete, does not show pulse modes, and does not mean that all these can be used by the amateur.

TYPE	DESCRIPTION	NOTE
	(Amplitude Modulation)	
A0	carrier - no modulation	
A1	on-off telegraphy	#1
A2	amplitude modulated telegraphy	#1,2

A3 DSB (full carrier telephony)
A3A SSB (reduced carrier telephony)
A3B (2 independent sidebands - reduced carrier) #3
A3J SSB (supressed carrier telephony)
A4 DSB facsimile
A4A SSB facsimile, reduced carrier
A4J SSB facsimile, supressed carrier
A5 DSB television
A5C VSB television #4

(Frequency modulation)

F0 carrier - no modulation
F1 frequency shift telegraphy #1
F2 frequency modulated telegraphy #1,2
F3 telephony
F4 facsimile
F5 television

----------Notes----------

1. This is not restricted to Morse - may be RTTY, for example. (RTTY could be run on 160 meters if on-off keying of the carrier is used).

2. Examples of this mode are: 1) Carrier keyed on/off 2) carrier on with the modulation keyed on/off 3) carrier on with the modulation frequency shift keyed.

3. This is used by short wave broadcast station studio to transmitter links with separate programs on each set of sidebands.

4. VSB = Vestigial sideband where all of one set of sidebands is transmitted but only about 20 percent of the other set of sidebands is transmitted (the lowest frequencies).

Common Amateur emissions:

Double sideband voice = 6A3
Single sideband voice = 3A3J
VHF FM voice = 16F3
25 wpm Morse cw = .1A1

(assume max modulating freq of 3KHz and max deviation of 5KHz)

Bandwidths are found with the following formulae:

A1 Bw = BK K=5 for fading circuits)
A2 Bw = BK+2M
A3 Bw = 2M

```
    A3J   Bw = M
    A4    Bw = KN+2M    (K=1.5)
    F1    Bw = 2.6D+.55B     (when 2D/B is less than 5.5)
     Bw = 2.1D+1.9B     (when 2D/B is greater than 5.5)
    F3    Bw = 2M+2DK   (K=1)
    F4    Bw = KN+2M+2D (K=1.5)

          WHERE:

     Bw = necessary bandwidth in Hz
     B  = speed in bauds
     C  = subcarrier freq. in Hz
     D  = 1/2 the diff. between max and min instantaneous
          freq (in other words, peak deviation).
     K  = fudge factor
     M  = maximum modulating freq. in Hz
     N  = maximum black & white elements per second
          (N = drum circumference x lines per unit length
              x drum rps)
    ------------------------------------------------------------
```

As a result of WARC 79, the very familiar signals of the emissions modes will be changed. The FCC will be implementing the following new symbols over the next several years.

Old Symbol	New Symbol	Old Symbol	New Symbol
A0	N0N	F0	N0N
A1	A1A	F1	F1B
A2	A2A	F2	F2A
	A2D		F2D
A2J	J2A	F3	F3E
	J2D	F4	F3C
A3	A3E	F5	F3F
A3J	J3E	P	P1B
A4	A3C		
A5	C3F		
	A3F		

Symbol Explanation:
  First character indicates emission type
  Second character indicates the nature of the signal
  Third character indicates the type of information transmitted

First Character
  N = Unmodulated carrier
  A = Double sideband AM
  J = Single sideband, suppressed carrier
  F = Frequency modulation
  P = Sequence of unmodulated pulses
  C = Vestigial sidebands

Second Character
  0 = No modulating signal
  1 = Single channel containing digital information without the use
      of a modulating subcarrier
  2 = Same as above, except using a modulating subcarrier
  3 = Single channel containing analog information

Third Character
  N = No information transmitted
  A = Telegraphy -- aural reception
  B = Telegraphy -- automatic reception
  C = Facsimile
  D = Data transmission, telemetry, telecommand
  E = Telephony
  F = Television

Example: A1A is double sideband, single channel containing digital
information without the use of a modulating subcarrier, telegraphy
for aural reception. In other words, CW!

From -3895429075798077058
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f922049c87586bd0
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-30 20:30:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!mtunh!ky2d-2!ai2q
From: ai2q@ky2d-2.UUCP (Alex)
Newsgroups: net.ham-radio
Subject: Re: Scanner antennas
Message-ID: <50@ky2d-2.UUCP>
Date: Wed, 30-Oct-85 23:30:38 EST
Article-I.D.: ky2d-2.50
Posted: Wed Oct 30 23:30:38 1985
Date-Received: Sat, 2-Nov-85 04:13:59 EST
References: <124@tapa.UUCP>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 17

> I am considering the purchase of a Yaesu FRG-9600 and would like to hear
> others thoughts on broadband antennas for the 60-900mhz. coverage of the
> Yeasu receiver.

*** REPLACE THIS LINE WITH YOUR MESSAGE ***
Larry:
You might wish to consider the log-periodic array as a possible
solution to solving the problem of an antenna which will give continuous
coverage over a substantial portion of the spectrum your
FRG-9600 will cover. The log-periodic is successfully used over a narrower
range, typically from about 50 MHz to about 250 MHz in the form of
common TV antennas. These arrays are referred to as "self-scaling" antennas,

that is, they are NOT frequency sensitve, and as such, offer a good match
to a fixed impedance feedline like ordinary coax over thier entire range.
Refer to W6SAI's Radio Handbook for designs spanning 140 to 450 MHz.
If you need more details, let me know. Good luck es 73 de Alex, AI2Q,
Freeport, Long Island >>AR>>

From -7076853424742616046
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,262805b6d9df5cee
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-30 22:05:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!linus!philabs!cmcl2!harvard!think!mit-eddie!cybvax0!frog!hydra!die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio
Subject: Re: Eavesdropping revisited [How's that again?]
Message-ID: <138@hydra.UUCP>
Date: Thu, 31-Oct-85 01:05:11 EST
Article-I.D.: hydra.138
Posted: Thu Oct 31 01:05:11 1985
Date-Received: Sun, 3-Nov-85 08:01:20 EST
References: <154@pyuxv.UUCP>
Reply-To: die@hydra.UUCP (David I. Emery)
Followup-To: !decvax!frog!die
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 69
Keywords: encryption shortsightedness
Summary: Why wasn't encryption used in cellular standard

In article <154@pyuxv.UUCP> craig@pyuxv.UUCP writes:
> Congress has a measure under consideration that would
>strengthen such privacy law requirements extending protection to
>cellular and cordless telephones. Markup is expected, for both the
>House and Senate versions of the bill, by early next year. There is a
>possibility of enactment by the end of 1986.

     I have always wondered why the cellular radio standard didn't
include digital transmission under (optional?) encryption. Digital
transmission would make cellular signals difficult to intercept with
scanners or even TV sets, and the hardware required - much like a descrambler
for a broadcast tv signal - would be specialized enough so random members
of the general public couldn't legally acquire it on the pretext of
using it for some legitmate purpose (unlike TVRO's and SSB receivers !!).
For a few dollars more the system could supply DES with reasonable
key security that would make the cellular link at least as private
as the rest of the telephone system.

     The current transmission method for cellular phones is FM, and
the channel spacing is such that there would be plenty of room for
a 16 or 32 khz QPSK (or even diphase) adaptive slope (ADPCM) or

CSVD transmission of high quality voice. As for performance, I have read some claims that clever demodulators can do as well demodulating digital voice signals near threshold as nbFM.

It seems a shame that the designers of a system as sophisticated as the cellular phone system chose not to consider the security issue seriously. I beleive that most of the design work was done in the late 70's when DES chips and LSI PCM chips were at least beginning to appear on the market, certainly any far sighted system architect could have confidently predicted that the required digital hardware would soon be available and eventually be quite cheap. My guess is that low cost in the short term and reduced technological risk dominated their thinking. Perhaps someone on the net can shed some light on why the current fm based system was chosen.

The real tragedy is that the proliferation of the current generation of FM based hardware will make it very difficult to convert the whole system over to digital. Perhaps the present transmission sites can be equiped with dual mode radios that would allow subscribers to use digital transmission as an option and thus allow those who understand the risk and want to protect their privacy to enjoy the conveniance and flexibility of roaming cellular phones with a modicum of privacy too. I should think that there might be quite a market for such a higher privacy (and price no doubt) service as people begin to discover that 900 mhz scanners (and some tv sets as Bob Parnass points out) can pick up their fm conversations clearly.

Unfortunately, though the NSA has been very active in trying to raise consciousness about security, the more political FCC has yet to authorize secure digital transmission over the current 900 mhz cellular phone frequencies. One would think that the government would get its act together and lead on the issue for once by requiring that all cellular systems be equiped with dual mode capability by some future date.

The cost of digital base station transcievers at cell sites and of the required microprocessor systems for key management would be a reasonably small addition to the cost of all the required hardware at cell sites. I suspect that by charging more for a secure service the costs could be recovered (I might add that the systems in the Boston area use microwave links to tie the cells together and those ought to be secured too...). And the digital hardware for mobiles could be implemented in a small number of VLSI chips that ought not to add excessive cost, power consumption or weight to these high tech transceivers.

David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.
uucp: decvax!frog!die

From -2686647057318577487
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f922049c87586bd0
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-10-31 05:24:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Scanner antennas (Hustler makes a discone)
Message-ID: <689@ihu1h.UUCP>
Date: Thu, 31-Oct-85 08:24:02 EST
Article-I.D.: ihu1h.689
Posted: Thu Oct 31 08:24:02 1985
Date-Received: Sat, 2-Nov-85 04:29:03 EST
References: <124@tapa.UUCP> <50@ky2d-2.UUCP>
Organization: AT&T Bell Laboratories
Lines: 12

x
I have a Hustler DCX discone antenna, for which
Newtronics claims a frequency range of 40-700 MHz.
It's still in the box, so I don't know how well it
works.

> I am considering the purchase of a Yaesu FRG-9600 and would like to hear
> others thoughts on broadband antennas for the 60-900mhz. coverage of the
> Yeasu receiver.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 278619640177843293
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,39ba2a50480bb63b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-31 08:37:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!taylor.WBST@Xerox.ARPA
From: taylor.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: GEE WHIZ, FELLERS
Message-ID: <2657@brl-tgr.ARPA>
Date: Thu, 31-Oct-85 11:37:29 EST
Article-I.D.: brl-tgr.2657
Posted: Thu Oct 31 11:37:29 1985
Date-Received: Sun, 3-Nov-85 10:28:46 EST
Sender: news@brl-tgr.ARPA
Lines: 6

I REALLY DONT SEE WHAT ALL THE COMMOTION IS ABOUT. IT'S SO EASY TO
DELETE ITEMS OF DISINTEREST! PERSONALLY, I FIND MORE HAM RADIO RELATED
ITEMS THAT I WANT TO DELETE ON SIGHT THAN THE OTHERS.

73 JIM (W2OZH)

From -5461934119777232939
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3428af64775e0e09,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-31 08:56:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!carpenter@nbs-vms.ARPA
From: carpenter@nbs-vms.ARPA (CARPENTER, ROBERT)
Newsgroups: net.ham-radio
Subject: Re: More HF radio questions
Message-ID: <2658@brl-tgr.ARPA>
Date: Thu, 31-Oct-85 11:56:38 EST
Article-I.D.: brl-tgr.2658
Posted: Thu Oct 31 11:56:38 1985
Date-Received: Sun, 3-Nov-85 10:29:56 EST
Sender: news@brl-tgr.ARPA
Lines: 28

A posting from Munich asks for comments on small HF rigs. A fine palce (place) to look for product reviews in "Radio Communication", published by the Radio Society of Great Britain (RSBG). Peter Hart, G3SJX, has a continuing series of very technical reviews, as well as comment from on-the-air use. Two reviews which aply to the above message are:

FT757GX in the May 1985 issue

TS430S in the June 1985 issue

These rever back to earlier similar reviews by Hart as follows----

IC740 November 1983
IC720A February 1982
FT102 January 1983
FT77 June 1984

Perhaps you will find these to be interesting..

73,

Bob W3OTC

From 6172036114682040558
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d10804acd9d2f58,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-31 10:46:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site hpfcmt.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!hpfcdc!hpfcla!roger
From: roger@hpfcla.UUCP
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <19700013@hpfcmt.UUCP>
Date: Thu, 31-Oct-85 13:46:00 EST
Article-I.D.: hpfcmt.19700013
Posted: Thu Oct 31 13:46:00 1985
Date-Received: Tue, 5-Nov-85 07:49:11 EST
References: <2376@brl-tgr.UUCP>
Organization: 31 Oct 85 11:46:00 MST
Lines: 17

/***** hpfcmt:net.ham-radio / brl-tgr!FAC0395%UOFT01.B / 6:23 am Oct 24, 1985*/

<<<<<<<<<<<!!!!!!!! FLAME !!!!!!!!>>>>>>>>>>>>>

>By all means, if you work Tony -T77C, do include a greenstamp. I
>believe that his QSL's are the sole source of income for the
>entire island.
>N8AAT /* ---------- */

Since when has Amateur Radio become a "source of income"?! I can understand helping a much desired DX station with postage by including an IRC (International Reply Coupon), but sending US$ to subsidize somebody's income is both against the principles of amateur radio and in violation of the law. Amateur Radio is a hobby. Let's not turn it into a business!

Roger Jollis KU6I/0
Fort Collins, Colorado

From -4384284432117740406
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3149dbb62aeb30bb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-31 12:26:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!decvax!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: STS-61A Orbital Elements
Message-ID: <664@petrus.UUCP>
Date: Thu, 31-Oct-85 15:26:08 EST
Article-I.D.: petrus.664

Posted: Thu Oct 31 15:26:08 1985
Date-Received: Sun, 3-Nov-85 05:46:31 EST
Organization: Bell Communications Research, Inc
Lines: 17

```
Epoch time:      85303.76940972
   Wed Oct 30 18:27:56.999 1985 UTC
Element set:     2
Inclination:       56.9732 deg
RA of node:       193.8653 deg
Eccentricity:    0.0011672
Arg of perigee:   327.5222 deg
Mean anomaly:      37.1006 deg
Mean motion:   15.81518188 rev/day
Decay rate:        0.00025 rev/day^2
Epoch rev:               2
Semi major axis:  6703.930 km
Anom period:     91.051751 min
Apogee:            337.944 km
Perigee:           322.295 km
Ref perigee:      2859.76289337
   Wed Oct 30 18:18:33.987 1985 UTC
```

From -3747615449606051561
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,397b107af8a290c4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-31 15:21:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!A-EPSTEIN@CS.COLUMBIA.EDU
From: A-EPSTEIN@CS.COLUMBIA.EDU (Adam Epstein)
Newsgroups: net.ham-radio
Subject: For Sale
Message-ID: <2683@brl-tgr.ARPA>
Date: Thu, 31-Oct-85 18:21:43 EST
Article-I.D.: brl-tgr.2683
Posted: Thu Oct 31 18:21:43 1985
Date-Received: Sun, 3-Nov-85 11:00:36 EST
Sender: news@brl-tgr.ARPA
Lines: 30

For Sale:

 Santec HT-1200 Synthesized 2m Handie-Talkie
   - 1W (low) 4W (high)
   - 143.000 - 148.999 (Tx) & 143.000 - 149.999 (Rx) (Covers MARS & CAP!)
   - 10 Memories
   - 16 Key Touch-Tone Pad
   - Odd Split Capability
   - Memory Scan & Search
   - Full Band Scan & Search

- Very Loud Local Audio (Great for mobile operation!)
- Stable Receiver (Doesn't get wiped out in NYC!)
- Never Needed Service
- 2 Sets of 500 mA/H NiCads (8 x 1.2V AA = 9.6V)
- Wall Charger
- Connector for External Charging (Use one battery while the other charges!)
- Motorola Belt Clip
- Speaker/Mike
- Switch Box for Optional Headset w/Boom Mike
- "Stubby Duck" Antenna

Reply to Adam (N2DHH) at:

A-EPSTEIN@CS.COLUMBIA.EDU (ARPANet)
A-EPSTEIN@CS.COLUMBIA.EDU@CSNET-RELAY.ARPA (CSNet)
A-EPSTEIN@CUCS20 (BITNet)
...!seismo!columbia!cs!a-epstein (USENet)

From -7655754759306999370
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,af4c8f57daa8d19d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-31 18:39:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!qantel!dual!vecpyr!
lll-lcc!lll-crg!seismo!brl-tgr!tgr!SPECTOR@NYU-ACF7.ARPA
From: SPECTOR@NYU-ACF7.ARPA (David H M Spector)
Newsgroups: net.ham-radio
Subject: Please modify my address.
Message-ID: <2693@brl-tgr.ARPA>
Date: Thu, 31-Oct-85 21:39:11 EST
Article-I.D.: brl-tgr.2693
Posted: Thu Oct 31 21:39:11 1985
Date-Received: Sun, 3-Nov-85 17:02:58 EST
Sender: news@brl-tgr.ARPA
Lines: 11

Hello,

Could you please change my addressin your list to: SPECTOR@NYU
(if its not that already..), as we have adjusted the mail routing in
ours local network..

Thanks Much,
Dave Spector, N2BCA

From -7928046029048096413
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,861f51c89950403c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-31 20:47:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Signals that "sweep" across the HF spectrum
Message-ID: <690@ihu1h.UUCP>
Date: Thu, 31-Oct-85 23:47:06 EST
Article-I.D.: ihu1h.690
Posted: Thu Oct 31 23:47:06 1985
Date-Received: Sat, 2-Nov-85 05:46:44 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 21

x
     Ever wonder about those signals that seem   to "sweep"
     across the HF band? Is it just a   bored operator twis-
     ting the VFO knob? A search of   government records
     revealed the following license:

   2.0000   KA2XNH____SRI International, experimental contract
     stn (US Navy co
                ntract N00014-83-C-0267). For sweeping the band 2-32 MHz
               in 1 Hz increments not more than 3 times per hour at a
                sweep rate of not less than 5 minutes sweep for the enti
                re band,   50w, A0 emission
                [Stanford, CA] (govt recds)

     QST carried an article several years ago on the subject
     of   sweepers. Can   anyone contribute more recent infor-
     mation regarding sweepers?
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 7212009127137257866
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5d6812d38a852a8e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-01 08:43:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \\"freedoms\\" A PLEA
Message-ID: <2710@brl-tgr.ARPA>
Date: Fri, 1-Nov-85 11:43:12 EST
Article-I.D.: brl-tgr.2710
Posted: Fri Nov 1 11:43:12 1985
Date-Received: Tue, 5-Nov-85 04:58:32 EST
Sender: news@brl-tgr.ARPA
Lines: 11

Last word on Satellite viewing freedoms:

All satellite channels may now be coded. Congress passed a law a few
years ago that they could not be coded "most of the time" until decoders
could be rented by the cable companies to the satellite viwers. They
are now available (about $12 a month). The satellite system sellers are
pressuring for a 2 year extension but it probably won't make it. Look
forward to coded (no you can't build your own decoder) reception as the
norm in the next 6mo to year. So you can forget the freedom stuff.

              Joe

From 7745004089557778251
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,39ba2a50480bb63b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-01 08:45:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ucbvax!decwrl!dec-
rhea!dec-tonto!withrow
From: withrow@tonto.DEC (Robert Withrow)
Newsgroups: net.ham-radio
Subject: Re: GEE WHIZ, FELLERS
Message-ID: <1208@decwrl.UUCP>
Date: Fri, 1-Nov-85 11:45:58 EST
Article-I.D.: decwrl.1208
Posted: Fri Nov 1 11:45:58 1985
Date-Received: Sun, 3-Nov-85 06:22:07 EST
Sender: daemon@decwrl.UUCP
Organization: Digital Equipment Corporation
Lines: 9

The 1985 ARRL handbook devotes two chapters to just such things (Chapters
39 and 40)(Monitoring and interference). I for one do not believe that Ham
Radio is just DX reports, Rig reports, etc, etc, etc... Personally, I have
been deleting all of the recent haranging about Rig Reliability, since,
being an experimenter, I generally build it and fix it myself. Should I
propose that all of that stuff be removed to info-rig-harangue? No! Of

course not. Many Hams I know are at least mildly interested in what is happening in communication in ALL parts of the EM spectrum.

From 4018836925443178196
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c8b712bb2dc5827e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-01 09:39:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Non-amateur signals in the 160m band (long article)
Message-ID: <691@ihu1h.UUCP>
Date: Fri, 1-Nov-85 12:39:20 EST
Article-I.D.: ihu1h.691
Posted: Fri Nov 1 12:39:20 1985
Date-Received: Sun, 3-Nov-85 04:47:11 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 500

x

Non-Amateur Signals on 160 Meters

Bob Parnass, AJ9S

My curiosity was aroused when another ham at work mentioned hearing "beacon-type" signals on the 160 meter ham band (1.8 - 2.0 MHz).

A search of FCC (1984) and IRAC (1981) files produced a long list of American stations that, at one time or another, may be operating in this band. Note that the first few experimental licenses in the list are for operation over a range of frequencies, rather than just one or two channels:

1.8000 KF2XHE____General Motors Research Corporation, for operation in the range 1.8-2.0 MHz, experimental research stn, 100w, 3A9B emission
[Warren, MI] (govt recds)

KM2XGO____Chrysler Corporation, for operation in the range 1.8-1.85 MHz, experimental research stn, 700w, A0 emission
[Detroit, MI] (govt recds)

1.8050 KI2XIR____Ford Communication Inc, experimental research stn, 1w, A0 emission

[Dearborn, MI] (govt recds)

1.8165 KI2XIR____Ford Communication Inc, experimental research stn, 1w, 3 A3J emission
[Dearborn, MI] (govt recds)

1.8500 WRLT2023__Lockheed Corp, Hollywood Burbank Airport, aero beacon, 1 w, 125P0 emission
[Burbank, CA] (govt recds)

WRLT2031__Boeing Company, Renton Municipal Airport, aero beacon, 4 0w, 100P9 emission
[Washington] (govt recds)

WRLT2032__Boeing Company, aero beacon, 40w, 100P9 emission
[Everett, WA] (govt recds)

WRLT2040__Delta Airlines Inc, Hartsfield Atlanta Intl Airport, aer o beacon, 1w, 125P0 emission
[Atlanta, GA] (govt recds)

WRLT4750__Northwest Airlines Inc, Logan Intl Airport, aero beacon, 1w, 125P0 emission
[Boston, MA] (govt recds)

WRLT4758__Northwest Airlines Inc, O'Hare Intl Airport, aero beacon , 1w, 125P0 emission
[Chicago, IL] (govt recds)

WRLT4760__Northwest Airlines Inc, John F Kennedy Intl Airport, aer o beacon, 1w, 125P0 emission
[New York, NY] (govt recds)

WRLT4760__Northwest Airlines Inc, aero beacon, 1w, 125P0 emission
[Philadelphia, PA] (govt recds)

WRLT4760__Northwest Airlines Inc, aero beacon, 1w, 125P0 emission
[Tacoma, WA] (govt recds)

WRLT4760__Northwest Airlines Inc, aero beacon, 1w, 125P0 emission
[Washington, DC] (govt recds)

WRLT4767__Trans World Airlines Inc, Baltimore Washington Intl Airp ort, aero beacon, 1w, 100P9 emission
[Baltimore, MD] (govt recds)

WRLT4767__Trans World Airlines Inc, aero beacon, 1w, 125P0 emissio n
[Denver, CO] (govt recds)

WRLT4767__Trans World Airlines Inc, aero beacon, 1w, 125P0 emissio n
[Windsor Locks, CT] (govt recds)

WRLT4770__Trans World Airlines Inc, James M Cox Municipal Airport,
aero beacon, 1w, 125P0 emission
[Dayton, OH] (govt recds)

WRLT4770__Trans World Airlines Inc, Witchita Mid-Continent Airport
, aero beacon, 1w, 125P0 emission
[Witchita, KS] (govt recds)

WRLT4770__Trans World Airlines Inc, aero beacon, 1w, 125P0 emissio
n
[Albuquerque, NM] (govt recds)

WRLT4770__Trans World Airlines Inc, aero beacon, 1w, 125P0 emissio
n
[Arlington, VA] (govt recds)

WRLT4770__Trans World Airlines Inc, aero beacon, 1w, 125P0 emissio
n
[Covington, KY] (govt recds)

WRLT4770__Trans World Airlines Inc, aero beacon, 1w, 125P0 emissio
n
[Detroit, MI] (govt recds)

WRLT4770__Trans World Airlines Inc, aero beacon, 1w, 125P0 emissio
n
[Miami, FL] (govt recds)

WRLT4801__Braniff Airways Inc, DFW Regional Airport, aero beacon,
40w, 100P9 emission
[Grapevine, TX] (govt recds)

WRLT4876__Braniff Airways Inc, Love Field, aero beacon, 1w, 100P9
emission
[Dallas, TX] (govt recds)

WRLT4893__Lockheed Corp, Ontario Intl Airport, aero beacon, 20w, 1
25P0 emission
[Ontario, CA] (govt recds)

WRLT4930__Boeing Company, aero beacon, 40w, 100P9 emission
[Seattle, WA] (govt recds)

WRLT4986__Lockheed Corp, Dobbins AFB, aero beacon, 10w, 100P9 emis
sion
[Marietta, GA] (govt recds)

WRLT4988__Trans World Airlines Inc, Will Rogers World Airport, aer
o beacon, 1w, 125P0 emission
[Oklahoma City, OK] (govt recds)

WRLT4989__Trans World Airlines Inc, Sky Harbor Airport, aero beaco

n, 1w, 100P9 emission
[Phoenix, AZ] (govt recds)

WRLT4990__Trans World Airlines Inc, McCarran Field, aero beacon, 1
w, 125P0 emission
[Las Vegas, NV] (govt recds)

WRLT4991__Trans World Airlines Inc, Weir Cook Municipal Airport, a
ero beacon, 100P9 emission
[Indianapolis, IN] (govt recds)

WRLT4992__Trans World Airlines Inc, Dulles Intl Airport, aero beac
on, 1w, 125P0 emission
[Chantilly, VA] (govt recds)

WRLT4994__Trans World Airlines Inc, Port Columbus Airport, aero be
acon, 100P9 emission
[Columbus, OH] (govt recds)

WRLT4998__Lockheed Corp, Palmdale Airport, aero beacon, 1w, 125P0
emission
[Palmdale, CA] (govt recds)

1.9000 WRLT2023__Lockheed Corp, Hollywood Burbank Airport, aero beacon, 1
w, 125P0 emission
[Burbank, CA] (govt recds)

WRLT2040__Delta Airlines Inc, Hartsfield Atlanta Intl Airport, aer
o beacon, 1w, 125P0 emission
[Atlanta, GA] (govt recds)

WRLT4750__Northwest Airlines Inc, Logan Intl Airport, aero beacon,
1w, 125P0 emission
[Boston, MA] (govt recds)

WRLT4758__Northwest Airlines Inc, O'Hare Intl Airport, aero beacon
, 1w, 125P0 emission
[Chicago, IL] (govt recds)

WRLT4760__Northwest Airlines Inc, John F Kennedy Intl Airport, aer
o beacon, 1w, 125P0 emission
[New York, NY] (govt recds)

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[Philadelphia, PA] (govt recds)

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[Witchita, KS] (govt recds)

WRLT4770__Trans World Airlines Inc, aero beacon, 1w, 125P0 emissio
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[Albuquerque, NM] (govt recds)

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[Phoenix, AZ] (govt recds)

WRLT4990__Trans World Airlines Inc, McCarran Field, aero beacon, 1
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[Las Vegas, NV] (govt recds)

WRLT4991__Trans World Airlines Inc, Weir Cook Municipal Airport, a
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[Indianapolis, IN] (govt recds)

WRLT4994__Trans World Airlines Inc, Port Columbus Airport, aero be
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[Columbus, OH] (govt recds)

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[Chicago, IL] (govt recds)

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WRLT4989__Trans World Airlines Inc, Sky Harbor Airport, aero beacon, 1w, 100P9 emission
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[Chantilly, VA] (govt recds)

WRLT4994__Trans World Airlines Inc, Port Columbus Airport, aero beacon, 100P9 emission
[Columbus, OH] (govt recds)

WRLT4998__Lockheed Corp, Palmdale Airport, aero beacon, 1w, 125P0 emission
[Palmdale, CA] (govt recds)

1.9926 call?_____US: Navy, radionavigation land station, 300w
[Camp Pendelton, CA] (govt recds)

1.9930 call?_____US: Navy, radionavigation land station, 300w
[Seal Beach, CA] (govt recds)

2.0000 call?_____US: Air Force, experimental testing station, 600w
[Grand Forks,ND] (govt recds)

call?_____US: Air Force, experimental testing station, 600w
[Verona, NY] (govt recds)

call?_____US: Air Force, sounder network station, 100w
[Bergstrom AFB, TX] (govt recds)

call?_____US: Air Force, sounder network station, 100w
[Dixon, CA] (govt recds)

call?_____US: Air Force, sounder network station, 100w
[Driver, VA] (govt recds)

call?_____US: Air Force, sounder network station, 100w
[Elgin AFB, FL] (govt recds)

call?_____US: Air Force, sounder network station, 100w
[MacDill AFB, FL] (govt recds)

call?_____US: Air Force, sounder network station, 100w
[Nellis AFB, NV] (govt recds)

call?_____US: Air Force, sounder network station, 100w
[Shaw, SC] (govt recds)

call?_____US: Air Force, sounder network station, 5kw
[Bingham, ME] (govt recds)

call?_____US: Air Force, sounder prediction station, 100w
[Homestead AFB, FL] (govt recds)

call?_____US: Air Force, sounder prediction station, 10w
[Avon Pk, FL] (govt recds)

call?_____US: Air Force, sounder prediction station, 10w
[Cape Canavrl, FL] (govt recds)

call?_____US: Air Force, sounder prediction station, 10w
[Kissimee, FL] (govt recds)

call?_____US: Air Force, sounder prediction station, 10w
[Patrick AFB, FL] (govt recds)

call?_____US: Air Force, sounder prediction station, 10w
[St Luciec, FL] (govt recds)

call?_____US: Air Force, sounder prediction station, 20w
[Robins AFB, GA] (govt recds)

call?_____US: Navy, experimental research station, 10w
[Chspk Beach, MD] (govt recds)

KNEV670___W5UNY Co
[USA-wide] (govt recds)

NAU_____US: Navy, sounder network station, 100w
[Isabella, PR] (govt recds)

NPM_____US: Navy, sounder network station, 30kw
[Lualuale, HI] (govt recds)

NPN_____US: Navy, sounder network station, 30kw
[Barrigad, Guam] (govt recds)

NUD_____US: Navy, sounder network station, 30kw
[Mt Moffett, AK] (govt recds)

KA2XNH____SRI International, experimental contract stn (US Navy co
ntract N00014-83-C-0267). For sweeping the band 2-32 MHz
in 1 Hz increments not more than 3 times per hour at a
sweep rate of not less than 5 minutes sweep for the enti
re band, 50w, A0 emission
[Stanford, CA] (govt recds)

KB2XDO____SRI International, experimental contract stn, 2w, 30000F
9 emission
[Avanal, CA] (govt recds)

KB2XEC____Southwest Research Institute, experimental contract stn,
5w, 0.1A1 emission
[San Antonio, TX] (govt recds)

KB2XED____Southwest Research Institute, experimental contract stn,
5w, 0.1A1 emission
[TX] (govt recds)

KF2XHE____General Motors Research Corporation, experimental resear
ch stn, A1 nd A3 emissions
[Warren, MI] (govt recds)

KI2XHI____Decca Marine Inc, experimental development stn, 150w, 2.
8A3J emission
[Palm Coast, FL] (govt recds)

KNEV670___Watson, WP, W5UNY Co, authorized for demonstration purpo
ses only, 1w, A3J
[USA-wide] (govt recds)

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==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 1079225767920923079
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab5de4ebf9658805,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-11-01 12:07:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ucla-cs.ARPA
Path: utzoo!linus!decvax!ittatc!dcdwest!sdcsvax!sdcrdcf!ucla-cs!wales
From: wales@ucla-cs.UUCP
Newsgroups: net.ham-radio
Subject: Need help on Kenwood TR-7950 problem
Message-ID: <7387@ucla-cs.ARPA>
Date: Fri, 1-Nov-85 15:07:31 EST
Article-I.D.: ucla-cs.7387
Posted: Fri Nov 1 15:07:31 1985
Date-Received: Tue, 5-Nov-85 05:43:15 EST
Reply-To: wales@ucla-cs.UUCP (Rich Wales/WA6SGA)
Distribution: net
Organization: UCLA Computer Science Department
Lines: 41

My Kenwood TR-7950 has been having an intermittent "receive" problem which has kept the rig in the service center (and kept me off the air) for about two months now.

The problem is that, when I have a station tuned in and am listening, the rig starts to "motorboat". That is, the sound is interspersed with "squelch tail" noise several times a second, and the signal-strength LED display alternates rapidly between "strong signal" and "no signal".

I normally operate out of my car. However, these identical symptoms were seen when the rig was hooked up to an AC power supply and fed input from a VHF FM signal generator. Hence, the culprit is definitely not my car battery or antenna wiring.

The problem seems to be intermittent. Specifically, it seems to occur most often when the rig is NOT thoroughly warmed up. I was seemingly able to reproduce the problem by disconnecting the DC power from the rig, turning the power/volume switch on, and shorting the DC connector pins together briefly in the back of the rig; when I reapplied power after doing this, the "motorboating" would return for a while. I am not 100% sure whether this was really making any difference, though, because shortly after doing this several times I discovered that I had drained my car battery!

Has anyone out there had anything similar happen to them? Does anyone have any ideas? The Kenwood customer service people seem quite open to any suggestions I can supply them regarding what the problem might be or how to make the rig misbehave at will.

PLEASE DON'T use this request of mine as a springboard for any tirades about poor equipment quality or repair competence by Kenwood, ICOM, or anyone else. All I am looking for are ideas that I can either pass along to the Kenwood people or pursue on my own in case they give up.

Please mail replies directly to me if possible (my address is below).
I will post a summary to the net once my rig is working again.

--
Rich Wales // UCLA Computer Science Department // +1 213-825-5683
     3531 Boelter Hall // Los Angeles, California 90024 // USA
     ARPA: wales@LOCUS.UCLA.EDU -or- wales@UCLA-LOCUS.ARPA
     UUCP: ...!(ucbvax,ihnp4)!ucla-cs!wales

From 9134081101301446402
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47f455699ca9b192
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-01 13:19:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site sdcsvax.UUCP
Path: utzoo!linus!decvax!ittatc!dcdwest!sdcsvax!brian
From: brian@sdcsvax.UUCP (Brian Kantor)
Newsgroups: net.ham-radio
Subject: Re: GEE WHIZ, FELLERS
Message-ID: <1174@sdcsvax.UUCP>
Date: Fri, 1-Nov-85 16:19:02 EST
Article-I.D.: sdcsvax.1174
Posted: Fri Nov 1 16:19:02 1985
Date-Received: Tue, 5-Nov-85 05:38:08 EST
References: <2549@brl-tgr.ARPA>
Reply-To: brian@sdcsvax.UUCP (Brian Kantor)
Organization: UCSD wombat breeding society
Lines: 36

In article <2549@brl-tgr.ARPA> FAC0392%UOFT01.BITNET@WISCVM.ARPA (Len Brady)
writes:
>My pleas of several months back having been completely ignored, I
>take terminal in hand to write again. In my first message of this
>type, I implored the TVRipOff boys (and girl) to start their own
>info-net, to be called surveillance-net or eavesdrop-info, and to
>leave that inappropriate trash off of the HAM RADIO NET.
>
>Tonight, I had to delete messages dealing with cordless telephones
>being overheard by television sets, AM radios and CIA-home-built
>converters. For Pete's sake, that has nothing to do with HAM RADIO!

Depends on what you think of as ham radio. I rather enjoy reading about
that sort of thing, as it has something technical to it. On the other
hand, if I have to read (thank G*d for rn's kill files!) one more
article about lower-than-30MHZ-conversations-with-some-unknown-little-
forsaken-island-using-some-foreign-manufactured-rice-rocket-hooked-up-
to-some-store-bought-heap-of-aluminum-for-a-grand-total-of-10-seconds-to
exchange-signal-reports, I'll puke.

Ham radio is a diverse hobby. I'm in it for the technical aspects, and
to learn more about radio, television, digital, and other modes of
communications. If I just want to talk to somebody, I'll use the
telephone. Its cheaper and more reliable.

So please! Tolerate the not-ham-radio-the-way-the-ARRL-invented-it traffic as well as the more traditional stuff here in ham-rado. Some of us like it!

Oh yes, if you want to look for me on the air, I'll be there. I rarely get below 420MHz, though.

Brian Kantor, WB6CYT

decvax\ brian@ucsd.arpa
akgua >--- sdcsvax --- brian
ucbvax/   Kantor@Nosc

From 7949316705212358906
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,62a4d3482f10dbd7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-01 20:01:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site drune.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!drutx!drune!mrv
From: mrv@drune.UUCP (VagherMR)
Newsgroups: net.ham-radio
Subject: modulation question
Message-ID: <79@drune.UUCP>
Date: Fri, 1-Nov-85 23:01:57 EST
Article-I.D.: drune.79
Posted: Fri Nov 1 23:01:57 1985
Date-Received: Sun, 3-Nov-85 06:23:57 EST
Organization: AT&T Information Systems Laboratories, Denver
Lines: 37

I've had some difficulty recently in trying to resolve an apparent difference between some simple mathematical analysis and practical results in terms of some basic spectral analysis. I decided to seek the help of specialists on the net before looking at another useless textbook on the subject. I'm sure the answer must be simple but anyway here it is:

If there exists a baseband signal x(t)=Kcos(Wmt) where Wm is the angular frequency and this signal is input to a multiplier or a balanced mixer where the multiplying signal or local oscillator is y(t)=Xcos(Wlt) at frequency Wl the output is s(t)=KXcos(Wmt)cos(Wlt). This leads to an equation for the output of s(t)=(KX/2)cos(Wl-Wm)t + (KX/2)cos(Wl+Wm)t . Taking the Fourier transform of this gives a "delta" function in the frequency domain of area KX/4 at frequencies Wl-Wm , Wl+Wm and also at the negative of these frequencies (which accounts for the extra 1/2 factor. However it should be perfectly valid to work with positive frequencies and real functions of time only. The output of this would be a DSB-SC signal.

Calculating the power of these spectral components is where I
have my dilemna. The expected value or mean square power of
the baseband component is K*K/2 in a one ohm system and
the power of each component of s(t) is K^2*X^2/8 or the total
power in s(t) equals K^2*X^2/4. Assuming K=X=1 the power in the
baseband signal would be 10log(1/2) or -3dBW. The power in each
of the components of s(t) would be -9dBW. This leads to a loss
of 6dB from the baseband to one of the components of s(t).
However, in working with real double balanced diode mixers the
loss from the baseband input to the output is from 5-7dB.
Actually this loss is specified as the conversion loss from
RF to IF but this is equivalent. The manufacturer's literature
briefly states that 3dB of the loss is due to theoretical
considerations and that the rest is due to thermal and mismatch losses.
Can anyone see where my mistake is in calculating 6dB of loss?

From 2217577591719873555
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c6513f1f9d6a180,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-01 20:53:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: SWL loggings (VLF military RTTY, HF jammers, etc.)
Message-ID: <692@ihu1h.UUCP>
Date: Fri, 1-Nov-85 23:53:56 EST
Article-I.D.: ihu1h.692
Posted: Fri Nov 1 23:53:56 1985
Date-Received: Sun, 3-Nov-85 06:24:42 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 48


```
   0.0393    call?_____US: Air Force, cryto message starting with "for applause
                        ", 67 wpm 170Hz, 10/22/85 @ 1138Z
                        [Silver Creek, Nebraska] (others)

   0.0506    call?_____unidentified: military station mentioned that Silver Cre
                        ek SLFCS xmtr was going to be off the air, 170Hz 67 wpm,
                         10/22/85, @1213Z
                        [location?] (others)

             call?_____unidentified: military station xmtg unclassified test ms
                        g to 381 Strategic Missile Wing to test 'SLFCS' printers
                        , 170Hz 67 wpm, 10/22/85, @1134Z
                        [location?] (others)
```

```
   0.1225    CFH_______Canada: Canadian Forces Maritime Radio METOC, wx report,
                        170Hz 100 wpm, 10/22/85
                       [Halifax, NS] (others)

  11.2390    call?_____US: Air Force, Sky King bdcst, usb, 10/31/85 @1716Z
                       [McClellan AFB, CA] (B. Parnass)

  11.8550    call?_____jamming: by multiple signals in the International Bdcst
                       Band, all identifying in cw with rough note. Could only
                       make out ids="R9" and "D3", (Soviets known to jam in thi
                       s manner), 10/31/85 @1734Z
                       [location?] (B. Parnass)

  11.8850    call?_____jamming: by multiple signals in the International Bdcst
                       Band, all identifying in cw with rough note. Could only
                       make out one id="ZM", (Soviets known to jam in this mann
                       er), 10/31/85 @1734Z
                       [location?] (B. Parnass)

  11.9350    call?_____jamming: by multiple signals in the International Bdcst
                       Band, all identifying in cw with rough note. Could only
                       make out one id="D3", (Soviets known to jam in this mann
                       er), 10/31/85 @1729Z
                       [location?] (B. Parnass)

  14.5630    call?_____Cyprus Radio, Radiotelephone Maritime Service, male voic
                       e id loop, phone patches heard on this frequency periodi
                       cally, usb, 10/31/85 @1702Z
                       [Cyprus] (B. Parnass)

--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -2078872051607126758
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,11042d4f93712a94
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-02 05:30:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: $Revision: 1.6.2.13 $; site hpuslma.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!we53!busch!
wucs!wuphys!hpuslma!scott
From: scott@hpuslma.UUCP
Newsgroups: net.ham-radio
Subject: Re: HAM frequencies/emissions list updat
Message-ID: <744100001@hpuslma.UUCP>
Date: Sat, 2-Nov-85 08:30:00 EST
Article-I.D.: hpuslma.744100001
Posted: Sat Nov  2 08:30:00 1985
Date-Received: Mon, 4-Nov-85 01:48:50 EST
```

References: <21320@mgweed.UUCP>
Lines: 6
Nf-ID: #R:mgweed:-2132000:hpuslma:744100001:000:166
Nf-From: hpuslma!scott   Nov 2 07:30:00 1985

As a new Ham (again) I appreciate the propagation reports and the recent
freq/emissions update. Thanks for your assistance in keeping us informed.

Jim Scott
N0GLP

From 5118535675219590755
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,677ac8538dbb80f4,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,677ac8538dbb80f4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-02 08:44:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio,net.ham-radio.packet
Subject: Re: Re: Help with Kantronix Packet
Message-ID: <324@anasazi.UUCP>
Date: Sat, 2-Nov-85 11:44:15 EST
Article-I.D.: anasazi.324
Posted: Sat Nov 2 11:44:15 1985
Date-Received: Tue, 5-Nov-85 06:43:13 EST
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 46
Keywords: Kantronix Packet
Xref: linus net.ham-radio:2890 net.ham-radio.packet:114

I tried to send this by mail, but it bounced somewhere near ARPA land.

In article <2438@brl-tgr.ARPA> you write:
>Please note the manual supplied is a USERS manual, NOT a
>TECHNICAL/SERVICE manual. The manual is complete with full detailed
>descriptions of commands and control. It's internal memory can be
   Since we're all supposed to be appliance operators, I suppose that
this is okay?? Come on. Packet is still experimental in amateur operation.
Even my Kenwood TS-430, a far more complicated appliance, comes with
more technical information that the Kantronix. Also, in an emergency,
I would rather be able to fix my appliance!

>The fact that you wasted several hours during a critical emergency net
>time only shows how important it is to be prepaired!   Participate in

A slight problem here: My own equipment could not be brought into

Mexico, so we had to do with what we could get. Were you prepared for the Mexico disaster? Where were you?

>The syndrome was "...we couldn't get it to receive anything."; perhaps
>the problem was a shorted audio mini-jack? Dead/inop AC outlet/power
>supply? Not enough receive level/audio? Incomplete/inop software? I

Since neither Carlos nor myself are idiots (or appliance operators), we of course eliminated all of these problems (and many more) early on.

So, now that you have criticized the fact that we had problems, how about a little help on the Kantronix. What is that big "WORLD" chip? What pins are what?

--
John Moore (NJ7E/XE1HDO)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
{hao!noao|decvax|ihnp4|seismo}!terak!anasazi!john
(602) 952-8205 (day or evening)
5302 E. Lafayette Blvd, Phoenix, Az, 85018 (home address)

--
John Moore (NJ7E/XE1HDO)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
{hao!noao|decvax|ihnp4|seismo}!terak!anasazi!john
(602) 952-8205 (day or evening)
5302 E. Lafayette Blvd, Phoenix, Az, 85018 (home address)

From 6653721796717475585
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d533f1981722d4cc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-02 21:25:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
FAC0395%UOFT01.BITNET@WISCVM.ARPA
From: FAC0395%UOFT01.BITNET@WISCVM.ARPA (Joe Feustle)
Newsgroups: net.ham-radio
Subject: Gee Wiz, Mongolia!
Message-ID: <2752@brl-tgr.ARPA>
Date: Sun, 3-Nov-85 00:25:37 EST
Article-I.D.: brl-tgr.2752
Posted: Sun Nov 3 00:25:37 1985
Date-Received: Tue, 5-Nov-85 05:35:28 EST
Sender: news@brl-tgr.ARPA
Lines: 3

15 meters was alive and doine fb this morning. JT0DJT on 21.027 at

1524 with a particularly strong signal. QSL via I8YGZ. DSW de
N8AAT

From -6613972613464208294
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e32d3a0a49c6c94a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-03 11:06:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
FAC0395%UOFT01.BITNET@WISCVM.ARPA
From: FAC0395%UOFT01.BITNET@WISCVM.ARPA (Joe Feustle)
Newsgroups: net.ham-radio
Subject: DX
Message-ID: <2757@brl-tgr.ARPA>
Date: Sun, 3-Nov-85 14:06:49 EST
Article-I.D.: brl-tgr.2757
Posted: Sun Nov 3 14:06:49 1985
Date-Received: Tue, 5-Nov-85 08:27:24 EST
Sender: news@brl-tgr.ARPA
Lines: 7

Please rest assured that my dx contacts are of only the highestt
quality. My Italian contact in Mongolia and I had a long con-
versation regarding the practice of the solitary vice by the
mountain tribesmen. Glad the band was in such good condition.
I'll admit to not being QRP, but my Alpha amp *is* manufactured
here in the good ole USA, just like my triband beam antenna. Ciao
de N8AAT

From 5227486895336957363
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc1e5c3a77662ea4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-04 05:29:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxd.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: BT1BK-CQWW
Message-ID: <805@inuxd.UUCP>
Date: Mon, 4-Nov-85 08:29:59 EST
Article-I.D.: inuxd.805
Posted: Mon Nov 4 08:29:59 1985
Date-Received: Tue, 5-Nov-85 23:07:57 EST
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 5

After the second day of CQWW and hearing the pileup on BY1PK and
BT1BK (I thought they were going as BY1BK in Peking) I was lucky
to work them on Sunday evening. They were the Japanese expedition
and I need the qsl info. This years cqww was a real good one
considering the conditions lately. tnx in advance. KN9K

From 3503984557161614575
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47f455699ca9b192
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-04 09:42:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!acardenas.ES@Xerox.ARPA
From: acardenas.ES@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: GEE WHIZ, FELLERS
Message-ID: <2789@brl-tgr.ARPA>
Date: Mon, 4-Nov-85 12:42:54 EST
Article-I.D.: brl-tgr.2789
Posted: Mon Nov 4 12:42:54 1985
Date-Received: Tue, 5-Nov-85 07:15:30 EST
Sender: news@brl-tgr.ARPA
Lines: 29

I agree that HAMRADIO^ should be open to *ALL* information on the
TOTAL spectrum.

Scanners/antennas/dx/dishes/appliances/fcc/tv/cable/packet/vhf/uhf/hf/lw/power/
questions/answers/networks...
some topics you will like, some you won't. Resolve to be mature enough
to respect the rights of others to learn and communicate.

It is also important to note that not all members or visitors to the dl
are hams. Appeals for information are made because users know that
honest, no-sales-hype replies can be found here. I have yet to see a
open question on communications go unanswered.

While DX-reports are not my cup of whiskey, I find that my delete
option works just fine. I do, however, object when a topic becomes a
matter of personal flames and contests to see who can turn whom into
black toast faster.

I marvel and value the vast wealth of knowledge and insight here on the
DL. I strongly object to restrictions upon members, communications or
topics.

73's
Tony Cardenas

WA6IGJ

From 2048186973372023243
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a9c28f853ef05259,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-04 11:19:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!YOUNG@MARLBORO.DEC.COM
From: YOUNG@MARLBORO.DEC.COM
Newsgroups: net.ham-radio
Subject: Re: HC8X
Message-ID: <2802@brl-tgr.ARPA>
Date: Mon, 4-Nov-85 14:19:32 EST
Article-I.D.: brl-tgr.2802
Posted: Mon Nov 4 14:19:32 1985
Date-Received: Tue, 5-Nov-85 07:18:02 EST
Sender: news@brl-tgr.ARPA
Lines: 47

The QSL information for HC8X is indeed K8CW.

If you send a card to K8CW, or to any of the operators for their /HC8
operations, don't be surprised if it is a while before you get a response.
Most of us have not had cards printed yet. In my case, I don't know
whether I am going with a simple card or a picture card, and won't make
that decision until the pictures from Galapagos are developed.

Conditions were fantastic on the high bands, allowing us to run JAs
on 10 meters, and to work long path Europe at night on 15. On the
other hand, 160 was very difficult - I hope you weren't among the folk
who were calling for hours without success.

As far as QSLs, here is a complete list

Call Via

KP2A N6CW
K8CV K8CV
HC1MD   K8LJG (also for NE8Z)
W8PBO   WB8UCB
K8CW K8CW
KA8TKB   K8CW
W8KKF   W8KKF
WD8ATP   W8KKF
WA8YST   WA8YST
K8MA K8MA
N2IC N2IC
K9AJ K9AJ

KA9RHK K9AJ
W0RLX W0RLX
AB8K AB8K
W6CDR W6CDR
K1XM KQ1F
KQ1F KQ1F

If you worked any other call, it was a bootlegger!

We did not operate much from HC1/HC2/HC5 because of time and antenna availability, and also because Equador was not that rare.

If you worked the HC8E expedition a couple months ago, cards should be coming soon. If you want a card from them, you are probably better off sending a greenstamp, as they are unable to cash IRCs in Equador.

Paul Young, K1XM

From -8912382602972318396
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,88cd12dcc1934dc0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-11-05 05:21:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site decwrl.UUCP
Path: utzoo!linus!decvax!decwrl!dec-rhea!dec-cache!leigh
From: leigh@cache.DEC (Allen Leigh SHR1-3/E29 DTN 237-3255)
Newsgroups: net.ham-radio
Subject: Need info on Yaesu FT203R 2m handheld
Message-ID: <1253@decwrl.UUCP>
Date: Tue, 5-Nov-85 08:21:25 EST
Article-I.D.: decwrl.1253
Posted: Tue Nov 5 08:21:25 1985
Date-Received: Fri, 8-Nov-85 05:02:59 EST
Sender: daemon@decwrl.UUCP
Organization: Digital Equipment Corporation
Lines: 9

Anybody know anything about the Yaesu FT203R 2 meter handheld? I especially would like to know about its reliability, present cost, and personal opinions from persons having that rig. Yaesu is not a popular brand here in New England, and I'm having trouble getting information about the rig. Please send responses directly to me. Any help will be appreciated.

Allen Leigh W7RCP
...decvax!decwrl!dec-rhea!dec-cache!leigh

From 6081930414846146083
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,c600ee039a15837c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-07 20:27:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!petrus!sabre!zeta!epsilon!gamma!ulysses!mhuxr!
mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 88 (renew your rptr directory listings)
Message-ID: <20844@mgweed.UUCP>
Date: Mon, 7-Oct-85 23:27:32 EDT
Article-I.D.: mgweed.20844
Posted: Mon Oct 7 23:27:32 1985
Date-Received: Thu, 10-Oct-85 07:03:59 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 16

qst de k9eui
hr arrl bulletin nr 88 from arrl headquarters
newington ct october 4, 1985
to all radio amateurs bt

attention repeater owners and operators. register your
repeaters with arrl hq by november 1 for inclusion in the
1986/87 arrl repeater directory. repeater listings with a
registration date no older than july 1982 will be carried over
verbatim from the 1985/86 edition unless amended, and listings
older than july 1982 will be deleted unless renewed. repeaters
can be registered on form cd 240, available from hq for an
sase. send all repeater registrations to repeater directory
edit, arrl hq, 225 main street, newington ct 06111 ar

From 524104457987644992
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,af3cf907193cd7f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-07 20:27:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!petrus!sabre!zeta!epsilon!gamma!ulysses!mhuxr!
mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 24
Message-ID: <20845@mgweed.UUCP>
Date: Mon, 7-Oct-85 23:27:55 EDT
Article-I.D.: mgweed.20845
Posted: Mon Oct 7 23:27:55 1985
Date-Received: Thu, 10-Oct-85 07:04:22 EDT
Organization: AT&T Information Systems - Montgomery Illinois

Lines: 25

qst de k9eui
hr crrl bulletin nr 24 from crrl headquarters
london ont october 7, 1985
to all radio amateurs bt

the crrl headquarters has been moved into larger quarters, about 7 miles north of london. the mailing address is still box 7009, station e, london, ont n5y 4j9, but the telephone number is now 519 225 2188.

to commemorate the 100th anniversary of louis riel, manitoba amateurs may use the prefix ch4 from october 16 to november 16.

in reply to the crrl request that canadian amateurs be given access to the 24.89 to 24.99 mhz band. the minister of communications indicated that access would have to wait until a number of commercial stations assigned to the band were either confirmed as being non operational or moved to other frequencies. crrl continues to pursue the matter.

the ontario section net, osn, and quebec section net, qsn, have been replaced by a new net, oqn, ontario quebec net. ve2edo is net manager ar

From 4429454089014069229
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7477ab215be34da1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-07 20:28:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!petrus!sabre!zeta!epsilon!gamma!ulysses!mhuxr!
mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 40
Message-ID: <20846@mgweed.UUCP>
Date: Mon, 7-Oct-85 23:28:24 EDT
Article-I.D.: mgweed.20846
Posted: Mon Oct 7 23:28:24 1985
Date-Received: Thu, 10-Oct-85 07:04:42 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 40

qst de k9eui
hr propagation forecast bulletin nr 40 from arrl headquarters
newington, ct october 7, 1985
to all radio amateurs bt

the solar flux has been 70 or lower since september 6. the october 6 reading of 66 ties the cycle 21 record low. thus we enter what is normally known as the prime dx season with solar activity so low that even 14 mhz is borderline territory. what little dx there is on 21 mhz is mostly north south in character, and even this is rarely heard on 24 or 28 mhz.

prospects for major improvements are not bright. the few active areas on the sun in september should be showing up this week. even a small rise in the solar flux would make a perceptible improvement in 21 mhz propagation and bring at least some north south potential back to 24 and 28 mhz. flux numbers in the high 70s would help a lot this time of year, but there is no basis in sight for predicting this much improvement.

a less attractive prediction makes more sense. this september was a time of high geomagnetic activity, a degrading factor likely to be with us again october 10 through 19. we were entering a period of relative quiet at bulletin time, and this could last through about october 9. erratic and frequent ups and downs observed september 13 through 18 are likely to return about october 11 through 19. late october looks somewhat better than the first half, with the 27th through the 29th probably the best of the fall season to date, but improvements if any will be mainly on 14 mhz and lower bands.

there can be bursts of high solar activity in the late years of the solar cycle. any tangible evidence of this in prospect will be reported in special bulletins.

american sunspot numbers for september 26 through october 2 were between 0 and 3 with a mean of 0.4 ar

From -4532418572273496862
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,641674a7a13f43d9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-08 06:08:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!
W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA (Keith Petersen)
Newsgroups: net.ham-radio
Subject: Mailer notices
Message-ID: <1982@brl-tgr.ARPA>
Date: Tue, 8-Oct-85 09:08:16 EDT
Article-I.D.: brl-tgr.1982
Posted: Tue Oct 8 09:08:16 1985
Date-Received: Fri, 11-Oct-85 07:10:35 EDT

Sender: news@brl-tgr.ARPA
Lines: 12

If you get any actual mailer rejections (not notifications that
your message has not yet been delivered) for messages posted to
INFO-HAMS@SIMTEL20, please notify me at INFO-HAMS-REQUEST. I need
this feedback so I can remove bad addresses from the mailing list.

Remember, your messages to Info-Hams are going to many different
addressees and the chances are at least one of the hosts will be down
on a given day. Just delete notices of pending mail. Our mailer
notifies the sender every 24 hours so he/she can know the status of
the message posted.

--Keith

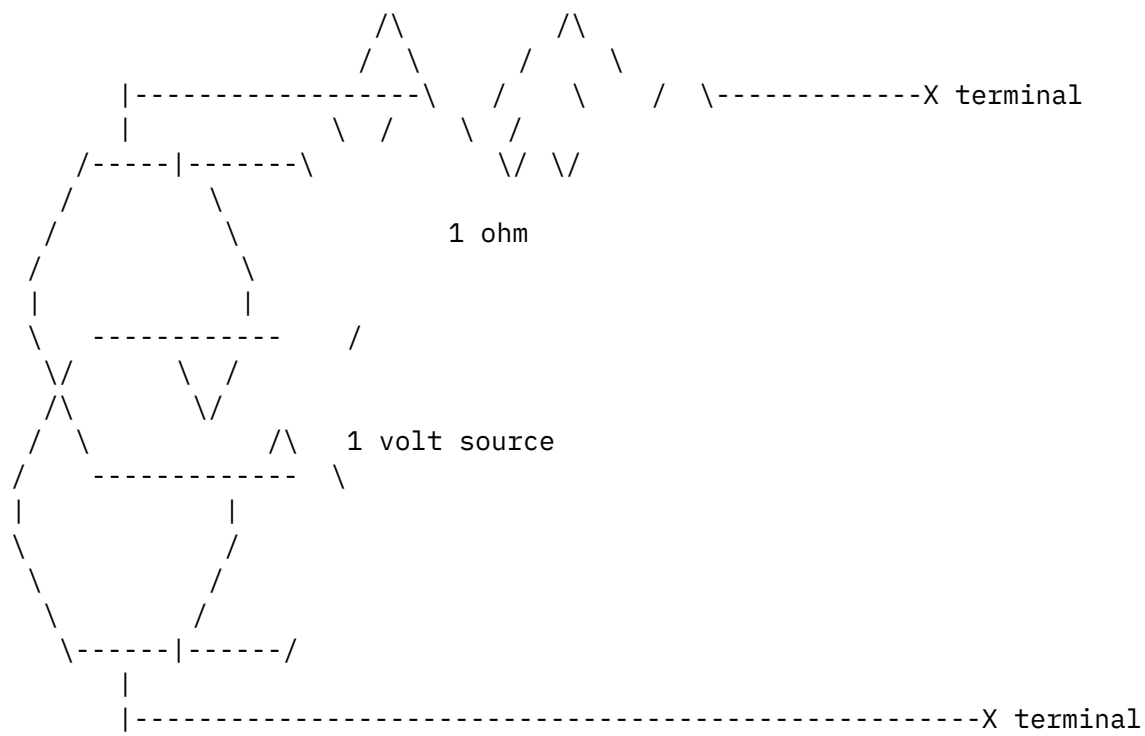
From 8394185128736837787
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,39b5d5c55f67ab24,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-08 06:24:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!tektronix!reed!
nsc-pdc!austin@UW-BEAVER.ARPA
From: austin@UW-BEAVER.ARPA
Newsgroups: net.ham-radio
Subject: Thevinin/Norton equivalents
Message-ID: <1983@brl-tgr.ARPA>
Date: Tue, 8-Oct-85 09:24:30 EDT
Article-I.D.: brl-tgr.1983
Posted: Tue Oct 8 09:24:30 1985
Date-Received: Fri, 11-Oct-85 07:11:24 EDT
Sender: news@brl-tgr.ARPA
Lines: 65

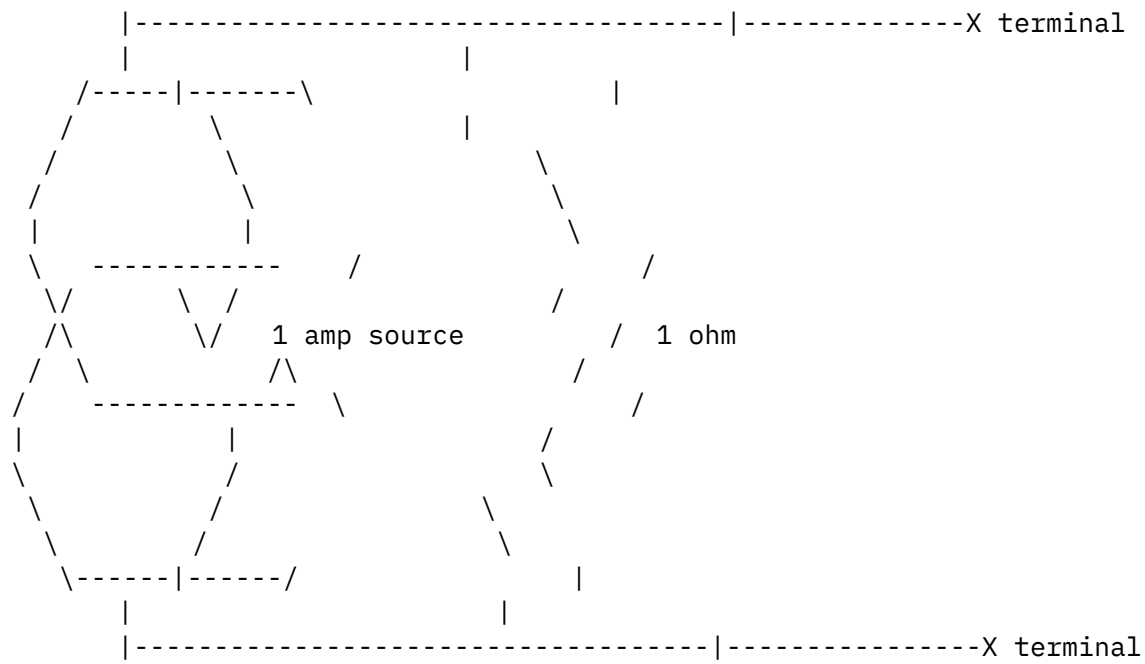
This is an old one but most people I've met have not seen it. If you
solve it in less than an hour, give yourself an 'A'.

The problem is as follows:

You are given 2 black boxes. One contains a perfect 1 volt voltage
source with a 1 ohm resistor in series connected to 2 external
terminals (assume 0 resistance wiring). The other box contains a
perfect 1 amp current source with a 1 ohm resistor in parallel with it
connected to the external terminals. Can you identify (without
opening) which box is which?

I'll post the correct answer(s).





Austin Mack

From 8380071620796078056
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,34a9c5afc1b953cb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-08 06:34:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!hplabs!hao!seismo!brl-tgr!tgr!
decvax!bellcore!petrus!karn@Ucb-Vax.ARPA
From: karn@Ucb-Vax.ARPA
Newsgroups: net.ham-radio
Subject: Re: Thevinin/Norton equivalents (SPOILER)
Message-ID: <1984@brl-tgr.ARPA>
Date: Tue, 8-Oct-85 09:34:55 EDT
Article-I.D.: brl-tgr.1984
Posted: Tue Oct 8 09:34:55 1985
Date-Received: Sat, 12-Oct-85 20:52:37 EDT
Sender: news@brl-tgr.ARPA
Lines: 11

You can't, if you're allowed only to see how the two terminals behave
to external circuits; they're equivalent.

However, with the terminals open-circuited, the black box with the
current source will be dissipating 1 watt of power, while the the one
with the voltage source will not be dissipating anything. Short the
terminals and the situation reverses. Stick each box into a picnic
cooler with a thermometer, and wait. This is the only way I see to
solve the puzzle.

Phil

From 1988156139493554898
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,59947d162d30d224,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-08 09:43:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site isosvax.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!asuvax!isosvax!wb7asr
From: wb7asr@isosvax.UUCP (Tom Boza, WB7ASR)
Newsgroups: net.ham-radio
Subject: Quality of ICOM radios
Message-ID: <240@isosvax.UUCP>
Date: Tue, 8-Oct-85 12:43:54 EDT
Article-I.D.: isosvax.240
Posted: Tue Oct 8 12:43:54 1985
Date-Received: Sat, 12-Oct-85 06:19:22 EDT
Organization: Intel Corp, Phoenix (Deer valley), AZ
Lines: 58

8th of October, 1985

WB7ASR
Thomas A. Boza
10627 N. 38th Ave.
Phoenix, Arizona 85029
HOME: 602-938-0004
WORK: 602-869-4387

ICOM Corp.
2380 116th Ave. N.E.
Bellevue, Wash. 98004
206-454-7619

I'm sending in my ICOM, IC-47A, UHF transceiver, Serial Number 01862, and one HM-23 microphone for repair, per telephone conversation with Tom Moore, on October 7th, 1985. Tom stated that the repair cost will be $45.00 per hour, for labor, plus parts.

The problem with the radio is that it has an intermittent transmit, both on high and low power settings. The LEDs indicate that transmit power is being delivered, but no RF or audio is being emitted. At times, it will transmit with full power into my "Bird" watt meter and dummy load, and then quit.

I am becoming VERY disillusioned with ICOM products. I only owned this radio for five months, and already have to send it in for repairs. It's only two months out of warranty. What really aggravates me, this is not the first time an ICOM product has given me problems. At the same time I bought this radio, I purchased the matching two meter radio, the IC-27A. The IC-27A had a similar problem. Within one month after purchase, the PLL circuit went out and it would not transmit or receive. Luckily, the entire radio was replaced under warranty, from the dealer. Currently, my replacement IC-27A has developed a small, but noticeable problem. About once or twice a week, the radio will jump frequency and loose the frequency that was programmed into that memory location. I'm living with this problem for the time being. Also, eight months ago, I purchased an ICOM IC-271A, two meter all mode transceiver. I had to replace that radio THREE times, under warranty, before I got one that would work for any length of time. I selected ICOM products, because I thought I was getting top shelf, state-of-the-art, quality radios. The way that my ICOM products are holding up, I'm VERY sceptical of ever buying any ICOM products again. By adding the cost for this repair and UPS charges to the total cost of the radio, I am paying more than your competitors equal value radio. This also doesn't take into consideration, my time spent dealing with broken radios. I do own several Kenwood and Yaesu radios, and I have never had one problem with any of them.

Once the repairs are made, please notify me either by telephone, to my day time business number, or by letter, to my home address. I will then send a check to you for the repairs. What type of warranty will I receive with the repair of this radio ? All the above mentioned warranty replacements are documented.

Thank You

From -253779054058895416
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d599b7b7372291a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-08 13:26:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!DSDC-SDT2@GUNTER-ADAM.ARPA
From: DSDC-SDT2@GUNTER-ADAM.ARPA (Walt Livingston)
Newsgroups: net.ham-radio
Subject: Re: Ham Emergency Nets
Message-ID: <1993@brl-tgr.ARPA>
Date: Tue, 8-Oct-85 16:26:59 EDT
Article-I.D.: brl-tgr.1993
Posted: Tue Oct 8 16:26:59 1985
Date-Received: Fri, 11-Oct-85 06:49:02 EDT
Sender: news@brl-tgr.ARPA
Lines: 12

Ed,
  I can't speak for the rest of the people in INFO-HAMS, but here in Alabama we use two different frequencies during emergencies. 3.965 MHz after 6 PM (Alabama Traffic Net "MIKE" (ATNM) 6:30 PM CDT to about 8:00 PM. 7.243 MHz during the day, same net name. Also, listen to 14.325 (I believe) for the Gulf Coast Hurricane Net, ham stationed in National Hurricane Center gives up to the minute news; however, net gets very undisciplined occasionally.

Walt WA4YCM
Montgomery, Alabama

From -2524359537980562324
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6264a23a92007d1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-08 13:43:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!price%marlin@nosc.ARPA
From: price%marlin@nosc.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: Re: Vertical Antenna Recommendations
Message-ID: <1994@brl-tgr.ARPA>
Date: Tue, 8-Oct-85 16:43:02 EDT
Article-I.D.: brl-tgr.1994

Posted: Tue Oct 8 16:43:02 1985
Date-Received: Fri, 11-Oct-85 06:49:15 EDT
Sender: news@brl-tgr.ARPA
Lines: 16

I'm not speaking from personal experience, but close second hand
experience.

I think the "all band" Butternut vertical is about the best one
on the market. It seems to work extremely well, is easy to assemble
and adjust, etc. They're kinda expensive, like $125 or so, but seem
to be worth it. It's a somewhat more "state of the art" device than
the ones you listed.

Don't have the model number right handy, but I think there's both
an older version (80 thru 10) and a newer one (160 thru 10 including
the WARC bands).

Good DX and all that--Jim, K6ZH

From 4522745901231937152
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a73be2280eb8c4f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-08 14:20:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.13 $; site hpuslma.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!houxm!ihnp4!mgnetp!
we53!busch!wucs!wuphys!hpuslma!scott
From: scott@hpuslma.UUCP
Newsgroups: net.ham-radio
Subject: ::x!
Message-ID: <628000001@hpuslma.UUCP>
Date: Tue, 8-Oct-85 17:20:00 EDT
Article-I.D.: hpuslma.628000001
Posted: Tue Oct 8 17:20:00 1985
Date-Received: Sat, 12-Oct-85 07:01:58 EDT
Lines: 3
Nf-ID: #N:hpuslma:628000001:000:3
Nf-From: hpuslma!scott   Oct 8 16:20:00 1985

:

From -3480049266218379984
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ebacf4b65dfc7bac,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-10-09 07:01:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxd.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!houxm!ihnp4!inuxc!
inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: 40M CW DX
Message-ID: <796@inuxd.UUCP>
Date: Wed, 9-Oct-85 10:01:56 EDT
Article-I.D.: inuxd.796
Posted: Wed Oct 9 10:01:56 1985
Date-Received: Sat, 12-Oct-85 05:47:45 EDT
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 1

9Q5MA worked 10-9 02:16Z 7004 kHZ qsl via PA0GAM de KN9K

From -8991096524742719683
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6264a23a92007d1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-09 07:24:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!ucbvax!ucdavis!lll-crg!
seismo!brl-tgr!tgr!CRC.DlosLV@Xerox.ARPA
From: CRC.DlosLV@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Vertical Antenna Recommendations
Message-ID: <2010@brl-tgr.ARPA>
Date: Wed, 9-Oct-85 10:24:56 EDT
Article-I.D.: brl-tgr.2010
Posted: Wed Oct 9 10:24:56 1985
Date-Received: Sat, 12-Oct-85 18:59:34 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

Jim,

     I use the Butternut (HFV6) and find it very good. I know others
in the area who use it too. Most of them use it on the ground with only
a good ground rod driven in next to the ant ground terminal.

     Chuck...
     W5USJ

From -3346202270246129217
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,6264a23a92007d1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-09 07:39:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!ucbvax!ucdavis!lll-crg!
seismo!brl-tgr!tgr!Hardie@MIT-MULTICS.ARPA
From: Hardie@MIT-MULTICS.ARPA (Maj. Douglas Hardie)
Newsgroups: net.ham-radio
Subject: Re: Vertical Antenna Recommendations
Message-ID: <2011@brl-tgr.ARPA>
Date: Wed, 9-Oct-85 10:39:43 EDT
Article-I.D.: brl-tgr.2011
Posted: Wed Oct 9 10:39:43 1985
Date-Received: Sat, 12-Oct-85 18:59:46 EDT
Sender: news@brl-tgr.ARPA
Lines: 12

Any of those verticals require a good ground plane to be effective. I
have used the Hygain in several configurations. It only worked when it
was not close to large metal objects and had a good set of radials. I
had real problems with the radials when mounting the antenna on the
roof. Never got that to work very well. If you ground mount it, it is
easier to get a good ground plane, but you have to watch out for others
(usually kids) who touch it while you`re operating. I have switched to
the Cushcraft R3 which is a half-wave vertical for 20-15-10 and does not
require radials. You lose the bottom bands, but avoid the radial
problem.

-- Doug WA6VVV

From -6955980972751338884
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d599b7b7372291a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-09 09:10:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!ucbvax!ucdavis!lll-crg!
seismo!brl-tgr!tgr!Bristol.henr@Xerox.ARPA
From: Bristol.henr@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Ham Emergency Nets
Message-ID: <2013@brl-tgr.ARPA>
Date: Wed, 9-Oct-85 12:10:14 EDT
Article-I.D.: brl-tgr.2013
Posted: Wed Oct 9 12:10:14 1985
Date-Received: Sat, 12-Oct-85 18:59:59 EDT
Sender: news@brl-tgr.ARPA
Lines: 11

Ed:

The ARRL publishes a NET DIRECTORY which is available for the price of a
s.a.s.e. That used to be a 9 x 12 envelope with $.88 postage on it,
before they raised the postage rates. If I compute it right that's now
$.90.

Good luck.

Bob
N2FQO

From 3961337852710951381
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f65e5df9f1ab143c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-09 11:02:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!ucbvax!ucdavis!lll-crg!
seismo!brl-tgr!tgr!hoffmann%marie@mit-mc.mit.edu
From: hoffmann%marie@mit-mc.mit.edu (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Arrl License Guide
Message-ID: <2016@brl-tgr.ARPA>
Date: Wed, 9-Oct-85 14:02:32 EDT
Article-I.D.: brl-tgr.2016
Posted: Wed Oct 9 14:02:32 1985
Date-Received: Sat, 12-Oct-85 18:55:32 EDT
Sender: news@brl-tgr.ARPA
Lines: 8

It has come to me that the ARRL now states that
their "License Guide" (the big green book) is
OBSOLETE. It has been superceded by a series of
small books geared to individual license classes.

Caveat emptor.

Ron Hoffmann - WA2EYC

From 7473232000285218146
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6264a23a92007d1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-09 12:10:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!ucbvax!ucdavis!lll-crg!
seismo!brl-tgr!tgr!jhallen.WBST@Xerox.ARPA
From: jhallen.WBST@Xerox.ARPA
Newsgroups: net.ham-radio

Subject: Re: Vertical Antenna Recommendations
Message-ID: <2020@brl-tgr.ARPA>
Date: Wed, 9-Oct-85 15:10:29 EDT
Article-I.D.: brl-tgr.2020
Posted: Wed Oct 9 15:10:29 1985
Date-Received: Sat, 12-Oct-85 18:55:45 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

Jim,
You didn't mention the Butternut Vertical but I would sure recommend it.
W1BBJ, Bill, Greenwich CT., has his 5BDXCC using one. I also found the
construction to be rugged. Good Luck.
         73, Jim NK2M

From 3198756556340151711
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3a297980ae3119f1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-09 15:14:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site copper.UUCP
Path: utzoo!linus!decvax!tektronix!teklds!azure!copper!edm
From: edm@copper.UUCP (Ed Morin)
Newsgroups: net.ham-radio
Subject: Using Gunnplexers
Message-ID: <101@copper.UUCP>
Date: Wed, 9-Oct-85 18:14:31 EDT
Article-I.D.: copper.101
Posted: Wed Oct 9 18:14:31 1985
Date-Received: Sat, 12-Oct-85 05:49:16 EDT
Reply-To: edm@copper.UUCP (Ed Morin)
Organization: Tektronix, Beaverton OR
Lines: 21

A friend of mine and I desire to establish a Full-Duplex, 9600
baud RS-232 data link between our apartments. Since we cannot
use any type of "solid" media (wire, fibre, string and Dixie
cups, etc.), we have decided to look into using Gunnplexers.
I understand that there is a book (unfortunately no longer in
print) called the "Gunnplexer Cookbook" by Robert Richardson
(W4UCH/2) that has some notes on using Gunnplexers for all sorts
of things. Has anybody seen a copy of this book, knows where I
can get a copy, or has a copy to sell? Also, does anybody have
any experience with using Gunnplexers for anything at all?

              Thanks in advance,

                        Ed Morin (WB7UBD)

E-mail   Snail-mail

Ed Morin Tektronix, Inc.
...decvax!tektronix!azure!edm Ed Morin Del. Sta. 92-569
(503) 629-1742 P.O. Box 4600
Beaverton, OR 97075

From -4571064191664831022
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef34332c422bff68
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-09 18:32:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site sri-unix.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!oliveb!hplabs!sri-unix!larson
From: larson@sri-unix.ARPA (Alan Larson)
Newsgroups: net.ham-radio
Subject: Re: .95 multiple factor for dipoles.....
Message-ID: <196@sri-unix.ARPA>
Date: Wed, 9-Oct-85 21:32:37 EDT
Article-I.D.: sri-unix.196
Posted: Wed Oct 9 21:32:37 1985
Date-Received: Sat, 12-Oct-85 17:48:46 EDT
References: <3220@teklabs.UUCP>
Organization: SRI, Menlo Park, CA.
Lines: 9

Guess again. Perhaps your next guess could account for why a 3/2
wavelength antenna is (462*2.95)/freq.

The .95 factor is for what is sometimes called 'end effect'. There
are capacitive effects seen at the ends of the dipole that make it
seem electrically longer than it is. The .95 is a correction for
that, so that it will come out to the right frequency.

     Alan, wa6azp

From 403923919038749035
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e17d530b0d0a7808,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-10 06:16:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Additional WWVB info from K9EUI
Message-ID: <20894@mgweed.UUCP>
Date: Thu, 10-Oct-85 09:16:52 EDT
Article-I.D.: mgweed.20894
Posted: Thu Oct 10 09:16:52 1985
Date-Received: Sat, 12-Oct-85 16:52:06 EDT

Organization: AT&T Information Systems - Montgomery Illinois
Lines: 35

SInce there were several people interested in WWVB, here is some additional
info that was asked for.

Publications regarding the use of WWV(B)'s transmissions and data regarding
them is available in several publications from the National Bureau of Standards:

1) NBS Special Publication #432
   NBS time and frequency dissemination services

2) Technical Note #379
   Standard time and frequency: its generation, control,
   and dissemination from the national bureau of standards
   time and frequency division

3) "Some statistical properties of LF
    and VLF propagation" by D.W. Allan
    and J.A. Barnes

To obtain these documents, write to:

    Frequency-time Broadcast Services Section
    Time and frequency division
    Institute for basic standards
    National Bureau of Standards
    Boulder, Colorado 80302

If Phil Biehl, Greg - WA9WUM, and Tom - WA7NJK, or any others are interested
in my circuits for my receive setup, send me your addresses and I will mail you
copies of what I use.

Bob K9EUI

From -5534493431679662485
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef34332c422bff68
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-10 18:54:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Re: .95 multiple factor for dipoles.....
Message-ID: <635@petrus.UUCP>
Date: Thu, 10-Oct-85 21:54:11 EDT
Article-I.D.: petrus.635

Posted: Thu Oct 10 21:54:11 1985
Date-Received: Sat, 12-Oct-85 21:22:52 EDT
References: <3220@teklabs.UUCP> <196@sri-unix.ARPA>
Organization: Bell Communications Research, Inc
Lines: 14

> The .95 factor is for what is sometimes called 'end effect'. There
> are capacitive effects seen at the ends of the dipole that make it
> seem electrically longer than it is. The .95 is a correction for
> that, so that it will come out to the right frequency.

The speed of light in air is neglegibly smaller than the speed of light in vacuum. Besides capacitance seen at the ends, dipoles are made from wire with finite diameter and this also has the effect of lengthening the dipole electrically. This effect is usually small at HF, but can be pretty significant at VHF and above. It also affects the feedpoint impedance.

See the 1985 ARRL Handbook, page 17-3.

Phil

From 5948662399653351931
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ee74d3e03752e923,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-11 08:15:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ulysses.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ucbvax!ulysses!wmbr
From: wmbr@ulysses.UUCP (W. M. Brelsford)
Newsgroups: net.ham-radio
Subject: DX info (cw)
Message-ID: <1120@ulysses.UUCP>
Date: Fri, 11-Oct-85 11:15:18 EDT
Article-I.D.: ulysses.1120
Posted: Fri Oct 11 11:15:18 1985
Date-Received: Sat, 12-Oct-85 20:10:29 EDT
Distribution: na
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 5

Thursday (10/10) evening: DJ9ON/S9 7001.5 at 0030Z (with 7 kHz pileup!),
and A92EM 7001 at 0100Z.

Bill Brelsford K2DI
ulysses!wmbr

From 4517297023091331056
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e484bb9364b5fbe8,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-10-11 09:28:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!ucbvax!ucdavis!lll-crg!
seismo!brl-tgr!tgr!gauthier@JPL-VLSI.ARPA
From: gauthier@JPL-VLSI.ARPA
Newsgroups: net.ham-radio
Subject: NEW OPEN DATA BANK
Message-ID: <2058@brl-tgr.ARPA>
Date: Fri, 11-Oct-85 12:28:24 EDT
Article-I.D.: brl-tgr.2058
Posted: Fri Oct 11 12:28:24 1985
Date-Received: Sun, 13-Oct-85 04:43:13 EDT
Sender: news@brl-tgr.ARPA
Lines: 30

THERE IS A NEW OPEN DATA BANK ON THE AIR.

IT CONTAINS RADIATION EFFECTS DATA FOR TOTAL DOSE AND SINGLE EVENT UPSET (SEU)
TESTS CONDUCTED FOR NASA AND DOD.

IT IS EASY TO OPERATE.

PHONE   818-354-5125

NAME   RADATA

PASSWORD READ

PROT: 8 BIT
          1 BIT STOP
          NO PARITY

          AUTOMATIC 300 OR 1200 BAUD

PLEASE FEEDBACK ANY COMMENTS OR PROBLEMS. THE DATA BANK IS NEWLY ON THE
AIR AND WE WOULD LIKE TO GET ALL THE BUGS OUT...IF THERE ARE ANY.

QUESTIONS OR INFO CONTACT:

MIKE GAUTHIER
JET PROPULSION LABORATORY
818-354-2126
GAUTHIER@JPL-VLSI.ARPA

From -7393048263161245196
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,caf51414bc817bb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-11 12:23:12 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!tekcrl!teklabs!rafaeld
From: rafaeld@teklabs.UUCP (Rafael De Arce)
Newsgroups: net.ham-radio
Subject: Guess what! I f@#ked-up (again).
Message-ID: <3226@teklabs.UUCP>
Date: Fri, 11-Oct-85 15:23:12 EDT
Article-I.D.: teklabs.3226
Posted: Fri Oct 11 15:23:12 1985
Date-Received: Mon, 14-Oct-85 03:50:10 EDT
Organization: Tektronix, Beaverton OR
Lines: 15

Yes, yes... I said that the 0.95 fudge factor used to calculate the length of
a dipole was due to a shift in the speed of light (electromagnetic propogat-
ion) traveling thru air.

Well, I was wrong. Dead wrong!

I spoke with a new guy in our research group here at Tektronix and he has
shown me the folly of my beliefs. He even gave mathematical proof that the
fudge factor comes from END EFFECTS. Not speed shifts. (By the way, the speed
shift is very minor.)

So if anyone wants to flame on this one... forget it! I beat you to the punch.

Using the famous words of a politician cought off guard: `I know that!'

From -8646184756247181431
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,489279221416a134,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-11 18:43:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA (Keith Petersen)
Newsgroups: net.ham-radio
Subject: Info-Hams mailer advisories
Message-ID: <2075@brl-tgr.ARPA>
Date: Fri, 11-Oct-85 21:43:15 EDT
Article-I.D.: brl-tgr.2075
Posted: Fri Oct 11 21:43:15 1985
Date-Received: Mon, 14-Oct-85 06:19:28 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

PLEASE do not forward mailer advisories that messages have not been

delivered but the mailer will try for another 2-3 days. Only the
final rejection where the message is returned in its entirety, please.

--73, Keith W8SDZ <INFO-HAMS-REQUEST@SIMTEL20>

From 7815617751997791464
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,84931305e18cb2c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-12 10:07:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!acardenas.ES@Xerox.ARPA
From: acardenas.ES@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Quality of ICOM radios
Message-ID: <2089@brl-tgr.ARPA>
Date: Sat, 12-Oct-85 13:07:56 EDT
Article-I.D.: brl-tgr.2089
Posted: Sat Oct 12 13:07:56 1985
Date-Received: Tue, 15-Oct-85 04:26:14 EDT
Sender: news@brl-tgr.ARPA
Lines: 21

Tom...

I needed repairs on my Icom IC245 and after three attempts with
ICOM-Washington, one trip to Icom-Texas repaired the problem.

Apparently the problem was built-in... foil lifting from the PWBA! The
repair was called a "jumper-job"... It cost me $65 plus time and
postage. I feel an honest company would have stood behind the product
and repaired the problem without cost.

Much like the issue with the Kenwood VHF Power Modules... If the arrl
really had it's stuff together, they would have brought a class action
against Kenwood on behalf of all American Radio Operators... A
strong message to all ham radio manufactures that we are fed up with
poor design/engineering and won't take it any more!

Tony Cardenas
WA6IGJ
QA Auditor,
6085 Project.ES

From -6599089155172224304
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d4828bb7fde2d50d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-12 10:36:41 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
FAC0395%UOFT01.BITNET@WISCVM.ARPA
From: FAC0395%UOFT01.BITNET@WISCVM.ARPA (Joe Feustle)
Newsgroups: net.ham-radio
Subject: DX
Message-ID: <2090@brl-tgr.ARPA>
Date: Sat, 12-Oct-85 13:36:41 EDT
Article-I.D.: brl-tgr.2090
Posted: Sat Oct 12 13:36:41 1985
Date-Received: Tue, 15-Oct-85 04:26:26 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

40 meters was spectacular this morning in Toledo, Ohio. In
addition to a large number of VK's, FT8XA (Kerguelen) was 579
long path at 1230Z. QSL via F6FYD. Good dx and 73.

N8AAT

From 7517395269472806238
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c51aa788bd851637,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-13 11:29:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!tektronix!reed!nsc-pdc!
austin@UW-BEAVER.ARPA
From: austin@UW-BEAVER.ARPA
Newsgroups: net.ham-radio
Subject: Thevinin/Norton equivalents
Message-ID: <2099@brl-tgr.ARPA>
Date: Sun, 13-Oct-85 14:29:43 EDT
Article-I.D.: brl-tgr.2099
Posted: Sun Oct 13 14:29:43 1985
Date-Received: Tue, 15-Oct-85 05:47:49 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

Thanks to everyone for all the replies to my previous posting. Many
of you answered (correctly) that the boxes are indeed electrically
equivalent, but the heat generated by current flowing through the
resistor will cause the Norton box to be warm. I think Jonathon E.
Quist (ihnp4!laidbak!jeq) had the best summary. In addition to the one
box being warm, he proposed suspending both boxes by a thread. The
norton box will align itself with the Earth's magnetic field!

                    Thanks again, Austin Mack

From -5733494069572984551
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a7e92e3fd244c124,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-13 18:39:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: W5YI report volume 7, no. 20
Message-ID: <249@inuxi.UUCP>
Date: Sun, 13-Oct-85 21:39:40 EDT
Article-I.D.: inuxi.249
Posted: Sun Oct 13 21:39:40 1985
Date-Received: Wed, 16-Oct-85 06:11:10 EDT
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 394

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    ::                              ::
    ::  T H E   W 5 Y I   R E P O R T  ::
    ::                              ::
    ::      D i t s   &   B i t s     ::
    ::                              ::
    ::      Vol 7 #20 --  10/15/85    ::
    ::                              ::
    ::    HamNet Electronic Edition   ::
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In this issue:

- A Special Report on Broadcast Use of Amateur Radio

HamNet thanks Fred Maia, W5YI, for permission to excerpt this Electronic Edition of his W5YI Report. The full ten-page biweekly newsletter is available by mail for $21 per year from Fred at Dept. C, PO Box 10101, 75207. Samples available for a 2 stamp large SASE.

: :

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FCC-Novice Study Guide	$3.00 + $1.00 Postage
FCC-Novice Element 2 Test	$1.00 + $0.50 Postage
FCC-Tech/General Study Guide	$5.00 + $1.50 Postage
FCC-Advanced Study Guide	$5.00 + $1.50 Postage
FCC-Extra Class Study Guide	$5.00 + $1.50 Postage
FCC Part 97 Rules Book	$3.00 + $1.50 Postage

: :

Note: Would you like to become a Volunteer Examiner under The W5YI Report program? If so, please send a copy of your Extra Class license, the following statement, and an SASE to:

W5YI - VEC - Dept. C
PO Box 10101
Dallas, TX 75207

You will also receive a booklet on how the Volunteer Examination program operates and how to go about giving tests. A certificate (optional) is also available for $1.00. Details and accreditation materials will be sent to you within a two week period. Include the following statement with your VE request:

"I am a currently licensed Extra Class amateur radio operator and wish to be a Volunteer Examiner. I have never had my station or operator license revoked or suspended. I do not own a significant interest in nor am an employee of any company or entity engaged in making or distributing amateur radio equipment or license preparation materials. My age is at least 18 years old."

: :

Do you have Amateur Radio news to contribute to The W5YI Report? If so, please call (817) 461-6443 and leave a message on Fred's recorder!

: :

o Broadcast Use of Amateur Radio - Mexico City

To what extent can amateur radio be used by broadcasters during an emergency? That is really the big amateur radio story to come out of Mexico City. Powerful tremors rocked the world's second most populated city on the morning of September 19th downing phone lines and knocking out long distance communications.

Quickly reacting to the disruption in commercial communications, the news media for the first time established logistical radio circuits right in the middle of the ham bands. They said the "new rules" allowed

it. Radio and television news correspondents and anchors converged on Mexico City... their travel and support coordinated on amateur radio by broadcast hams.

Journalists, concerned with only one objective, reporting the news and getting their people and equipment in and out of Mexico City, were annoyed with other amateurs interfering with their transmissions. Broadcasters more or less took over the ham bands. Media people are very aggressive and do whatever it takes to report the news. As a mass, ham operators were completely confused!

Angry amateurs wanted to know "How can this legally happen?"..."Doesn't the FCC forbid news gathering and transacting business on amateur radio?" They heard of 'new rules' from transmissions that they monitored but didn't know what they were. My phone rang off the hook... "What did I miss? Why doesn't the amateur radio community know about them... Why didn't you report them?" ... You can use ham radio for reporting an emergency, but you can't use it to report on an emergency. When did that change? Just take a listen to twenty meters... you won't believe it!"...and on and on! Quite honestly, it caught us by surprise, too.

While I did make a couple of phone calls before the last issue went to press, there wasn't time then to investigate the broadcast use of ham radio in detail. One thing became apparent. I wasn't the only one getting complaints. The FCC got them by the dozen.

HISTORY: BROADCAST USE OF HAM RADIO

Nearly seven years ago the National Association of Broadcasters (NAB) filed a petition seeking to allow CBers and amateurs to transmit emergency and public safety information for broadcast and broadcast related purposes.

The Commission ruled (on March 15, 1979) that amateurs were prohibited from participating in these communications... no exceptions. CB, on the other hand, could be used for news gathering - although not for broadcasting to the public - since "business" could legally be conducted there.

In 1982, Congress modified Section 605 of the Communications Act to eliminate the statutory prohibition on the unauthorized interception of amateur and CB radio transmissions. In a sentence, amateur communications were no longer to be considered private. Section 605 was redesignated Section 705 in 1984.

THE GRENADA INVASION NEWS BLACKOUT

Many questions arose during the United States invasion of Grenada in October of 1983 concerning broadcast use of amateur radio. The media was prevented from covering the military action by a Department of Defense news blackout. Newsmen were herded onto nearby Barbados Island and prevented from going to Grenada. They weren't happy.

The only news link as to what was going on in Grenada came from a medical student who happened to be a ham operator. He reported the invasion to the world from under a table at the medical school campus. Broadcasters, starving for news, began reporting and rebroadcasting his transmissions. The FCC issued cautioning bulletins as to what the media could and could not do on amateur spectrum.

COMPREHENSIVE REVIEW UNDERTAKEN

In light of the uncertainty about broadcast use of amateur radio, the FCC adopted a Notice of Proposed Rulemaking on July 12, 1984. The Notice set forth specific proposals for eliminating restrictions and procedures with respect to rebroadcast activity and for rewriting portions of the amateur rules to clarify the Commission's policy with respect to use of amateur facilities for broadcast purposes.

Up until this point, broadcasters had to obtain permission from the station licensee and the FCC before personal radio transmissions could be rebroadcast in the media. Amateurs weren't allowed to engage in any form of broadcasting to the public, but could give rebroadcast consent provided that the transmissions did not contain any reference to the airing. Broadcasters were precluded from interacting with ham operators since Part 97.114 prohibits use of an amateur station for third party communications involving compensation or business.

JUST WHAT ARE 'THE NEW RULES'?

On June 7, 1985, the FCC finally released their ruling entitled "Rebroadcasts of Transmissions of Non-Broadcast Radio Stations." It was printed in the June 18th Federal Register (...pages 25241 to 25247 if you want to read it at your public library). We reported on it in our July 1st issue.

It set forth the following rule changes:

(1.) - The FCC eliminated the prohibition on rebroadcasts of Personal Radio Service communications stating that they "were sensitive to the First Amendment rights of broadcasters and do not wish to impose any regulation that might necessarily restrict broadcasters access to information sources."

(2.) - The FCC was concerned in 1984 that their amateur rules "might be insufficiently specific with respect to (their) intent that they prohibit all activities involving use of amateur stations for broadcast purposes." They proposed to "resolve this by rewriting pasts of the amateur rules and including a specific prohibition on the use of amateur stations for broadcast news gathering and other program production purposes."

Two powerful broadcast organizations, the National Association of Broadcasters (NAB) and the Radio-Television News Directors Association (RTNDA) supported bona fide news event gathering by amateur radio when other telecommunications facilities were not available or inadequate.

NAB membership includes more than 4,500 commercial radio stations, 800 television stations and the major commercial broadcast networks. RTNDA is a professional journalism organization of more than 2,000 news directors and others involved in supervising, reporting and editing news programs. Both groups are very well funded.

The ARRL opposed their position saying it was overly broad and inconsistent with the noncommercial nature of the amateur radio service.

THE NEW AMATEUR RULES - PART 97.113

The final FCC amateur rules clearly prohibited use of amateur stations for broadcast news gathering or production as originally proposed. Part 97.113 was rewritten to make this crystal clear. There were no exceptions! The FCC said in new Part 97.113 that...

(a.) An amateur station shall not be used to engage in any form of broadcasting, that is, the dissemination of radio communications intended to be received by the public directly or by intermediary relay stations...

(b.) An amateur station may not be used for any activity related to program production or news gathering for broadcast purposes.

(c.) An amateur station shall not retransmit programs or signals emanating from any class of radio station other than amateur except for emergency communications which were redefined by the Commission to ensure against any misinterpretation.

The redefinition of "Emergency Communication" (Part 97.3(w) is "A non-directed request for help or a distress signal directly relating to the immediate safety of human life or the immediate protection of property." The key word is non-directed. It was a very narrow and clear definition.

PARAGRAPH 22 OF THE FCC ORDER...

The FCC acknowledged, however, that broadcasters had sought a much broader application of amateur radio to broadcast purposes. The RTNDA and the NAB wanted to use amateur radio circuits when commercial facilities were not available. Ham operators...and communications...are always readily available. There are few remote locations where a ham station is not already set up and operational. Broadcasters wanted to use them.

The FCC decided not to provide for any "unnecessary exceptions in the amateur rules which could needlessly encourage unauthorized broadcast related amateur transmissions." At least that is what they said in one portion of the Order...

THE BROADCAST LOOPHOLE EMERGES...

In another, the FCC said RTNDA's needs could be accomodated by a "rule

of reason." While never appearing in the written amateur rules, the Commission wrote in paragraph 22 of their Order that...

"Conveying news information directly relating to an unforeseen event which involves the safety of human life or the immediate protection of property falls within this rules of reason, if it cannot be transmitted by any means other than amateur radio because of the remote location of the originating transmission or because normal communications have been disrupted by earthquake, fire, flood, tornado, hurricane, severe storm or national emergency."

The Commission further added that "We believe acceptable uses of amateur radio in emergencies are governed by traditional common sense interpretations..."

RTNDA AND NETWORKS INTERPRET RULES

When broadcasters received the new rules last June, they took particular note of paragraph 22. Here was a loop-hole in the ruling. The RTNDA's legal counsel, Larry Scharff of the Washington law firm of Pierson, Ball & Dowd, put out a "Special Report" in August that was very widely distributed. Every newsroom across the country got it.

In it, Scharff said that the FCC's Order was complex when applied to their request for increased journalistic use of ham radio during an emergency. The RTNDA published paragraph 22 of the Order in their Special Report. While acknowledging that the FCC generally reinforced its rules prohibiting ham radio stations being used for broadcast purposes - the RTNDA opinion to news broadcasters said the paragraph...

(1.) - "...went beyond its new non-directed 'distress call' emergency communications definition to include transmitting news information during a disaster when normal channels have been disrupted."

He was right! While paragraph 22 used the word "emergency", it also related it to "conveying news information directly related to an unforeseen event..."

(2.) - ...the FCC is not expected to interpret the "safety of human life... the immediate protection of property... or the newly adopted 'emergency' rule" requirements 'narrowly.'

(3.) - "...the FCC condones 'common sense interpretations' of ham radio use in emergencies."

(4.) - "...it is the RTNDA's legal opinion 'that paragraph 22 permits cooperation between broadcasters and ham operators in such instances as immediate post-hurricane or immediate post-plane crash coverage, even when there is no immediate threat to life or property..."

(5.) - News organizations were advised to have their attorneys review the new rules "to determine the extent to which ham facilities may be used for broadcast purposes."

ARRL ASKS FCC TO RECONSIDER

While it never made it to the rules, the League also noted paragraph 22. They filed a Petition for Reconsideration on the emergency communications definition and criticized the "rule of reason" broadcaster/ham operator cooperation approach taken by the Commission. Another amateur, David B. Popkin, W2CC, of New Jersey, also took issue with the ruling.

Both said there were shortcoming in the Order. The League said that clear parameters for amateur operation during emergencies should be stated in the amateur rules. In responding to the two Petitions for Reconsideration, the NAB and RTNDA jointly agreed that a clarification of paragraph 22 was needed.

"NAB and RTNDA believe that in paragraph 22 of the Report and Order, the Commission essentially has adopted our recommendation that amateur radio operators be allowed to cooperate voluntarily with broadcasters for news gathering and reporting purposes when information about extraordinary and significant events cannot be transmitted by other means of communication," their August 26th comments on the Petitions for Reconsideration read.

"The paragraph specifically states that the new rules permit amateur radio cooperation with journalists in certain situations and refers approvingly to examples offered by the RTNDA in its comments in this proceeding, including the use of amateur radio during 'severe weather and seismic conditions, ...tornados after they have struck and severed all other communications systems, ...rapidly moving forest fires ...(and) an airline crash in a remote area.' These definitions clearly go beyond the definition of emergency communication adopted in the Report and Order...'a non-directed request for help or a distress signal'"

NAB, RTNDA REQUESTS CLARIFICATION

The NAB and RTNDA again in August asked that the FCC "adopt, as an exception to the prohibition against business communications and broadcast related activities of amateur radio, a provision that would allow voluntary cooperation between an amateur operator and a broadcast journalist for news gathering and reporting when information concerning extraordinary and important news events cannot be transmitted by other means of communications."

The NAB and RTNDA said that "At minimum, the Commission should add a footnote to Part 97.3(w) stating:

> For purposes of amateur radio operators cooperating with the news media in certain emergency situations, a "rule of reason" will apply.

They also added that without further clarification "...that aids the

free flow of information to the public, the Commission's new rules raise serious dum qrocess and First Amendment issues." The NAB and RTNDA again "urged the Commission to adopt rule changes that would permit amateur radio operators to cooperate with journalists for news gathering and reporting purposes when information concerning extraordinary and important events cannot be transmitted by other means of communication."

MEXICO CITY LEVELED BY EARTHQUAKE

All of this... the legal interpretations by the networks and their industry association counsels... the Petitions for Reconsideration... the Comments on them... the RTNDA "Special Report"... was going on between July 1st and the end of August.

On the morning of September 19th, Mexico City was devastated by a terrible earthquake that killed over 5,000... and knocked out most, but not all, long distance communications. Satellite circuits were still available and used to transmit video and telephone communications out of the city.

Freshly armed with all of the high priced legal opinions, reports, and interpretations of what the FCC said in their June Report and Order could be done on the ham bands during an "emergency", the media took matters into their own hands. They established amateur radio logistical and news gathering links which they maintained were legal and specifically provided for. They had been given an inch... they took a mile. In effect, broadcasters "tossed the ball" into the FCC's "court" and have now forced a confrontation.

One thing is known! The Commission never intended to provide for any amateur radio circuits being used for news media support, period! The FCC went to great pains to preclude it. Still, their handling of paragraph 22 remains a mystery.

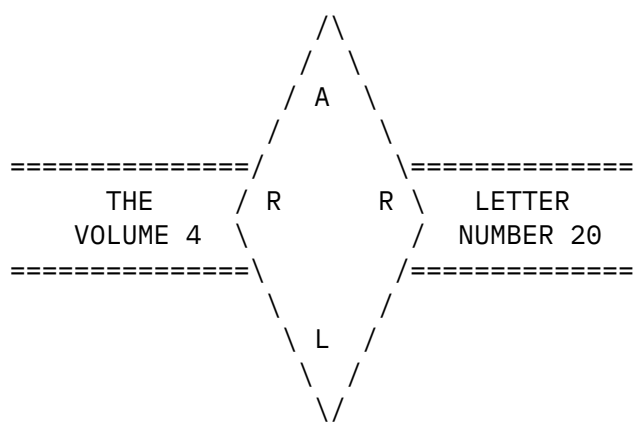
We have talked to officials in the FCC's Private Radio Bureau and they are as surprised as anyone over the extent that amateur radio was used by the broadcasters. "We thought we put an end to all of that (amateur spectrum use by broadcasters)," I was told.

We will have to wait and see how they deal with it. This story is undoubtedly not over!

[End this issue]

From -4216155691828246013
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36558f15b1345014,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-13 18:56:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley

From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL Letter Volume 4, no. 20
Message-ID: <250@inuxi.UUCP>
Date: Sun, 13-Oct-85 21:56:48 EDT
Article-I.D.: inuxi.250
Posted: Sun Oct 13 21:56:48 1985
Date-Received: Wed, 16-Oct-85 06:10:41 EDT
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 353



September 30, 1985

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In this issue:

o IN THE DAYS OF THE COMET

o DXCC, NO-NO

o FCC: YES TO FEDERAL PREEMPTION

o ...and much more!

FCC: "YES" TO FEDERAL PREEMPTION!

"State and local regulations that operate to preclude amateur communications in their communities are in direct conflict with federal objectives and must be preempted." So saying, FCC, on September 16, 1985, adopted a Memorandum Opinion and Order in PRB-1, granting ARRL's request for limited Federal preemption over state and local regulations involving Amateur Radio facilities. In filing its request, the League had acknowledged the need for local authorities to regulate Amateur Radio facilities to the degree necessary to insure the safety and health of community residents. But, ARRL argued, such regulations must not be so restrictive that they could preclude effective amateur communication.

FCC's Opinion picks up the tale with a discussion of local ordinances: "Conflicts between amateur operators regarding radio antennas and local authorities regarding restrictive ordinances are common. The amateur operator is governed by the regulations contained in Part 97 of our rules. Those rules do not limit the height of an amateur antenna but they require, for aviation safety reasons, that certain FAA notification and FCC approval procedures must be followed . . . on the other hand, local municipalities or governing bodies frequently enact regulations limiting antennas and their support structures in height and location, e.g. to side or rear yards, for health, safety or aesthetic considerations. These limiting regulations can result in conflict because the effectiveness of the communications . . . from an amateur station are directly dependent upon the location and the height of the antenna. Amateur operators maintain that they are precluded from operating in certain bands allocated for their use if the height of their antennas is limited by a local ordinance." Examples of restrictive local ordinances were submitted by several amateur operators in PRB-1.

"Other limits are enacted by local jurisdictions," said FCC, "--anti-climb devices on towers, or fences around them; minimum distances of towers from property lines; and regulations pertaining to the structural soundness of the antenna installation. By and large, amateurs do not find these safety precautions objectionable. What they do object to are the sometimes prohibitive, non-refundable application filing fees to obtain a permit to erect an antenna installation and those provisions in ordinances which regulate antennas for purely aesthetic reasons."

FCC touched upon restrictive covenants, noting that such

covenants (contained in the deeds for homes or in apartment leases) are contractual agreements between private parties and, as such, "are not generally a matter of concern to the Commission. However, since some amateurs who commented in this proceeding provided us with examples of restrictive covenants, they are included for information."

Who came out in support of PRB-1? Answer: the American Red Cross, the Department of Defense, and city and county civil defense groups, who agreed that overly restrictive antenna ordinances would adversely affect the success of disaster relief efforts, national security and emergency preparedness operations. The Quarter Century Wireless Association also took a strong stand in favor of limited federal preemption.

On the adversarial side, subdivision associations, the National Association of Counties (NACO), American Planning Association (APA) and the National League of Cities (NLC) were opposed to federal preemption. The subdivision associations maintained that amateur installations constitute safety hazards, cause interference to home electronic equipment, and detract from the value of surrounding property. NACO warned that federal intrusion into local concerns of health and
safety would weaken traditional police power and unduly interfere with legitimate activities of the state. APA and NLC maintained that federal and local interests could be accommodated without preemption of local authority.

The Commission took a long hard look at all of this while pro and con parties crossed their fingers. And in the "Discussion" section of the PRB-1 Opinion, the first words touched upon a document important to us all: "When considering preemption, we must begin with two constitutional provisions. The Tenth Amendment provides that any powers which the constitution either does not delegate to the United States or does not prohibit the states from exercising are reserved to the states. These are the police powers of the states. The Supremacy Clause, however, provides that the constitution and the laws of the United States shall supersede any state law to the contrary . . . given these basic premises, state laws may be preempted in three ways: First, Congress may expressly preempt the state law . . . or, Congress may indicate its intent to completely occupy a given field so that any state law encompassed within that field would implicitly be preempted . . . finally, preemption may be warranted when state law conflicts with federal law . . . the situation before us requires us to determine the extent to which state and local zoning regulations may conflict with federal policies concerning amateur radio operators.

"Few matters coming before us present such a clear dichotomy of viewpoint as does the instant issue . . . cities, counties, local communities and housing associations see an obligation to all of their citizens and try to address their concerns . . . at the opposite pole are the individual amateur operators and their support groups . . . [and] aligned with the operators are such entities as the Department of Defense, the American Red Cross and local civil defense and emergency organizations who have found in

Amateur Radio a pool of skilled radio operators and a readily available backup network . . .

"Preemption is primarily a function of the extent of the conflict between federal and state and local regulation . . . we recognize here that there are certain general state and local interests which may, in their even-handed application, legitimately affect amateur radio
facilities. Nonetheless, there is also a strong federal interest in promoting amateur communications . . . upon weighing these interests, we believe a limited preemption policy is warranted. State and local regulations that operate to preclude amateur communications in their communities are in direct conflict with federal objectives and must be preempted.

"Because amateur station communications are only as effective as the antennas employed, antenna height restrictions directly affect the effectiveness of amateur communications. Some amateur antenna configurations require more substantial installations than others if they are to provide the amateur operator with the communications that he/she desires to engage in. For example, an antenna array for international amateur communications will differ from an antenna used to contact other amateur operators at shorter distances. We will not, however, specify any particular height limitation below which a local government may not regulate, nor will we suggest the precise language that must be contained in local ordinances, such as mechanisms for special exceptions, variances, or conditional use permits. [Emphasis added.] Nevertheless, local regulations which involve placement, screening, or height of antennas based on health, safety or aesthetic considerations must be crafted to accommodate reasonably amateur communications, and to represent the minimum practicable regulation to accomplish the local authority's legitimate purpose."

So the preemption issue is not cut and dried. How many towns, villages and cities are there in the United States, with how many properties, how many citizens, how many amateurs in each town? The 11-page document we call PRB-1 is not an instant cure-all for difficulties we face now, nor does it guarantee friendly agreement on the placement of antennas and antenna supports everywhere in future. Yet, FCC feels it has provided a valuable tool in PRB-1. "Obviously, we do not have the staff or financial resources to review all state and local laws that affect amateur operations. We are confident, however, that state and local governments will endeavor to legislate in a manner that affords appropriate recognition to the important federal interest at stake here and thereby avoid unnecessary conflicts with federal policy, as well as time-consuming and expensive litigation in this area. Amateur operators who believe that local and state governments
have been overreaching and thereby have precluded accomplishment of their legitimate communication goals may, in addition, use this document to bring our policies to the attention of local tribunals and forums."

W1AW carried news of the release of PRB-1 within minutes of

its receipt from Washington. November QST will carry its full text -- food for thought, a tool waiting to be used, and recommended reading.

FCC SCUTTLES WAITING PERIOD FOR RE-EXAMINATION

Effective November 8, 1985, FCC has amended the amateur rules to eliminate the 30-day wait before an applicant for an amateur examination may retake a failed examination element. This action, in PR Docket 85-21, is the result of a petition filed by Phil Miller, KB8QX, in 1984. Miller had requested that the waiting period for retaking an amateur exam be reduced from 30 days to 7 days. FCC's Notice of Proposed Rulemaking proposed elimination of the waiting period altogether, and included a proposal to require public announcement only of examination sessions intended for five or more candidates. The extant rule required Volunteer-Examiner Coordinators to publicize all exam sessions.

In its Report and Order on 85-21, the Commission opened with discussion of the retest waiting period. "Commenters favoring complete elimination of a waiting period are of the belief that without a waiting period, amateur applicants would have more incentive to study and retake the examination." The other of the two basic positions was characterized by the Commission as more multifaceted: "Commenters who favor retaining a waiting period before retaking an examination element believe that an interval is necessary to preclude answering the examination questions mechanically or unthinkingly as a result of repetitive rote learning. They do not want a candidate to encounter the same questions on subsequent examinations. They also feel that it would be an undue burden on Volunteer-Examiner Coordinators to prepare new examinations more than once a month, resulting in increased costs. These commenters also oppose the idea of allowing each VEC the latitude to establish a waiting period to suit its own capabilities, stating that it would lead to confusion and loss of program integrity."

ARRL was one of the commenters arguing in favor of retention of a waiting period; it asked for 27 days. The idea behind this reduction by three days was that the 30-day wait often causes a person to miss the next exam where examination opportunities are offered monthly.

The Commission countered that the aim of the 30-day waiting period had not necessarily been that of guaranteeing the integrity of the examination and successful exam candidates. It was, instead, "a carry-over from the days when the Commission administered the examinations. While it may promote conscientious preparation for examinations, its purpose was to conserve Commission resources. If concerns for integrity can be satisfied, we see no need to restrict the remarkably flexible volunteer examination system with outdated prohibitions." The Commission next turned its guns on the question of whether the waiting period ever improved the quality of the knowledge of applicants who had to wait before successful retesting. "There

is no persuasive evidence in the record that an applicant who has waited 30 days between tests will be better prepared for the next test than one who has waited 27 days, or 13 days or 7 days or any other period of time. Thus, we feel that the only circumstance which must be guarded against is the administration of the same questions at the applicant's next examination. Our instructions to the VECs already prevent this from occurring. VECs have been instructed not to use the same set of questions in successive examination sessions. This prevents, for example, Friday test takers from giving advance information to Saturday test takers. It also precludes the possibility of the same questions on reexaminations. Different VECs can and do coordinate examination sessions at different events in the same locality. Since each VEC makes up its own test designs following our algorithm, it is highly unlikely that examination sessions coordinated by two different VECs will contain the same questions . . . we conclude that the public interest will best be served by eliminating the retest waiting period altogether. This decision adds no additional burdens on VECs. They are under no obligation to give tests on demand, to hold sessions on multiple dates, to examine more people than they can plan for or accommodate, to promptly return to a locality for retesting or in any other way to alter their present procedures. Their only obligations are to maximize the number of different examinations in use and to change frequently the questions used. These obligations already exist."

So, retention of the waiting period, any waiting period, was blown out of the water. What about requiring public announcement only of exam sessions intended for five or more candidates? ARRL had opposed the proposal, saying that no examination should be private, i.e., without public announcement -- that unannounced "back room" exams promote abuse or the perception of possible abuse, and that exams should be in the public eye to insure integrity. If the Commission did decide to eliminate the public announcement of exams, said the League, it should be done not on the basis of the number of persons present, but rather on the basis that special exceptions are made for those who are handicapped or who cannot leave their homes because of a disability. The Central Vermont Amateur Radio Club also opposed deletion of the public announcement requirement.

FCC's reply was that no matter where an exam was given, it had to be given by a team of three examiners, each of whom had to be accredited by a VEC. "This circumstance alone is calculated to preclude fraudulent examinations. Nevertheless, in view of the comments, we will continue to require that public announcement of all examinations be given." Recognizing that the number of exam candidates at any one exam session may be limited, FCC will require that public announcements of exams alert the public to any such limitation.

To update your copy of the FCC Rule Book, revise paragraph (a) of Section 97.26 to read:

(a) Each examination for an amateur operator license must be administered at a place and time chosen by the examiner(s). The

number of candidates at any examination session may be limited. Public announcement must be made before all examinations for elements 1(B), 1(C), 3, 4(A) or 4(B).

Paragraph (h) of Section 97.26 is removed and reserved.

PRIBILOF ISLANDS WILL NOT BE A NEW ONE FOR DXCC

On September 17, the ARRL Awards Committee voted 7-0 that the Pribilof Islands not be added to the DXCC Countries List -- this after the DX Advisory Committee had recommended addition of the Pribilofs to the list by a 9-7 vote. Country status was not conferred because the Pribilofs are less than 225 miles away from the Aleutian Islands -- which are part of the "governing area" of Alaska -- and as such were judged to fail the test of DXCC Countries List Criteria Rule 2(a). The "mainland" reference in 2(a) was seen only as clarifying the situations to which the Rule itself applies.

IN THE DAYS OF THE COMET

On October 8, the Earth will pass through the orbit of Comet Giacobini-Zinner (phonetically: "jock-o-benny zinner") only 25 days after the comet's passage. Experts have estimated that this might produce 6,000 to 10,000 meteors per hour. For comparison, we've tended to consider the annual Perseids shower a high producer with its "mere" 40 to 60 meteors per hour.

With the advent of packet radio, we have an excellent opportunity to collect data on the effect of meteor showers on VHF communications. It is suggested that from 0500Z to 2100Z on October 8, packet stations use 28.0985, 50.65 and 145.09 MHz. Send CQ every 10 seconds and your grid square locator. In between, monitor and capture all incoming transmissions. Please send reports to: Wake Digital Communications Group, c/o Ed Stephenson, AB4S, 700 Madison Avenue, Cary NC 27511. A summary and report will be prepared for QST -- Will Harper, K4IWW

EARTHQUAKE IN MEXICO--AND HURRICANE GLORIA Disaster struck Mexico on September 19 when an earthquake measuring 7.8 on the Richter scale, centered 40 miles off the west coast of Mexico, devasted coastal areas and brought down highrises in Mexico City, including hotels and a hospital -- official reports say at least 4000 have died.

One week later, Hurricane Gloria raked the Eastern Seaboard with winds topping 100 mph, and energy outages widespread.

Amateur Radio jumped into the breach in both emergencies -- watch QST for details.

*eof

From 6811124063340305979
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cf576c762e6f528b,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-10-14 08:57:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!YOUNG@MARLBORO.DEC.COM
From: YOUNG@MARLBORO.DEC.COM
Newsgroups: net.ham-radio
Subject: More DX Info
Message-ID: <2120@brl-tgr.ARPA>
Date: Mon, 14-Oct-85 11:57:30 EDT
Article-I.D.: brl-tgr.2120
Posted: Mon Oct 14 11:57:30 1985
Date-Received: Tue, 15-Oct-85 07:13:57 EDT
Sender: news@brl-tgr.ARPA
Lines: 43

40 Meters has been lots of fun lately, with the FT8X station (FT8XA and FT8XB apparently share a station) being workable from Massachusetts both long and short path. There has not been a whole lot going on in the morning, though.

The big news around here is the DL9ON/S9 and DK9DX/S9 (I may have those calls wrong, I'm working without notes) expedition. They have been on 20 CW at 14025, and 20 SSB at 14195 listening 14200-14215. There was some question as to whether they would have permission to operate on the low bands. They have been on 40 meters CW, transmitting at around 7001 and listening up, every evening starting at 2200Z or before. Last night they showed up on 80 meters! I worked them at around 2350Z, and they were gone by 0030Z. Not a very big signal, but I won't complain! They were working transceive on 3501, and went split when the pile-up got bigger.

Also, FT8XB finally showed up on 80. He was transceive on 75 meters, 3795 at around 0100Z a couple days ago. Needless to say, it was a bit of a mess, especially for those of us without beverages...

N7DF/TT8 has apparently moved into his new quarters. He was on 160 meters last night. Or at least the people with the beverages think so, I couldn't hear him. I expect to hear him on 80 meters soon.

Conditions on Sunday were excellent, with 15 meters having a SOLID opening to Europe and Africa. I worked 5X5GK on 15 meters SSB, and ZB2EO (for my sixth band) on 15 meters CW. There was plenty of good stuff on 20 SSB also, including 9X5, ZD7, and D68.

Next week, starting probably on 22 October, there should be a lot of activity from Galapagos, HC8. A group of about 15 operators is setting up for a CQ WW SSB multi-multi. I'm one of the operators. We will have 4 element monobanders on 10, 15, and 20, a short yagi on 40, phased verticals on 80, a short (60 to 80 feet) vertical on 160, beverages, and amplifiers on all bands. Look for us using our USA callsigns portable HC8 on CW before the contest, and as HC8X on SSB during the contest. QSL via the home call for the portables, and via K8CW for the HC8X contest QSOs. We also will try to be active on 10 and 30

meters before the contest. Please stop by and give us a point in
the contest!

Paul Young, K1XM

From 7806172957937987689
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a790a35b84e287b8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-14 11:27:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!jeffr@sri-spam
From: jeffr@sri-spam
Newsgroups: net.ham-radio
Subject: Re: RIT for the HW-8 (Help!)
Message-ID: <2123@brl-tgr.ARPA>
Date: Mon, 14-Oct-85 14:27:04 EDT
Article-I.D.: brl-tgr.2123
Posted: Mon Oct 14 14:27:04 1985
Date-Received: Tue, 15-Oct-85 06:25:19 EDT
Sender: news@brl-tgr.ARPA
Lines: 35

Ade Weiss' address is

c/o Milliwatt Books
833 Duke St., #83
Vermillion, SD 57069

His writeup costs $7.00 (proceeds used to support the
Milliwatt Trophy program). He also has a book out,
"The Joy of QRP: Strategy for Success" which costs
$10.95 pp. I recommend both.

Fred Bonavita writes the QRP column for Worldradio,
and I got his address from the byline on his column.
Unfortunately, his column did not appear this month,
so here is his address from the callbook (hope it
is current !):

Box 12072 Capitol Station
Austin, TX. 78711

His "Hot Water Handbook" costs $5.00, and is well
worth it. I'm at home now, but I think I have an
old copy of Worldradio at work. I'll get back to
you if this address is not correct.

Good luck with your HW-8 ! I certainly enjoy mine,
and also use a (much modified) HW-7 and an Argonaut.

73,
Jeff Rininger
N6MNI

From 7287950405708400189
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2fed48d1fdd77a87,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-14 12:07:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 SMI; site husky.uucp
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!ucbvax!ucdavis!lll-crg!seismo!rochester!ritcv!husky!fab
From: fab@husky.uucp (Rick Booth)
Newsgroups: net.ham-radio
Subject: Quality of Icom radios
Message-ID: <231@husky.uucp>
Date: Mon, 14-Oct-85 15:07:21 EDT
Article-I.D.: husky.231
Posted: Mon Oct 14 15:07:21 1985
Date-Received: Thu, 17-Oct-85 01:41:37 EDT
Organization: Eastman Kodak Company, Rochester, NY
Lines: 15

Tom Boza is not alone in his frustration with Icom and radios
sent back for repair. I have an Icom R-70 that has been back to the
factory at a cost of $100 to replace the main CPU chip. The cost of
shipping and hourly repair charge could make a $200-300 unit almost
a throw away unit if it needs service. My Icom 47-A also has a problem
that I have lived with since I got it last year. The transmit carrier
has a PLL loop whine that is quite noticeable. Icom says they are aware
of the problem but have no fix. I spent $415 for a high quality radio
only to be told that is the way it is and you'll have to live with it.
By the way I also own Kenwood VHF and HF equipment and have no problems
with any of it!

Rick Booth, K2SA
Eastman Kodak Company {allerga,seismo}!rochester!ritcv!husky!fab

From 376842635597304910
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef34332c422bff68
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-14 13:27:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!CRC.DlosLV@Xerox.ARPA
From: CRC.DlosLV@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: .95 multiple factor for dipoles.....
Message-ID: <2126@brl-tgr.ARPA>
Date: Mon, 14-Oct-85 16:27:06 EDT
Article-I.D.: brl-tgr.2126
Posted: Mon Oct 14 16:27:06 1985
Date-Received: Tue, 15-Oct-85 06:26:04 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

And the point 95 factor is only good at one element diameter. Other ratios
of diameter to wavelength change the end-effect factor. ARRL antenna book
is a good source of more info..

     Chuck... W5USJ

From 4161384287397154443
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1f6f17be7b2662b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-14 19:22:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 41
Message-ID: <20989@mgweed.UUCP>
Date: Mon, 14-Oct-85 22:22:30 EDT
Article-I.D.: mgweed.20989
Posted: Mon Oct 14 22:22:30 1985
Date-Received: Wed, 16-Oct-85 04:42:19 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 31

qst de k9eui
hr propagation forecast bulletin nr 41 from arrl headquarters
newington ct october 14, 1985
to all radio amateurs bt

the very low level of solar activity continues. in 24 days
beginning september 19, the solar flux averaged only 67.7, and
never was above 69. only july 1976, in the first month of
solar cycle 21, can match the solar calm of september and
october, to date. a typical result, for this connecticut
observer, is that 14 mhz is almost completely a daylight dx
band. even the old reliable 10 mhz wwv signal is gone by about

0130 utc, until about an hour after sunrise the next morning. the 21 mhz band is marginally useful from mid morning to dusk but mostly to the lower latitudes. only an occasional day provides any propagation on 24 or 28 mhz, and that for only a few hours of north south work. the 10 meter beacons in the range 28.2 to 28.3 mhz come through briefly on the best days, but only those in south america are heard currently.

prospects for the forecast week are for erratic conditions through about october 19. there will be some improvement thereafter, until about the 22nd, and again october 25 to 30. severe geomagnetic disturbances can be expected again in the first few days of november. these will be most troublesome in the northern tier of states and in canada.

there were no visible sunspots reported for the week of october 3 through 9 ar

From -7700741080987769353
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a9c56ddb0447cf4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-15 05:01:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site decwrl.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ucbvax!decwrl!dec-rhea!dec-gumdrp!piermarini
From: piermarini@gumdrp.DEC
Newsgroups: net.ham-radio
Subject: poor service
Message-ID: <839@decwrl.UUCP>
Date: Tue, 15-Oct-85 08:01:25 EDT
Article-I.D.: decwrl.839
Posted: Tue Oct 15 08:01:25 1985
Date-Received: Thu, 17-Oct-85 00:40:51 EDT
Sender: daemon@decwrl.UUCP
Organization: Digital Equipment Corporation
Lines: 13

I have been reading alot lately in this notes file about all the problems people are having with there new Ham gear. well i had been planning to purchase some new gear but am now having secound thoughts.

Should I purchase new gear or just keep my Hallicrafters which have been working fine for me. Sounds to me like the old stuff is still more reliable than the new and easier to fix also.

(boat anchors forever) Paul KA1MWQ

From 7152350763129739062
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6264a23a92007d1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-15 08:03:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Re: Vertical Antenna Recommendations
Message-ID: <252@inuxi.UUCP>
Date: Tue, 15-Oct-85 11:03:05 EDT
Article-I.D.: inuxi.252
Posted: Tue Oct 15 11:03:05 1985
Date-Received: Thu, 17-Oct-85 00:31:39 EDT
References: <2020@brl-tgr.ARPA>
Organization: AT&T Consumer Products, Indianapolis
Lines: 14

> Jim,
> You didn't mention the Butternut Vertical but I would sure recommend it.
> W1BBJ, Bill, Greenwich CT., has his 5BDXCC using one. I also found the
> construction to be rugged. Good Luck.
> 73, Jim NK2M

I second the butternut vertical....i worked 5bwas, dxcc (mixed, ssb,
and cw) with mixed to 175 endorsement, WAC, and did well in several
contests...using the darn antenna from an apartment patio, with NO
ground wires.....I have heard people using them with ground planes,
and their stories are even more successful.

73, Steve Wheatley
KU9C

From -7411164005319570624
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e7ff4ba0be3792e5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-16 00:15:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!
FAC0392%UOFT01.BITNET@WISCVM.ARPA
From: FAC0392%UOFT01.BITNET@WISCVM.ARPA (Len Brady)
Newsgroups: net.ham-radio
Subject: Information for Gareth Howell
Message-ID: <2169@brl-tgr.ARPA>
Date: Wed, 16-Oct-85 03:15:29 EDT

Article-I.D.: brl-tgr.2169
Posted: Wed Oct 16 03:15:29 1985
Date-Received: Fri, 18-Oct-85 20:07:06 EDT
Sender: news@brl-tgr.ARPA
Lines: 11

A couple of weeks ago, Gareth Howell had a note here asking for help with amateur radio emergency procedures. I have some documents I believe will fill his need. Unfortunately, no address for mailing was included, no amateur call was given, and Gareth said he only gets into the net occasionally.

If anyone knows how I can get in touch with him (or if you are reading this, Gareth), please send me the information I need. Many thanks and 73.

Len KF8J <FAC0392@UOFT01.BITNET>

From -8193389139469839247
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,37c123aa2e4be50b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-16 01:57:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site decwrl.UUCP
Path: utzoo!linus!decvax!decwrl!dec-rhea!dec-gycsc1!ora
From: ora@gycsc1.DEC (Ora Jaervinen, CSC Munich)
Newsgroups: net.ham-radio
Subject: Icom IC-735 comments wanted
Message-ID: <858@decwrl.UUCP>
Date: Wed, 16-Oct-85 04:57:49 EDT
Article-I.D.: decwrl.858
Posted: Wed Oct 16 04:57:49 1985
Date-Received: Thu, 17-Oct-85 20:45:36 EDT
Sender: daemon@decwrl.UUCP
Organization: Digital Equipment Corporation
Lines: 15

Having been QRT for over 15 years, I'm planning to (maybe) get active again. The first thing I'll have to get is a decent radio. I don't have a fortune to invest, and have more or less narrowed down my choice to an IC-735. Does anyone have any practical experience with it? I'm also interested in how the 1200 Bd serial port works, the local Icom dealer here (in Munich, Germany) couldn't shed any light on this. My assumption is that you should be able to control the rig similarly to an FT-757.

Or does anyone have any other suggestions? Rigs in a similar price class (at least here) would be TS-430, IC-745 and FT-757. What I need is a medium price (<$1000), preferably computer control (locks out TS-430 and IC-745), good receiver (I live close to a lot of strong AM/SW transmitters), full BK (I'm planning to get into RTTY, AMTOR, packet etc.).

73 de Ora, x-OH4QG, OH2TA, hopefully soon DL???

From 7901303224897202090
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ffaa921030c5a95,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-16 07:04:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: SWLing above 20 meters using a 'ham band only' radio
Message-ID: <682@ihu1h.UUCP>
Date: Wed, 16-Oct-85 10:04:30 EDT
Article-I.D.: ihu1h.682
Posted: Wed Oct 16 10:04:30 1985
Date-Received: Thu, 17-Oct-85 23:43:39 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 54

x

Listening to shortwave utility stations, or "utes", is a fascinating pastime. Although a general coverage receiver is usually required, one can get a taste of the action using ordinary amateur gear.

The 20 meter band coverage on many "amateur band only" transceivers extends to 14.500 MHz, and many non-amateur stations can be heard in the 14.4 - 14.5 MHz region. Although most transmissions are of the Spanish language "smuggler-bootlegger" variety, the following stations have been identified:

14.4540 CLP33_____Cuba: Cuban embassy, test msg, cw 10/15/85 @ 1838Z
[Addis Ababa, Ethiopia] (B. Parnass)

14.4550 call?_____US: NASA, Nationwide Tracking Net
[location?] (magazines)

NA4XAR____US: NASA, barge Orion calling NASA barge Poseiden during landing of Space Shuttle Atlantis on its first military mission, usb, 10/7/85 @ 1715Z
[location?] (B. Parnass)

P8W_______US: Navy, anti-drug smuggling network of aircraft and maritime stations, one station reported it boarded and seized a 60' small craft "by authority of Home Base", net seemed to be watching boats in an undetermined area, only tactical calls used, usb, 4/17/85

[location?] (B. Parnass)

14.4577 CIW62_____Canada: Canadian Forces Amateur Radio Network, phone pat
ch with CIS91 and CIS91B, usb
[location?] (B. Parnass)

14.4600 Y7L36_____East Germany: embassy, cw
[Havana] (B. Parnass)

14.4655 KCC97_____US: FAA, scene of accident and command & control net, us
b
[Diamondhead, HI] (govt recds)

KCD72_____US: FAA, scene of accident and command & control net, us
b
[Guam] (govt recds)

KDM48_____US: FAA, scene of accident and command & control net, us
b
[Pago Pago, American Samoa] (govt recds)

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==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 7312148544551759601
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c941af952ca3595,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-16 09:39:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Problems with new rigs - a comment
Message-ID: <21020@mgweed.UUCP>
Date: Wed, 16-Oct-85 12:39:44 EDT
Article-I.D.: mgweed.21020
Posted: Wed Oct 16 12:39:44 1985
Date-Received: Fri, 18-Oct-85 00:45:52 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 20

My own observations on newer ham gear and reliability are that ICOM seems
to have more problems than Kenwood. In our area, there are a LOT of Kenwood
users (430, 830, 930, 2500, and R-1000). One Kenwood
problem I recall locally is the early 2500's had a problem with the LCD
display "washing out". Other than that, one owner of a R-1000 receiver
had to have a small transformer replaced in the DC-DC converter that powers
the display and develops the negative AGC bias. That was in one of about

a dozen R-1000's that are around here.

I have not heard of any problems with any of the Kenwood H-F gear, and there is plenty of it in our area. I heard that early 930's had some problems but later ones were OK. I have a 2500, two R-1000's, the last 450MHz xtal controlled transciever Kenwood made, and a 8 month old 930S. So far the only problem I had was a cold solder in the 450 rig (located with the naked eye).

I have heard of quite a few people having to send their NEW ICOM rigs back.

Bob K9EUI

From -1891108972893318407
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e45845f69c8f91a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-16 09:57:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: ham radio emergency procedures and related matters
Message-ID: <2188@brl-tgr.ARPA>
Date: Wed, 16-Oct-85 12:57:42 EDT
Article-I.D.: brl-tgr.2188
Posted: Wed Oct 16 12:57:42 1985
Date-Received: Fri, 18-Oct-85 21:05:35 EDT
Sender: news@brl-tgr.ARPA
Lines: 29

A friend of mine, Jack Carroll, AB1Z, has written a paper called "Calling In The Hams: A Manual for Public Safety Officials and Public Event Organizers" -- or something approximating that title. Information on obtaining a copy is available from Jack at 275 Evergreen St., Bedford, MA 01730. He may ask for cost of copying and postage if he gets inundated with requests.

Incidentally, I have found that people recognize the term "ham radio" as something different than CB, whereas the seemingly more dignified "Amateur Radio" is more often confused with CB or perhaps pirate broadcasting. I was pleased to note that the newscasters IMMEDIATELY mentioned ham radio as a possible link to Mexico City after the recent earthquake. We are getting some serious recognition these days, usually under the name "ham radio".

A final plug: All you hams out there in Net-land please consider your responsibility to do at least a little public service work from time to time. I used to think helping with parades and boat races was silly, but I have become convinced that (a) it is good PR to preserve our special treatment with regard to spectrum space and (b) it is the best way to shake out the bugs and learn what works and what the problems are in field operations. It's a darn good idea to do your learning when your help is OPTIONAL rather

than when lives hang in the balance and seconds count. Besides, it's fun
to get out and do these things. My advice is: unless you are medically unable
to help out, you should try to participate in AT LEAST ONE public service
operation per year. That's not much to ask of you in return for our precious
spectrum allocations.

73,
John S., W3IKG

From -2055087151999293488
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,95a7382c8b0da4b2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-16 13:01:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site amdcad.UUCP
Path: utzoo!watmath!clyde!cbosgd!gatech!amdcad!jayaram
From: jayaram@amdcad.UUCP (Jayaram Kalpathy)
Newsgroups: net.ham-radio
Subject: Radioing India
Message-ID: <5042@amdcad.UUCP>
Date: Wed, 16-Oct-85 16:01:50 EDT
Article-I.D.: amdcad.5042
Posted: Wed Oct 16 16:01:50 1985
Date-Received: Fri, 18-Oct-85 00:23:57 EDT
Organization: AMDCAD, Sunnyvale, CA
Lines: 14

I have a friend in India who is a ham-radio enthusiast and I
wanted to find out what it takes to start communicating with
him over ham-radio.

Does anybody know:
1) Is it possible to communicate with India over ham ? I'm
   on the west coast of the U.S. near San Francisco.
2) What kind of equipment would I require to establish a
   reliable link ?
3) What does it take to get started ?

Thanks in advance!

Jayaram Kalpathy. ucbvax!amdcad!jayaram

From -8992635163222686545
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a40819f2a75debf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-16 14:42:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!rachiele@NADC

From: rachiele@NADC
Newsgroups: net.ham-radio
Subject: beverages
Message-ID: <2203@brl-tgr.ARPA>
Date: Wed, 16-Oct-85 17:42:53 EDT
Article-I.D.: brl-tgr.2203
Posted: Wed Oct 16 17:42:53 1985
Date-Received: Fri, 18-Oct-85 21:19:41 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

What does the term "beverages" mean? Is this some type of equipment or what?
I have never heard that term before.
Jim
KA3OKP

From -8286914746732391466
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3aa61fe6a67ecf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-16 21:15:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!brosen@BBN-SPCA.ARPA
From: brosen@BBN-SPCA.ARPA (Bruce L. Rosen)
Newsgroups: net.ham-radio
Subject: VLF Antennas
Message-ID: <2207@brl-tgr.ARPA>
Date: Thu, 17-Oct-85 00:15:01 EDT
Article-I.D.: brl-tgr.2207
Posted: Thu Oct 17 00:15:01 1985
Date-Received: Sat, 19-Oct-85 07:39:46 EDT
Sender: news@brl-tgr.ARPA
Lines: 7

I received my new Heathkit catalog today, in which there appeared a new
product: a fairly low-cost VLF converter kit.

I would appreciate references/suggestions as to a suitable receiving antenna
for VLF (10-500 KHz). I understand that loop antennas are popular.

Thanks! Bruce (K1FFX)

From 4416909587102218961
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47a0f26462c6c954,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-17 01:03:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
FAC1154%UOFT01.BITNET@WISCVM.ARPA
From: FAC1154%UOFT01.BITNET@WISCVM.ARPA (James Apsey)
Newsgroups: net.ham-radio
Subject: Language arts
Message-ID: <2209@brl-tgr.ARPA>
Date: Thu, 17-Oct-85 04:03:22 EDT
Article-I.D.: brl-tgr.2209
Posted: Thu Oct 17 04:03:22 1985
Date-Received: Sat, 19-Oct-85 06:36:13 EDT
Sender: news@brl-tgr.ARPA
Lines: 7

Almost as irritating as TVRipOff is the letter group <alot> which
popped up on the screen twice today. Check it out. There is no
such word in English.

Spelling isn't noticed on A3/F3, and it has always been clobbered
on cw. But with the growing use of the printed word on Amateur
Radio these days, spelling becomes more important.

From -1590150245115627870
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,575b1c5562ab2c82,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,575b1c5562ab2c82,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 120a1f,575b1c5562ab2c82,start
X-Google-Attributes: gid120a1f,public
X-Google-ArrivalTime: 1985-10-17 06:24:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site cp1.UUCP
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!umcp-cs!aplvax!cp1!hart
From: hart@cp1.UUCP (rod hart)
Newsgroups: net.ham-radio.packet,net.ham-radio,net.wanted.sources
Subject: IBM PC PBBS SOFTWARE WANTED
Message-ID: <1115@cp1.UUCP>
Date: Thu, 17-Oct-85 09:24:29 EDT
Article-I.D.: cp1.1115
Posted: Thu Oct 17 09:24:29 1985
Date-Received: Sun, 20-Oct-85 09:01:42 EDT
Distribution: net
Organization: C & P Tel. Co., Baltimore, Md.
Lines: 3
Xref: linus net.ham-radio.packet:83 net.ham-radio:2789 net.wanted.sources:1435

I just recently heard that there is a IBM PC Packet Radio Bulletin
Board software package in the public domain. Could someone tell me
how I could go about obtaining a copy. Thanks!

From -8888805378403078077
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a9c56ddb0447cf4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-17 08:19:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!Hardie@MIT-MULTICS.ARPA
From: Hardie@MIT-MULTICS.ARPA (Maj. Douglas Hardie)
Newsgroups: net.ham-radio
Subject: Re: poor service
Message-ID: <2215@brl-tgr.ARPA>
Date: Thu, 17-Oct-85 11:19:45 EDT
Article-I.D.: brl-tgr.2215
Posted: Thu Oct 17 11:19:45 1985
Date-Received: Sun, 20-Oct-85 07:11:06 EDT
Sender: news@brl-tgr.ARPA
Lines: 19

Problems with electronic equipment are not new or confined to any one manufacturer. Frequently I find that problems become bad with a rig when the manufacturer takes short cuts and lowers the safety factors for parts to near zero to reduce costs and increase profits. Designers are always under pressure to keep costs down. Afterall, why use 40 amp diodes in a power supply that only provides 25 amps when 25 amp diodes are much cheaper.

That attitude has always plagued some ham radio manufacturers, even in years past (I remember some Eicho gear very well). The quality of any given manufacturer's gear will change with time, e.g. when I first got my lisense, Heathkits were top quality, state of the art. But in the 70's, they had severe problems with their top price rigs.

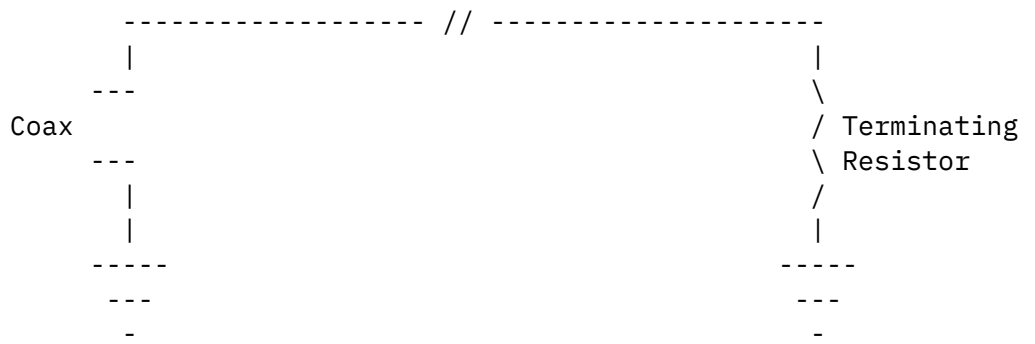
If you have a rig that does what you want and works fine - why get rid of it?

-- Doug WA6VVV

From 1802878080184193228
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a40819f2a75debf
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-17 09:22:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!YOUNG@MARLBORO.DEC.COM
From: YOUNG@MARLBORO.DEC.COM
Newsgroups: net.ham-radio
Subject: Re: beverages

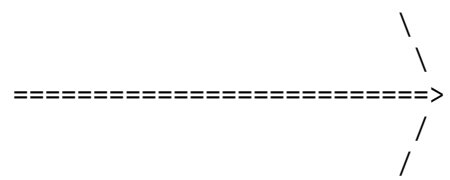
Message-ID: <2218@brl-tgr.ARPA>
Date: Thu, 17-Oct-85 12:22:15 EDT
Article-I.D.: brl-tgr.2218
Posted: Thu Oct 17 12:22:15 1985
Date-Received: Sun, 20-Oct-85 07:14:15 EDT
Sender: news@brl-tgr.ARPA
Lines: 53

A Beverage antenna (named after a person, not a soft drink) is a directional receiving antenna. In it's simplest form it looks like this:



It's input impedance is usually around 300-500 ohms, so a 4:1 transformer is often used to connect to the coax. The wire is not very high; 3 to 10 feet is typical. A good beverage is long. A half wavelength is considered short, a wavelength is probably about the minimum where it is worthwhile to install one. I know of some beverages for 80 and 160 which are 1500 feet long or more!

The directivity is in the direction of the resistor. For the antenna pictured above, it is like this:



The resistor is usually about 470 ohms, although the exact value for best front to back depends on height, length, and ground conductivity. Some people use a potentiometer and adjust it for best results.

The antenna has loss as compared to a dipole, so it is never used as a transmitting antenna. Many radios require an external preamp when used with a beverage. Because the directivity of the beverage cuts down on the noise (remember, for receiving it's not signal strength, but signal to noise ratio that's important) it is possible to copy signals on a beverage which cannot be heard on a dipole or vertical.

Beverages are seldom used above 40 meters, since stations big enough to justify beverages have directive antennas on the higher bands. Even on 40 meters, they are not tremendously popular. But on 80 and 160, I have not heard anything which works as well.

There are people who use unterminated beverages, which are bidirectional, and there are designs for 2 wire beverages where the directivity is steerable. But when most people refer to a beverage, they are talking about the simple 1 wire terminated antenna.

Paul Young, K1XM

From -7405505654192224212
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b003b00a2e3c5989,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-17 09:58:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ELF/VLF thoughts
Message-ID: <21043@mgweed.UUCP>
Date: Thu, 17-Oct-85 12:58:58 EDT
Article-I.D.: mgweed.21043
Posted: Thu Oct 17 12:58:58 1985
Date-Received: Sat, 19-Oct-85 04:44:17 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 25

I have been receiving newspaper articles and other dope on ELF from friends in Michigan for some time. For those that may not be aware of it, The Navy has this BIG transmitter/antenna thing covering many acres of ground to send data to subs. The last I heard, the site was commissioned and is on the air. Its center frequency is 76Hz and uses low speed frequency shift modulation swinging between 72 and 80 Hz.

Obviously, the transmissions are encrypted, but is anyone curious enough about it to attempt to receive it? I was thinking that a "TRF" type receiver would not be at all difficult to build but that the biggest difficulty would be rejecting 60Hz.

I have always been attracted to the idea of playing around on frequencies below 10kHz (where the FCC doesn't care) for short range local communications. I have been on 1750 meters and managed to be heard a mile or so away (with a legal transmitted signal level) using a very innefficient vertical antenna).

I have also thought about trying carrier current transmission on the power line for controlling my 2 meter repeater, a mile away.

Has anyone else messed around with low frequency stuff?

Bob, K9EUI

From -7642938493750465515
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82af42d394f3e028,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-17 13:12:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ecsvax.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!ecsvax!jwb
From: jwb@ecsvax.UUCP (Jack Buchanan)
Newsgroups: net.ham-radio
Subject: Re: New Equipment
Message-ID: <591@ecsvax.UUCP>
Date: Thu, 17-Oct-85 16:12:24 EDT
Article-I.D.: ecsvax.591
Posted: Thu Oct 17 16:12:24 1985
Date-Received: Sun, 20-Oct-85 05:53:30 EDT
References: <868@decwrl.UUCP>
Reply-To: jwb@ecsvax.UUCP (Jack Buchanan)
Organization: UNC-CHAPEL HILL
Lines: 39
Summary: Three out of five rigs back to the factory is poor quality control

In article <868@decwrl.UUCP> daemon@decwrl.UUCP (The devil himself) writes:
>Regarding the purchase of new equipment and reliability of same:
>
>.............. . Its
>unlikely that a transistor or IC will fail in them. But when they do, it's
>back to the factory.
>............... Many of the repairs are glitches that appear
>during the first few days or weeks of operation. Here's some history on my
>gear:
>
   (Summary. Three of five rigs had to go back to the factory. Icom
    was pretty decent about warranty, etc.)

I personally think it should be extremely rare for a rig to have to go back to the factory (really a repair station, since the factory was most likely in Japan). How often does a GE microprocessor controlled clock radio have to "go back to the factory", even the ones made in Malaysia. They are pretty sophisticated, and the problems which seem to happen with these ham rigs seem to have a lot in common with them (I don't see a lot of problems reported with the RF parts of the transmitter circuits.)

>All my problems were caused by defective parts that could only have been
>picked up after realtime use. I doubt if Icom does 100% reliability testing
>on their assembly lines.

I still call this poor quality control. I doubt that GE (I am using this generic ly) does 100% reliability testing on their clock radios either, but 3 of five don't have to "go back to the factory". My own rigs: Heathkit SB-101, about 20 years old. Heathkit HW-12 75 meter single bander, even older. Kenwood

TR-7400A 2 meter rig, pushing age 10, the light bulb has burned out in the S-meter. Kenwood TH-21AT hand held, 2 weeks old, crossing my fingers. None of these has ever been "back to the factory". I have been coveting a new HF rig (such as Icom 735) but all this "back to the factory" stuff is causing me second thoughts.

>73, Paul - WA1OMM
>

73, Jack - K4FRS

From -6758889471878085442
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6a819af1fd22fcca,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-24 11:38:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!cromwell
From: cromwell@pur-ee.UUCP (Robert L Cromwell)
Newsgroups: net.ham-radio
Subject: A VHF question
Message-ID: <3338@pur-ee.UUCP>
Date: Tue, 24-Sep-85 14:38:14 EDT
Article-I.D.: pur-ee.3338
Posted: Tue Sep 24 14:38:14 1985
Date-Received: Thu, 26-Sep-85 06:32:36 EDT
Organization: Electrical Engineering Department , Purdue University
Lines: 17

     We are trying to find an article we saw about a VHF amplifier.
It had interchangeable cavities, which allowed it to easily be put
on different bands. It covered 50, 144, and 220 MHz. (? not
exactly sure of this) It used one power amplifier tube. If you
recall this design, please tell me where it is.

     Thank you very much.

Bob Cromwell KC9RG
pur-ee!cromwell

Electrical Engineering
Purdue University
West Lafayette IN 47907
317-743-0769

From -2694077936911693508
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f83019b45a1950,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-24 14:03:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!mit-eddie!think!harvard!seismo!brl-tgr!tgr!hoffmann%marie@mit-
mc.mit.edu
From: hoffmann%marie@mit-mc.mit.edu (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Back Issues, QST
Message-ID: <1696@brl-tgr.ARPA>
Date: Tue, 24-Sep-85 17:03:56 EDT
Article-I.D.: brl-tgr.1696
Posted: Tue Sep 24 17:03:56 1985
Date-Received: Sat, 28-Sep-85 06:25:16 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

If interested in the following, please
contact Mrs. Frances Florencourt of Arlington, MA.
Tel. 617-643-4410.

She has, from her father's collection, QST as follows:

          November 1931 to
          November 1965   COMPLETE

and many issues between 1965 and 1970.

73, Ron Hoffmann WA2EYC

From 3544697117543842675
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f50e08fa652b1625,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-24 14:32:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!mit-eddie!think!harvard!seismo!brl-tgr!tgr!RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA (Richard Shapiro)
Newsgroups: net.ham-radio
Subject: RCI SWL Digest interference
Message-ID: <1700@brl-tgr.ARPA>
Date: Tue, 24-Sep-85 17:32:00 EDT
Article-I.D.: brl-tgr.1700
Posted: Tue Sep 24 17:32:00 1985
Date-Received: Sat, 28-Sep-85 06:25:30 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

I've long been a fan of Radio Canada International's program
SWL Digest. I used to like to listen 0300 Monday on 5960 kHz but for the last
several weeks there has been strong and rather strange interference in
this time slot (the French broadcast at 0200 generally comes in
loud and clear). Has anyone else noticed this? If yes, do you
know what's causing the interference? And are there other broadcasts
of SWL Digest dependably receivable in northeast US? The parallel
frequency at 0300 Monday, 9755 kHz, is not so dependable...

Thanks --

Richard Shapiro/RSHAPIRO@BBNA

From -2649135245687588183
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11bd51,d78f845ca052e0cb,start
X-Google-Attributes: gid11bd51,public
X-Google-Thread: 151e61,d78f845ca052e0cb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-25 07:55:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site kodak.UUCP
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!rochester!kodak!williams
From: williams@kodak.UUCP (ray williams)
Newsgroups: net.ham-radio,net.ham-radio.packet
Subject: IC22S on 145.01 --- HELP!
Message-ID: <144@kodak.UUCP>
Date: Wed, 25-Sep-85 10:55:56 EDT
Article-I.D.: kodak.144
Posted: Wed Sep 25 10:55:56 1985
Date-Received: Tue, 1-Oct-85 08:32:24 EDT
Reply-To: williams@kodak.UUCP (ray williams)
Organization: Eastman Kodak Co., Rochester, NY
Lines: 6
Xref: linus net.ham-radio:2680 net.ham-radio.packet:65

Sender:Ray Williams (WA2RYT)

I am interested in setting up my ICOM IC22S on 145.01 mhz. The problem is that
the phase locked loop goes west below 145.5 mhz. Has anyone run an IC22S as
low as 145.01, or can someone point me to a reference (QST, etc.) with
info on moving the PLL down.

Please respond via mail -----> {allegra,seismo}!rochester!kodak!williams

From -5310021993220615275
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b7f495f9e8d327e5,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-25 09:47:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site biomed.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
wjh12!biomed!lagasse
From: lagasse@biomed.UUCP (Robert C. Lagasse)
Newsgroups: net.ham-radio
Subject: telephone ringback
Message-ID: <135@biomed.UUCP>
Date: Wed, 25-Sep-85 12:47:29 EDT
Article-I.D.: biomed.135
Posted: Wed Sep 25 12:47:29 1985
Date-Received: Sun, 29-Sep-85 06:22:13 EDT
Organization: Mass. Gen. Hosp. - Dept. Biomed. Engineering
Lines: 13

    Since the phone stuff is deregulated, it seems that there must be a
standardization of several of the telephone functions. My questi85 15:39:09 GMT
References: <433@aero.UUCP>
Lines: 28
Nf-ID: #R:aero:-43300:prism:7700014:000:1342
Nf-From: prism!matt   Sep 24 10:57:00 1985

> /* Written 4:37 pm Sep 19, 1985 by pwv@vax1 in prism:net.micro.pc */
>
> > From: sinclair@aero.ARPA (William S. Sinclair)
> > Is there any way we can put pressure on them to improve their service?
>
> I wish.
>
> /* End of text from prism:net.micro.pc */

Sure there is - stop buying their buggy, substandard, virtually
unsupported pro

From 8676209390677151381
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e98c5f17c31a4bf1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-25 12:14:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!prls!amdimage!amdcad!amd!vecpyr!lll-crg!gymble!umcp-cs!
seismo!brl-tgr!tgr!FRANK@RADC-TOPS20.ARPA
From: FRANK@RADC-TOPS20.ARPA
Newsgroups: net.ham-radio
Subject: N.Y. packet users list
Message-ID: <1717@brl-tgr.ARPA>
Date: Wed, 25-Sep-85 15:14:13 EDT

Article-I.D.: brl-tgr.1717
Posted: Wed Sep 25 15:14:13 1985
Date-Received: Tue, 1-Oct-85 07:08:47 EDT
Sender: news@brl-tgr.ARPA
Lines: 77

Since there has been a suggestion for a listing of packet radio operators by state I thought I would help out by providing a list of operators in New York. Here they are;

Utica-Rome area

AC2I	RICHARD	CAMDEN
WA2BBE	GEN	ILION
KD2HM	OWEN	JOHNSTOWN
WA2AZA	?	UTICA
WA2YNS	?	UTICA
KD2EE	?	UTICA
KA2TSC	JOAN	UTICA
KA2GVI	BILL	UTICA
KA2GVI-1	(DIGIPTR)	
KA2GVI-2	(DIGIPTR)	

SYRACUSE AREA

NA2C	JOHN	SYRACUSE	KA1TY	GEORGE	N.SYRACUSE
N2GB	STEVE	SYRACUSE	AE2K	GEORGE	LIVERPOOL
KA2QJO	RICK	FAYITVILLE	N2DI	GARY	SYRACUSE
N2ACQ	MICK	OSWEGO	KA2ETW	VICTOR	SYRACUSE
WB2WHE	HENRY	SYRACUSE	WB2PIF	HANS	SYRACUSE
K2QCX	TOM	CLAY	KA2CIA	BOB	SYLVAN BEACH
N2AGO	GEORGE	CLEVLAND	WB2QFE	??	OSWEGO
KD2A	KRIS	WATERTOWN			

BINGHAMTON AREA

WA2AAQ	??	ENDICOTT	N2HR	??	JOHNSON CITY
NE2W	ED	BINGHAMTON	WB2LRO	??	OTEGO
WA2MSU	??	ONEONTA	KC2M	??	ONEONTA
WA3WKA	??	PORT DICKENSON	W2OW	(DIGIPTR)	

SOUTHERN N.Y.

WB2EMS	KEVIN	ITHACA	K2VD	MITCH	ITHACA
WB2NVU	??	ITHACA	WA3PWX	ALAN	CANDOR
W2IKF	PAUL	NICHOLS			

ROCHESTER

WB2NBU	DICK	N2GH	DAVE	W2DUC	FRED	KA2ASL	WALT
N2DWL	DAVE	K2YNW	BOB	N2AMK	FRANK	K2PPO	NORM
N2BNE	JOHN	N2EKR	BILL	WA2AAZ (DIGIPTR)			

BUFFALO

W2EUP	GIL	W2ICZ	OLE SYD	KA2OQZ	DAVE	K2NV	TONY
WB2SIB	JACK	K2IMF	DON	KD2FH	JACK	KC2UK	STEVE
KA2VTX	JIM	KA2VTY	DEB	WA2AIV	DON	W2FEY	RICHARD

OTHER (EASTERN N.Y.)

W2DTH	BILL	SCHENECTADY
WB2WHD	??	SCHENECTADY
W2LGF	RUEBEN	LAKE GEORGE
W2IDI	BILL	GLENS FALLS

  This list came from a (somewhat) local packet radio newsletter. Therefore, I can't be 100% certain about the status of all those listed but it should be a good reference for anyone needing information. Personally, I think this information could be very useful and I hope to see lists from other states.

         73's
         Joe - N2EUV

From -1162460452785138967
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,10e2c9617e679a9e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-25 12:42:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2.fluke 9/24/84; site vax3.fluke.UUCP
Path: utzoo!linus!philabs!prls!amdimage!amdcad!amd!pesnta!hplabs!tektronix!uw-beaver!fluke!limey
From: limey@fluke.UUCP (Paul Baldock)
Newsgroups: net.ham-radio
Subject: Any information on German Hams in Space?
Message-ID: <1479@vax3.fluke.UUCP>
Date: Wed, 25-Sep-85 15:42:38 EDT
Article-I.D.: vax3.1479
Posted: Wed Sep 25 15:42:38 1985
Date-Received: Tue, 1-Oct-85 08:09:04 EDT
Distribution: net
Organization: John Fluke Mfg. Co., Inc., Everett, WA
Lines: 9

Does anybody have any information on the upcoming German ham activity from space?

Rumor has it that they will be operating up link on 70cm and down link on 2m F.M., with possible activity on 10m. I have not seen any of this in print though.

KW7Y

From 1508810840877233341
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82c37d94d0fd19a0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-25 15:17:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tektronix!tekcrl!teklabs!rafaeld
From: rafaeld@teklabs.UUCP (Rafael De Arce)
Newsgroups: net.ham-radio
Subject: re: Call for restraint
Message-ID: <3210@teklabs.UUCP>
Date: Wed, 25-Sep-85 18:17:43 EDT
Article-I.D.: teklabs.3210
Posted: Wed Sep 25 18:17:43 1985
Date-Received: Sat, 28-Sep-85 07:17:08 EDT
Organization: Tektronix, Beaverton OR
Lines: 15

Yes! I agree. We all worked for our licenses to communicate with each other not passively easedrop.

Ask your self if you would like someone else listening in on your conversations regardless wether the easedropper knew you or not.

Let's drop this issue and move on to other things.

Case in point... F.C.C. agrees that local government may not zone antennas out. I've been waiting for a decision on this for a while. That ruling is cause to celebrate. Of course, it's got to go thru the Supreme Court before it's offi-cial!

Can someone tell me where I can read an article on this subject?

From -99640942831183917
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public

X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-25 20:03:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 (MC840302); site ecrcvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!
mcvax!unido!ecrcvax!pete
From: pete@ecrcvax.UUCP (Pete Delaney)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <144@ecrcvax.UUCP>
Date: Wed, 25-Sep-85 23:03:13 EDT
Article-I.D.: ecrcvax.144
Posted: Wed Sep 25 23:03:13 1985
Date-Received: Sat, 28-Sep-85 07:44:19 EDT
References: <779@vortex.UUCP> <262@mot.UUCP> <293@unccvax.UUCP> <ssc-bee.372>
Reply-To: pete@ecrcvax.UUCP (Pete Delaney)
Organization: ECRC, D-8000 Muenchen 81, W. Germany
Lines: 15
Xref: watmath net.dcom:1325 net.video:1552 net.ham-radio:3297

Also, the FCC isn't cheap. Looks like the $200,000,000,000 deficit will hit
$300,000,000,000 in just a few years.   Really, see todays Wall Street Jorunal.
Thats only a few hundred thousand per family.
Then there is the un-funded debt; Social Security and Military Pensions.
I've seen government figures indicating it to be about 10 times as large.
Looks like soon the USA will be yet another courpse of a country.
--

Pete Delaney - Rocky Mnt. Unix Consultant Phone: (49) 89 92699-139
European Computer-Industry Research Center   UUCP: mcvax!unido!ecrcvax!pete
ArabellaStrasse 17   UUCP Domain: pete@ecrcvax.UUCP
D-8000 Muenchen 81, West Germany   X25: (262)-45890040262
CSNET:pete%ecrcvax.UUCP@Germany.CSNET   Login: <to be provided?>

From 10783153423986118 53
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e6ee9bc7f3b2178b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-26 09:08:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!YOUNG@DEC-MARLBORO.ARPA
From: YOUNG@DEC-MARLBORO.ARPA
Newsgroups: net.ham-radio
Subject: DX Info
Message-ID: <1741@brl-tgr.ARPA>
Date: Thu, 26-Sep-85 12:08:00 EDT

Article-I.D.: brl-tgr.1741
Posted: Thu Sep 26 12:08:00 1985
Date-Received: Tue, 1-Oct-85 08:06:15 EDT
Sender: news@brl-tgr.ARPA
Lines: 36

If you need Kergulen (FT8X, formerly FB8X) now is a good time to get it.
FT8XA was on 7007 last night (26 Sept) at around 0235Z.
He is a better CW operator than FT8XB, who was on 40 meters
on 21 and 22 Sept.

There has also been a lot of pacific activity in the mornings on
40 meters, around 1100Z. Stations heard/worked include KX6DS, H44IA,
ZL7UW (Chatham), FK8FF, and VK9NM/LH (Lord Howe).

Also, N7ET/DU2 was heard on 7008 working Europeans. He was too weak to
work in Massachusetts, though.

There's also been some Asian activity in the evenings, with UA0BCV
and HZ1HZ coming through between 01:30 and 02:00Z.

As for Africa, the only interesting thing I've heard lately (besides
DL0MAR/9G) was 3V8AL, who was running Europe on 7001 at 21:15Z. I
was able to break the pile-up, and so was K1MEM. He then started to
listen for non-Europe, but I didn't hang around to see how much stuff
he worked.

DL0MAR/9G has been on 14026 at 17:30 to about 19:00, weak into the
U.S. but easily workable. After 19:00 or so he goes to 40 meters,
and tries 80 occasionally at U.S. sunset.

OE7RKH/YK is still active. He's been heard on 20 and 40 meters. He
sends error-free at 55 WPM, quite the CW op. I've worked him on 20,
40, and 80 meters; he has a good signal on all three bands.

Does anyone know what the pile-up on 7005 at 1100Z this morning
(26 Sept) was? There were a lot of JA's and some VK's calling,
but there was too much echo and the station they were calling was
real weak. I only heard one U.S. station calling.

          Paul Young, K1XM

From -5826580290215887522
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,177444f7a322f131,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-26 13:33:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!rachiele@NADC
From: rachiele@NADC

Newsgroups: net.ham-radio
Subject: 30 day waiting period
Message-ID: <1751@brl-tgr.ARPA>
Date: Thu, 26-Sep-85 16:33:22 EDT
Article-I.D.: brl-tgr.1751
Posted: Thu Sep 26 16:33:22 1985
Date-Received: Tue, 1-Oct-85 09:17:39 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

I read a few days ago on this net that the 30 day waiting period is now gone.
Is this true? Is it in effect now? Does that mean I can just keep taking the
general code test over and over until I get lucky?
               KA3OKP
                 Jim

From 8773727719210244458
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b7f495f9e8d327e5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-26 14:45:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-sem.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!brl-sem!ron
From: ron@brl-sem.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: telephone ringback
Message-ID: <405@brl-sem.ARPA>
Date: Thu, 26-Sep-85 17:45:45 EDT
Article-I.D.: brl-sem.405
Posted: Thu Sep 26 17:45:45 1985
Date-Received: Tue, 1-Oct-85 09:17:56 EDT
References: <135@biomed.UUCP>
Organization: Ballistic Research Lab
Lines: 23

>   Since the phone stuff is deregulated, it seems that there must be a
> standardization of several of the telephone functions. My question
> is,.....is there a common method to have a phone ringback as a ringer
> test. I have installed several phones for friends lately, and the only way
> to test ringer function is to have them call a friend and explain what is
> going on. This ringback business used to be a deep dark secret that
> installers would guard with their lives.   Is it still a secret, or is there
> a formula to follow which uses the local phone #? I am in Boston, area code
> 617. Thanks
>
In this area there is a set of magic numbers that vary from exchange to
exchange. The deal is you dial XXX-NNNN where XXX is the magic number
and NNNN is the last four digits of your telephone number. You then get
a dial tone back. Flash the switchhook and you get a medium pitched tone,
hang up and the phone will ring.

Interesting side effect. When I was testing an answering machine, I was doing the ringback thing alot. After a whole evening of doing this, my phone suddenly got flagged "out of order" and I couldn't use it until the next day when someone at the co reset the line (they still sent someone out to the house).

-Ron

From -4844829810362750666
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b076e44da2aa702b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-26 16:00:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!harvard!seismo!brl-tgr!tgr!CLEMENTS@BBNG.ARPA
From: CLEMENTS@BBNG.ARPA
Newsgroups: net.ham-radio
Subject: ARRL DX bulletin 37
Message-ID: <1758@brl-tgr.ARPA>
Date: Thu, 26-Sep-85 19:00:10 EDT
Article-I.D.: brl-tgr.1758
Posted: Thu Sep 26 19:00:10 1985
Date-Received: Tue, 1-Oct-85 09:54:10 EDT
Sender: news@brl-tgr.ARPA
Lines: 45

Hr DX Bulletin Nr 37 From ARRL Headquarters
Newington CT September 19, 1985, Edited by K1BC
To All Radio Amateurs BT

Thanks to KB1BE and the Connecticut DX Association for the following DX information.

ARRL DXCC desk. The ARRL awards committee met on September 17 to consider the country status of the Pribilof Islands. The matter was referred to the awards committee by the DX Advisory Committee which had recommended addition to the list by a 9 to 7 vote. After many hours of studying the voluminous documentation and two hours of in person deliberation, the awards committee unanimously voted, 7 to 0 that the Pribilof Islands NOT be added to the DXCC countries list.

Comoros: Guido, PA0GMM is expected to operate from Grand Comoro Island as D68DX September 17 to 24 and October 1 and 2. He will also run FH/PA0GMM from Mayotte September 26 to October 1. He plans to work 20 meter SSB and CW. QSL to his home call.

Chad: N7DF/TT8 is active on 20 and 40 meters, but will move to a new location September 24 and is expected to work 80 and 160 meters. QSL via K0HGW.

Western Samoa and Tokelaus: ZL1AMO, Ron, is expected to be at 5W1CW around October 12, and then Tokelaus as ZK3, which is a new prefix replacing ZN7.

Papua New Guinea: Jim Smith, P29JS is using P29PNG to help celebrate the independence anniversary of the island. Look for him on 14220 KHz SSB at 0600 UTC and 3795 to 3800 KHz around 1130 to 1200 UTC.

St Martin and St Marteen: Joe, W3HNK, is expected to be at both French FS and Dutch PJ7 September 26 to October 2.

Kermadec: ZL4OY signing ZN8OY to start operations late this month through December 31.

Macao: XX9SP will be operated by KS9P from September 22 to 28.

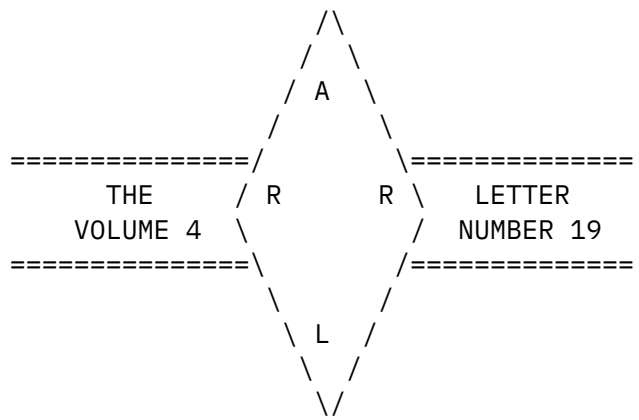
Heard Island Look for VK2BCC as VK0CC beginning at the end of September. AR

From -1176861777890219267
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-26 22:19:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site proper.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!cmcl2!seismo!lll-crg!dual!proper!elric
From: elric@proper.UUCP (elric)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <329@proper.UUCP>
Date: Fri, 27-Sep-85 01:19:46 EDT
Article-I.D.: proper.329
Posted: Fri Sep 27 01:19:46 1985
Date-Received: Mon, 30-Sep-85 00:48:56 EDT
References: <338@nicmad.UUCP> <780@vortex.UUCP> <95@l5.uucp> <435@kitty.UUCP> <>
Reply-To: carl@proper.UUCP (Elric of Imrryr)
Organization: Lunatic Laboratories Unltd.
Lines: 7
Xref: watmath net.ham-radio:3307 net.dcom:1330 net.video:1562

<><><>
Some posted a LONG message under this subject all about HOW to tap a phone

transmission. I saved a copy of that message, but somehow lost it.
It is no longer on the net at our site, could someone please repost it.
  Thanx
Elric

From 6181048223254215191
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e88e3b802e21186,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-26 22:36:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: ARRL LETTER Volume 4, no. 19
Message-ID: <247@inuxi.UUCP>
Date: Fri, 27-Sep-85 01:36:09 EDT
Article-I.D.: inuxi.247
Posted: Fri Sep 27 01:36:09 1985
Date-Received: Sat, 28-Sep-85 08:29:49 EDT
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 360



September 19, 1985

The ARRL Letter is published bi-weekly by the Information Services Department of the American Radio Relay League, 225 Main St., Newington, CT, 06111; (203) 666-1541. Larry E. Price, W4RA, President; David Sumner, K1ZZ, Executive Vice President; Dave Newkirk, AK7M, Editor; Debra Chapor, Circulation Manager.

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In this issue:

o HAMS IN SPACE AGAIN

o FCC ON RADAR DETECTORS

o 902-928 MHz OPENING IMMINENT

o ...and much more!

FLASH! HAMS IN SPACE AGAIN -- NEXT MONTH!

In October, the Federal Republic of Germany will have the first scientific manned space mission of her own: the D1 mission. German science astronauts Dr. Ernst Messerschmid, DG2KM, and Dr. Reinhard Furrer, DD6CF, will carry out experiments on board the Spacelab, carried into orbit by NASA's Space Shuttle Columbia. They'll also operate an Amateur Radio station aboard Columbia -- DP0/SL.

During this Spacelab mission, scheduled to last seven days, startup of Amateur Radio activity is planned for mission day 3, continuing until about 12 hours before touchdown -- this means a stretch of as many as five days during which DG2KM and DD6CF may activate DP0/SL during their free time. As a rough estimation, six shuttle passes, each offering a maximum of 12 minutes of possible contact time, may be expected per day.

DP0/SL's ham-in-space activity will be focused on Europe -- but astronaut-amateurs Messerschmid and Furrer intend to to attempt contacts with other parts of the world, as far as mission parameters and spacecraft flight attitude (among other factors) may permit.

During DP0/SL's operating stint in the sky, calls of responding ground stations will be recorded on tape for post-mission evaluation -- to be confirmed by the Deutscher Amateur Radio Club (DARC) with special QSL cards.

When DD6CF and DG2KM are unable to undertake voice communication via DP0/SL, their rig may be operated as a recording beacon: an automatic CQ would be transmitted, followed by a one-minute listening period during which responses would be recorded on tape, with this cycle automatically repeated. Callsigns identified on this tape will also be confirmed by DARC. The

DP0/SL transceiver may also be operated as a normal beacon: continuous transmission with callsign inserted, but without receiving periods. This mode may be used for VHF propagation measurements.

The Rig Itself

The DP0/SL transceiver is a special development, designed and constructed by BOSCH/Germany according to the D1 Mission specifications, using components from BOSCH's mobile transceiver program. It contains a built-in microcassette recorder. RF power output of the rig is 10 watts; this is reduced to one watt for automatic (beacon) operation. Frequency coverage is 144 to 146 MHz, using F3E (FM voice) and F2A (FM Morse) emissions.

DP0/SL is equipped to receive in the band 430 to 440 MHz. Receiver sensitivity for a 12dB S+N/N ratio is 0.45 microvolts.

Selection of operating frequencies is made from ROM, programmed for 4 VHF transmitting frequencies and 6 UHF receiving frequencies on 25 kHz channel spacing.

And the Frequencies Are...

Channel	Downlink	Uplink
0/	145.450 MHz	437.125 MHz
1	145.475 MHz	437.175 MHz
2	145.550 MHz	437.225 MHz
3	145.575 MHz	437.275 MHz
4	---	437.325 MHz
5	---	437.375 MHz

Ground stations transmit on the uplink since DP0/SL listens there; ground stations listen on the downlink, since DP0/SL transmits there. Uplink and downlink channels may be "mixed and matched" -- for example, downlink Ch 2 (145.550 MHz) might be paired with uplink Ch 1 (437.175 MHz), the resultant pair being termed "2/1."

It's recommended that circularly polarized antennas, adjustable in azimuth and elevation, be used. Maximum tracking velocity to follow Columbia's orbit: approximately 1.5 degrees per second. At least for receiving, manual steering of the antennas is sufficient, since only low-gain antennas (3dB gain) are required to receive signals from DP0/SL.

An effective radiated power (EIRP) of 20dBW is recommended for contacts with Spacelab. This means, for instance, that a 70-cm transmitter with a power output of 10 watts, combined with an antenna providing 10dB gain, would be a good choice.

How DP0/SL May Operate

Astronauts Messerschmid and Furrer may use any of the following operating modes:

1) Ham rig "OFF"
2) Beacon operation with inserted

callsign, no receive

3) Beacon operation with automatic recording of incoming calls. In this mode, the transceiver transmits a CQ in Morse (F2A): "CQ DE DP0/SL RECORD ON TAPE K", followed by one minute of receiving time with automatic recording of calls. Responses to DP0/SL during such operation must be made using F3E (FM voice)

4) Two-way voice QSO operation using F3E

The normal channel pair will be 3/3 (145.575 MHz downlink, 437.275 MHz uplink). In the event of heavy pileups, the astronauts will change their receiving frequency without notice. In such cases, terrestrial stations will have to choose one of six uplink frequencies with equal likelihood of being heard -- reducing the pileup density for the astronauts by a factor of six.

More Information on DP0/SL

At this writing, German stations DF0/VR, DF0/LRK, DK0/UB and DK0/EK will issue daily information on the mission using 2 and 80 meters, but no real-time information service is in place outside Europe. A 20-meter service is a possibility. Closer to home for most ARRL members, W1AW and The ARRL Letter will provide further details as they become available. (tnx DARC)

902-928 MHz BAND OPENING IMMINENT

Remember -- we've got it as of 0001 UTC September 28, 1985. It's available to all radio amateurs under FCC jurisdiction in ITU Region 2 holding Technician class licenses and above. Amateur use of the band must proceed on a secondary, non-interference basis; we must not interfere with and must accept interference from the Fixed and Radiolocation Services, and industrial, medical and scientific (ISM) devices there.

An in-depth report on the how, what and why of the 902-928 MHz band appears in October QST. But now hear this, especially amateurs in Colorado and Wyoming: "In the 902-928 MHz band, amateur radio stations shall not operate within the States of Colorado and Wyoming, bounded by the areas of latitude 39 degrees to 42 degrees North, and longitude 103 degrees West to 108 degrees West. The band is allocated on a secondary basis to the amateur service subject to not causing harmful interference to the operations of Government stations authorized in this band or to Automatic Vehicle Monitoring (AVM) systems. Stations in the amateur service must tolerate any interference from the operations of industrial, scientific and medical (ISM) devices, AVM systems and the operations of Government stations authorized in this band" -- this the text of added Limitation 14 to Section

97.7 of the FCC Rules, in addition to the restrictions on operation and output power imposed in and around the White Sands Missile Range for this band (see the Letter, August 15, 1985); otherwise, the usual restriction of 1500 watts PEP output power applies. Emissions authorized are N0/N, A1A, A2A, A2B, A3E, A3C, A3F, F1B, F2B, F3E, G3E, F3C, F3F, F8E and P0/N.

The interim 902-928 MHz band plan appears in the FCC Rule Book, the 1985-86 Repeater Directory and in the August 29 Letter.

One more thing. Among the ISM devices authorized for use in the band (at 915 MHz) are microwave ovens. This is a broad-as-a-barn-door hint that caution is needed if you're going to be getting close to radiated 902-928 MHz energy in your Amateur Radio pursuits. So -- be careful out there.

LAST CALL FOR 420-430 MHz ABOVE LINE A

We lose a little as we gain 902-928 MHz, as reported in the August 15 Letter: also at 0001 UTC, September 28, 1985, the 420-430 MHz segment is whisked out of the Amateur Service "above Line A." See December 1984 QST for a detailed description of the Line; October 1985 QST carries the story in detail, complete with a map showing the position of the Line.

COURT TOLD OF FCC'S INTEREST IN PRB-1

Federal preemption in amateur antenna and tower matters is of high interest to amateurs anywhere. But especially it is running high in Kentucky. The case of Thernes vs. City of Lakeside Park was to be heard September 19, 1985, in the U.S. Court of Appeals for the Sixth Circuit. The "fact pattern" of the case is as good as any to come along in years: the city denied Thernes' (WM4T) application for a tower simply because amateur towers were not on the list of permitted accessory uses. Thus, the case is a good example of why the Federal Government should establish some degree of preemption in such matters. If PRB-1 were to be successfully completed before the oral argument September 19, it is virtually certain that the amateur would prevail. Without any input from Washington, DC, however, an unfavorable judgment was almost guaranteed.

Energetic work by ARRL's General Counsel and its Washington Area Coordinator got results on August 20. In a letter to the U.S. Court of Appeals, Sixth Circuit, Cincinnati, FCC General Counsel Jack D. Smith referred to Case No. 84-6009, John Thernes v. City of Lakeside Park, Kentucky, et al.:

"This office is informed that the above-referenced case, calendared for oral argument on September 19, 1985, concerns municipal regulation of amateur radio antenna structures.

"The Federal Communications Commission presently has before it a request for declaratory ruling delineating the limitations of local zoning and other state regulatory authority over federally-licensed radio facilities, File Number PRB-1. The staff has completed its analysis of the comments, and it is anticipated that the Commission will take some action by the fall.

"You may wish to consider the pendency of this proceeding in

establishing the Court's own procedural timetable in Case No. 84-6009."

Aside from any effect it may have in the Thernes case, should positive action on PRB-1 be a cause for immediate celebration everywhere? Not necessarily. The preemption issue is a labyrinth, and variations in local law abound. How PRB-1 should be viewed at this point was perhaps best stated at Minute 27 of the ARRL Board's July meeting in Hartford: "It should be regarded as providing a useful legal tool, rather than a panacea to solve all problems."

FCC SAYS IT DOESN'T REGULATE SPEED-RADAR DETECTORS

In a Public Notice dated August 1, 1985, FCC reminds us that they're not in the radar-detector-regulation business:

"Traffic radars used by police to enforce highway speed limits are transmitters. As such, they are type-accepted and authorized by the FCC under Parts 2 and 90 of its rules. These rules permit any state or local government with an FCC license for its radio communications system to operate speed radars without getting separate licenses for them. The radar frequencies and number of units do not have to be shown on the license itself.

"FCC rules spell out how radars may be operated as transmitters but not how they may be used by police to measure vehicle speeds. The FCC has no jurisdiction over the calibration of radars or over the reliability of their readings.

"[The U.S. Department of Transpor-tation's National Highway Traffic Safety Administration (NHTSA) is the federal agency concerned with the enforcement of highway speed limits and with the operation of police radars as enforcement tools. For more information, write to NHTSA's Office of Enforcement and Emergency Services, 400 Seventh St., S.W., Washington DC 20590. Or call the state or local police department for information about how radar is used in a particular area.]

"Radar jammers are transmitters tuned to interfere with ('jam') a radar signal. The intentional use of jammers is considered 'malicious interference,' which is strictly prohibited by the Communications Act of 1934, as amended by FCC rules. Anyone using a jammer risks such penalties as losing any FCC licenses, paying a fine, or even facing criminal prosecution.

"Radar detectors are radio receivers popularly known for being tuned to receive police radar signals...[for the purpose of] warn[ing] motorists of radar 'traps' ahead of them. In this regard, the FCC regulations pertaining to receivers are limited in scope and, as currently drafted, do not address the subject of radar detectors. The use of radar detectors by members of the public, therefore, does not constitute in itself a violation of FCC rules. The FCC is aware that other agencies have addressed the subject of radar detectors, but the FCC has not, to date, and has no future plans to address the activities of these other agencies.

"In summary, the FCC regulates transmitters, but exercises only limited jurisdiction over receivers, with the subject of

radar detectors not being addressed in the FCC Rules. From a policy standpoint, the FCC favors authorizing the use of radio, including radars, to promote safety on the public highways and elsewhere."

[Editor's comment: note well the warning concerning the possible loss of any FCC licenses if you're cited for radar jamming. We understand, for instance, that this has already come up in cases of "pirate" broadcasters who were also licensed as radio amateurs. Understandably, FCC takes the position that being licensed to operate a transmitter in one service implies that you "know better" than to operate an illicit transmitter in another.

[In some instances, operation of a VHF or UHF transceiver in the vicinity of a police radar can result in erroneous estimations of vehicle speed. ARRL Hq. can provide a letter of assistance in such cases where police radar may have been at fault because of VHF/UHF interference. (If you were speeding, though, better 'fess up!)]

EXECUTIVE COMMITTEE DELIBERATES ON DOCKETS 85-215, 85-196, 85-231 -- AND PRB-2

The ARRL Board's Executive Committee met in Scottsdale, Arizona, on August 24, 1985. Consideration of the League's position in regulatory matters will result in the filing of comments in opposition to PR Docket 85-215, Auxiliary Operation; in the EC's view, auxiliary operations should be conducted only on frequencies above 220.5 MHz. The ARRL's position in PR Docket 85-196, "Maintenance of Question Pools in the Volunteer Examiner Program...," remains that FCC should retain maintenance of the examination pool and that only VECs should be permitted to design exams from questions in the pool. In General Docket 85-231, concerning field disturbance sensors at 54-72 and 76-88 MHz, ARRL will file in support of FCC's decision to disallow the devices in the 50-54 MHz band as requested by the original petitioner, Control Data Canada, Ltd. In PRB-2, a request for a waiver of amateur rules to allow use of Amateur Radio frequencies for newsgathering, Counsel was ordered to file comments opposing "in the strongest possible terms" the unwarranted intrusion of broadcasting into an amateur band.

ARRL INTERNATIONAL DX CONTEST TOP TEN SINGLE OPERATOR SCORES

	Call	Score
|	K1RX	1,291,059
|	K1AR	1,277,460
P	W3BGN	1,096,710
H	N2LT	912,114
O	K2BU	902,388
N	W2RQ	841,572
E	NA5R (K5GN)	801,810

```
     |     W9RE           787,788
     |     K1VR           775,008
     |     KS1L           717,408
     |     K1AR         1,893,105
     |     N2LT         1,770,018
     |     W3GRF (K0/DQ) 1,668,025
     |     K1TO         1,584,243
     C     K1BW         1,556,820
     W     W3BGN        1,446,660
     |     K1EA         1,410,270
     |     N4AR         1,404,054
     |     K3ZO         1,378,134
     |     W9RE         1,256,073

*eof


From 834570959740836329
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,55912e56f553fbff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-26 22:41:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: w5yi report, vol. 7, no. 18
Message-ID: <248@inuxi.UUCP>
Date: Fri, 27-Sep-85 01:41:26 EDT
Article-I.D.: inuxi.248
Posted: Fri Sep 27 01:41:26 1985
Date-Received: Sat, 28-Sep-85 08:30:13 EDT
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 255


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    ::  T H E   W 5 Y I   R E P O R T  ::
    ::                              ::
    ::      D i t s   &   B i t s     ::
    ::                              ::
    ::      Vol 7 #18 --  9/15/85     ::
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Up to the minute news from the worlds of amateur radio, personal
computing and emerging electronics.  While no guarantee is made,
information is from sources we believe to be reliable.  May be
reproduced providing credit is given to The W5YI Report.
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In this issue:

- National VEC Organization Formed
- Gathering News on the Ham Bands
- Ham Publishes Commodore Book
- AEC - Work-at-Home Association

: :

The W5YI Report, even though a VEC in all regions, has been given permission by the FCC to distribute license preparation materials as a convenience to applicants and VE's. All manuals contain ALL questions, answers and discussion why the answer is right! You can order the guides from The W5YI Report, PO Box 10101, Dallas, TX 75207. The following guides are available:

FCC-Novice Study Guide	$3.00 + $1.00 Postage
FCC-Novice Element 2 Test	$1.00 + $0.50 Postage
FCC-Tech/General Study Guide	$5.00 + $1.50 Postage
FCC-Advanced Study Guide	$5.00 + $1.50 Postage
FCC-Extra Class Study Guide	$5.00 + $1.50 Postage
FCC Part 97 Rules Book	$3.00 + $1.50 Postage

: :

Note: Would you like to become a Volunteer Examiner under The W5YI Report program? If so, please send a copy of your Extra Class license, the following statement, and an SASE to:

W5YI - VEC
PO Box 10101
Dallas, TX 75207

You will also receive a booklet on how the Volunteer Examination program operates and how to go about giving tests. A certificate (optional) is also available for $1.00. Details and accreditation materials will be sent to you within a two week period. Include the following statement with your VE request:

"I am a currently licensed Extra Class amateur radio operator and wish to be a Volunteer Examiner. I have never had my station or operator license revoked or suspended. I do not own a significant interest in nor am an employee of any company or entity engaged in making or distributing amateur radio equipment or license preparation materials. My age is at least 18 years old."

: :

Do you have Amateur Radio news to contribute to The W5YI Report? If so, please call (817) 461-6443 and leave a message on Fred's recorder!

: :

o National VEC Organization Formed

Should the fragmented amateur testing community be brought together under the guidance of a single umbrella organization? That was the question pondered by VEC representatives at a recently concluded FCC workshop held August 9th at the FCC's Gettysburg, PA, licensing facility. At present, we have some two dozen plus VEC ham test administrators.

The informal after hours meeting found that much duplication of effort exists among the VEC's. Each has their own test preparation system and a somewhat different program... even though their instructions from the FCC are the same. The collective feeling seemed to be that VEC's need to work together toward achieving uniform amateur radio operator testing and a system should be developed to provide for input from VE's and VEC's into the testing decision making process.

Many phone calls and a couple of weeks later, a national testing organization tentatively named the Council for Amateur Radio Examining (C.A.R.E.), has been formed. Already being considered are such things as mutually recognizing each others volunteer examiners, developing a common examination pool, establishing test standards, co-op printing and stockpiling of testing materials and cooperating in exam scheduling. C.A.R.E. will also serve as a national clearinghouse to gather and disseminate amateur radio testing information.

Membership in C.A.R.E. will be open to any FCC accredited VEC and to any individual volunteer examiners... even if the VEC is not a C.A.R.E member. Associate membership status will be open to anyone. Annual dues range from $25.00 for VEC's down to $5.00 for associate members.

Work on the C.A.R.E organization is continuing rapidly. The Board of Directors will be made up of each VEC member - each having one vote on C.A.R.E. policy. A Vice Director will be selected by the Director. A National VEC Net to discuss how amateur radio operator testing could be standardized now meets Sunday's at 14.173 MHz at 1700 Z.

Preliminary draft articles of C.A.R.E. incorporation in the State of Illinois have been prepared and forwarded to all VEC's for further comment and suggestions. Incorporation will be sought under IRS Code 501(c)3 which provides for non-profit incorporation for charitable, educational and scientific purposes.

The initial officers of the group will be:

Joe T. Ingram, Jr., K4OOV, President, Central Alabama VEC - Region 4.
Alex Magocsi, WB2MGB, First Vice President, Metroplex VEC - Region 2, soon to be a national VEC.
Frederick O. Maia, W5YI, Vice President, The W5YI Report VEC -

National VEC.
        James Georgias, W9JUG, Executive Vice President, Devry VEC - National VEC.
        Gordon Girton, W6NLG, Secretary/Treasurer, Sunnyvale VEC - Region 6 VEC.

These officers will serve until 1987. While the president will be the principal officer of the corporation, day-to-day operation of C.A.R.E. will be handled by Executive Vice President Jim Georgias, W9JUG, of the DeVry VEC. Joe Schroeder, W9JUV, has been asked to handle the public relations function of the group.

o News Gathering on Ham Spectrum

Should the FCC allow news gathering on amateur radio frequencies? Up until this point the Commission has ruled that this is an illegal (commercial) use of amateur spectrum. In the wake of a NPRM (Docket 85-188 4/15/85) that provides for land mobile - amateur radio service shared use of the 421-430 MHz band, this may be changing.

On August 13th, Lee Shoblom, President and General Manager of London Bridge Broadcasting, Inc., 2001 Industrial Blvd., Lake Havasu City, AZ 86403, filed a request with the FCC for waiver of the amateur rules to permit him to use amateur radio for news gathering for broadcast purposes.

Specifically, Mr. Shoblom requests that he be permitted to use amateur frequency 434 MHz for gathering news on matters of community interest and broadcast such news on his low power television station.

The FCC's Private Radio Bureau seeks comments on this filing and has assigned "File No. PRB-2" to the matter. "PRB" file numbers are something the FCC unofficially came up with to solicit information from the public. They are more or less similar to NOI's ... Notice of Inquiry which we don't seem to see too much of any more.

News gathering on amateur frequencies has some interesting ramifications. Will amateurs be allowed to participate? Can they be stopped if the licensee (broadcaster) approves it? Can non-type accepted ham gear be used when usually FCC approved communications equipment is required?

I can remember thirty years ago participating in the New England Weather Net on 80 meters. While commercial radio stations did not actively participate, they did listen - and broadcast - the weather the amateurs passed on. At least one television station gave credit to the weather network for their reports. It was cloudy as to whether the net existed to assist broadcasters - or to simply exchange reports among amateurs.

We were confused as to why it was OK to report bad weather directly to amateurs at the US weather burear via ham radio but not to amateur radio

operators at commerical stations. There seems to be a fine line between amateur and non-amateur public service.

A good use of amateur spectrum might be to report traffic tie-ups and accidents to broadcast stations during rush hour traffic but it is not legal. But it is legal to report it to the police via phone patch.

Broadcasters have trouble understanding the difference. Some maintain that the government has no power to control what is said on the air waves... any air waves. The difference, of course, is that the Part 97.110 rules allow emergency... but not routine... business communications on the ham bands. Broadcasters do not handle emergencies... they only report them.

o Ham Publishes Commodore/Ham Book

If you are a ham and have a Commodore home computer, you might look into a new book entitled "The Commodore Ham's Companion."

Written by Jim Grubbs, K9EI, of Springfield, IL, the 160-page paperback book contains over 80 sources for Commodore amateur radio software and hardware... and a bibliography of over 60 magazine articles and reviews about using Commodore machines in the ham shack.

Jim claims that Commodore machines are the easiest to interface with amateur radio. He concentrates on the VIC-20 and the C-64. The chapter on "How to use your Commodore computer to join the packet radio revolution" is worth the price of the book alone. Jim talks about his packet lashup to his Dad, W9DXA, and brother, Jon, WB9YJC. Completely up to date , he also mentioned the TAPR TNC-2 ($185) that has just been released! (Book was published in August.)

Self-published by QSKY Publishing, (PO Box 3042, Springfield, IL 62708), "The Commodore Ham's Companion" Is $15.95 plus $2.50 first class shipping/handling. (VISA/MC accepted). Jim, an active ham since age 11, holds Satellite Worked All States certificate #16.

o Independent Computer Cottagers

Do you have some sort of computer linked business "on the side"... maybe even full time... that you do from your home? If so, you might want to consider being a member of AEC... the Association of Electronic Cottagers formed in January 1985.

Formed by Paul and Sarah Edwards of (677 Canyon Drive), Sierra Madre, California (91024), AEC is designed to support the growing number of people who work from their home with personal computers.

The Association of Electronic Cottagers is partly a support group for

the cottage industries made possible using personal computers and partly a rights watchdog for home workers.

Members of AEC can obtain marketing assistance, business consultation and other services... also access up-to-the-minute news affecting their interests through a monthly newsletter, an online hotline, bulletin boards, electronic conferences and private databases available through the CompuServe Information Service.

AEC evolved out of an international computer network... the Work-At-Home special interest group (SIG) of CompuServe, an interactive database for computer users. The Edwards' began this SIG because they wanted to meet other entrepreneurs and believed others had the same need.

Labor unions see working at home and telecommuting as a threat. Local bureaucrats, using zoning laws, have put some home computer workers out of business. AEC has put together an Electronic Bill of Rights which, among other things, asks that legislatures make no laws prohibiting freedom to work in one's home... when that work does not interfere with neighbor's enjoyment of their own homes and communities.

The Edwards' are the authors of several books on working from home with a personal computer. Paul is an attorney... Sarah holds a Masters degree in Social Work. Their 18-year old son is an engineering student at UCLA.

[End this issue]

From -8600413446549880178
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1985-09-27 09:36:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!henry
From: henry@utzoo.UUCP (Henry Spencer)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <5998@utzoo.UUCP>
Date: Fri, 27-Sep-85 12:36:50 EDT
Article-I.D.: utzoo.5998
Posted: Fri Sep 27 12:36:50 1985
Date-Received: Fri, 27-Sep-85 12:36:50 EDT
References: <763@vortex.UUCP> <253@ccivax.UUCP>, <1517@hammer.UUCP>
Organization: U of Toronto Zoology
Lines: 8

> > Suppose the frequencies being used effected human health (X-Rays).
>
> Microwaves *do* effect human health...

Intensity matters. You *emit* microwaves, remember, as does any warm object.
--
Henry Spencer @ U of Toronto Zoology
{allegra,ihnp4,linus,decvax}!utzoo!henry

From 5586251623262845924
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-Thread: 168ea8,1de64ebb9ea45042
X-Google-Attributes: gid168ea8,public
X-Google-ArrivalTime: 1985-09-29 23:27:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!dual!lll-crg!
seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio,net.dcom,net.video,net.news.stargate
Subject: Re: Listen to phone calls on your tvro
Message-ID: <287@anasazi.UUCP>
Date: Wed, 11-Sep-85 10:19:04 EDT
Article-I.D.: anasazi.287
Posted: Wed Sep 11 10:19:04 1985
Date-Received: Sun, 15-Sep-85 09:49:20 EDT
References: <30538@lanl.ARPA> <782@vortex.UUCP> <284@unccvax.UUCP>
<20281@mgweed.UUCP>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 20
Xref: watmath net.ham-radio:3237 net.dcom:1290 net.video:1511
net.news.stargate:202

In article <20281@mgweed.UUCP> prg@mgweed.UUCP (Phil Gunsul) writes:
>>
>>   Interception of common carrier telephone facilities, wire, coax,
>>microwave, satellite, whatever; I am assured by a prominent Washington
>>attorney, is technically wiretapping.
>
>ONLY if I use what I hear!! I can listen as much as I want, I just
>can't use or repeat it. Maybe you better explain that to your
>prominent Washington attorney.

Not true! You are referring to the sectoion 605 of the Communications Act.
Common carriers are protected (by different rules) from interception. Those

rules have been used to prosecute (for example) MDS HBO listeners.

--
John Moore (NJ7E)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
{hao!noao|decvax|ihnp4|seismo}!terak!anasazi!john
(602) 952-8205 (day or evening)

From 8195326224332561372
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e0719d730e6bda8b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-30 09:31:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!carpenter@nbs-vms
From: carpenter@nbs-vms (CARPENTER, ROBERT)
Newsgroups: net.ham-radio
Subject: VHF DX Info
Message-ID: <1802@brl-tgr.ARPA>
Date: Mon, 30-Sep-85 12:31:42 EDT
Article-I.D.: brl-tgr.1802
Posted: Mon Sep 30 12:31:42 1985
Date-Received: Wed, 2-Oct-85 20:20:16 EDT
Sender: news@brl-tgr.ARPA
Lines: 66

As you in the East may know, the VHF bands were in very good shape up
and down the East coast this weekend. Apparently Saturday evening was good,
but I wasn't on. The following is my view of things from the Washington, D.C.
area.

Tropo conx were good, and improving when I listened just before 8 am Sunday
morning....

My 432 setup isn't very good; there were good contacts on that band as
well. For example K4CAW (NC) worked VE1UT in Nova Scotia.

All contacts on 144.2+- SSB unless noted

Time	Station	State	Grid	
29 September 1985				
1140Z	WB4NMA	GA	EM84	
1142Z	WS4F	GA	EM84	
1144Z	WB4TWX		EM94	
1147Z	W4HGM		EM84	
1206Z	W4OJK	NC	EM96	also worked on 432
Then I had to leave the house....				
2215Z	KB4CSE	SC	EM94	

2220Z WB2KHD GA EM83
2228Z K4AGV NC EM96
2240Z WA4VCC SC EM94
2248Z WA4NJP GA EM84
2256Z WB4EFZ SC EM94
2336Z KE6HA TN EM86
2350Z K5MA/1 MA FN41 W. Falmouth, MA
2356Z WQ4V SC EM95
2359Z AA4FS NC FM05
30 September 85
0012 WB2OTK SC EM84
0020 W9IP/2 NY FN24 Johnstown, NY
0025 K1WHS ME FN43
0028 WB2KMY NY FN31
0054 WB2RQC NY FN23
0111 N4AVV NC FM04
0132 W4CPZ SC EM95
0154 VE2DFO QU FN25
0206 W4TZU NC FM06
0216 WA1OUB NH FN43
0227 KD4LT GA EM71 Albany, GA
0247 K4KAE SC FM02 Charleston
0303 WA4ZIA NC EM95 on 432
0354 WA4CQG AL EM72 Auburn, AL
0355 W4ZPG GA EM73
0412 WA1AYS MA EM42 Arlington, MA
Then went to bed....
1158Z KI4CI FL EM90
Lots of others were in this morning...WA1OUB, K5MA/1, WB2OTK, W4ISS, etc.,
but I had to get to work......
W4ISS (GA) and K5MA/1 (MA) were have an argument as I left the house....

The band will probably be fairly good this evening, although "AM Weather"
on PBS shows a front coming through tomorrow.

See you on TWO...

73,

Bob W3OTC

From 1888546517720108077
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ca3a715cf5dbdbc1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-30 10:38:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site dicomed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!dicomed!katy
From: katy@dicomed.UUCP (Kathleen Cornelson)

Newsgroups: net.ham-radio
Subject: very old radio
Message-ID: <624@dicomed.UUCP>
Date: Mon, 30-Sep-85 13:38:06 EDT
Article-I.D.: dicomed.624
Posted: Mon Sep 30 13:38:06 1985
Date-Received: Wed, 2-Oct-85 07:41:25 EDT
Organization: DICOMED Corp., Minneapolis
Lines: 11

I know next to nothing about radios, but I just purchased a
really neat old radio and would appreciate any tips on how to
use it and maintain it.

Said radio stands about 3 feet tall and is housed in an art
deco style wooden cabinet. The radio will pick up local and
short wave stations, and police bands.

Does anyone know of a good introductory type book about this
type of radio. I would like to know more about them so I don't
wreck the marvelous old beast.

From 1063911195992168108
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9f344ce27efffaea,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-01 09:39:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: WWVB user comments: to Bob K1BC
Message-ID: <20717@mgweed.UUCP>
Date: Tue, 1-Oct-85 12:39:04 EDT
Article-I.D.: mgweed.20717
Posted: Tue Oct 1 12:39:04 1985
Date-Received: Thu, 3-Oct-85 05:15:56 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 15

Received your mail ok here but for some reason can't get back to you
directly.

I was not aware that there was any 60 kHz signals from England. I believe
there is something on 50 kHz however (which I have never heard here).
I would think the tuned loop would reject that.

Thanks for the info on the manufacturer of the unit you have.

I believe that WWV or the NBS has something like 5 to 7 of the cesium

clocks in operation.

Bob K9EUI

From 7465476580936838986
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d69e1c8fb5590c55,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-01 09:47:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: DX info: inquiry summary (K9EUI)
Message-ID: <20718@mgweed.UUCP>
Date: Tue, 1-Oct-85 12:47:32 EDT
Article-I.D.: mgweed.20718
Posted: Tue Oct 1 12:47:32 1985
Date-Received: Thu, 3-Oct-85 05:16:14 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 12

Thanks to all those that commented about the desire for DX info.
I received about 2 dozen direct comments. They were pretty evenly split
between suggesting that the info be posted on the net by each person
or, mailing the info to one person for posting later.

I would think that until/unless it gets out of hand, we should just start
by each person posting his own info. Anyone not wanting "DX INFO" can just
hit the "N" key....

Bob K9EUI

From 142684905819327717
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c7873c1af875b518,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-01 12:02:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Denver Mods 7/26/84) 6/24/83; site drutx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!drutx!n2ic
From: n2ic@drutx.UUCP (LondonSM)
Newsgroups: net.ham-radio
Subject: Hello K1XM
Message-ID: <106@drutx.UUCP>
Date: Tue, 1-Oct-85 15:02:20 EDT
Article-I.D.: drutx.106
Posted: Tue Oct 1 15:02:20 1985
Date-Received: Thu, 3-Oct-85 05:24:08 EDT

Organization: AT&T Information Systems Laboratories, Denver
Lines: 13

I do not know how to reach you via usenet (is there some kind
of UNIX mail interface ????).

If you need to reach me and/or confer about HC8 trip I can be reached
via net.ham-radio or ihnp4!druxr!n2ic (if you know how to get to
ihnp4 !).

By the way, I have been running propagtion charts using the RSGB version
of Minimuf from HC8 to various spots. Verrrrry Interesting !
If you can send me a UNIX mail address, I will send you them.

73,
Steve London, N2IC

From -4008940515014420613
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ac6495689c2fadf5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-01 16:19:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 86 (packet buffs - take note)
Message-ID: <20726@mgweed.UUCP>
Date: Tue, 1-Oct-85 19:19:46 EDT
Article-I.D.: mgweed.20726
Posted: Tue Oct 1 19:19:46 1985
Date-Received: Thu, 3-Oct-85 04:26:17 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 46

qst de k9eui
hr arrl bulletin nr 86 from arrl headquarters
newington ct september 30, 1985
to all radio amateurs bt

on october 8 the earth will pass through the orbit of comet
giacobini zinner, only 25 days after the comet has passed.
experts have estimated that this might repeat might produce
6000 to 10000 meteors per hour. the annual perseids meteor
shower produces about 40 to 60 per hour. packet radio offers
an excellent opportunity to collect data on the effect of
meteor showers on vhf communication.

it is suggested that from 0500 to 2100z on october 8, packet
stations call cq on frequencies of 28.0985, 50.65 and 145.09

mhz about every 10 seconds and send only the two letter two figure grid square of your location, optionally followed by the hour and minutes in zulu time if your setup can be programmed to do so. then monitor and save to disk all incoming cq transmissions if possible. if you wish to connect to another station, exchange grid squares. power levels of the order of 100 watts to the legal output limit are usually necessary for meteor scatter communication.

on 28.0985 mhz use direct frequency shift keying or frequency shift keying of audio tones via a single sideband transmitter. on 50.65 and 145.09 mhz use frequency shift keyed tones modulating a frequency modulated transmitter. all frequencies are center frequencies.

according to fcc rules, the above transmissions must be under operator, not automatic, control at all times. by comparison, unattended beacons in these bands are limited to 100 watts on the subbands of 28.2 to 28.3, 50.05 to 50.08 and 144.05 to 144.06 mhz.

listen for w1aw on 50.65 mhz.

please send reports to,

wake digital communications group c/o ed stephenson, ab4s 700 madison ave , cary nc 27511

a summary will be prepared for qst ar

From 8544646412986927708
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d2a058209e8e5985,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-01 16:20:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 85 (calls issued to U.S. hams in Japan)
Message-ID: <20727@mgweed.UUCP>
Date: Tue, 1-Oct-85 19:20:44 EDT
Article-I.D.: mgweed.20727
Posted: Tue Oct 1 19:20:44 1985
Date-Received: Thu, 3-Oct-85 04:26:30 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 85 from arrl headquarters

newington ct september 26, 1985
to all radio amateurs bt

just nineteen days after the u.s; japan reciprocal operating agreement took effect, five individual station licenses, 7j1aaa through 7j1aae, have been issued to u.s. amateurs. full information on operating in japan is available from the japan amateur radio league, 1 14 ww sugamo, toshima, tokyo 170 ar

From 8689732328749442312
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f0daa4571f83173,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-01 16:21:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 23 (good news for Canadian hams)
Message-ID: <20728@mgweed.UUCP>
Date: Tue, 1-Oct-85 19:21:27 EDT
Article-I.D.: mgweed.20728
Posted: Tue Oct 1 19:21:27 1985
Date-Received: Thu, 3-Oct-85 04:36:43 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 33

qst de k9eui
hr crrl bulletin nr 23 from crrl headquarters
london ontario september 29, 1985
to all radio amateurs bt

doc made several important announcements at the rso crrl 1985 convention held in london, ontario this weekend. effective friday, september 27, canadian amateurs may,

use cw and phone, maximum legal power, on the entire 160 meter band, 1.8 to 2.0 mhz.

operate repeaters on the 29 mhz band.

use 6 mhz bandwidth fast scan television.

operatz slow scan television without a special endorsement.

also effective friday, september 27th, foreign amateurs from itu regions 1 and 3, operating under reciprocal agreements, may use the entire 2 meter band, 144 to 148 mhz.

doc declined to comment on restructuring of the amateur

service, which is likely to propose a canadian novice license, because the document was not in its final form.

doc did indicate its intention to proceed with the proposal for deregulation of mode sub bands, which would allow canadian amateurs to operate any mode, anywhere in their amateur bands, relying only on voluntary adherence to recommended band plans ar

From 952648901192594045
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6b17aaa4bcfd75a4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-01 16:21:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 39
Message-ID: <20729@mgweed.UUCP>
Date: Tue, 1-Oct-85 19:21:56 EDT
Article-I.D.: mgweed.20729
Posted: Tue Oct 1 19:21:56 1985
Date-Received: Thu, 3-Oct-85 04:47:10 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 37

qst de k9eui
hr propagation forecast bulletin nr 39 from arrl headquarters newington ct september 30, 1985
to all radio amateurs bt

with one day to go as this bulletin was prepared, the solar flux average for september is 69.6. this will not change significantly when the flux reading for the 30th is added. we will then have our first monthly average under 70 since july 1976, the start of cycle 21. the present calm spell began august 11, when a nine year low of 67 was recorded. the flux has been no higher than 73 since, and there have only been 3 of these. more important, there were 26 days under 70 in the past 2 months including one 66 and six at 67. several short lived sunspots appeared several times but the most recent visible spot activity of any consequence came in late july.

some solar emissions that cause fluctuations in the earths magnetic field and increased attenuation of hf signal levels in the higher latitudes cannot be seen in the conventional white light view of the sun. thus the sunspot record is not a completely reliable indicator for hf propagation prediction. the very erratic hf conditions of late september were typical,

with about 5 periods of 1 to 2 days each of very good and very bad propagation, following one another in rapid succession. there will be more of this in october, after some fairly consistent good times early in the month.

it is believed that the almost total absence of sunspots recently is a temporary phenomenon, probably not an indicator of an early end of cycle 21. the best 8 weeks of the year are at hand, in any case.

american sunspot numbers for september 19 through 25 were between 0 and 10 with a mean of 3.4 ar

From -8814245685046364869
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9009701a120b3103,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-02 05:50:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site whuts.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuts!res1
From: res1@whuts.UUCP (STEALEY)
Newsgroups: net.ham-radio
Subject: Packet Still Alive
Message-ID: <308@whuts.UUCP>
Date: Wed, 2-Oct-85 08:50:58 EDT
Article-I.D.: whuts.308
Posted: Wed Oct 2 08:50:58 1985
Date-Received: Thu, 3-Oct-85 06:39:56 EDT
Distribution: na
Organization: AT&T Bell Laboratories
Lines: 5

There have been no postings to net.ham-radio.packet for the past several weeks on our machine (whuts). The total to date is only five. Is ham-radio.packet that quiet or is our machine not getting the postings?
Rick

From 8403003438013592116
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,86d73f6218e9a108,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-03 06:27:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxd.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: DX on 40CW-10/3/85
Message-ID: <795@inuxd.UUCP>

Date: Thu, 3-Oct-85 09:27:56 EDT
Article-I.D.: inuxd.795
Posted: Thu Oct 3 09:27:56 1985
Date-Received: Fri, 4-Oct-85 04:49:20 EDT
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 5

DX continues to roll in on 40M cw in the mornings. YB0ARA 7008KHz

and VK9NM/LH 7004KHz both on at 12:00z and both about 559 here

in Indiana.   de   KN9K

From -5860235503109574371
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4e973f910c0eaf25,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-03 06:36:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!dual!lll-crg!
gymble!umcp-cs!seismo!brl-tgr!tgr!carpenter@nbs-vms
From: carpenter@nbs-vms (CARPENTER, ROBERT)
Newsgroups: net.ham-radio
Subject: RE: TVRO message from Nourse
Message-ID: <1876@brl-tgr.ARPA>
Date: Thu, 3-Oct-85 09:36:59 EDT
Article-I.D.: brl-tgr.1876
Posted: Thu Oct 3 09:36:59 1985
Date-Received: Sun, 6-Oct-85 05:07:35 EDT
Sender: news@brl-tgr.ARPA
Lines: 12

Don't get tooooooo excited yet. HBO has announced the availability of
their home decoders by the end of 1985 at a price of $400. (Broadcasting
magazine, 30 Sept 85). If I remember correctly the monthly subscription
fee will be something like $12 for HBO OR   Cinemax, or $18 for both.
I'm sure I'm right about the purchase price, but may be somewhat low on
the monthly price.

Bob, W3OTC

From -8933329586288555613
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d7c4612c94a3b3e3,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-10-03 08:16:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!dual!lll-crg!
gymble!umcp-cs!seismo!brl-tgr!tgr!Dbennett%xmm-plexus01.amc@amc-hq.arpa
From: Dbennett%xmm-plexus01.amc@amc-hq.arpa
Newsgroups: net.ham-radio
Subject: VA-PKT.OCT
Message-ID: <1881@brl-tgr.ARPA>
Date: Thu, 3-Oct-85 11:16:20 EDT
Article-I.D.: brl-tgr.1881
Posted: Thu Oct 3 11:16:20 1985
Date-Received: Sun, 6-Oct-85 05:24:40 EDT
Sender: news@brl-tgr.ARPA
Lines: 128

VA-PKT.OCT

Revised September 29, 1985
By K4NGC

The following is a list of call signs and names of some Radio Amateurs in Virginia, known to be on Packet Radio. Also included are their primary digipeaters and PBBS mailboxes used, if known. A number of files covering different areas of the northeastern United States are available on a number of EASTNET Packet Bulletin Board Stations.

File Name	Area Covered	Maintained by @ Mailbox
MD-PKT.###	Maryland	K1HTV @ W3IWI
NY-PKT.###	New York	WA2RKN @ WA2RKN
NJ-PKT.###	New Jersey	N2DSY @ WA2SNA
PADE-PKT.###	Pa & Del.	K3TS @ WB2MNF
DCWV-PKT.###	DC & WVa.	K1HTV @ W3IWI
VA-PKT.###	Virginia	K4NGC @ W3IWI

Note: The "###" above refers to the month which the file was updated.

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*                   Terminal Node Controller [TNC]                    *
*-----------------------------------------------------------------------*
*  (T) = TAPR       (Y) = ASHBY  (X) = Xerox 820  (G) = GLB           *
*  (V) = VANCOUVER  (A) = AEA    (H) = HEATHKIT   (K) = Kantronics    *
*  (2) = TAPR 2                                                       *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

** VIRGINIA **

Call	TNC	Name	Location	Telephone	Mailbox	Digiptr
K0LB	K	LARRY	WOODBRIDGE	703-590-2695	W3IWI	WB4FQR-4
W0QDP		GARY	NORTH ORANGE		W3IWI	WB4JFI-5

N2JR	A	RICHARD	WARRENTON	703-439-8109	W3IWI	WB4JFI-5
K3AKK	T	DICK	ARLINGTON	703-524-1727	W3IWI	WB4JFI-5
N3RC	K	ROGER	ALEXANDRIA	703-660-6607	W3IWI	WB4JFI-5
WA3UKK	K	RICH	STERLING		W3IWI	WB4JFI-5
W3VH		ROLF	ARLINGTON		W3IWI	WB4JFI-5
K4ARO	G	CARTER	PETERSBURG	804-733-8411		K4ARO-1
K4ARO-1	G	DIGIPEATER	GLENN ALLEN			
KC4B		JOHN	FARIFAX	703-273-2519	W3IWI	WB4JFI-5
WD4BAV		LEE	ENON			K4ARO-1
W4CQI	T	CLIFF	WARRENTON		W3IWI	WB4JFI-5
W4DO	G	HARRISON	CHARLOTTESVILLE		W3IWI	K4LKQ-1
KF4DQ	V	DIGIPEATER	JARMAN CAP MTN			
WB4DTD	V	IVAN	VIENNA		W3IWI	WB4JFI-5
WD4EBH	K	CRAIG	DALE CITY	703-680-5492	W3IWI	WB4FQR-4
WD4ECK	H	STU	DALE CITY	703-670-4252	W3IWI	WB4FQR-4
KA4ERP	G	JIM	FREDRICKSBURG		W3IWI	WB4FQR-4
N4FHL	G	BEN	ROANOKE			K4LKQ-1
N4FHL-1	G	DIGIPEATER	ROANOKE			
WB4FQR-4	A	DIGIPEATER	WOODBRIDGE			
WB4GJZ	A	JOHN	WOODBRIDGE	703-494-7949	W3IWI	WB4FQR-4
AA4GM					W3IWI	WB4JFI-5
K4GVO	T	JIM	FORREST	804-525-4160		K4LKQ-1
WD4GYW	G	WALLY	MADISON HTS	804-929-3535		K4LKQ-1
W4HCP	H	TOM	WATERFORD		W3IWI	WB4JFI-5
K4HEX-1		DIGIPEATER	LYNCHBURG			
KI4HQ	H	DON	VIENNA		W3IWI	WB4JFI-5
KC4HR	H	LEW	STAFFORD		W3IWI	WB4FQR-4
K4HWG	K	JACK	WOODBRIDGE	703-494-3321	W3IWI	WB4FQR-4
N4ICK	V	ANDRE	MCLEAN		W3IWI	WB4JFI-5
WD4IRD	H	BOB	DALE CITY	703-670-6738	W3IWI	WB4FQR-4
WA4IVM		JIM	NEWPORT NEWS			
WB4JFI	VTG	TERRY	MCLEAN	703-356-8334	W3IWI	WB4JFI-5
K4JST	G	GIL	CHARLES CITY			K4ARO-1
K4JUM		JOEL	WARRENTON		W3IWI	WB4FQR-4
K4KMC	H	BOB	SPRINGFIELD		W3IWI	WB4JFI-5
WA4KXV		WALLY	VIRGINIA BEACH			WA4KXV-1
WA4KXV-1		DIGIPEATER	VIRGINIA BEACH			
K4LKQ	T	BOB	LYNCHBURG	804-845-8898		K4LKQ-1
K4LKQ-1	G	DIGIPEATER	LYNCHBURG			
WD4LPG	H	SONNY	STAFFORD		W3IWI	WB4FQR-4
WD4LWD		MARC	SPRINGFIELD		W3IWI	WB4JFI-5
W4MIB	V	BILL	VIENNA		W3IWI	WB4JFI-5
KA4MVO	T	MIKE	LYNCHBURG	804-845-1649		K4LKQ-1
WB4NFB	V	BILL	BURKE		W3IWI	WB4JFI-5
K4NGC	H	DON	WOODBRIDGE	703-670-4773	W3IWI	WB4FQR-4
KB4NQJ					W3IWI	WB4FQR-4
W4NTG		DICK	WILLIAMSBURG			K4ARO-1
KB4OB		BILL	FREDRICKSBURG		W3IWI	WB4FQR-4
WD4OLV	G	RICK	FORREST	804-525-6648		K4LKQ-1
WB4ONL		DENNIS	LYNCHBURG			K4LKQ-1
W4OTF	G	RAY	CHARLOTTESVILLE			K4LKQ-1
W4PUJ	T	DICK	ARLINGTON		W3IWI	WB4JFI-5
WB4QOJ		DIGIPEATER	ROANOKE			K4LKQ-1

WD4SKQ	K	DAVID	WOODBRIDGE	703-494-6897	W3IWI	WB4FQR-4
N4SN	H	MILT	MANASSAS		W3IWI	WB4FQR-4
WA4SNY	G	DAVE	LYNCHBURG	804-845-4158		K4LKQ-1
NF4T	K	RICK	DALE CITY	703-670-6504	W3IWI	WB4FQR-4
WG4T	G	DAVE	KENTS STORE			K4LKQ-1
KA4TMB	A	STEVE	MANASSAS	703-369-1563	W3IWI	WB4FQR-4
K4TS	G	CHUCK	FREDRICKSBURG		W3IWI	WB4FQR-4
WA4TSC		WES	MIDDLEBURG		W3IWI	WB4JFI-5
WA4TVS		BILL	PARKSLEY			K3TKJ-1
K4UMI	V	DAVE	GRAFTON	804-898-5913		K4UMI-5
K4UMI-5	V	DIGIPEATER	LANGLEY AFB			
KA4URD		PAUL	RICHMOND			K4ARO-1
KA4USE	K	JIM	DALE CITY	703-680-4188	W3IWI	WB4FQR-4
KR4V	G	JEAN	RICHMOND			K4ARO-1
W4VOO		AL	BURKE		W3IWI	WB4JFI-5
WQ4W	H	DON	DALE CITY	703-670-3414	W3IWI	WB4FQR-4
AI4W		GENE	NOKESVILLE		W3IWI	WB4FQR-4
WA4WBG		BILL	DALE CITY	703-590-4699	W3IWI	WB4FQR-4
W4WWQ	T	PETE	FORREST	804-525-1146		K4LKQ-1
KA4WZO	H	RANDY	BURKE		W3IWI	WB4FQR-4
WA4YPV	G	BOB	RICHMOND			K4ARO-1
WD5DBC	V	HOWARD	BURKE	703-425-6852	W3IWI	WB4JFI-5
WB5MMB	V	SANDY	VIENNA		W3IWI	WB4JFI-5
KB6BGE	A	DICK	ROSSLYN		W3IWI	WB4JFI-5
W7KKE			VIRGINIA BEACH			WA4KXV-1
K8MMO	V	DAVE	STERLING	703-450-5284	W3IWI	WB4JFI-5

Please let me know of any corrections or additions to any of this file.
Send them to me. K4NGC @ W3IWI via one of the EASTNET PBBS mailboxes.

73's Don -- K4NGC
15016 Carlsbad Road
Woodbridge, Va 22193
(Voice) 703-670-4773
(Data) 703-670-5881

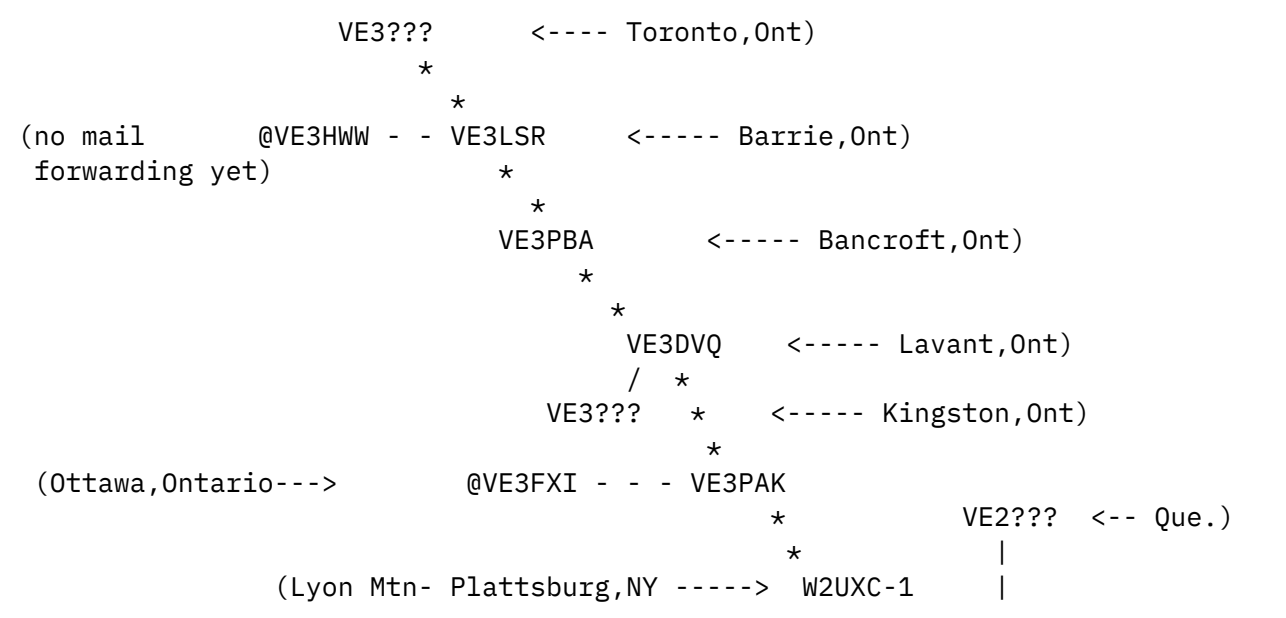
From -7607064305543837968
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2adc77f7be9a2793,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-03 09:04:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!dual!lll-crg!
gymble!umcp-cs!seismo!brl-tgr!tgr!Dbennett%xmm-plexus01.amc@amc-hq.arpa
From: Dbennett%xmm-plexus01.amc@amc-hq.arpa
Newsgroups: net.ham-radio
Subject: East Net Packet Map
Message-ID: <1884@brl-tgr.ARPA>

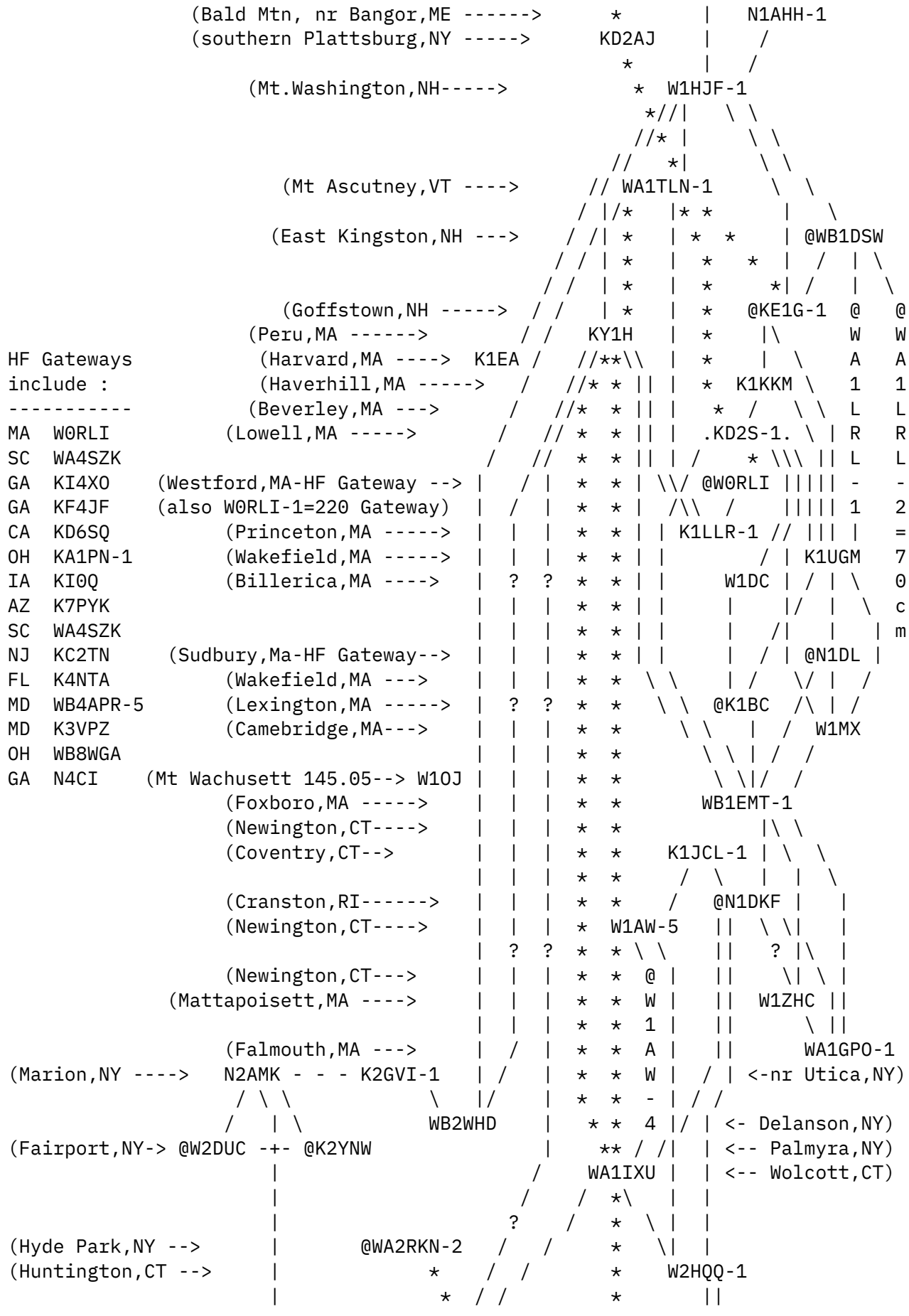
Date: Thu, 3-Oct-85 12:04:09 EDT
Article-I.D.: brl-tgr.1884
Posted: Thu Oct 3 12:04:09 1985
Date-Received: Sun, 6-Oct-85 05:25:39 EDT
Sender: news@brl-tgr.ARPA
Lines: 222

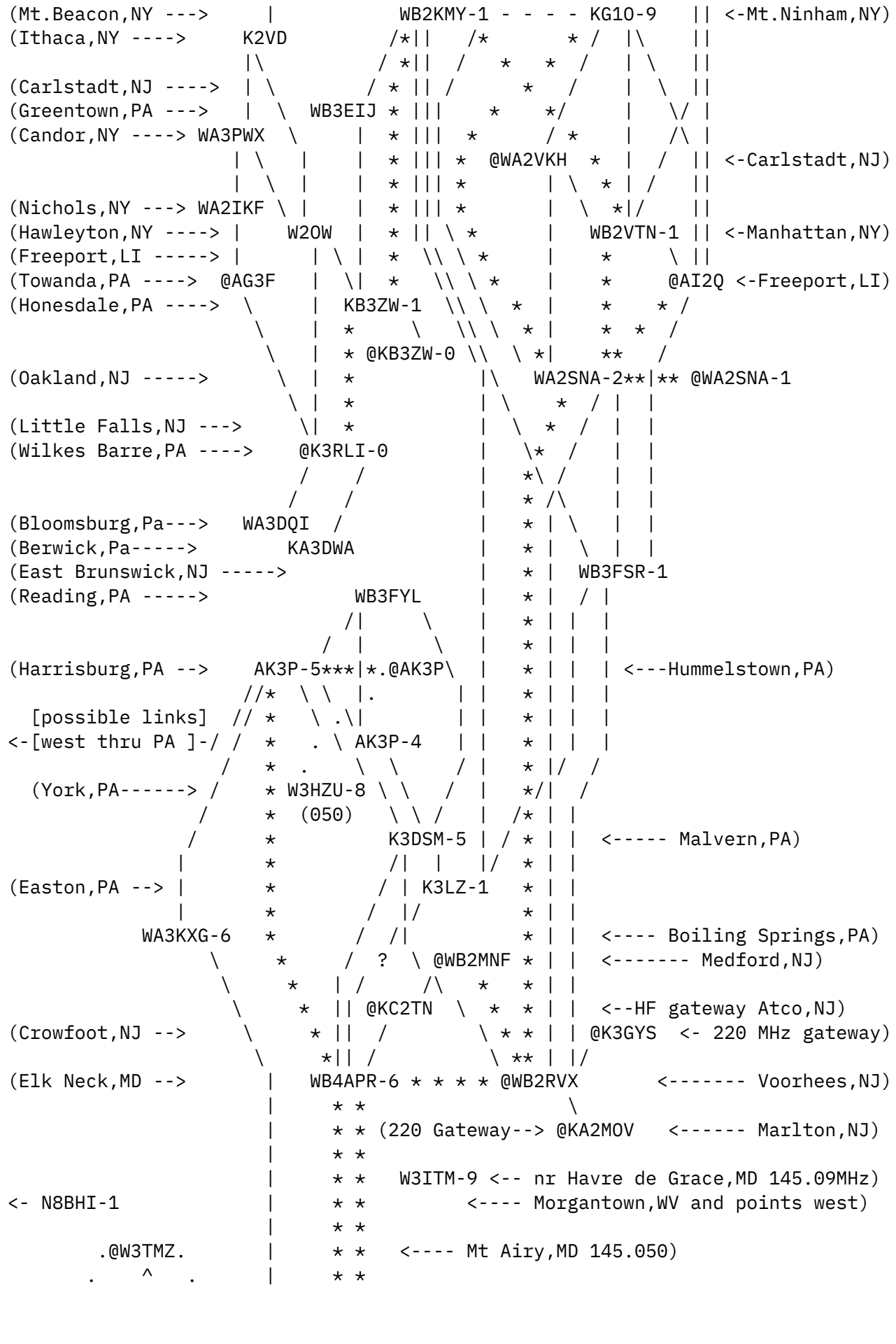
EAST-MAP.17
October 1, 1985
by K1HTV

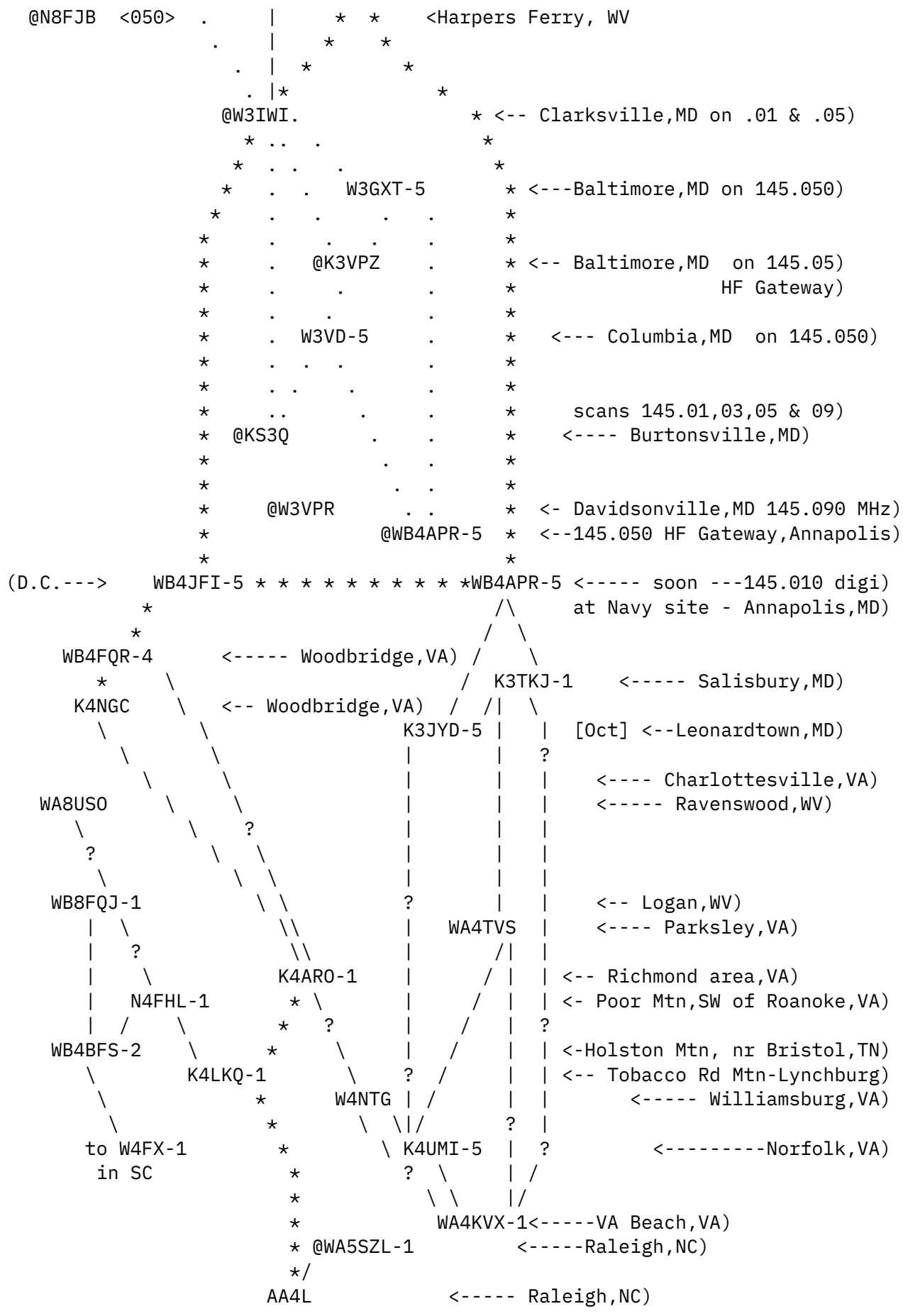
The following is a graphic representation of Packet Radio links which are believed to exist on 145.010 MHz on the East coast of North America. The area covers from Canada to and including the state of North Carolina. Another file called SOUTHMAP.NNN covers the area from Virginia south to Florida. Included in these maps are digipeaters, Packet Bulletin Board Stations (PBBS), and home stations usually left on for digipeating. Stations running W0RLI compatible software for PBBSs, Mailboxes and/or gateways are indicated by the use of the "@" character preceeding the call sign. The primary routes used for mail forwarding in EASTNET are marked with asterisks (****) while other links are shown by either | \ or / as connecting characters. All "****" routes are presently on 145.010 . In the Baltimore/Washington area .050 is heavily used for local traffic. Links on 145.050 MHz in MD, WV and PA are connected on this map by (.) dots. 220 MHz trunk links will parallel 145.010 in the future.

To improve readability of this linking you might want to use colored felt tipped pens to outline the various linking paths. Those links which are marked with a question mark (?) indicate a link of unknown reliability. If you have any information concerning known reliability, unreliablity or non-existence of any links shown on this map please drop me a note. Send the info to me, K1HTV @ W3IWI, via one of the many auto-forwarding PBBSs or via the U.S. mail.




(Bald Mtn, nr Bangor,ME ------>
(southern Plattsburg,NY ----->
N1AHH-1
KD2AJ
(Mt.Washington,NH----->
W1HJF-1
(Mt Ascutney,VT ---->
WA1TLN-1
(East Kingston,NH --->
@WB1DSW
(Goffstown,NH ----->
@KE1G-1
(Peru,MA ------>
KY1H
HF Gateways
include :
(Harvard,MA ----> K1EA
(Haverhill,MA ----->
(Beverley,MA --->
MA W0RLI
(Lowell,MA ----->
SC WA4SZK
GA KI4XO
(Westford,MA-HF Gateway -->
GA KF4JF
(also W0RLI-1=220 Gateway)
CA KD6SQ
(Princeton,MA ----->
OH KA1PN-1
(Wakefield,MA ----->
IA KI0Q
(Billerica,MA ---->
AZ K7PYK
SC WA4SZK
NJ KC2TN
(Sudbury,Ma-HF Gateway-->
FL K4NTA
(Wakefield,MA --->
MD WB4APR-5
(Lexington,MA ----->
MD K3VPZ
(Camebridge,MA--->
OH WB8WGA
GA N4CI
(Mt Wachusett 145.05--> W1OJ
(Foxboro,MA ----->
(Newington,CT---->
(Coventry,CT-->
(Cranston,RI------>
(Newington,CT---->
(Newington,CT--->
(Mattapoisett,MA ---->
(Falmouth,MA --->
(Marion,NY ----> N2AMK - - - K2GVI-1
WB2WHD
(Fairport,NY-> @W2DUC -+- @K2YNW
WA1IXU
<-- Wolcott,CT)
(Hyde Park,NY -->
@WA2RKN-2
(Huntington,CT -->
K1LLR-1
W1DC
K1UGM
K1JCL-1
@N1DKF
W1AW-5
@K1BC
W1MX
WB1EMT-1
@N1DL
K1KKM
.KD2S-1.
@W0RLI
WA1GPO-1
W2HQQ-1
<-nr Utica,NY)
<- Delanson,NY)
<-- Palmyra,NY)


(Mt.Beacon,NY --->
WB2KMY-1 - - - - KG1O-9 <-Mt.Ninham,NY)
(Ithaca,NY ----> K2VD
(Carlstadt,NJ ----> (Greentown,PA ---> WB3EIJ
(Candor,NY ----> WA3PWX
@WA2VKH <-Carlstadt,NJ)
(Nichols,NY ---> WA2IKF
(Hawleyton,NY ----> W2OW
WB2VTN-1 <-Manhattan,NY)
(Freeport,LI -----> (Towanda,PA ----> @AG3F
@AI2Q <-Freeport,LI)
(Honesdale,PA ----> KB3ZW-1
@KB3ZW-0
(Oakland,NJ -----> WA2SNA-2**|** @WA2SNA-1
(Little Falls,NJ --->
(Wilkes Barre,PA ----> @K3RLI-0
(Bloomsburg,Pa---> WA3DQI
(Berwick,Pa-----> KA3DWA
(East Brunswick,NJ ----->
WB3FSR-1
(Reading,PA -----> WB3FYL
(Harrisburg,PA --> AK3P-5***|*.@AK3P\
<---Hummelstown,PA)
[possible links]
<-[west thru PA]-/
(York,PA------> W3HZU-8
(050)
K3DSM-5
<----- Malvern,PA)
(Easton,PA --> K3LZ-1
WA3KXG-6
<---- Boiling Springs,PA)
@WB2MNF
<------- Medford,NJ)
@KC2TN
<--HF gateway Atco,NJ)
(Crowfoot,NJ -->
@K3GYS <- 220 MHz gateway)
(Elk Neck,MD --> WB4APR-6
@WB2RVX
<------- Voorhees,NJ)
(220 Gateway--> @KA2MOV
<------ Marlton,NJ)
W3ITM-9 <-- nr Havre de Grace,MD 145.09MHz)
<- N8BHI-1
<---- Morgantown,WV and points west)
.@W3TMZ.
<---- Mt Airy,MD 145.050)


@N8FJB <050>
<Harpers Ferry, WV
@W3IWI.
* <-- Clarksville,MD on .01 & .05)
W3GXT-5
* <---Baltimore,MD on 145.050)
@K3VPZ
* <-- Baltimore,MD on 145.05)
HF Gateway)
W3VD-5
<--- Columbia,MD on 145.050)
scans 145.01,03,05 & 09)
@KS3Q
<---- Burtonsville,MD)
@W3VPR
<- Davidsonville,MD 145.090 MHz)
@WB4APR-5
<--145.050 HF Gateway,Annapolis)
(D.C.---> WB4JFI-5
*WB4APR-5 <----- soon ---145.010 digi)
at Navy site - Annapolis,MD)
WB4FQR-4
<----- Woodbridge,VA)
K3TKJ-1
<----- Salisbury,MD)
K4NGC
<-- Woodbridge,VA)
K3JYD-5
[Oct] <--Leonardtown,MD)
<---- Charlottesville,VA)
WA8USO
<----- Ravenswood,WV)
WB8FQJ-1
<-- Logan,WV)
WA4TVS
<---- Parksley,VA)
K4ARO-1
<-- Richmond area,VA)
N4FHL-1
<- Poor Mtn,SW of Roanoke,VA)
WB4BFS-2
<-Holston Mtn, nr Bristol,TN)
K4LKQ-1
<-- Tobacco Rd Mtn-Lynchburg)
W4NTG
<----- Williamsburg,VA)
to W4FX-1
in SC
K4UMI-5
<---------Norfolk,VA)
WA4KVX-1<-----VA Beach,VA)
* @WA5SZL-1
<-----Raleigh,NC)
AA4L
<----- Raleigh,NC)

                    *
(Cary,NC -----> @K4IWW

A graphic map of Packet Radio links south from Virginia south to Florida can be found under the file name of SOUTHMAP.NNN , available on many of the same PBBSs carrying this EAST-MAP.NNN file.

Please send any corrections or additions to the above linking map to me, K1HTV @ W3IWI via one of the EASTNET Packet Radio Bulletin Board systems, the U.S. mail, or give me a phone call. Thanks.

   73,
   Rich Zwirko - K1HTV
   12509 Ransom Drive
   Glenn Dale, MD 20769
   phone (301)464-2133 (5:00-10:00 PM)

From 6920582489862649636
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cd272c0b3f0b4525,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 10cb58,cd272c0b3f0b4525,start
X-Google-Attributes: gid10cb58,public
X-Google-ArrivalTime: 1985-10-03 09:47:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site nbc1.UUCP
Path: utzoo!decvax!mcnc!philabs!nbc1!abs
From: abs@nbc1.UUCP (Andrew Siegel)
Newsgroups: net.ham-radio,na.forsale
Subject: Terminal and Ham Gear for sale
Message-ID: <115@nbc1.UUCP>
Date: Thu, 3-Oct-85 12:47:45 EDT
Article-I.D.: nbc1.115
Posted: Thu Oct 3 12:47:45 1985
Date-Received: Fri, 4-Oct-85 15:52:17 EDT
Distribution: na
Organization: NBC Computer Imaging, New York, NY
Lines: 16
Xref: pepe net.ham-radio:1281 na.forsale:218

Heath H-19 terminal $300
Prentice 300 baud modem   50

Heathkit SB-303 receiver with cw filter and SB-401 transmitter, together, $300.

Collins R-388 general coverage receiver: vintage ~1954, with manual, alignment tools, covers .5-30 MHz, 1 KHz tuning accuracy, $250

Call or mail: Andy Siegel, N2CN
NBC Computer Imaging Dept.
philabs!nbc1!abs
work: 212-664-5776
home: 212-535-2467

From -8556642759075293884
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8b3e907e85d44625,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1487c6,8b3e907e85d44625,start
X-Google-Attributes: gid1487c6,public
X-Google-Thread: 126c94,8b3e907e85d44625,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 15f443,8b3e907e85d44625,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1985-10-03 09:57:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site tesla.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!tesla!
brucef
From: brucef@tesla.UUCP (Bruce Fingerhood)
Newsgroups: net.ham-radio,net.rec.photo,net.wanted,net.analog
Subject: Flash info wanted
Message-ID: <611@tesla.UUCP>
Date: Thu, 3-Oct-85 12:57:44 EDT
Article-I.D.: tesla.611
Posted: Thu Oct 3 12:57:44 1985
Date-Received: Fri, 4-Oct-85 06:46:07 EDT
Distribution: na
Organization: Cornell University, Electrical Engineering Dept.
Lines: 23
Xref: watmath net.ham-radio:3329 net.rec.photo:1555 net.wanted:7283 net.analog:477

*** REPLACE THIS LINE WITH YOUR MESSAGE *

Help!

Can anyone point me in the right direction to obtaining information
(schematics, theory,etc) on large, electronic flash units? Any
book titles or other sources would be appreciated.

Thanks

**
--
Bruce Fingerhood
School Of Electrical Engineering
Cornell University
Ithaca,NY 14853

(607) 256 8588

ARPA: brucef@tesla.ARPA
UUCP: decvax!cornell!tesla!brucef
{decvax,vax135,uw-beaver}!cornell!tesla!brucef

From -7652191799984830392
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c790e4ce66f0ac7d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-03 10:15:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!dual!lll-crg!
gymble!umcp-cs!seismo!brl-tgr!tgr!Dbennett%xmm-plexus01.amc@amc-hq.arpa
From: Dbennett%xmm-plexus01.amc@amc-hq.arpa
Newsgroups: net.ham-radio
Subject: East-Map and User Listing
Message-ID: <1888@brl-tgr.ARPA>
Date: Thu, 3-Oct-85 13:15:32 EDT
Article-I.D.: brl-tgr.1888
Posted: Thu Oct 3 13:15:32 1985
Date-Received: Sun, 6-Oct-85 05:26:54 EDT
Sender: news@brl-tgr.ARPA
Lines: 7

I have just sent a copy of the Packet Radio East-Map and Virginia Packet
User Listing to all hams. It would be interesting to see if we could use
this system to exchange Maps and User Listings for the entire United
States. Because Packet at present time can not do it because of incomplete
links this could be a way of passing this needed information. How about it,
anyone interested.
73's Don (K4NGC)

From -7701231829898197479
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1d3ef642d13daf84,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-03 13:07:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site mhuxt.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!rma
From: rma@mhuxt.UUCP (ATKINS)
Newsgroups: net.ham-radio
Subject: stereo TV info needed
Message-ID: <1178@mhuxt.UUCP>
Date: Thu, 3-Oct-85 16:07:57 EDT
Article-I.D.: mhuxt.1178
Posted: Thu Oct 3 16:07:57 1985
Date-Received: Fri, 4-Oct-85 05:47:53 EDT
Organization: AT&T Bell Laboratories, Murray Hill

Lines: 10

This may not quite fit into the ham radio catagory, but
I found no info in net.audio or video and knowing the vast
pool of knowledge in ham-radio circles(!) I thought I`d try here.

Does anyone know where I can find out the scheme used for
stereo sound transmission on broadcast TV signals? Looking at
the signal it seems to be some kind of sub-carrier system, but
not (L+R) and (L-R) as in FM radio.

Thanks, Bob Atkins (KA1GT)

From 6597191594210407214
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,603dd5172491c2c0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-03 14:35:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!dual!lll-crg!
seismo!brl-tgr!tgr!YOUNG@MARLBORO.DEC.COM
From: YOUNG@MARLBORO.DEC.COM
Newsgroups: net.ham-radio
Subject: 40 meter DX info
Message-ID: <1892@brl-tgr.ARPA>
Date: Thu, 3-Oct-85 17:35:16 EDT
Article-I.D.: brl-tgr.1892
Posted: Thu Oct 3 17:35:16 1985
Date-Received: Sun, 6-Oct-85 05:41:16 EDT
Sender: news@brl-tgr.ARPA
Lines: 12

This morning, 3 October, was the first time we got any significant
long path openings in the morning. Several UL7's and UA9's were
coming through. Also 9V1TL was on, big USA pile-up, plenty of
people calling continuously. VK9NM/LH was also active, and has
been almost daily. He still had a good pile-up going, though.
And a VU was also coming through, although I don't remember the
callsign (VU2TEC?). All this was between 1130 and 1200Z, and all
the signals were coming from the South or Southwest. This was
from Massachusetts, of course.

Paul Young, K1XM

From -7234067446306255103
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d42b15d84a736b7e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-03 16:22:13 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!dual!lll-crg!
seismo!brl-tgr!tgr!price%marlin@nosc.ARPA
From: price%marlin@nosc.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: Re: very old radio
Message-ID: <1897@brl-tgr.ARPA>
Date: Thu, 3-Oct-85 19:22:13 EDT
Article-I.D.: brl-tgr.1897
Posted: Thu Oct 3 19:22:13 1985
Date-Received: Sun, 6-Oct-85 05:41:31 EDT
Sender: news@brl-tgr.ARPA
Lines: 16

I have a good friend here in San Diego, CA who makes a living
restoring and knowing a lot about old radios. He's a ham, too.
Suggest you call: Bill Gabb, K1BO, (619) 692-4321. I'm sure he
can recommend books that will help you. He can also give you
some idea of what your "baby" is worth if you give him the make
and model, etc. He's also a good source for tubes and other
hard-to-find parts. Tell him I sent you.

Some of those floor model radios are really hot receivers in that
they were made for people who lived in Upper Cornfield, Nebraska
and wanted to listen to WGN in Chicago and WNBC in New York;
likewise to BBC and Tokyo Rose. Have fun!

73--Jim Price, K6ZH, (619) 225-2665

From 1217869308005049768
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9009701a120b3103
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-03 19:38:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: Re: Packet Still Alive
Message-ID: <504@mtunh.UUCP>
Date: Thu, 3-Oct-85 22:38:02 EDT
Article-I.D.: mtunh.504
Posted: Thu Oct 3 22:38:02 1985
Date-Received: Fri, 4-Oct-85 06:54:03 EDT
References: <308@whuts.UUCP>
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 2

There have been 73 articles posted on net.ham-radio.packet on mtunh.
73, Jim ky2d

From -5218617353846175076
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,95c1b80cb5bb92f8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-04 10:27:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Johnson Desk Kilowatt (comments on modifications)
Message-ID: <20779@mgweed.UUCP>
Date: Fri, 4-Oct-85 13:27:09 EDT
Article-I.D.: mgweed.20779
Posted: Fri Oct 4 13:27:09 1985
Date-Received: Sat, 5-Oct-85 06:53:04 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 34

Some time last year there was some interest in the results of my project of rebuilding/modernizing an old Johnson Desk Kilowatt. The basic renovations were removing the screen and bias supplies and converting the RF deck to a grounded grid scheme. I also added 160 meter capability (which has affected 10 meters due to added stray capacities to the point where it will not function on 10). Since I also completely rebuilt the control/power circuitry, I basically started over except for the main layout of the RF deck.

Except for the 10 meter situation, results have met expectations and the unit performs well with the 100 watts drive from my 930S. Input matching is done with a low Q "T" network which replaced the old grid tank.

For 160 meters, a coil is switched in series with the original rotary inductor and 300 pf added across the plate tuning capacitor. This coil is shorted out but still connected to the circuit on the other bands. The proximity of this coil to the shield cover adds the unwanted stray capacitance to ground which affects the upper bands. If I can find a suitable DPDT switch, that problem should be taken care of.

Input power is about 950 watts (2500V at 380ma). On 160 thru 20 meters, output is 800 watts as measured on a Bird wattmeter. On 15 and 12 meters, the output is 600 watts.

If anyone has any questions, ask away. I would like to know if anyone else on the net (or anyone you know) has one of these

units.

Bob, K9EUI

From -124669601194027355
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3cda6ec08fbce18,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-04 10:44:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Dipole antenna theory observation/question
Message-ID: <20780@mgweed.UUCP>
Date: Fri, 4-Oct-85 13:44:27 EDT
Article-I.D.: mgweed.20780
Posted: Fri Oct 4 13:44:27 1985
Date-Received: Sat, 5-Oct-85 06:55:21 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 27

The question concerns the formula given in the handbooks for determining the length of a half wave dipole.

The handbooks say that dipole length in free space is determined by the formula: 492/MHz = feet. End effects on wire antennas reduce this figure by 5% so that the common figure used is 468/MHz = feet.

Several friends and I have erected various antennas this year and have all independently arrived at the conclusion that 492 should be multiplied by

This was observed during the installation of at least 3 antennas (80, 40 and 12 meter dipoles) all at different locations, and all at various heights. In every case, it meant shortening an antenna that was cut to length with the handbook formula. It made no difference if a balun was used or not, except that higher frequency antennas (say 20 meters and up) often have to be slightly shorter if a balun is used since inductance adds to the electrical length.

If what we are seeing is real, where was the .95 factor derived from and why has it not been corrected?

Bob, K9EUI

From -5124826123186255672

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,776c7814ae5ead25,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-04 15:29:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 39
Message-ID: <20788@mgweed.UUCP>
Date: Fri, 4-Oct-85 18:29:32 EDT
Article-I.D.: mgweed.20788
Posted: Fri Oct 4 18:29:32 1985
Date-Received: Sat, 5-Oct-85 08:03:32 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 44

qst de k9eui
hr dx bulletin nr 39 from arrl headquarters
newington ct october 3, 1985
to all radio amateurs bt

thanks to w1trc, k1xm and the southern new england dx association for the following dx information.

cyprus. zc4mr has b cyprus. zc4mr has been active on 3786 khz between 0300 and 0400z. he can also sometimes be found around 14225 khz at 1900z.

namibia. zs3e shows up on 7060 khz, listening on 7160 or 7198 khz, at 0545z, particularly on mondays.

guernsey. dale, k5mm, will operate gu0cia for one more week. he operates 160 through 20 meter cw only. he has been worked on 1834 khz between 0500 and 0600z. qsl via w7ni. also, a group of dutch amateurs will operate gu0/pa2fas on all bands 160 through 10 meters, both ssb and cw, from october 23 to 30.

rhodes. hal, sv0dv/9 is planning a visit to rhodes in a few weeks. he will operate on 80 and 40 meters. qsl to wb4tdh.

zaire. pa0gam will operate 9q5ma through october 10. he will be mainly on cw, 80 through 10 meters.

kerguelen. ft8xa is active on 40 cw between 0100 and 0200z.

mali. tz6fe, franz has been on 14227 khz at 2300. qsls go to dl4bc.

st. pierre. fp5hl has been active on 1833 khz at 0200z.

burundi. 9u5jm has been worked on 14183 khz around 2230z.

aland island. oh0rj was active over the weekend on 14175 khz
at 1400z.

liechtenstein. hb0/dk1dn has been worked on 3798 khz at 2300z

ar

From 924103993526723437
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 10cb58,e2b7397b657bee60,start
X-Google-Attributes: gid10cb58,public
X-Google-Thread: 151e61,e2b7397b657bee60,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,e2b7397b657bee60,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1985-10-05 08:15:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sphinx.UChicago.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!gargoyle!sphinx!west
From: west@sphinx.UChicago.UUCP (Steve Westfall)
Newsgroups: net.ham-radio,na.forsale,net.wanted
Subject: Ham station & oscilloscope for sale
Message-ID: <1163@sphinx.UChicago.UUCP>
Date: Sat, 5-Oct-85 11:15:46 EDT
Article-I.D.: sphinx.1163
Posted: Sat Oct 5 11:15:46 1985
Date-Received: Sun, 6-Oct-85 06:54:14 EDT
Organization: U. Chicago - Computation Center
Lines: 35
Xref: watmath net.ham-radio:3345 na.forsale:229 net.wanted:7299

For Sale: Ham Radio Station and Oscilloscope

PRICE SLASHED!

Icom IC-720A transceiver with narrow CW filter
Icom PS-15 power supply
Icom IC-SM5 desk microphone
Icom hand-held microphone (not used for mobile operation)
AEA AMT-1 Rtty/Amtor computer interface
Astron RS-7A 12 volt dc power supply (for AMT-1)
Heath phone patch
Hustler vertical antenna (80, 40, 20, 15, 10 meters)
Heath IO-4105 oscilloscope (5 MHz, single trace)

The transceiver is in very good condition and has never been
used for mobile operation. The oscilloscope is in mint condition
because it has received practically no use since construction (it
was certified by Heath as in perfect working order). The AMT-1

will work with most microcomputers that have some kind of terminal
program for communicating with other computers.

I prefer to sell everything as a package for $1100.00 (I'll pay
the shipping), but will consider other offers.

Call me at 312-231-6054 (Mon - Fri, 8:30am - 4:30 pm CST) or
312-852-1271 (Mon - Fri, 5:30 pm - 10:00 pm CST, or all day on
weekends).

--
Steve Westfall, WA5MZI   Uucp: ihnp4!gargoyle!sphinx!west
General Manager, InfotronX, Inc.
159 W. Roosevelt Road
West Chicago, Illinois 60185
(312) 231-6054

From 5924965496829987517
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4e973f910c0eaf25
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-05 12:03:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ucbvax!decvax!bellcore!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: RE: TVRO message from Nourse
Message-ID: <828@vortex.UUCP>
Date: Sat, 5-Oct-85 15:03:38 EDT
Article-I.D.: vortex.828
Posted: Sat Oct 5 15:03:38 1985
Date-Received: Mon, 7-Oct-85 06:07:02 EDT
References: <1876@brl-tgr.ARPA>
Organization: Vortex Technology, Los Angeles
Lines: 7

Don't hold your breath. The HBO scrambling experiments STILL are going
badly, and the technical problems with the scrambling system have yet
to be solved. It increasingly looks like other broadcasters may
decide NOT to use the same system as HBO unless the technical issues
can be worked out properly.

--Lauren--

From -8689284042269713169
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c790e4ce66f0ac7d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-05 12:06:34 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ucbvax!decvax!bellcore!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Please use packet subgroup for packet materials
Message-ID: <829@vortex.UUCP>
Date: Sat, 5-Oct-85 15:06:34 EDT
Article-I.D.: vortex.829
Posted: Sat Oct 5 15:06:34 1985
Date-Received: Mon, 7-Oct-85 06:07:16 EDT
References: <1888@brl-tgr.ARPA>
Organization: Vortex Technology, Los Angeles
Lines: 6

Can we please keep packet-related materials in the packet subgroup for
ham-radio? That subgroup was created so that people receiving the
packet materials via other routes wouldn't be forced to pay for
duplicates. Thanks.

--Lauren--

From 6044670975109089850
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6264a23a92007d1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-05 20:57:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.13 $; site hpuslma.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!we53!busch!wucs!
wuphys!hpuslma!scott
From: scott@hpuslma.UUCP
Newsgroups: net.ham-radio
Subject: Vertical Antenna Recommendations
Message-ID: <599800001@hpuslma.UUCP>
Date: Sat, 5-Oct-85 23:57:00 EDT
Article-I.D.: hpuslma.599800001
Posted: Sat Oct 5 23:57:00 1985
Date-Received: Mon, 7-Oct-85 02:54:33 EDT
Lines: 13
Nf-ID: #N:hpuslma:599800001:000:549
Nf-From: hpuslma!scott   Oct 5 22:57:00 1985

I have just recently received my Tech license, built a HW-5400 now at Heath
for further trouble shooting after I found numerous bad MOSFET's, and am
now in search of a suitable multiband HF antenna to get me started. To that
end I am considering some sort of trap vertical, so could someone please
give me some suggestions, comments, or advice on the HyGain 18AVT, Cushcraft
AV5, and Hustler 5BVT/6BVT. Which one would give the best overall operation
and freq. coverage. Any assistance would be appreciated.

73,

Jim Scott
N0GLP

From 3142793390832298819
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15d222,8161e2957463474b,start
X-Google-Attributes: gid15d222,public
X-Google-Thread: 1197bb,8161e2957463474b,start
X-Google-Attributes: gid1197bb,public
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-Thread: 163b79,8161e2957463474b,start
X-Google-Attributes: gid163b79,public
X-Google-ArrivalTime: 1985-10-06 22:42:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 (MC840302); site ecrcvax.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!mcvax!unido!ecrcvax!pete
From: pete@ecrcvax.UUCP (Pete Delaney)
Newsgroups: net.dcom,net.video,net.ham-radio,net.politics,net.jokes,net.general
Subject: Re: Satellite viewing "freedoms"
Message-ID: <150@ecrcvax.UUCP>
Date: Mon, 7-Oct-85 01:42:53 EDT
Article-I.D.: ecrcvax.150
Posted: Mon Oct 7 01:42:53 1985
Date-Received: Thu, 10-Oct-85 05:47:51 EDT
References: <779@vortex.UUCP> <262@mot.UUCP> <293@unccvax.UUCP> <ssc-bee.372>
<144@ecrcvax.UUCP> <unc.99>
Reply-To: pete@ecrcvax.UUCP (Pete Delaney)
Organization: ECRC, D-8000 Muenchen 81, W. Germany
Lines: 100
Keywords: USA-Bankrupt, Federal_Reserve_Scam, Marx_Method, USSA, Star-Wars
Xref: linus net.dcom:1163 net.video:1526 net.ham-radio:2736 net.politics:10709
net.jokes:12283 net.general:3131
Summary: The Federal Deficit; Lets shape up.

In article <unc.99> rentsch@unc.UUCP (Tim Rentsch) writes:
>In article <144@ecrcvax.UUCP> pete@ecrcvax.UUCP (Pete Delaney) writes:
>>Also, the FCC isn't cheap. Looks like the $200,000,000,000 deficit will hit
>>$300,000,000,000 in just a few years. Really, see todays Wall Street Journal.
>>Thats only a few hundred thousand per family.
>
>$200,000,000,000 / 200,000,000 people = $1,000 / person
>
>I guess that means several hundred people per family (to get to "a
>few hundred thousand per family").

Looks like you cought me; my mistake. $200 Billion is "just" the Deficit
for this year. I guess the funded debt then at $2 Trillion would be "just"
$10,000 / person. And of course as we all know (dont we?) the unfunded
debt is somewhere between 3 and 10 times the funded debt. You know good
old social in-security, milatary pensions, etc. I even heard a congressmen
today actually say something about the constitutional ammendment stoping
a Bidgit Deficit not being significant because all the really important
stuff isn't in the budget; well at least he was being a bit honest.
So if we optimisticly estimate a unfunded debt of say $10 to $20 Trillion
that would be JUST $50,000 to $100,000 per person.
I left my economic literature in storage, else I could give you the
offical actuarry figures.

Of course we have a congressive (sic alias: progressive) tax structure
that puts a significantly larger part of that burden on us UNIX hackers,
doctors, etc...

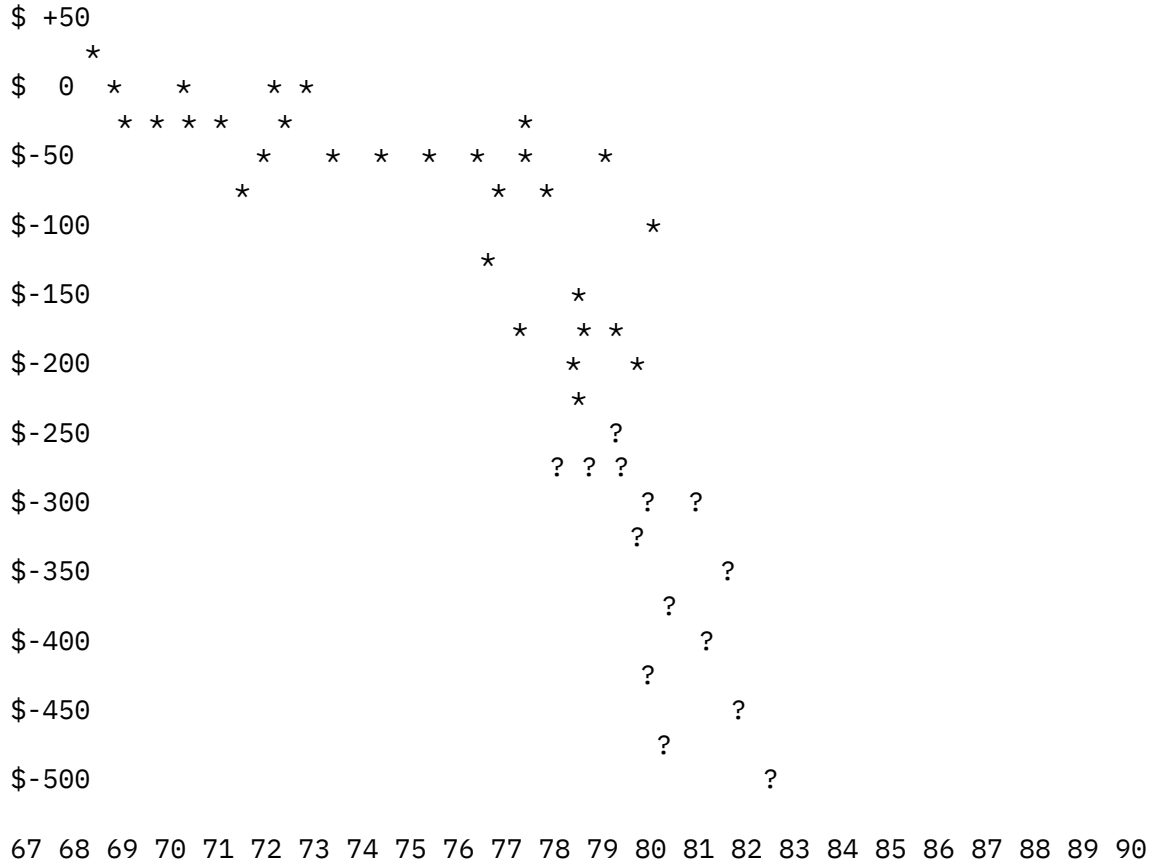
I was really impressed that they are TALKING about PROMISSING a balanced budget
by 1991.

a. It's curently be discussed in Washington, DO SOMETHING!

b. Promisses by governments are usually broken.

c. What about the unfunded stuff? it's more important!

d. What about the current trend?



So, by this simple graphical extrapolation it currently looks like by 1990:

```
Yearly Deficit:        $-500Billion/Yr        $2,500/Yr/Person


Federal Debt:      $4 Trillion        $20,000/Person
      +                 +                  +
Unfunded Dept:         $20 to 50 Trillion $100,000 to 250,000/Person
--------------         ------------------ -------------------------

Total Fed Debt:        $25 to 55 Trillion $120,000 to $270,000/Person
                              (  HALF A MILLION )
                              (  PER UNIX HACKER )
```

Of course the congressive tax will shift the major part of that burden to those with something still left to take. Now, you could call up your congressional aids and demand that they balance the TOTAL budget NOW. But like most civilizations we won't respond to the threat until their knife is up against our throats.

Oh yes, there is another solution. The Federal Reserve open market commitee can 'buy' the tressury dept and then issue Federal Reserve Notes on it. After all Debt is good collateral, right? It's called printing money. Marx promoted it as a way to distroy a free/market-based society.

Sorry for flaming so long and posting in net.general.
If you care, a quick phone call to Washington MIGHT help.
--


```
-------------------------------------------
Pete Delaney - Rocky Mnt. Unix Consultant Phone: (49) 89 92699-139
European Computer-Industry Research Center    UUCP: mcvax!unido!ecrcvax!pete
ArabellaStrasse 17                   UUCP Domain: pete@ecrcvax.UUCP
D-8000 Muenchen 81, West Germany          X25: (262)-45890040262
CSNET:pete%ecrcvax.UUCP@Germany.CSNET          Login: <to be provided?>
-------------------------------------------------------------------------------
```



```
From -4031057345059312432
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1d3ef642d13daf84
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-07 10:46:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site
videovax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!tekcrl!vice!tekfdi!videovax!bill
From: bill@videovax.UUCP (William K. McFadden)
Newsgroups: net.ham-radio
Subject: Re: stereo TV info needed
Message-ID: <1458@videovax.UUCP>
```

Date: Mon, 7-Oct-85 13:46:14 EDT
Article-I.D.: videovax.1458
Posted: Mon Oct 7 13:46:14 1985
Date-Received: Sat, 12-Oct-85 13:22:19 EDT
References: <1178@mhuxt.UUCP>
Reply-To: bill@videovax.UUCP (William K. McFadden)
Organization: Tektronix, Wilsonville OR
Lines: 52
Summary:

In article <1178@mhuxt.UUCP> rma@mhuxt.UUCP (ATKINS) writes:
>Does anyone know where I can find out the scheme used for
>stereo sound transmission on broadcast TV signals? Looking at
>the signal it seems to be some kind of sub-carrier system, but
>not (L+R) and (L-R) as in FM radio.

I tried to reply to this when you asked about it in net.audio.
Unfortunately, the system somehow ate my reply before I could get it
properly posted. In my frustration I gave up. Since no one else has replied
I thought I would try again.

Being an EE in the Television Products Division at Tektronix, I have become
familiar with the American stereo TV system, known as MTS or BTSC.
MTS does transmit L+R and L-R, but not the same as FM radio.
First, the frequencies involved are different. MTS uses 15.734 KHz for its
pilot and 31.468 KHz for the L-R instead of the 19 and 38 KHz of FM radio.
15734 Hz is the horizontal scanning rate in US TV's, so it was chosen as
the basis for MTS to reduce interference between the horizontal circuits
and the stereo decoder. TV people call this frequency H. Thus, the pilot
is at H and the L-R is at 2H.

The principal difference between TV and FM is that the L-R subcarrier in
BTSC is compressed before transmission. This was done to reduce noisy reception
in fringe areas. Although designed by dbx, the companding system used for
stereo TV is not the simple linear 2:1 system used in their tape noise
reduction systems. In TV stereo, the companding is both amplitude and
frequency dependent. This makes the expander circuit fairly complex and I'm
afraid no one has managed to squeeze it into a single IC (yet). (Actually, I
have heard of one company that it trying to develop a digital TV stereo chip,
but that's probably still a couple of years away). The present decoders have
lots of discrete components and about 8 trimpots, so you can see there is a
lot of room for improvement.

For the sake of completeness, I should mention that BTSC provides for two other
subcarriers, SAP at 5H and PRO at 6.5H. SAP stands for Second Audio Program
and is indtended for bilingual broadcasts (e.g., SAP can broadcast a dubbed
foreign language version of the audio). SAP is FM modulated and dbx
compressed. I beleive the frequency response is somewhere around 10 KHz.
The PRO (PROfessional) channel is for data or low-grade voice transmission and
is not intended for the general public.

So far, the is one station using SAP (to transmit in Spanish). The TV industry

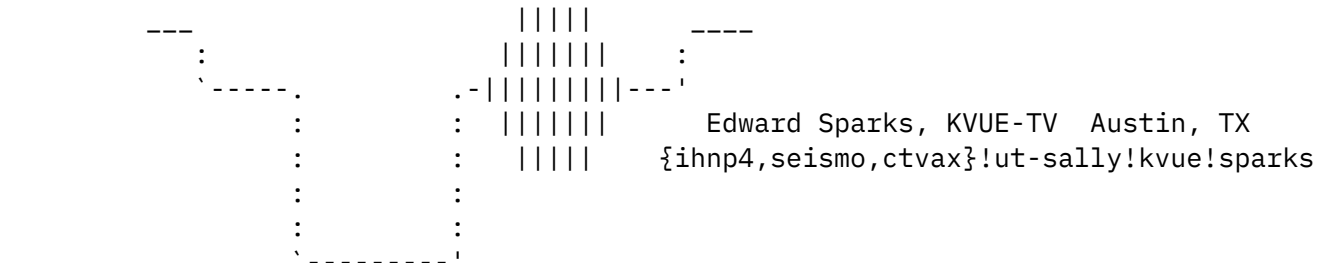
predicts there will be 200 stereo TV stations on the air by the end of the year.

I hope this helped!

--
Bill McFadden Tektronix, Inc. P.O. Box 500 MS 58-594 Beaverton, OR 97077
UUCP: ...{ucbvax,ihnp4,uw-beaver,decvax}!tektronix!videovax!bill
GTE: (503) 627-6920 "How can I prove I am not crazy to people who are?"

From -6643663713444187228
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e2a75720c30dfe7f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-07 10:55:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site kvue.UUCP
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!ut-sally!oakhill!kvue!
sparks
From: sparks@kvue.UUCP (Ed Sparks)
Newsgroups: net.ham-radio
Subject: RIT for the HW-8 (Help!)
Message-ID: <232@kvue.UUCP>
Date: Mon, 7-Oct-85 13:55:46 EDT
Article-I.D.: kvue.232
Posted: Mon Oct 7 13:55:46 1985
Date-Received: Fri, 11-Oct-85 07:16:35 EDT
Distribution: net
Organization: KVUE-TV, Austin, Tx.
Lines: 14

I am trying to modify my Heathkit HW-8 for RIT. Can anybody point me
to any articles on this subject? (I remember a few many years ago, but
don't know their source.) Is this project worthwhile!?
Thanks in advance.
                      Ed Sparks WA5ZEG



From -4662023055279179O7
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef34332c422bff68,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-10-07 11:57:53 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!linus!decvax!tektronix!tekcrl!teklabs!rafaeld
From: rafaeld@teklabs.UUCP (Rafael De Arce)
Newsgroups: net.ham-radio
Subject: .95 multiple factor for dipoles.....
Message-ID: <3220@teklabs.UUCP>
Date: Mon, 7-Oct-85 14:57:53 EDT
Article-I.D.: teklabs.3220
Posted: Mon Oct 7 14:57:53 1985
Date-Received: Wed, 9-Oct-85 05:29:12 EDT
Organization: Tektronix, Beaverton OR
Lines: 10

Their is a simple reason for the 0.95 factor involved in calculating the
lenght of a dipole: the speed of light moves slower in air than in vacuum.
The 0.95 factor is the speed shift.

Second, that formula is an approximation. (a very good approx.) Most of us
cut the lengths on the long side and tune (cut) it as close to 1:1 on the
SWR.

.

From 381828176828391043
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ee59721fba4ad93d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-06 08:33:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 35
Message-ID: <20183@mgweed.UUCP>
Date: Fri, 6-Sep-85 11:33:24 EDT
Article-I.D.: mgweed.20183
Posted: Fri Sep 6 11:33:24 1985
Date-Received: Sat, 7-Sep-85 06:35:32 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 41

qst de k9eui
hr dx bulletin nr 35 from arrl headquarters
newington ct september 5, 1985
to all radio amateurs bt

thanks to w1trc, k1xm and the southern new england dx
association for the following dx information.

mali. tz6fic will be on 14236 khz at 2300z on friday.

st. pierre. fp/k1rh has been worked on 3507 khz at 0430z, on 3784 khz at oo3oz and on 14027 khz at 1500z. qsl to k1rh.

solomon islands. h44ia, bryan, has been quite active. he has been worked on 3799 khz at 1045z and on 7004 khz at 1100z. he is also supposedly active on 1825 khz at 1100z.

syria. look for w7rkh/yk on 7005 khz at 2130z.

eastern caroline islands. kc6jc may be found on 3806 khz at 1030z.

malta. 9h3dx has been active on 7002 khz at 2215z.   qsl via df2uu.

kuwait. 9k2ec has be worked on 14190 khz at 2330z.

turkey. ta1e showed up on 14195 khz at 0030z last night.

gabon. tr8jld has been active on 160 meters. look or him at 0230z on 1833 khz.

ecuador. hc1bi has also been active on 160 recently.   he was worked on 1835 khz at 0400z.

kirghiz. um8mm has been on 14198 khz at 0130z.

kampuchea. xu1ss is now active on thursdays at 1200z on 14180 khz ar

From -7682708866285353793
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,941ab5e3e4707ba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-06 12:51:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!inuxc!pur-ee!cromwell
From: cromwell@pur-ee.UUCP (Robert L Cromwell)
Newsgroups: net.ham-radio
Subject: slow Russian shortwave broadcasts
Message-ID: <3272@pur-ee.UUCP>
Date: Fri, 6-Sep-85 15:51:29 EDT
Article-I.D.: pur-ee.3272
Posted: Fri Sep 6 15:51:29 1985
Date-Received: Sun, 8-Sep-85 04:22:55 EDT
Organization: Electrical Engineering Department , Purdue University
Lines: 17

Subject: Slow Russian broadcasts
Newsgroups: net.nlang net.ham-radio net.wanted

Hello. A friend and I are enrolled in a beginning Russian course here, and would like to know the times and frequencies of any shortwave broadcasts in slow Russian. I know that the VOA broadcasts in "special English" and Radio Peking has a regular show of instruction in Chinese, so such shows do exist. Does Radio Moscow, Minsk, Vilnius, etc, or anyone else have a regular program for Russian instruction or in slow, easy text?
Thank you very much.

Bob Cromwell

Purdue University

From -3440739400719505629
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,ef061071952456ad,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,ef061071952456ad,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 06:54:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site unccvax.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!mcnc!unccvax!dsi
From: dsi@unccvax.UUCP (Dataspan Inc)
Newsgroups: net.analog,net.ham-radio
Subject: Vacuum Tube RF amp wanted
Message-ID: <286@unccvax.UUCP>
Date: Sat, 7-Sep-85 09:54:58 EDT
Article-I.D.: unccvax.286
Posted: Sat Sep 7 09:54:58 1985
Date-Received: Mon, 9-Sep-85 02:39:53 EDT
Organization: UNC-Charlotte
Lines: 47
Xref: watmath net.analog:464 net.ham-radio:3195

Remember vacuum tubes, you know, the things which have little heaters inside? When I was in high school, we had no trouble coming up with them, sockets, chassis, power supplies, butterfly type variable capacitors for push-pull tube RF amps, and all that jazz.

I'm working on a project where I need these kinds of things, but they are pretty darn near impossible to come by. (I'd prefer tubes because constructing VHF solid state class "C" amplifiers is expensive...I expect to blow up more than a few active devices in the process...)

Somewhere, sitting in someone's basement, there e ssits eexactly what I need: a chassis, with several stages of push-pull RF amplification, preferably at 6 meters. A power supply is not required but would be nice. Total power output should be in the 10 - 30 watt range but I will entertain others. This device will be employed in a project which WILL have the blessings of the FCC before being put on the air (it will also be modified). I will consider single-ended gain but would prefer the former type.

One-tenth watt driving power is available. Of course, if you have a **real** commercial FM transmitter of the 10 watt variety, I cn use this too (or exciter). This would have to be of the direct FM type.

Please indicate if you have spares for this device.

Again, I emphasize that the project will be FCC licensed under part 74 of the Rules and Regulations, and is absolutely not to be used for illegal purposes. I'm not trying to cop a CB linear or similar device. Supervision will be by several general class operators and highly sophisticated equipment; again, this is strictly on the up and up.

Owners of suitable equipment, please state what you would have to have for it, and contact me directly via UUCP or snail mail:

David Anthony
Chief Development Engineer
DataSpan, Inc (decvax, akgua, philabs ! mcnc !unccvax! dsi)

7853 N. Tryon
Charlotte NC 28213

(704) 597-8317

From 6743228347364966853
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 12:40:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!wjc@ll-vlsi.ARPA
From: wjc@ll-vlsi.ARPA (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <1308@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 15:40:26 EDT
Article-I.D.: brl-tgr.1308

Posted: Sat Sep 7 15:40:26 1985
Date-Received: Mon, 9-Sep-85 03:23:40 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

It would be interesting to see citations of some of those cases.

Bill
N1CPK

From -4629629152319622767
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82cf550795c601ff
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 12:47:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!prg%mgweed.uucp@brl.ARPA
From: prg%mgweed.uucp@brl.ARPA (Phil Gunsul)
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <1311@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 15:47:51 EDT
Article-I.D.: brl-tgr.1311
Posted: Sat Sep 7 15:47:51 1985
Date-Received: Mon, 9-Sep-85 03:24:13 EDT
Sender: news@brl-tgr.ARPA
Lines: 19

[....]

I have found that I am listening to my satellite dish much more than
watching it lately. I suggest anyone with a dish get off Galaxy I
for a while and listen to Keith Lamonica on Telstar 303 (a couple of
degrees East of where Comstar D4 was), transponder 18. The program
is a "call in" type and really generates some interesting conversations.
He is on each evening from 8:00 P.M. central time until 10, 11 or 12,
whenever things die down! On Sunday evenings, he is starting to have
video, although I think I like just the call in better.

I would like to hear from any other individuals who have been listen
to him... If you value your _RIGHT_ to own and operate your own
Earth station, I suggest you listen in!

Happy dish fishing!!

Phil Gunsul -- WB9AAX

From 3050482907330636773

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 168ea8,1de64ebb9ea45042
X-Google-Attributes: gid168ea8,public
X-Google-ArrivalTime: 1985-09-07 16:17:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!bellcore!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio,net.dcom,net.video,net.news.stargate
Subject: Re: Listen to phone calls on your tvro
Message-ID: <788@vortex.UUCP>
Date: Sat, 7-Sep-85 19:17:08 EDT
Article-I.D.: vortex.788
Posted: Sat Sep 7 19:17:08 1985
Date-Received: Mon, 9-Sep-85 02:37:07 EDT
References: <284@unccvax.UUCP>
Organization: Vortex Technology, Los Angeles
Lines: 1
Xref: watmath net.ham-radio:3194 net.dcom:1269 net.video:1482
net.news.stargate:198

That is correct. Under current law, it appears that listening
to cordless phones

From -7047537200797331521
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 19:35:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!wjc@ll-vlsi.ARPA
From: wjc@ll-vlsi.ARPA (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <1347@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 22:35:58 EDT
Article-I.D.: brl-tgr.1347
Posted: Sat Sep 7 22:35:58 1985
Date-Received: Tue, 10-Sep-85 03:00:32 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

It would be interesting to see citations of some of those cases.

Bill
N1CPK

From 6981767095407355465
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82cf550795c601ff
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 19:36:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!prg%mgweed.uucp@brl.ARPA
From: prg%mgweed.uucp@brl.ARPA (Phil Gunsul)
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <1348@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 22:36:20 EDT
Article-I.D.: brl-tgr.1348
Posted: Sat Sep 7 22:36:20 1985
Date-Received: Tue, 10-Sep-85 03:00:44 EDT
Sender: news@brl-tgr.ARPA
Lines: 19

[....]

I have found that I am listening to my satellite dish much more than
watching it lately. I suggest anyone with a dish get off Galaxy I
for a while and listen to Keith Lamonica on Telstar 303 (a couple of
degrees East of where Comstar D4 was), transponder 18. The program
is a "call in" type and really generates some interesting conversations.
He is on each evening from 8:00 P.M. central time until 10, 11 or 12,
whenever things die down! On Sunday evenings, he is starting to have
video, although I think I like just the call in better.

I would like to hear from any other individuals who have been listen
to him... If you value your _RIGHT_ to own and operate your own
Earth station, I suggest you listen in!

Happy dish fishing!!

Phil Gunsul -- WB9AAX

From 7215221625389774094
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 19:36:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!

harvard!seismo!brl-tgr!tgr!wjc@ll-vlsi.ARPA
From: wjc@ll-vlsi.ARPA (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <1349@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 22:36:53 EDT
Article-I.D.: brl-tgr.1349
Posted: Sat Sep 7 22:36:53 1985
Date-Received: Tue, 10-Sep-85 03:00:56 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

It would be interesting to see citations of some of those cases.

Bill
N1CPK

From -1324689728969793257
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82cf550795c601ff
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 19:37:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!prg%mgweed.uucp@brl.ARPA
From: prg%mgweed.uucp@brl.ARPA (Phil Gunsul)
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <1350@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 22:37:20 EDT
Article-I.D.: brl-tgr.1350
Posted: Sat Sep 7 22:37:20 1985
Date-Received: Tue, 10-Sep-85 03:01:08 EDT
Sender: news@brl-tgr.ARPA
Lines: 19

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degrees East of where Comstar D4 was), transponder 18. The program
is a "call in" type and really generates some interesting conversations.
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whenever things die down! On Sunday evenings, he is starting to have
video, although I think I like just the call in better.

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to him... If you value your _RIGHT_ to own and operate your own
Earth station, I suggest you listen in!

Happy dish fishing!!

Phil Gunsul -- WB9AAX

From -6974500038101310 45
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 19:37:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!wjc@ll-vlsi.ARPA
From: wjc@ll-vlsi.ARPA (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <1351@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 22:37:45 EDT
Article-I.D.: brl-tgr.1351
Posted: Sat Sep 7 22:37:45 1985
Date-Received: Tue, 10-Sep-85 03:01:20 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

It would be interesting to see citations of some of those cases.

Bill
N1CPK

From -1667374825086358991
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82cf550795c601ff
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 19:38:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!prg%mgweed.uucp@brl.ARPA
From: prg%mgweed.uucp@brl.ARPA (Phil Gunsul)
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <1352@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 22:38:16 EDT
Article-I.D.: brl-tgr.1352
Posted: Sat Sep 7 22:38:16 1985
Date-Received: Tue, 10-Sep-85 03:01:33 EDT
Sender: news@brl-tgr.ARPA
Lines: 19

[....]

I have found that I am listening to my satellite dish much more than
watching it lately. I suggest anyone with a dish get off Galaxy I
for a while and listen to Keith Lamonica on Telstar 303 (a couple of
degrees East of where Comstar D4 was), transponder 18. The program
is a "call in" type and really generates some interesting conversations.
He is on each evening from 8:00 P.M. central time until 10, 11 or 12,
whenever things die down! On Sunday evenings, he is starting to have
video, although I think I like just the call in better.

I would like to hear from any other individuals who have been listen
to him... If you value your _RIGHT_ to own and operate your own
Earth station, I suggest you listen in!

Happy dish fishing!!

Phil Gunsul -- WB9AAX

From 5198431148130456048
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 19:38:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!wjc@ll-vlsi.ARPA
From: wjc@ll-vlsi.ARPA (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <1353@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 22:38:39 EDT
Article-I.D.: brl-tgr.1353
Posted: Sat Sep 7 22:38:39 1985
Date-Received: Tue, 10-Sep-85 03:01:44 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

It would be interesting to see citations of some of those cases.

Bill
N1CPK

From 6292359094541779707
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82cf550795c601ff
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 19:39:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!prg%mgweed.uucp@brl.ARPA
From: prg%mgweed.uucp@brl.ARPA (Phil Gunsul)
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <1354@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 22:39:09 EDT
Article-I.D.: brl-tgr.1354
Posted: Sat Sep 7 22:39:09 1985
Date-Received: Tue, 10-Sep-85 03:01:57 EDT
Sender: news@brl-tgr.ARPA
Lines: 19

[....]

I have found that I am listening to my satellite dish much more than
watching it lately. I suggest anyone with a dish get off Galaxy I
for a while and listen to Keith Lamonica on Telstar 303 (a couple of
degrees East of where Comstar D4 was), transponder 18. The program
is a "call in" type and really generates some interesting conversations.
He is on each evening from 8:00 P.M. central time until 10, 11 or 12,
whenever things die down! On Sunday evenings, he is starting to have
video, although I think I like just the call in better.

I would like to hear from any other individuals who have been listen
to him... If you value your _RIGHT_ to own and operate your own
Earth station, I suggest you listen in!

Happy dish fishing!!

Phil Gunsul -- WB9AAX

From -597390174139541467
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 19:45:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!wjc@ll-vlsi.ARPA
From: wjc@ll-vlsi.ARPA (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <1355@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 22:45:48 EDT
Article-I.D.: brl-tgr.1355
Posted: Sat Sep 7 22:45:48 1985
Date-Received: Tue, 10-Sep-85 03:02:38 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

It would be interesting to see citations of some of those cases.

Bill
N1CPK

From 432419525157397823
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82cf550795c601ff
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 19:52:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!prg%mgweed.uucp@brl.ARPA
From: prg%mgweed.uucp@brl.ARPA (Phil Gunsul)
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <1356@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 22:52:34 EDT
Article-I.D.: brl-tgr.1356
Posted: Sat Sep 7 22:52:34 1985
Date-Received: Tue, 10-Sep-85 03:02:50 EDT
Sender: news@brl-tgr.ARPA
Lines: 19

[....]

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watching it lately. I suggest anyone with a dish get off Galaxy I
for a while and listen to Keith Lamonica on Telstar 303 (a couple of
degrees East of where Comstar D4 was), transponder 18. The program
is a "call in" type and really generates some interesting conversations.
He is on each evening from 8:00 P.M. central time until 10, 11 or 12,
whenever things die down! On Sunday evenings, he is starting to have
video, although I think I like just the call in better.

I would like to hear from any other individuals who have been listen
to him... If you value your _RIGHT_ to own and operate your own
Earth station, I suggest you listen in!

Happy dish fishing!!

Phil Gunsul -- WB9AAX

From 9150955947382810377
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,45b2377253762bd4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-07 20:42:15 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA (Keith Petersen)
Newsgroups: net.ham-radio
Subject: Mailer loop fixed!
Message-ID: <1358@brl-tgr.ARPA>
Date: Sat, 7-Sep-85 23:42:15 EDT
Article-I.D.: brl-tgr.1358
Posted: Sat Sep 7 23:42:15 1985
Date-Received: Tue, 10-Sep-85 03:03:16 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

Sorry about the mailer loop. Someone at LOUIE.UDEL.EDU messed up a
redistribution list. I have removed that entry from the mailing list
until they fix it.

--Keith Petersen, W8SDZ <INFO-HAMS-REQUEST@SIMTEL20.ARPA>

From -6580608916038207514
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-08 21:10:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!cybvax0!frog!hydra!die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <127@hydra.UUCP>
Date: Mon, 9-Sep-85 00:10:52 EDT
Article-I.D.: hydra.127
Posted: Mon Sep 9 00:10:52 1985
Date-Received: Tue, 10-Sep-85 04:08:06 EDT
References: <125@hydra.UUCP> <777@vortex.UUCP>
Organization: Charles River Data Systems, Framingham MA
Lines: 174
Xref: watmath net.ham-radio:3211 net.dcom:1272 net.video:1485

> It should be pointed out that monitoring telephone conversations
> from either terrestrial or satellite links would almost certainly
> be construed, under current law, as wiretapping. This is,
> I believe, a federal crime (probably a felony), and not to be
> taken lightly.
>

> --Lauren--
>

As far as I know (and I am an engineer not a lawyer) there is at least one other law (than 605) that concerns interception of telephone calls and that is the Omnibus Crime Control and Safe Streets Act of 1968. This law which is section 2115 of title 82 (?) of the US Code is the basic federal anti-bugging/anti-wiretapping statute. Among other thing it forbids interception of any common carrier communications of aural or visual material that travels by "wire, cable or other means".

It also forbids interception of any aural or visual material that travels for any part of its trip on a common carrier channel even if it is not being intercepted from a common carrier channel.

And unlike section 605, 2115 forbids interception alone, not just interception *and* use or disclosure. I believe the operative phrase is something like "whosoever intercepts ..." as contrasted with 605's "whoseover intercepts and discloses ..."

2115 establishes both stiff federal felony penalties (I think 5 years and $50,000 fine) and, interestingly, also civil penalties (someone whose communications have been intercepted can sue the intercepter for damages).

I do not know if 2115 is considered to apply to radio communications by common carriers, as I remember it it doesn't mention radio in this context, and because 605 is specifically about radio communications it might be assumed to take precedence.

If 2115 is considered to apply to radio communications it would very clearly forbid even casually listening to any common carrier transmission whether or not any use was made of it's contents and even if this act of interception was in the privacy of one's home and did not involve disclosure. And a surprisingly large fraction of radio transmissions could be considered common carrier. For example SCA subcarriers, scrambled TV stations, virtually all mobile, marine and cellular phones, almost all satellite links (the transponders are owned by a common carrier and often leased to another common carrier that actually uses them to transmit information such as cable tv feeds), MDS transmissions, and almost all commercial users of the hf spectrum are common carrier services or could claim to be.

In addition many non common carrier transmissions that have simply been routed via common carrier facilities at some point in their path could claim protection under 2115 (for example one could argue that if the local police use a leased telco line to connect to their transmitter site on a nearby hill then simply passively listening to them is a violation of 2115 since the communications went by common carrier for part of the way).

How does 2115 apply ?

I do not know where the fine line has been drawn by the courts in interpreting 2115. (I would appreciate citations of cases if anyone reading this knows of some). It certainly is true that nobody was prosecuted (that I know of) for watching satellite cable tv feeds even though these are clearly common carrier transmissions of aural and visual material. (It is currently quasi-legal to watch unscrambled satcom cable feeds under another act of congress). Yet there have been at least attempts at prosecution of people who have received the same video and audio (mostly HBO) from 2150 mhz MDS transmissions. I find that distinction puzzling since I cannot see a significant difference between receiving HBO from a 4 GHz transmitter out in space using FM modulation and a 2 ghz transmitter on the top of some nearby tall building that uses AM.

Lauren claims that there have been successful prosecutions of people who have intercepted telephone calls from terrestrial microwave links. (He doesn't say under what statute but I presume 2115). I also fail to see the difference between listening to a 4 ghz ground based transmitter (FM-FDM presumably) on a tvro and swl receiver and using a scanner to listen to the FM 150/450 mhz IMTS mobile telephone calls. Many thousands of scanner enthusiasts listen to mobile phone conversations - yet I have never heard of a prosecution for merely listening to these common carrier transmissions (I think there have been some or at least some attempts in cases where information was disclosed or put to some use), and yet the distinction between microwave and vhf listening is widely presumed to exist.

So the law is murky and even murkier in the area of intercepting satellite signals. It is apparently more likely to get you prosecuted if you intercept ground based microwave links (VHF/UHF is probably OK) and more complex signals (simplex FM is very safe). This makes little sense since these are all radio signals, all carry private communications that the users presume will not be disclosed, and all can be received with standard consumer equipment widely available to average people. Perhaps the only distinction is that millions know how to listen to calls on on their scanners, and until recently when several recently published books on tvro systems broached the subject there was a conspiracy of silence surounding simple methods of intercepting microwave multiplex FM signals.

The data loophole

There is one important hole in 2115 however, it carefully aviods mention of data, record (telex and the like), telegraph, teletype, facsimile and other forms of non-voice, non-video information transmission. It has been widely reported that this was at the behest of the NSA which had (at least in 1968) much more capacity to process and filter out material of interest in these forms of communications than it had to monitor telephone calls (which take (or took) human transcribers to laboriously take down the words). Apparently the courts have upheld this loophole, as there has been some recent effort to get congress to close it.

Conclusion

The intent of my posting on tvro interception of calls was to make a point about the vulnerability of microwave transmissions

to interception by common consumer tvro and swl hardware owned by millions of people, many of whom live within easy receiving range of ground based microwave systems, and all of whom are in range of satellites carrying significant interceptable telephone traffic. Whether or not it is legal, whether or not it is covered by 2115 in addition to 605, it is clear that the proliferation of the hardware required into the hands of millions of Americans, many of whom beleive that it is their God given right to listen in to anything they can pick up, is going to make long distance telephone and data transmissions significantly less private.

I am personally an advocate of what is becoming a more and more widely accepted national goal, and that is routing all long distance traffic via paths which cannot be intercepted by casual listeners with widely available equipment. At the minimum this means digital microwave transmission under DES or better encryption. Hopefully in many cases it will also mean fiber optic paths (which are at least much harder for the KGB and friends to tap than microwave or coax links). I have always felt that making an act as passive and invisible as intercepting a radio signal a serious crime was the wrong approach. Prosecution of such acts is necessarily so erratic and dependant on violations of the privacy of whoever is intercepting the signal that it seems worse than the crime in all too many cases.

Perhaps more fundementally, the secret nature of listening guarentees that someone whose purpose is more sinister than casual observation of the electromagnetic fields around his back yard can almost always intercept whatever he needs to with little or no chance of getting caught. For this reason draconian laws only serve to reduce the number of harmless casual snoops, without doing much of anything about the professional information thief. Limiting efforts toward prosecution, however, will tend to force those who set up systems to consider designing in security by using encryption and transmission media that cannot be readily tapped, rather than living in the fools paradise of assuming that since it's illegal nobody will be doing it and communications are secure.

And as someone on the net pointed out, the difficulty of proving interception took place will soon lead to proposals to make mere possession of equipment that could or might intercept private transmissions a crime. This of course will be rather interesting since there are so many examples of legitimate radio equipment that could be used to pick up forbidden private signals by merely pointing the antenna differently or keying in a slightly different frequency. This of course will result in licensing of such equipment only to people who have a proven need, and while once you could listen to your local fire department if you are a volunteer fire fighter or the airport control tower at your local airport if you are a private pilot you will probably have to prove need and be registered to own a receiver that covers other than the broadcast band (and let the heavens quake if you should decode an SCA subcarrier from an FM station). And think of all your neighbors accusing you of tuning your radio to a forbidden channel just because they don't like your lifestyle!

I think it is too bad in this age of the digital revolution in transmission and storage of information and of readily available digital security devices to depend on oppressive legal avenues to protect communications that can be effectively secured by encryption. But that seems to be the direction in which the courts are going.

David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.
uucp: decvax!frog!die

From -4523279385361112179
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 168ea8,1de64ebb9ea45042
X-Google-Attributes: gid168ea8,public
X-Google-ArrivalTime: 1985-09-09 06:31:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!prg
From: prg@mgweed.UUCP (Phil Gunsul)
Newsgroups: net.ham-radio,net.dcom,net.video,net.news.stargate
Subject: Re: Listen to phone calls on your tvro
Message-ID: <20281@mgweed.UUCP>
Date: Mon, 9-Sep-85 09:31:22 EDT
Article-I.D.: mgweed.20281
Posted: Mon Sep 9 09:31:22 1985
Date-Received: Tue, 10-Sep-85 04:20:04 EDT
References: <30538@lanl.ARPA>, <782@vortex.UUCP> <284@unccvax.UUCP>
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 18
Xref: watmath net.ham-radio:3212 net.dcom:1273 net.video:1486
net.news.stargate:200

>
> Interception of common carrier telephone facilities, wire, coax,
>microwave, satellite, whatever; I am assured by a prominent Washington
>attorney, is technically wiretapping.
>
>David Anthony
>CDE
>DataSpan, Inc
>
>
>

ONLY if I use what I hear!! I can listen as much as I want, I just
can't use or repeat it. Maybe you better explain that to your
prominent Washington attorney.

Phil Gunsul -- WB9AAX

From -5039560474212221021
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-09 10:58:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ucbvax!decvax!bellcore!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <794@vortex.UUCP>
Date: Mon, 9-Sep-85 13:58:30 EDT
Article-I.D.: vortex.794
Posted: Mon Sep 9 13:58:30 1985
Date-Received: Wed, 11-Sep-85 06:19:20 EDT
References: <127@hydra.UUCP>
Organization: Vortex Technology, Los Angeles
Lines: 10
Xref: watmath net.ham-radio:3213 net.dcom:1276 net.video:1490

Once again, I've been merely reporting on how the courts seem to be
treating these subjects--I don't necessarily agree with all of them!

As I recall, one of the prosecution issues revolved around "reasonable
expectation of privacy." That is, when you make a mobile telephone
call you apparently have less of an "expectation of privacy" than
you do when you make a non-mobile to non-mobile call. I'll try
dig up some references...

--Lauren--

From 1188885136270038380
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-09 16:12:04 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ucbvax!decvax!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <535@petrus.UUCP>
Date: Mon, 9-Sep-85 19:12:04 EDT
Article-I.D.: petrus.535
Posted: Mon Sep 9 19:12:04 1985
Date-Received: Wed, 11-Sep-85 06:26:41 EDT
References: <127@hydra.UUCP> <794@vortex.UUCP>
Organization: Bell Communications Research, Inc
Lines: 57
Xref: watmath net.ham-radio:3214 net.dcom:1277 net.video:1494

I pulled the following item off another system. I'm posting it here because
I thought it might be relevant to the current discussion.

Phil

C1025 CC204 Harry Goodman (Harry,409)   9/ 8/85 12:26 PM L:49
KEYS:/LEAHY'S ELECTRONIC COMMUNICATIONS PRIVACY ACT / A START/

This report from Billye Leymon of the MetaNetwork:

Thought you'd be interested in this:

 Senator Leahy to propose Electronic Communications Privacy Act

 This afternoon, at the first annual meeting of the Electronic
 MAIL Association, Senator Patrick J. Leahy (Democrat-Vermont)
 announced his intention to introduce the Electronic Communication
 Privacy Act of 1985. When the Senate reconvenes, similar
 legislation will be introduced in the House. In his address,
 Senator Leahy focused on the complex public policy problems which
 have emerged with the increase of computer-based communications.

 Policy is now needed to protect the privacy and security of
 communication exchanged via new technologies, so that citizens
 may feel as secure using newer communications media as they do in
 using the mail services or the telephone. At present, the
 Federal legislation enacted in 1968 on the illegality of
 wire-tapping is the only act which might apply to privacy of
 communication issues. That legislation designed to protect voice
 communication via common carrier is no longer adequate, as
 protection is extended only to communication "capable of being
 heard." According to the Senator, current federal policy needs to
 protect "WHAT is being transmitted, not the WAY it is
 transmitted."

 The Senator, Vice-Chairman of the Senate Select Committee on
 Policy, is committed to the protection of private communication

from any source, be it government itself or a private, undetected perhaps, intruder in a database.

The to-be-proposed Electronic Communication Privacy Act of 1985 will make five important changes to the "wire tap laws." As outlined, these changes will:

- extend coverage from "voice" to all electronic transmission
- recognize private carriers, so that all communications systems will be covered, not just common carriers as at present.
- institute civil and criminal penalties for illegal access.
- institute civil penalties for _disclosure_ of private information stored on any system.
- for law enforcement, require that a court order be obtained before accessing information stored on private communications systems.

HarryG

From -5750521570280627384
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,90f97609501d84fc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-09 16:12:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!tektronix!tekcrl!teklabs!rafaeld
From: rafaeld@teklabs.UUCP (Rafael De Arce)
Newsgroups: net.ham-radio
Subject: Listening to radio transmissions and Wire-tapping...
Message-ID: <3187@teklabs.UUCP>
Date: Mon, 9-Sep-85 19:12:38 EDT
Article-I.D.: teklabs.3187
Posted: Mon Sep 9 19:12:38 1985
Date-Received: Thu, 12-Sep-85 11:15:09 EDT
Organization: Tektronix, Beaverton OR
Lines: 30

Their has been much talk on the net with regards to our "freedoms" to listen to radio transmissions and the legallity of this listening.

I called the F.C.C. this afternoon and spent about a half hour speaking to them on this subject. I wanted to set the record straight in my mind as to what the law was on this matter. I must tell you frankly, that their are many people out their that are misinformed in this subject and I was one of them.

First and foremost... listening to Common Carriers IS wire-tapping and illegal! It smacks a 10,000 dollar fine and five years. (Some states impose their own

penalties on top of the federal penalties.) When and if you listen to a phone conversation transmitted on a common carrier band, it is tantamount to plugging into the cables between the conversing parties. By law, the line is se cure.

Radar Detectors... The F.C.C. regards these as RECIEVERS and they are legal. States have the right to ban them. (That issue is somewhat mute and needs further definition.) They don't operate in the forbidden common carrier bands so the F.C.C. has no problem with them.

For those that would like to read further on the subject, I was told to see sections 301 and 605 of the Communications Act of 1934. Title 18 was suggested reading as well.

Anything outside of the common carrier bands is legal to listen to.

Let's move on and drop this subject. Their's been too much attention paid to this subject on several nets. All it takes is a phone call to the proper agency and they can and will point you to the rules, regulations and the law.

From 8968985426825298273
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7e66d50e533ee61,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-09 22:25:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
FAC0392%UOFT01.BITNET@WISCVM.ARPA
From: FAC0392%UOFT01.BITNET@WISCVM.ARPA (Len Brady)
Newsgroups: net.ham-radio
Subject: thanks
Message-ID: <1403@brl-tgr.ARPA>
Date: Tue, 10-Sep-85 01:25:43 EDT
Article-I.D.: brl-tgr.1403
Posted: Tue Sep 10 01:25:43 1985
Date-Received: Thu, 12-Sep-85 08:27:44 EDT
Sender: news@brl-tgr.ARPA
Lines: 3

Glad you zapped him, Keith. If I saw one more Louie.UDEL.EDU, I was goin
to pull the plug forever.
73 de KF8J

From 6596404230481752555
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750

X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-10 01:29:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site l5.uucp
Path: utzoo!linus!decvax!decwrl!sun!l5!gnu
From: gnu@l5.uucp (John Gilmore)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <95@l5.uucp>
Date: Tue, 10-Sep-85 04:29:05 EDT
Article-I.D.: l5.95
Posted: Tue Sep 10 04:29:05 1985
Date-Received: Thu, 12-Sep-85 21:15:51 EDT
References: <338@nicmad.UUCP> <780@vortex.UUCP>
Organization: Ell-Five [Consultants], San Francisco
Lines: 14
Xref: linus net.ham-radio:2584 net.dcom:1076 net.video:1405
Summary: NSA does legal wiretaps by "only" listening for touchtones, u can 2

The last time the wiretapping laws were hacked, the NSA suggested (and
got) a small wording change that effectively makes it legal to listen
in AS LONG AS YOU ONLY LISTEN TO TELCO SIGNALLING rather than user
data/speech. This means that, for example, receiving microwave phone
transmissions is defensible if your equipment filters out all but the
"who called who" info. They wanted this because it gives them a legal
reason to have tapping equipment always installed. (Who's to know if
their equipment happens to switch to recording speech or data if an
interesting phone number makes or receives a call?)

It would be interesting to see them try you for it -- if they found
you guilty, you could sue the government to stop the NSA.

Please correct me if I'm wrong, Lauren.

From -4985634597437866322
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-10 08:20:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site gwsd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!qantel!hplabs!
sdcrdcf!sdcsvax!gwsd!revc
From: revc@gwsd.UUCP (Bob Van Cleef)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <170@gwsd.UUCP>
Date: Tue, 10-Sep-85 11:20:27 EDT

Article-I.D.: gwsd.170
Posted: Tue Sep 10 11:20:27 1985
Date-Received: Sun, 15-Sep-85 12:12:26 EDT
References: <125@hydra.UUCP> <777@vortex.UUCP> <127@hydra.UUCP>
Organization: Gateway Computer Systems, San Diego
Lines: 27
Xref: watmath net.ham-radio:3240 net.dcom:1292 net.video:1512
Summary: German listening laws

In article <127@hydra.UUCP>, die@hydra.UUCP (Dave Emery) writes:
>   And as someone on the net pointed out, the difficulty of
> proving interception took place will soon lead to proposals to
> make mere possession of equipment that could or might intercept private
> transmissions a crime. This of course will be rather interesting
> since there are so many examples of legitimate radio equipment
> that could be used to pick up forbidden private signals by merely pointing
> the antenna differently or keying in a slightly different frequency.

My brother-in-law, a German airlines pilot, likes to tell the story of
one airlines Captain who lost his commercial license because he was
discovered listening to airplane conversations with an unlicensed
receiver.

In Germany the Post Office has the functions of our FCC, and you are
NOT allowed to monitor anything non-commercial without a license. In
the case of this pilot, the German supreme court overruled the PO,
on the grounds that loss-of-livelyhood was excess punishment, but
they kept his receiver system.

Bob
--
Bob Van Cleef   {ihnp4|akgua|decvax|dcdwest|ucbvax}
(619) 457-2701   ...sdcsvax!gwsd!revc
Gateway Computer Systems   CompuServe - [71565,533]
4980 Carroll Canyon Road
San Diego, CA 92121

From 6926042934102724147
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-10 08:59:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!prls!amdimage!amdcad!amd!vecpyr!lll-crg!gymble!umcp-cs!
seismo!brl-tgr!tgr!wmartin@Almsa-2
From: wmartin@Almsa-2 (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <1415@brl-tgr.ARPA>
Date: Tue, 10-Sep-85 11:59:42 EDT
Article-I.D.: brl-tgr.1415

Posted: Tue Sep 10 11:59:42 1985
Date-Received: Sat, 14-Sep-85 01:17:12 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

Just would like to say to all the electronics, scanner, and radio enthusiasts
out there:

Welcome to the world of persecution and harassment by government that we
firearms enthusiasts have been experiencing for the last century or so!

Isn't it wonderful when your relationship with what is *supposed* to be an
organization dedicated to SERVING your needs (government) is instead a
continual firefight and struggle to simply be *let alone*?!?!?

Plus, of course, you can NEVER win; you can only stave off further
encroachment or assaults until they decide to attack you again...

Will

From 6791304743985392885
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5faee5a7dd76563e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-10 20:07:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site sask.UUCP
Path: utzoo!utcsri!ubc-vision!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: Help with W3IWI updates??
Message-ID: <276@sask.UUCP>
Date: Tue, 10-Sep-85 23:07:59 EDT
Article-I.D.: sask.276
Posted: Tue Sep 10 23:07:59 1985
Date-Received: Sun, 15-Sep-85 00:42:03 EDT
Distribution: net
Organization: University of Saskatchewan, CANADA
Lines: 6

A friend of mine (Les VE5DS) heard on the amsat net that there are some
changes that have to be made to the W3IWI software to make it work in 1986.
Some QRM got in his way though. Can someone tell me what precisely were
the changes and what do they do (i.e. why are they required?).
Tnx + 73
de Pete VE5BEL

From 4871341954497243769
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public

X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-11 03:15:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!decvax!bellcore!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <801@vortex.UUCP>
Date: Wed, 11-Sep-85 06:15:37 EDT
Article-I.D.: vortex.801
Posted: Wed Sep 11 06:15:37 1985
Date-Received: Sat, 14-Sep-85 05:14:08 EDT
References: <95@l5.uucp>
Organization: Vortex Technology, Los Angeles
Lines: 14
Xref: watmath net.ham-radio:3228 net.dcom:1286 net.video:1504

The way I heard it, what actually happened is that courts have ruled
that telco can track and deliver to authorized agencies the
numbers dialed on particular phones without a "wiretap" court
order. This is considered to be about the same as a "mail watch"
where the post office keeps track of return addresses on mail
to a particular point.

In both cases, I suspect that only the particular entities specifically
authorized (i.e. telco and post office) have the appropriate permissions
for such activities--I doubt if the permissions extend to the
public at large. I'm speculating on the details of this point,
so don't take this message as gospel.

--Lauren--

From 3383713211462604765
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,66a4afde6815ae40,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-11 07:28:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: DX info question
Message-ID: <20339@mgweed.UUCP>
Date: Wed, 11-Sep-85 10:28:24 EDT
Article-I.D.: mgweed.20339
Posted: Wed Sep 11 10:28:24 1985
Date-Received: Thu, 12-Sep-85 10:45:37 EDT

Organization: AT&T Information Systems - Montgomery Illinois
Lines: 13

A letter from Lou, K2ANC, has prompted me to post this note regarding
DX contacts.

Outside of the occasional ARRL dx bulletins that I post, there has been
little about DX contacts on the net. From other comments I receive,
I would say there is pretty good interest in DXing. So the question is
should I or someone collect dx station info to be summarized and posted
to the net (weekly)? Or should active dxers each post their own interesting
contacts? Lets's hear some ideas/opinions.

Bob K9EUI

From 900419891731353816
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6557cc5de684c48b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-11 08:42:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 76 (new beacon)
Message-ID: <20340@mgweed.UUCP>
Date: Wed, 11-Sep-85 11:42:45 EDT
Article-I.D.: mgweed.20340
Posted: Wed Sep 11 11:42:45 1985
Date-Received: Thu, 12-Sep-85 11:02:18 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 17

qst de k9eui
hr arrl bulletin nr 76 from arrl headquarters
newington ct september 6, 1985
to all radio amateurs bt

(((((accuracy not guaranteed due to poor conditions)))))

a new 14 mhz beacon, lu4aa/b in argentina, is now on the air.
it can be heard on 14.100 mhz every 10 minutes, starting at (?)
minutes past the hour. reception reports would be welcomed by
both the radio club argentino and by the northern california dx
foundation.

another new beacon, hk4lr/b in columbia should be on the air
shortly. ar

From -5165278813391465547
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d34a6ff860047648,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-11 08:43:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 77 (elections)
Message-ID: <20341@mgweed.UUCP>
Date: Wed, 11-Sep-85 11:43:26 EDT
Article-I.D.: mgweed.20341
Posted: Wed Sep 11 11:43:26 1985
Date-Received: Thu, 12-Sep-85 11:02:36 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 17

qst de k9eui
hr arrl bulletin nr 77 from arrl headquarters
newington ct september 10, 1985
to all radio amateurs bt

(((((accuracy not graranteed due to poor conditions)))))

the following have been reelected without balloting as section
managers for their respective sections:

kansas k0bxf, michigan w8mzd, santa barbara k6fi, tennessee
no4q, and (garble) massachusetts ka1t.

those elected begin their new term of office january 1, 1986.
ar

From -5439320662733536307
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cca7a2007aa58804,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-11 08:44:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 36
Message-ID: <20342@mgweed.UUCP>
Date: Wed, 11-Sep-85 11:44:10 EDT
Article-I.D.: mgweed.20342
Posted: Wed Sep 11 11:44:10 1985

Date-Received: Thu, 12-Sep-85 11:02:52 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 33

qst de k9eui
hr arrl propagation forecast bulletin nr 36 from arrl headquarters
newington ct september 8, 1985
to all radio amateurs bt

(((((accuracy not guaranteed due to poor conditions)))))

the almost total solar calm that (started) nearly a month ago
is still with us. the solar flux has been no higher than 72
since september 1, and it was down to 69 by the 8th. the flux
was even lower 4 weeks ago, so readings in the high 60s are
expected through about september 13. the sun is moving to its
most favorable position for the northern hemisphere so
propagation will tend to be good on 14 mhz and lower bands much
of the time. a small flux rise will bring 21 mhz to life,
especially when the wwv k index is 2 or lower. even 24 and 28
mhz have been good on the ? days, but thus far they are usable
only on transequatorial or other low latitude circuits. flux
values in the middle 70s or higher will improve conditions on
24 and 28 mhz quite markedly when the k index is 2 or lower.
the k index trend is important so a new value is given every 3
hours. the a index is a 24 hour figure, more useful for
statistical purposes. the k index values are expected to be
higher during the middle of september but this will tend to be
offset by the improving sun position. the qst propagation
charts should be more (accurate) this fall. they are now based
on solar flux values in the low 70s, more in line with what can
be expected in the coming weeks.

american sunspot numbers for august 29 through september 5 were
between 0 and (3?) with a mean of (.4?). ar

From -1177265135360412686
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-11 10:54:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!dual!lll-crg!
seismo!brl-tgr!tgr!acardenas.ES@Xerox.ARPA
From: acardenas.ES@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <1430@brl-tgr.ARPA>
Date: Wed, 11-Sep-85 13:54:16 EDT
Article-I.D.: brl-tgr.1430

Posted: Wed Sep 11 13:54:16 1985
Date-Received: Sun, 15-Sep-85 09:40:09 EDT
Sender: news@brl-tgr.ARPA
Lines: 40

As I understand it...

The new (now old) push is for DEregulation. It appears that attempts to limit *monitoring* is not in step with FCC and Feds efforts to that end.

Amatures have seen an almost 'washing-of-the-hands' as far as FCC rules and regs violations go. That is to say, amatures do the foot work, then document-document-document and then with enough complaints, the FCC MAY take action against the violator.

Bearcat 250; one of the most popular scanners on the market...

WHO made the original demands to limit the tunning range(s), FBI, CIA, FCC, USA? I would sure like to see the letters, memos or read the notes from the meetings! What kind of 'pressure' was applied to Bearcat assure compliance with the feds desires? Perhaps threats of no FCC equipment certification? (Some newer scanners now offer almost full-spectrum tunning).

Looking at the technical manual for the Bearcat 250, a simple vco voltage controls what frequency is monitored. It is apparent that if one simply injected a adjustable control voltage, FULL-spectrum tunning is possible within all three of the bands! I expect that one could tune even higher and lower of specified limits with some loss of sensitivity at the band edges. Bypass the memory/processor and it's done. I add that there ARE program 'tricks' that fool the processor, however, there is a loss of receiver sensitivity. There are limits to the 'tricks' too, only a few more MHz are added with this method.

The next logical question is: Who will monitor the monitors?

Uncle T.
Tony Cardenas
Q.A. Auditor, 6085 Project
WA6IGJ

From -3715198943810973298
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2433f16431db8d99,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-11 12:44:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!dual!lll-crg!
seismo!brl-tgr!tgr!AD.XRH@AFSC-HQ.ARPA
From: AD.XRH@AFSC-HQ.ARPA (NICK KASS AD/XR EGLIN AFB FL 32542)
Newsgroups: net.ham-radio
Subject: MAILING LIST DELETION
Message-ID: <1433@brl-tgr.ARPA>
Date: Wed, 11-Sep-85 15:44:31 EDT
Article-I.D.: brl-tgr.1433
Posted: Wed Sep 11 15:44:31 1985
Date-Received: Sun, 15-Sep-85 09:40:54 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

*
*
*
*
*
*
PLEASE DELETE ME FROM YOUUR MAILING AND DISTRIBUTION LISTS.

NICK KASS

From 5808660274360439149
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-11 15:32:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site rpics.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!rpics!weltyrp
From: weltyrp@rpics.UUCP (Richard Welty)
Newsgroups: net.ham-radio,net.dcom
Subject: Re: Re: Listen to phone calls on your tvro
Message-ID: <182@rpics.UUCP>
Date: Wed, 11-Sep-85 18:32:46 EDT
Article-I.D.: rpics.182
Posted: Wed Sep 11 18:32:46 1985
Date-Received: Fri, 13-Sep-85 04:48:50 EDT
References: <338@nicmad.UUCP> <780@vortex.UUCP> <95@l5.uucp>
Organization: RPI CS Department, Troy NY
Lines: 28
Xref: watmath net.ham-radio:3225 net.dcom:1283

> The last time the wiretapping laws were hacked, the NSA suggested (and
> got) a small wording change that effectively makes it legal to listen
> in AS LONG AS YOU ONLY LISTEN TO TELCO SIGNALLING rather than user

> data/speech. This means that, for example, receiving microwave phone
> transmissions is defensible if your equipment filters out all but the
> "who called who" info. They wanted this because it gives them a legal
> reason to have tapping equipment always installed. (Who's to know if
> their equipment happens to switch to recording speech or data if an
> interesting phone number makes or receives a call?)

Actually, traffic analysis (knowledge of the sources and destinations
of a large group of messages) is an extremely useful form of intellegence
collection -- knowledge of where and in what volume is remarkably useful.
Thus, even if NSA equipment only checked destination and source for a
message, they would certainly have a use for the information.

I don't want them to listen to me, but I also don't want them to know my
correspondents, either ...
--

                  Rich Welty

     (I am both a part-time grad student at RPI and a full-time
      employee of a local CAE firm, and opinions expressed herein
      have nothing to do with anything at all)

     CSNet: weltyrp@rpi
     ArpaNet: weltyrp.rpi@csnet-relay
     UUCP: seismo!rpics!weltyrp

From -5805606544767450236
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,90f97609501d84fc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-11 16:17:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site lanl.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!cmcl2!lanl!djw
From: djw@lanl.ARPA
Newsgroups: net.ham-radio
Subject: Re: Listening to radio transmissions and Wire-tapping...
Message-ID: <30519@lanl.ARPA>
Date: Wed, 11-Sep-85 19:17:35 EDT
Article-I.D.: lanl.30519
Posted: Wed Sep 11 19:17:35 1985
Date-Received: Fri, 13-Sep-85 04:49:24 EDT
References: <3187@teklabs.UUCP>
Reply-To: djw@a.UUCP (David Wade)
Organization: Where God decreed skies should be purple and the beaches are 1000
miles long.
Lines: 28

In article <3187@teklabs.UUCP> rafaeld@teklabs.UUCP (Rafael De Arce) writes:
>
>There has been much talk on the net about our "freedoms" to listen

>to radio transmissions...
>
>First and foremost... listening to Common Carriers IS wire-tapping and illegal!

I think I must be misunderstanding the discussion. You responded with the oft-quoted information that listening to "common-carrier" data is wiretapping. But this discussion was about listening in on satellite beams which were broadcast at you. The satellite issue has been addressed frequently by people with a lot more at stake than you or I; and the supreme court has ruled that people are entitled to listen in on the satellite broadcasts.

Not only that; (and this applies to your radar detectors as well;) I am a licensed amateur operator and it is quite legal for me to transmit in those bands... What makes you think that it's illegal for me to receive my own transmissions?

There are about five or six different understandings about what we've been talking about here. I originally got into this about the "loss of freedoms" discussion. I own a satellite receiver; as do several of my friends, and none of us were aware that anything had changed. From your comments about the FCC, I must conclude that nothing has; we're just talking about separate things.

Dave Wade
Los Alamos National Laboratories

From 5824705308732532882
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-11 16:20:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 Unisoft-Cosmos; site kepler.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!harvard!seismo!lll-crg!dual!ptsfa!well!micropro!kepler!mojo
From: mojo@kepler.UUCP (Morris Jones)
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <229@kepler.UUCP>
Date: Wed, 11-Sep-85 19:20:38 EDT
Article-I.D.: kepler.229
Posted: Wed Sep 11 19:20:38 1985
Date-Received: Sat, 14-Sep-85 06:01:33 EDT
References: <1415@brl-tgr.ARPA>
Reply-To: mojo@kepler.UUCP (mojo)
Organization: MicroPro Int'l Corp., San Rafael, CA
Lines: 16

In article <1415@brl-tgr.ARPA> wmartin@Almsa-2 (Will Martin -- AMXAL-RI) writes:
>Plus, of course, you can NEVER win; you can only stave off further
>encroachment or assaults until they decide to attack you again...

You can't win because people like you and I, Will, favor privacy as
one of our basic freedoms. Especially privacy from the government.
But that has to extend to privacy from other individuals. I also happen
to believe in property rights and free enterprise, and feel that there
are property rights involved in the use of the radio spectrum.

Thieves and eavesdroppers get no respect from me.

--
Mojo
... Morris Jones, MicroPro Product Development
{dual,ptsfa,hplabs}!well!micropro!kepler!mojo

From -169601007330501353
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,90f97609501d84fc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-11 19:12:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!qantel!dual!lll-crg!
seismo!brl-tgr!tgr!gd@sri-spam
From: gd@sri-spam
Newsgroups: net.ham-radio
Subject: Re: Listening to radio transmissions and Wire-tapping...
Message-ID: <1443@brl-tgr.ARPA>
Date: Wed, 11-Sep-85 22:12:55 EDT
Article-I.D.: brl-tgr.1443
Posted: Wed Sep 11 22:12:55 1985
Date-Received: Sun, 15-Sep-85 09:43:22 EDT
Sender: news@brl-tgr.ARPA
Lines: 11

> Anything outside of the common carrier bands is legal to listen to.

So what does the FCC include in their definition of a common carrier?
Satellite TV? Private "cable" TV using microwaves?

thanks for the definitive scoop,

Greg, WB6DEO

From -1284249255982235058
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public

X-Google-Thread: 168ea8,1de64ebb9ea45042
X-Google-Attributes: gid168ea8,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-12 06:53:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.dcom,net.video,net.news.stargate
Subject: Re: Listen to phone calls ... (mobile phone scanning == wiretapping?)
Message-ID: <667@ihu1h.UUCP>
Date: Thu, 12-Sep-85 09:53:30 EDT
Article-I.D.: ihu1h.667
Posted: Thu Sep 12 09:53:30 1985
Date-Received: Fri, 13-Sep-85 04:17:38 EDT
References: <30538@lanl.ARPA>, <782@vortex.UUCP> <284@unccvax.UUCP>
Organization: AT&T Bell Laboratories
Lines: 13
Xref: watmath net.ham-radio:3222 net.dcom:1281 net.video:1499
net.news.stargate:201

> Interception of common carrier telephone facilities, wire, coax,
> microwave, satellite, whatever; I am assured by a prominent Washington
> attorney, is technically wiretapping.
>
> David Anthony

Mobile telephone services are common carrier.

Does the Washington attorney consider listening to these calls on a scanner,
as thousands of folks do, to be "wiretapping"?
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -9214644544460098048
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1985-09-12 12:31:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site mot.UUCP
Path: utzoo!utcs!mnetor!mot!fred
From: fred@mot.UUCP (Fred Christiansen)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <262@mot.UUCP>

Date: Thu, 12-Sep-85 15:31:24 EDT
Article-I.D.: mot.262
Posted: Thu Sep 12 15:31:24 1985
Date-Received: Thu, 12-Sep-85 17:12:09 EDT
References: <779@vortex.UUCP>
Organization: Motorola Microsystems, Phoenix AZ
Lines: 17
Xref: utcs net.dcom:1287 net.video:1496 net.ham-radio:3030

maybe i've missed this point, so forgive me: if i watch network TV,
i am paying to watch it indirectly (the cost to the advertisers is passed
thru in the cost of the product). if i watch cable TV, i am paying to
watch it directly (the monthly or whatever cable charge). if i watch
satellite TV, using my own dish, i am paying for it (cost a fair bundle
to get that baby!). so i'm *NOT* freeloading.
     i recognize the cable people may get upset over the intercept.
but the solution is for them to get into the satellite dish business
(Yes, Mr. Customer, we're glad to serve you. How do you want it?
Monthly cable charges or monthly payments on these fantastic dishes?)
     besides there are gobs of places not served by cable (and not too
well by networks, either). e.g., ever drive thru northern CA or Oregon?
--
<< Generic disclaimer >>
Fred Christiansen ("Canajun, eh?") @ Motorola Microsystems, Tempe, AZ
UUCP: {seismo!terak, trwrb!flkvax, utzoo!mnetor, ihnp4!btlunix}!mot!fred
ARPA: oakhill!mot!fred@ut-sally.ARPA   AT&T: 602-438-3472

From -6900854156048871509
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-12 13:42:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site mot.UUCP
Path: utzoo!utcs!mnetor!mot!coffin
From: coffin@mot.UUCP (Chris Coffin)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <264@mot.UUCP>
Date: Thu, 12-Sep-85 16:42:40 EDT
Article-I.D.: mot.264
Posted: Thu Sep 12 16:42:40 1985
Date-Received: Fri, 13-Sep-85 00:46:38 EDT
References: <338@nicmad.UUCP>, <780@vortex.UUCP>
Organization: Motorola Microsystems, Phoenix AZ
Lines: 10
Xref: utcs net.ham-radio:3031 net.dcom:1288 net.video:1497

My (and I suspect most other peoples) opinion about
receiving ANYTHING from the airwaves is:

If you don't want me listening (watching etc) to it,
then KEEP YOUR PHOTONS OFF OF MY PROPERTY!

Chris Coffin
ihnp4!mot!coffin

[If you can't fix the warp drive, you're fired.]

From -7587628565185821702
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,66a4afde6815ae40
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-12 16:07:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: Re: DX info question
Message-ID: <497@mtunh.UUCP>
Date: Thu, 12-Sep-85 19:07:21 EDT
Article-I.D.: mtunh.497
Posted: Thu Sep 12 19:07:21 1985
Date-Received: Fri, 13-Sep-85 04:38:01 EDT
References: <20339@mgweed.UUCP>
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 6

Several of us I'm sure get various DX newsletters and exchange info via mail. If you, Bob, are willing to pick up and post various items (DXpeditions, stations heard -- freq/time, etc) I for one would be an avid reader.

73, jim ky2d

From 3130770201356640910
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3d19761f0eced3b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-12 22:02:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!
FAC0392%UOFT01.BITNET@WISCVM.ARPA
From: FAC0392%UOFT01.BITNET@WISCVM.ARPA (Len Brady)
Newsgroups: net.ham-radio
Subject: a New info-net!!!!!!!!!!
Message-ID: <1461@brl-tgr.ARPA>

Date: Fri, 13-Sep-85 01:02:43 EDT
Article-I.D.: brl-tgr.1461
Posted: Fri Sep 13 01:02:43 1985
Date-Received: Sun, 15-Sep-85 05:20:04 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

I recommend strongly that a new info-net be started. It should be one
dealing exclusively with eavesdropping on telephone conversations by
TVRipOff dishes (isn't that what tvro means?), by microwave ovens, by
electronic wristwatches, by any tool the morbidly curious want to use
for their homegrown surveillance. Another section of the new net can
deal with any aspect of real or imagined legal information pertaining
(or not pertaining) to such activity.
But leave me out of it! What connection anyone sees between all this
b**l sh*t and amateur radio escapes me.
73 to some (probably most) of you.

From 8982694486321995372
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bdc1930354aa0e8a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-13 06:05:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!
FAC0395%UOFT01.BITNET@WISCVM.ARPA
From: FAC0395%UOFT01.BITNET@WISCVM.ARPA
Newsgroups: net.ham-radio
Subject: K9EUI & DX
Message-ID: <1468@brl-tgr.ARPA>
Date: Fri, 13-Sep-85 09:05:02 EDT
Article-I.D.: brl-tgr.1468
Posted: Fri Sep 13 09:05:02 1985
Date-Received: Sun, 15-Sep-85 05:48:17 EDT
Sender: news@brl-tgr.ARPA
Lines: 8

Would LOVE to see/hear more about DX on the info-net. When I
have time to work some, I'll be happy to post my info. Hope
other colleagues will do the same. My FO0XX cards arrived
yesterday, and I need to work one more to submit for 290.
No big threat to the big guns on the Honor Role, but working
on it.

73 de N8AAT, Joe Feustle

From 22582933583673854
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,161dbb04b070a3a5,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-09-13 06:31:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!rachiele@NADC
From: rachiele@NADC
Newsgroups: net.ham-radio
Subject: DX information
Message-ID: <1470@brl-tgr.ARPA>
Date: Fri, 13-Sep-85 09:31:27 EDT
Article-I.D.: brl-tgr.1470
Posted: Fri Sep 13 09:31:27 1985
Date-Received: Sun, 15-Sep-85 05:48:40 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

I would think it would be better if someone summarized and posted, then if
anyone was not interested they would only have one message to delete, rather
than dozens to wade through. But I like the idea, I'll read it for sure.
          Jim
          KA3OKP

From -194761048002433889
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-13 06:45:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ucbvax!ucdavis!lll-crg!seismo!brl-tgr!tgr!ptb@mitre-
bedford.ARPA
From: ptb@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls ... (mobile phone scanning == wiretapping?)
Message-ID: <1472@brl-tgr.ARPA>
Date: Fri, 13-Sep-85 09:45:57 EDT
Article-I.D.: brl-tgr.1472
Posted: Fri Sep 13 09:45:57 1985
Date-Received: Sun, 15-Sep-85 05:49:16 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

One comment, then I'll sign here. There is another issue, that legal
or not, in order to be prosecuted, one HAS TO CATCH YOU doing it. I
think that a good number of people are protected in the scanner
environment by laws precluding unreasonable search and seizure (even
if what they are doing may be interpreted as being illegal).

Really, folks, haven't we beaten this dead horse enough???

73 de Peter (ptb@mitre-bedford)

From -8716098718326924316
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4ec9b6951afde144,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-13 07:00:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!ucbvax!ucdavis!lll-crg!
seismo!brl-tgr!tgr!carpenter@nbs-vms
From: carpenter@nbs-vms (CARPENTER, ROBERT)
Newsgroups: net.ham-radio
Subject: RE: DX Info
Message-ID: <1474@brl-tgr.ARPA>
Date: Fri, 13-Sep-85 10:00:20 EDT
Article-I.D.: brl-tgr.1474
Posted: Fri Sep 13 10:00:20 1985
Date-Received: Sun, 15-Sep-85 23:59:51 EDT
Sender: news@brl-tgr.ARPA
Lines: 23

I, too, suspect that there would be considerable interest in DX info
on this net. I want to suggest that you expand the scope to include
the AMSAT DX info, which you may be able to get through KA9Q, who is
on this list. The Amateur Satellite DX group is quite avid.

As for myself, the interest is VHF DX - primarily six meters. I did a
one-man DXpedition to FG0 (FG0HZW) in June-July 1983. All operation
was on six and I had about 180 different contacts (mostly US) in the
two weeks. The ONE main central source of VHF/UHF DX info is W3XO, who
does the column in QST - but he isn't on this net. K2UYH is the center
of 432 (moon) DX news. The 'real' jobs of these people:

W3XO, Johns Hopkins U., Applied Physics Lab.
K2UYH, Trenton (NJ) State College.

Again, keep up the DX news.......

Bob W3OTC

From -7652318928314998171
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3d19761f0eced3b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-13 08:20:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!ucbvax!ucdavis!lll-crg!
seismo!brl-tgr!tgr!d3unix!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: a New info-net!!!!!!!!!!
Message-ID: <1475@brl-tgr.ARPA>
Date: Fri, 13-Sep-85 11:20:12 EDT
Article-I.D.: brl-tgr.1475
Posted: Fri Sep 13 11:20:12 1985
Date-Received: Mon, 16-Sep-85 00:00:06 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

Why not just a general, all-purpose FLAMENET?

-73, (note negative sign)
John S., W3IKG

From -6447924562152269485
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,904e5240c9bcee63,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-13 15:24:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 36
Message-ID: <20388@mgweed.UUCP>
Date: Fri, 13-Sep-85 18:24:06 EDT
Article-I.D.: mgweed.20388
Posted: Fri Sep 13 18:24:06 1985
Date-Received: Sat, 14-Sep-85 07:56:10 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 49

qst de k9eui
hr dx bulletin nr 36 from arrl headquarters
newington ct september 12, 1985
to all radio amateurs bt

thanks to kb1be and the connecticut dx association for the
following dx information.

the congo. tn8ee is active on 20 and 40 meter cw, around 1930z
on 14029 khz and later on 7 mhz. he is expected to be on ssb
on friday the 13th, at 2130z on 14236 khz.

grenada. don, j37ah, is back on grenada and is very active on
the 20 meter ssb nets. he plans to operate on 40, 80 and 160

meters this fall and winter.

kermadec island. chris, zl7oy, returns to kermadec around september 20 as zl8oy. after october 1, his call will be zm8oy.

tokelau islands. ron, zl1amo, will activate tokelau october 10 or 12 for a dxpedition as zk(??) replacing the zm7 call. look for him on 20 and 40 meter cw. there will be some ssb operation as well. he is expected to be on 14236 khz at 2330z on october 19 and 26.

belize. wa6vnr is expected to operate v3cq october 1 through 7.

macao. ks9p is expected to operate xx9sp from september 22 through 28.

heard island. vk2bcc, a radio technician aboard an antarctic research institute ship, nella dan, will be on heard island in late september for a five week stay. his call will probably be vk0cc. jim smith, p29js/vk9ns, will try to have him on his 14220 net whenever possible.

willis island. vk9zb is active on 14220 khz at 0700z, and may also be found on 40 and 75 meter ssb around 1000z.

beacons. a new beacon, lu4aa, began operation on september 3 as part of the ncdxf 14.1 mhz cw beacon net. lu4aa will key for one minute each ten minutes in the 0008 time slot following zs6dn/b. another new beacon, hk4lr/b, is expected to begin operation soon in the 0009 time slot. further information on the beacon net may be found in june 1983 qst ar

From 6519760536933509839
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-13 15:26:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 SMI; site husky.uucp
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!rochester!ritcv!husky!mkh
From: mkh@husky.uucp (Mike Hiliger)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: wanted: reliable high speed modem and cost
Message-ID: <204@husky.uucp>
Date: Fri, 13-Sep-85 18:26:45 EDT

Article-I.D.: husky.204
Posted: Fri Sep 13 18:26:45 1985
Date-Received: Sun, 15-Sep-85 23:44:14 EDT
References: <125@hydra.UUCP> <777@vortex.UUCP> <338@nicmad.UUCP> <1229@brl-tgr.ARPA>
Organization: Eastman Kodak Company, Rochester, NY
Lines: 5
Xref: watmath net.ham-radio:3244 net.dcom:1294 net.video:1513

I am currently looking for a high speed modem (56kb/s), to be used for
communications between an SNA network and an Ethernet network thru
a gateway. I would like information anyone may have regarding vendors
who produce a reliable device. Please include any information you
may have on these vendors and approximate prices.

From -6151233337640990826
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6f6f06adc8d48c5c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-13 18:31:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site vax135.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!hpk
From: hpk@vax135.UUCP (Howard Katseff)
Newsgroups: net.ham-radio
Subject: Re: Schematics for stereo FM modulator needed
Message-ID: <1186@vax135.UUCP>
Date: Fri, 13-Sep-85 21:31:16 EDT
Article-I.D.: vax135.1186
Posted: Fri Sep 13 21:31:16 1985
Date-Received: Sat, 14-Sep-85 08:17:37 EDT
References: <1237@brl-tgr.ARPA> <1445@videovax.UUCP>
Reply-To: hpk@vax135.UUCP (Howard Katseff)
Distribution: net
Organization: AT&T Bell Labs, Holmdel, NJ
Lines: 4
Summary:

I happen to have the address for Panaxis Productions. It is
PO Box 130, Paradise, CA 95969. The address is from the back
of the FM Atlas catalog, which is a good source for SCA adapters.
Their address is FM Atlas, Adolph, MN 55701-0024.

From 575211553090965883
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-13 19:29:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!karn

From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <538@petrus.UUCP>
Date: Fri, 13-Sep-85 22:29:14 EDT
Article-I.D.: petrus.538
Posted: Fri Sep 13 22:29:14 1985
Date-Received: Sat, 14-Sep-85 17:39:56 EDT
References: <1415@brl-tgr.ARPA>
Organization: Bell Communications Research, Inc
Lines: 8

There's an interesting circular argument forming here. It is said that listening in on cordless phones isn't illegal (and police don't need a warrant to do it) because it's so easy; i.e., there is no "reasonable expectation of privacy". But if listening in on a common carrier's trunks is almost as easy, then why should their customers have any greater "expectation of privacy"?

Phil

From 4627404612435637298
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9af162a0123b17,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-14 22:10:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!mit-eddie!cybvax0!frog!hydra!die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio
Subject: Theft is Theft
Message-ID: <128@hydra.UUCP>
Date: Sun, 15-Sep-85 01:10:43 EDT
Article-I.D.: hydra.128
Posted: Sun Sep 15 01:10:43 1985
Date-Received: Wed, 18-Sep-85 03:19:07 EDT
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 91

Theft is Theft.

I started poking around the terrestrial and then the celestial microwave spectrum in the mid 70's. Amoung the things I found were the very powerful (someone told me 100+ watts) MDS transmissions that carried HBO and of course the satcom cable feeds (which were much harder to receive) and various terrestrial feeds that all carried the HBO signal. I thought long and hard about whether I had any right to watch movies from these HBO signals and decided that in doing so I was obtaining a service that

I would otherwise have to pay for, and which someone paid to provide, transmit and so forth. This seemed to me to be theft pure and simple.

I could see no difference in kind or substance between paying for a copy of these signals from a downconverter or cable so I could watch them on my tv for whatever amusement I could get from the old and usually second rate movies they run, and hooking up a kluge of microwave hardware to my tv and pointing a horn out the window at Boston's Prudential building. Granted I had provided the receiving hardware, but it seemed very clear to me that I was receiving exactly the benefit I would get if I subscribed to the service. It seemed a very stretched interpretation of 605 or for that matter simple morality to argue that I had some inalienable right to use the service for free just because I provided the receiver and they beamed it at me. I was never able to rationalize my right to pirate a service that someone had gone to considerable expense to provide, so I never watched it.

I feel that this same principle applies to using any rf service for which there is a usual fee, particularly if this fee is intended to cover the costs of providing the service and transmitting it, not just to cover the cost of the receiving equipment. It seems to me that a somewhat stretched analogy can be made with the widely accepted view that it is not morally appropriate (or legal either) to copy and/or use licensed software in violation of it's license terms simply because it is easy, technically trivial, and often conveniant to do so. It seems to me that the same kind of moral scruples that lead us to frown on those who make pirate copies of our software ought to be raised when we point our tvro's at satellites that carry programming that someone paid to provide as a service they charge for.

In short, whether or not it is legal to intercept signals from one rf source or another (which was a subject of considerable disagreement on the net) obtaining a service without paying for it by intercepting such signals is theft.

The only contrary perspective I can think of is that radiation of information into space owned and occupied by others is somehow equivalent to putting it completely into the public domain (or at least ceding all rights to it to those whose space it traverses) and that the provider of a service therefore cedes all rights to collect for providing his service when he transmits it by radio. This viewpoint would give anyone the right to do absolutely anything they want with any information that alters the E or M field in any space they have control over. As a practical matter this would eliminate unencrypted radio as a medium for transmitting any form of proprietary or confidential or private information, and elevate cryptography and cryptology to the status of crucial arts.

One has to wonder whether this view is justified as one tries to balence the rights of individuals to make sense of photons impinging on them with the social purpose of providing communications and services that would be otherwise impractical or impractically expensive to provide.

In any case as a hacker, I still occasionally poke around and try demodulating random signals I find (as a strictly technical challenge and recreation) but I remain careful not to allow myself to use my knowlage and skill to obtain services that I am not paying for. My recreation (very occasional these days now I have a wife and child to soak up my time) is technically quasi-legal since I am only looking at data and other signals not covered by 2115 (did my posting on this get out?) but is probably a dying sport as broader laws and encryption steadily encroach.

I would not recomend the kind of technical swl'ing I became addicted to in my youth to a child of the modern age, aside from the fact that we are gradually waking up to the need to secure communications and starting to install encryption and non-rf links at a rapid rate, the temptation to cheat and use one's skills to obtain services grows more difficult to resist as rf based services proliferate.

It is probably better to regard listening to anything but what one can pick up on an ordinary unmodified tv or AM/FM radio as forbidden fruit, the same way we carefully avoid using a UNIX (tm) utility on an unlicensed machine.

David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.
uucp: decvax!frog!die

From -3895067814209482416
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-15 07:31:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site unccvax.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!unccvax!dsi
From: dsi@unccvax.UUCP (Dataspan Inc)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <293@unccvax.UUCP>
Date: Sun, 15-Sep-85 10:31:49 EDT
Article-I.D.: unccvax.293
Posted: Sun Sep 15 10:31:49 1985
Date-Received: Tue, 17-Sep-85 04:49:51 EDT
References: <779@vortex.UUCP>, <262@mot.UUCP>
Organization: UNC-Charlotte
Lines: 35
Xref: watmath net.dcom:1298 net.video:1515 net.ham-radio:3247

The solution for CATV companies to "get into satellite TV" is a very sticky legal issue. About 5 years ago, some podunk CATV ma-and-pa operation wanted to essentially open a ColorTyme or U-Rent franchise. Then, for one monthly payment, you'd get cable TV and the receiver(s) to watch it on. (From a technical standpoint, this isn't a bad idea. I'd much rather see the Zenith Z-TAC decoder inside the tv set instead of the demod-remod thing on top of my TV; then I'd get BTSC stereo sound at home!!!!!)

However, someone pitched a holy conniption fit over this, and it is now standard practice to include an "anti equipment leasing", directly or otherwise, in franchise agreements with communities/CATV state boards/whatever. This includes repair, sale, leasing..... (This may even go further back, coming to think of it - I seem to remember something about the Greensboro, NC people wanting to adjust IF amplifier response in certain receivers for a fee (because the people had sloppy sets back then with poor trapping) and that was thumbs down, also!)

I think it was in New York that the state's goody-goody CATV commission tried to achieve the same objective (make sure that delivery of video was over the air or through duly licensed CATV operators) by making illegal the construction of earth stations and SMATV facilities, even though some of the SMATV operators were duly licensed by the service(s) they carried! This didn't work, either, ol' Charlie Ferris's boys stepped in.

The real solution to this whole mess is to leave the electronic media alone, deregulate the heck out of it (except for technical matters such as harmful interference and so on) and let good old American engineering solve the problem of "freeloaders" with a profit motive! Things could be worse; most of the "network" stuff on Anik (ITV, BCTV) is scrambled anyway! Last I looked, you could only get CBC.

David Anthony
DataSpan, Inc
.

From 310077058164491986
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-15 13:47:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!bellcore!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <804@vortex.UUCP>
Date: Sun, 15-Sep-85 16:47:29 EDT
Article-I.D.: vortex.804
Posted: Sun Sep 15 16:47:29 1985

Date-Received: Tue, 17-Sep-85 05:24:06 EDT
References: <538@petrus.UUCP>
Organization: Vortex Technology, Los Angeles
Lines: 6

I suspect that the key is that when you use a cordless phone, you're
not a common carrier and thusly don't have the "expectation of privacy."
It gets tricky, but note that the designation of "common carrier"
exists (in part) specifically to categorize some of these issues.

--Lauren--

From -8797295272097030911
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef061071952456ad
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-16 07:12:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site hpcnof.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!hplabs!hpfcdc!hpfcla!hpcnof!jrc
From: jrc@hpcnof.UUCP
Newsgroups: net.ham-radio
Subject: Re: Vacuum Tube RF amp wanted
Message-ID: <44500003@hpcnof.UUCP>
Date: Mon, 16-Sep-85 10:12:00 EDT
Article-I.D.: hpcnof.44500003
Posted: Mon Sep 16 10:12:00 1985
Date-Received: Sat, 21-Sep-85 05:36:42 EDT
References: <286@unccvax.UUCP>
Organization: 16 Sep 85 08:12:00 MDT
Lines: 4

I can't resist. Watcha buildin?

Jim Conrad KQ7B
ucbvax!hplabs!hpcnof!j_conrad

From 305820228105403161
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,116c3c6cf5c63ad7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-16 07:12:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!rachiele@NADC
From: rachiele@NADC
Newsgroups: net.ham-radio
Subject: Sears 2 Meter
Message-ID: <1513@brl-tgr.ARPA>
Date: Mon, 16-Sep-85 10:12:04 EDT
Article-I.D.: brl-tgr.1513

Posted: Mon Sep 16 10:12:04 1985
Date-Received: Thu, 19-Sep-85 03:27:24 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

I have an old Sears 2 meter rig. It seems to work ok but the audio seems
weak. Also to modify the frequency presets, it is necessary to move some
stickers around on a drum to block out certain light paths. The remaining
light paths trigger a row of diodes to select the frequency. But I don't
know if it can select to 5 kc. Does anyone out there have any information
on this rig? I believe it is made by Yeisu.
               Jim
               KA3OKP

From 8155437636249618334
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d9c1eec4f8f7978,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-16 09:51:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!dual!lll-crg!gymble!umcp-cs!seismo!
brl-tgr!tgr!wmartin@Almsa-2
From: wmartin@Almsa-2 (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: Ham Equipment Info Source
Message-ID: <1522@brl-tgr.ARPA>
Date: Mon, 16-Sep-85 12:51:58 EDT
Article-I.D.: brl-tgr.1522
Posted: Mon Sep 16 12:51:58 1985
Date-Received: Thu, 19-Sep-85 06:31:17 EDT
Sender: news@brl-tgr.ARPA
Lines: 31

I have an old (early 70's) set of looseleaf reference material to ham
equipment from 1945 through 1973; it is called the HAM EQUIPMENT BUYERS'
GUIDE, and was designed to provide specs, original retail price, and other
info on receivers, transmitters, transceivers, and linears for the ham
shopping for used or flea-market/hamfest gear. It is a handy reference.

It was published by Alton L. Brand (WA9MBJ), at PO Box 311, Sycamore, IL
60178 (also have a street address of 415 E. Sycamore St., same town).
I wrote to that PO Box address back in 1981, hoping to locate later
volumes that would bring the reference up to include current gear.
However, my letter was returned as "Undeliverable -- unable to forward"
by the US Mail.

This publisher also produced a twice-a-month classified ad newsletter
called "Equipment Exchange - Ham Trader". I do not know if this is
still being published, under the same or a different name, by the same or
different people.

Does anyone have any info on this operation? Are they still in business
at a different address? Is "Alton L. Brand" still around, or was it
taken over by someone else, or was this one of those one-man operations
run by a retired person, which ceased when he died?

If they are still available, or if you can get an old copy, anyone interested
in older receivers and the like will find this "Buyers' Guide" a good
source of info on that otherwise-unknown dusty box you picked up at a yard
sale for $1.00!

Regards, Will

ARPA/MILNET: wmartin@almsa-1.ARPA   USENET: seismo!brl-bmd!wmartin

From -7214419818788121556
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f4158f8ff125817b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-16 11:53:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!dual!lll-crg!seismo!brl-tgr!tgr!
acardenas.ES@Xerox.ARPA
From: acardenas.ES@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing / NO RAIDERS!
Message-ID: <1527@brl-tgr.ARPA>
Date: Mon, 16-Sep-85 14:53:27 EDT
Article-I.D.: brl-tgr.1527
Posted: Mon Sep 16 14:53:27 1985
Date-Received: Thu, 19-Sep-85 06:32:29 EDT
Sender: news@brl-tgr.ARPA
Lines: 27

****
IF YOU DON'T CARE ABOUT THE L.A.RAIDERS, DELETE THIS MESSAGE.
****

OK LA RAIDER FANS!!! HERE's THE HOT FLASH!!!...

The "inside" news is.... the Raider games are to be transmitted on
the 12GHz Bands... Forget your 10 foot dishes... a NEW LNA to
cover 12 GHz will be required.

Sorry... I don't know of any local taverns that have the new 12 GHz
down converter in service at this time...

There are about three companies ready to deliver the new 12 GHz
LNA/System... about the same cost as a 'standard' TVRO (dish)...
The good news is, the higher frequency requires a smaller dish...
about three to five feet in diamenter... larger dishes = higher gain.

I expect VERY few networks to convert to 12 GHz because of loss of new-found advertising income satellite commercials now bring.

Uncle T.

Tony Cardenas
QA Auditor
6085 Project

From 5151089737140998553
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b804c120d64b1610,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-16 15:29:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 37
Message-ID: <20444@mgweed.UUCP>
Date: Mon, 16-Sep-85 18:29:54 EDT
Article-I.D.: mgweed.20444
Posted: Mon Sep 16 18:29:54 1985
Date-Received: Wed, 18-Sep-85 02:22:58 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 36

qst de k9eui
hr propagation forecast bulletin nr 37 from arrl headquarters
newington ct september 16, 1985
to all radio amateurs bt

after more than a month with almost no sunspot activity, a small but plainly visible spot appeared near the east limb of the sun september 13. the solar flux had been down to 68 september 11 and 12, but it rose to 70 and held there for the next few days. even this small flux rise affected propagation noticeably. the 21 mhz band was active over much of the world, and 24 and 28 mhz were open to south and central america daily.

the solar flux average for the first half of september was just over 70, and most of the period was below corresponding days of the previous solar rotation. it is likely that we will see somewhat higher numbers after september 20, but no major change is expected. higher geomagnetic activity will make for erratic propagation through the balance of september.

the best advice for anyone trying to work out on 21, 24 or 28

mhz is to keep at it. the 5, 10, 15 and 20 mhz signals of wwv, wwvh, and other worldwide time and frequency stations often give good indications of the dx potential of amateur bands near these frequencies.

though solar activity is very low currently, and it has been for more than a month, this does not necessarily indicate an early end for cycle 21. lows so far have not been as deep or as long as those recorded in the final months of cycles 18, 19 and 20.

american sunspot numbers for september 5 to 11 were between 0 and 2 with a mean of 0.3 ar

From -1395228760021857643
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-16 15:48:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ccivax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!
rochester!ritcv!ccivax!rb
From: rb@ccivax.UUCP (rex ballard)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <253@ccivax.UUCP>
Date: Mon, 16-Sep-85 18:48:59 EDT
Article-I.D.: ccivax.253
Posted: Mon Sep 16 18:48:59 1985
Date-Received: Fri, 20-Sep-85 04:04:54 EDT
References: <763@vortex.UUCP>
Organization: CCI Telephony Systems Group, Rochester NY
Lines: 60
Xref: watmath net.dcom:1306 net.video:1522 net.ham-radio:3260

> I think there's rather a lot of misconception floating around regarding
> this issue. Part of my work is in the satellite communications area
> so I track these issues pretty closely.
>
> There have been a number of different legal events and laws regarding
> this area, and I'm not going to try specify them, but rather just
> explain the backround and outcome as I understand them.
>
> ---
>
> First of all, the oft-quoted old Communications Act doesn't really
> say you can listen/watch to whatever you want. It essentially says you can

> receive "broadcast" signals so long as you don't divulge the contents nor
> receive "benefit" from them. Interpretations of this law have
> long held that intercepting point-to-point telephone microwave
> transmissions can be construed as wiretapping, by the way. I'm
> simplifying to some extent regarding the Act, but you get the idea.

The real issue is the basic principles of the ORIGINAL Communications
Act, the primary Charter of the Federal Communications Commission.

The premise of the FCC was that the "ether" (electromagnetic spectrum)
was considered PUBLIC PROPERTY. In effect, without proper regulation,
the entire spectrum would be on giant "CB" band. EMI regulations,
Liscensing,... are all means of protecting the integrety of the various
bandwdths of the spectrum. In fact, the ONLY spectrum user with any
right to privacy at all is the Defence Department. One 194? precedent
even challenged that. Therefore, if a person/corporation wishes to
obtain a liscence and use "broadcast" media to transmit information,
they do so with the implicit understanding that they waive the right
to privacy (It is theoreticly legal to monitor a long distance call
if it is broadcast by satellite. In fact, the only value of a
channel is the ability for people to recieve it.

Unfortunately, since about 1980, the FCC has all but abandoned the
original charter and principles on which it was based. Various
rulings have attempted to make the taping, reproduction, and use
of signals recieved illegal. Even though the precedents have been
set by rulings, the basic charter has been violated. Even the
basic requirements of Commercial Stations to provide "Public Service"
are no longer valid.

If the FCC terminated all ham/CB liscences, and allowed all broadcast
stations to "Charge" for the priviledge of recieving their signal
(including AM/FM and all TV bands), the public would be outraged.
But because it affects only a select few at a time, the precedents
are being methodically set up to do exactly that. Instead of needing
a liscence to "transmit", we will, in effect, need a liscence to
recieve.

Suppose the frequencies being used effected human health (X-Rays).
Do you suppose we would allow the Commercial station to DEMAND payment
for the priveledge of recieving these cancer causing rays? Perhaps
the day will come when a "radio rebellion" will occurr, could you
imagine the effect of every ham/cb operater running their old ham
gear ad satelite frequencies for even 10 minutes?

When I got my first General Class liscence, the frequencies now
used for satellite and microwave transmissions were ham bands,
now they want to charge for the use of the reciever!

From 331146651391623714
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750

X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-16 15:53:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site kitty.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!genrad!panda!talcott!
harvard!seismo!rochester!rocksvax!rocksanne!sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Re: Listen to phone calls on your tvro
Message-ID: <435@kitty.UUCP>
Date: Mon, 16-Sep-85 18:53:39 EDT
Article-I.D.: kitty.435
Posted: Mon Sep 16 18:53:39 1985
Date-Received: Thu, 19-Sep-85 04:29:27 EDT
References: <338@nicmad.UUCP> <780@vortex.UUCP> <95@l5.uucp>
Organization: Recognition Research Corp., Clarence, NY
Lines: 55
Xref: watmath net.ham-radio:3253 net.dcom:1303 net.video:1517

> The last time the wiretapping laws were hacked, the NSA suggested (and
>   ^^^
> got) a small wording change that effectively makes it legal to listen
> in AS LONG AS YOU ONLY LISTEN TO TELCO SIGNALLING rather than user
> data/speech. This means that, for example, receiving microwave phone
> transmissions is defensible if your equipment filters out all but the
> "who called who" info. They wanted this because it gives them a legal
> reason to have tapping equipment always installed. (Who's to know if
> their equipment happens to switch to recording speech or data if an
> interesting phone number makes or receives a call?)
>
> It would be interesting to see them try you for it -- if they found
> you guilty, you could sue the government to stop the NSA.
>
> Please correct me if I'm wrong, Lauren.

    You are partially wrong. NSA does not NEED an excuse to monitor telecomunications traffic - the 'interest of national security' says it all. The real agencies who benefit from this decision are law enforcement agencies like the FBI, DEA, local police, etc. Telephone toll statements (and therefore signalling information) has ALWAYS been freely available to law enforcement agencies - in many cases without even requiring a subpoena. This has been considered to be no more than accounting information, and does not come under the pervue of eavesdropping statutes. Local dialed numbers have historically been available at the request of law enforcement agencies; if central office equipment did not automatically record this information, the telephone company would install a dialed number recorder ('pen register').

    There has never been any restriction on obtaining this information by bona fide law enforcement agencies. In general, up until about ten years ago only the telephone company could install a dialed number recorder. As a result

of some court decisions (including People vs Stewart 1973 in NY State), law enforcement agencies were permitted ON THEIR OWN and WITHOUT THE ASSISTANCE of the telephone company, to attach dialed number recorders to a subject's telephone line. ONLY a bona fide law enforcement agency has this right.

My personal opinion is that the telephone companies should be more cooperative with law enforcement agencies insofar as furnishing dialed number information; such cooperation would eliminate any claims that law enforcement agencies might be listening in. However, most telephone companies tend NOT to cooperate with law enforcement agencies due to a fear of 'bad press'; as a result of this NON-cooperation in the past, law enforcement agencies have been permitted to take this matter into their own hands.

I am certain that a number of people will be upset that their dialed number information COULD be obtained by a law enforcement agency without the benefit of any judicial proceeding authorizing same. However, if you are not doing anything illegal which would MOTIVATE a law enforcement agency to take this rather EXTREME step, then you really shouldn't lose any sleep over the possibility...

+++ Larry Lippman @ Recognition Research Corp., Clarence, New York   +++
+++ UUCP   {decvax,dual,rocksanne,rocksvax,watmath}!sunybcs!kitty!larry +++
+++ VOICE   716/741-9185   {rice,shell}!baylor!/   +++
+++ FAX   716/741-9635 {AT&T 3510D}   syr!buf!/
            +++
+++ TELEX   69-71461 ansbak: ELGECOMCLR {via WUI} ihnp4!/
            +++
+++   +++
+++   "Have you hugged your cat today?"
               +++

From 7611871484575498257
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-16 16:16:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site sdcrdcf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!petsd!pesnta!
hplabs!sdcrdcf!brad
From: brad@sdcrdcf.UUCP (Brad Spear)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <2348@sdcrdcf.UUCP>
Date: Mon, 16-Sep-85 19:16:17 EDT
Article-I.D.: sdcrdcf.2348
Posted: Mon Sep 16 19:16:17 1985
Date-Received: Sat, 21-Sep-85 05:09:11 EDT
References: <779@vortex.UUCP> <262@mot.UUCP>
Reply-To: brad@sdcrdcf.UUCP (Brad Spear)

Organization: System Development Corp. R+D, Santa Monica
Lines: 31
Xref: watmath net.dcom:1310 net.video:1528 net.ham-radio:3269
Summary:

In article <262@mot.UUCP> fred@mot.UUCP (Fred Christiansen) writes:
> ... if i watch network TV, i am paying to watch it indirectly ...
> ... if i watch cable TV, i am paying to watch it directly ...
> ... if i watch satellite TV, using my own dish, i am paying for it (cost a
> fair bundle to get that baby!). so i'm *NOT* freeloading.

It may be costing you, but the provider is making zilch. In the first two cases, the entity that is providing the service sees a return. That is:

1) company pays for spot, recoups losses with additional price on product and profits by increased sales

2) company provides transmission lines or home decoder boxes and the electronics to transmit the channels, makes their profit by providing and charging for this service.

In the third case however, companies are paying the owner of the satellite for the ability to use it for their own purposes or to sell their transmissions to cable companies. When you receive that signal, you are freeloading on their information; they do not get paid for it unless the signal is scrambled and you rent a decoder from them, which immediately puts you in case 2 above. The only ones who profit from this are the commercial channels transmitted via satellite, which becomes case 1 above, and the companies that make satellite dishes, downconverters and the lot.

Of course, receiving satellite transmissions could be made into case two if the originators made some deal with the satellite manufacturers, and caused a fee to be passed on to you for the service.

Brad Spear
sdcrdcf!brad

From 1532222944922029854
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-17 01:54:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!FTD%MIT-OZ@MIT-MC.ARPA
From: FTD%MIT-OZ@MIT-MC.ARPA (David D. Story)
Newsgroups: net.ham-radio
Subject: Listen to phone calls on your tvro
Message-ID: <1536@brl-tgr.ARPA>
Date: Tue, 17-Sep-85 04:54:29 EDT
Article-I.D.: brl-tgr.1536
Posted: Tue Sep 17 04:54:29 1985

Date-Received: Fri, 20-Sep-85 01:44:48 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

Because the F.C.C. says so as well as a great many states but public
and restricted bands do not except for xmit. No constitution issues
here...so sorry charlie !

Dave

From -5486963024997468731
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-17 07:13:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ssc-bee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
ssc-vax!ssc-bee!maa
From: maa@ssc-bee.UUCP (Mark A Allyn)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <372@ssc-bee.UUCP>
Date: Tue, 17-Sep-85 10:13:16 EDT
Article-I.D.: ssc-bee.372
Posted: Tue Sep 17 10:13:16 1985
Date-Received: Thu, 19-Sep-85 04:47:21 EDT
References: <779@vortex.UUCP>, <262@mot.UUCP> <293@unccvax.UUCP>
Organization: Boeing Aerospace Co., Seattle, WA
Lines: 14
Xref: watmath net.dcom:1304 net.video:1518 net.ham-radio:3254

> The real solution to this whole mess is to leave the electronic media
> alone, deregulate the heck out of it (except for technical matters such as
> harmful interference and so on) and let good old American engineering solve
> the problem of "freeloaders" . . .

Come on - there you go along with everyone else. You just ruined your
objective by including an exclusion clause. Why not go all the way and
let the industry solve all of its own problems including interference.
Eliminate the FCC. Once you stipulate something to regulate (harmfull
interference, you open the floodgates for other exceptions.

Mark Allyn
WA1SEY
!uw-beaver!ssc-vax!ssc-bee!maa

From -7824232753503557239
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c2f4af9ab1244e5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-17 09:00:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!mhuxt!houxm!mtuxo!mtunh!ky2d-2!
ka2ugq
From: ka2ugq@ky2d-2.UUCP (Peter)
Newsgroups: net.ham-radio
Subject: 24 MHz Band plan
Message-ID: <37@ky2d-2.UUCP>
Date: Tue, 17-Sep-85 12:00:25 EDT
Article-I.D.: ky2d-2.37
Posted: Tue Sep 17 12:00:25 1985
Date-Received: Wed, 18-Sep-85 05:23:05 EDT
Distribution: net
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 14

From "The ARRL Letter" August 1, 1985

"The New 24-MHz band. The board adopted this band plan for 12 meters
(frequencies in MHz):

     24.890 - 24.920   CW only
     24.920 - 24.930   CW and digital communications
     24.930 - 24.990   CW, Phone, and SSTV
Hope that was helpful to all who were wondering about the 12-meter
band!

Tom Brown KA2UGQ

From 5832383024527932910
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6f6f06adc8d48c5c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-17 09:09:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site
videovax.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!mhuxt!houxm!vax135!cornell!uw-
beaver!tektronix!tekcrl!vice!tekfdi!videovax!bill
From: bill@videovax.UUCP (William K. McFadden)
Newsgroups: net.ham-radio
Subject: Re: Schematics for stereo FM modulator needed
Message-ID: <1448@videovax.UUCP>
Date: Tue, 17-Sep-85 12:09:02 EDT

Article-I.D.: videovax.1448
Posted: Tue Sep 17 12:09:02 1985
Date-Received: Thu, 19-Sep-85 06:26:51 EDT
References: <1237@brl-tgr.ARPA>
Reply-To: bill@videovax.UUCP (William K. McFadden)
Organization: Tektronix, Wilsonville OR
Lines: 75

I tried to send this via mail but it failed. My apologies to the net for
any inconvenience.

I have had some experience designing cheap FM stereo
transmitters. (I designed and built one as a college senior project.)
Your project sounds interesting, so I hope some of this will be useful.

First, the technique used to modulate FM stereo onto videotape is
different than the one used in broadcasting. The Beta/VHS Hi-fi systems
use two separate FM carriers, one for each channel. On the other hand,
FM broadcasting modulates the baseband with mono (L+R) and a 38 KHz
subcarrier with L-R information. The subcarrier is AM double sideband,
suppresed carrier (DSB-SC), and a 19 KHz pilot tone is needed to
properly demodulate this signal (also provides a way for your receiver
to tell if an incoming signal is in stereo). To regenerate the L and R
channels, they are mixed in the following way.

```
(L+R) + (L-R) = 2L
(L+R) - (L-R) = 2R
```

Thus, a simple matrix will decode the signals. Mono receivers demodulate
only the baseband signal (L+R) and ignore the subcarriers. Thus, the FM stereo
signal is compatible with both types of receivers. (You may already know
all of this, but I thought I'd include it for completeness.)

You are right that PLL is the way to go. As part of my project I looked at
several ways to generate a stable carrier and digital frequency synthesis
was by far the best and cheapest. My design uses a transistor oscillator
with varactor diode tuning to generate the FM carrier. This is divided
down to ~1 MHz with digital counters and fed into a CD4059 modulo-N counter.
The CD4059 can divide by any number between 3 and 9999 inclusive and is
programmed with with a 16-bit input consisting of four BCD digits. This
made it easy to use dip switches or thumbwheel switches for tuning.
I am not aware of any versastile divide-by-N counters that operate up to
100 MHz, but there are high speed decade counters that run this fast.
Therefore it was easy to divide the carrier frequency to the slower rate
needed by the 4059.

The phase comparator was a CD4046 PLL chip with the internal VCO disabled
(it only goes to 1 MHz). The frequency out of the 4059 was 1 KHz, thus
a 1 MHz crystal oscillator followed by a divide-by-1000 counter (MC14559)
generated the reference frequency.

I should stop here before I get carried away. If you would like to know more about my design (e.g., schematics), let me know.

There are a couple of companies that offer plans, boards, and kits for FM stereo transmitters, some of which use PLL synthesis and dipswitch programming. I have included their addresses below.

Panaxis Productions
P.O. Box 130
Paradise, CA 95969
(916) 534-0417
Contact: Ernie Wilson

Stellatron (This company may not still be in business)
4942 Whitsett Av. #205
N. Hollywood, CA 91607
(213) 506-0415
Contact: Wayne Slater

Bill McFadden
Tektronix, Inc.
P.O. Box 500
MS 58-594
Beaverton, OR 97077
(503) 627-6920

Net address:
...{ucbvax,ihnp4,uw-beaver,decvax}!tektronix!bill@videovax.UUCP

From -6988324200975066114
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,316e9a8206249581,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-17 12:38:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!wjc@ll-vlsi
From: wjc@ll-vlsi (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: 6-meter propagation beacon
Message-ID: <1543@brl-tgr.ARPA>
Date: Tue, 17-Sep-85 15:38:03 EDT
Article-I.D.: brl-tgr.1543
Posted: Tue Sep 17 15:38:03 1985
Date-Received: Fri, 20-Sep-85 01:46:54 EDT
Sender: news@brl-tgr.ARPA
Lines: 13

A 6-meter beacon will soon be operating from FN41 on Cape Cod.

The frequency of the beacon is 50.070 MHz and it ID's in slow Morse Code as W2CAP/B. The beacon will have a Yagi at >100' aimed at Great Britain. The sponsors of this machine include K1VZI, K1MUC, and W2CAP.

     As of this mailing, the beacon is on the air most evenings at W2CAP's main QTH south of Boston.

Bill
N1CPK (W1XM during contests)

From 3275541204048386370
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9af162a0123b17
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-17 13:08:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!prg
From: prg@mgweed.UUCP (Phil Gunsul)
Newsgroups: net.ham-radio
Subject: Re: Theft is Theft
Message-ID: <20461@mgweed.UUCP>
Date: Tue, 17-Sep-85 16:08:06 EDT
Article-I.D.: mgweed.20461
Posted: Tue Sep 17 16:08:06 1985
Date-Received: Wed, 18-Sep-85 04:16:00 EDT
References: <128@hydra.UUCP>
Distribution: net
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 23

I must disagree with what you are saying about tvro being illegal to receive. Congress just ruled late last year that as long as a signal is NOT encrypted, it is legal to receive it, where there is no established means of paying for the service. Don't get me wrong, I have no problem with paying for HBO (if I wanted to watch it) on my tvro or even CNN, but I will not pay a 1000% inflated price to do so. I currently have a tvro and also have cable and PAY for a premium service. However, there are people out in the 'sticks' that will NEVER have cable. Why should they not be able to erect a dish and receive these services? Sure they should pay for them, but why should they pay the middle man (cable company) for their equipment when they have their own? All the tvro owners are asking is for a fair shake. The cable companies have gone out of their way to kill any competition from the tvro market... They run advertisements in local papers to scare perspective buyers into thinking the "sky will go dark"... Where is judge Green when he could do something useful???

I'm mad as hell... and I'm not going to take it anymore!!!

Phil Gunsul -- WB9AAX

From 3091263226732612340
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,65f6cf6c5f177a51,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-18 07:50:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!ucbvax!ucdavis!lll-crg!
gymble!umcp-cs!seismo!brl-tgr!tgr!wjc@ll-vlsi
From: wjc@ll-vlsi (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: British 6-meter Privileges
Message-ID: <1567@brl-tgr.ARPA>
Date: Wed, 18-Sep-85 10:50:36 EDT
Article-I.D.: brl-tgr.1567
Posted: Wed Sep 18 10:50:36 1985
Date-Received: Sat, 21-Sep-85 03:30:13 EDT
Sender: news@brl-tgr.ARPA
Lines: 16

Further clarification...

According to the "World Above 50 MHz" column in the September 1985 QST,
one hundred G-land hams have permits that allow them to transmit on
6 meters after 2230Z. The column didn't say what time the Gs must stop
transmitting on 6. The column also says that both 6/10-meter crossband
as well as 6-meter single-band QSOs were had on July 2, 1985.

In addition, the "IARU News" column in the same issue of QST said that
the 50.0 to 50.5 MHz band is expected to be allocated to British hams
sometime this fall.

Bill
N1CPK

From -1772705244839152561
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c05495c931e48ba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-18 08:06:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!ucbvax!ucdavis!lll-crg!
gymble!umcp-cs!seismo!brl-tgr!tgr!wjc@ll-vlsi
From: wjc@ll-vlsi (Bill Chiarchiaro)

Newsgroups: net.ham-radio
Subject: 1985 ARRL September VHF QSO Party
Message-ID: <1568@brl-tgr.ARPA>
Date: Wed, 18-Sep-85 11:06:37 EDT
Article-I.D.: brl-tgr.1568
Posted: Wed Sep 18 11:06:37 1985
Date-Received: Sat, 21-Sep-85 03:30:26 EDT
Sender: news@brl-tgr.ARPA
Lines: 12

I don't know how many VHF contesters are on this mailing list; however, I would like to collect people's results and post them in a single listing to info-hams. I just can't stand waiting several months for QST to do it.

If you are interested, mail your results to wjc@ll-vlsi. Please give number of QSOs (not QSO points) and grids per band, your grid and ARRL section, and the callsigns of your operators. I would also like to see mentions of any openings you observed.

Bill
N1CPK (W1XM Contester)

From -4050459311648967595
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b6f8b121afa99526,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-18 10:13:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: VLF band question: (FCC rules and other comments)
Message-ID: <20476@mgweed.UUCP>
Date: Wed, 18-Sep-85 13:13:18 EDT
Article-I.D.: mgweed.20476
Posted: Wed Sep 18 13:13:18 1985
Date-Received: Thu, 19-Sep-85 06:01:14 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 57

To answer Steve's (possibly some others as well) question on VLF, here are the basic rules as quoted from Part 15 of the FCC Rules:

15.111 OPERATION BELOW 1600 kHz:

A low power communication device may be operated on any frequency between 10 and 490 kHz or between 510 and 1600 kHz subject to the condition that the emission of RF energy on the fundamental frequency or any harmonic or other spurious frequency does not exceed the field strength in the following table.

Freq (kHz)	Distance (meters)	Field strength (uv/meter)
10 - 490	300	2400/F (kHz)
510 - 1600	30	24000/F (kHz)

15.112 ALTERNATE PROVISIONS FOR OPERATION BETWEEN 160 AND 190 kHz:

In lieu of meeting the requirements of 15.111, a low power communication device may operate on any frequency in the band 160-190 kHz provided it meets all the following conditions:

(a) The power input to the final radio frequency stage (exclusive of filament or heater power) does not exceed 1 watt.

(b) All emissions below 160 kHz or above 190 kHz are suppressed 20 dB below the unmodulated carrier.

(c) The total length of the transmission line plus the antenna does not exceed 15 meters.

One publication dedicated to VLF experimentation is called "The Lowdown". It is a monthly publication and the cost used to be $10/year.

There have been some real DX contacts made on the 1750 meter band, I am told. Some stations have worked several hundred miles. It appears that the only way to get a decent signal out is to use a vertical and lotsa radials. Antenna efficiency is poor, to say the least. 15 meters (50 feet) on 1750 meters is about like trying to use a 2 meter whip on 160 meters!

The only commercial manufacturer of transmitting equipment that I have seen is Palomar. They also make a receiving converter. Surplus ARC-5's and some other surplus VLF receivers are also popular.

With a 15 foot loaded vertical mounted on a 50 foot chain link fence, I have been heard a mile away (not very impressive, huh). There are supposedly quite a few experimenter's "beacon" stations on at night and weekends, but I have never heard any myself. "Call signs" usually are the experimenter's initials. DO NOT USE AMATEUR CALLS THERE! Because there are megawatt stations on this band in Europe and the USSR, one must pick a frequency carefully to avoid getting clobbered. Shielded loops, loopsticks, and some active (whip) antennas are the best for receiving.

Bob K9EUI

From 2610473667672580452
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5388dce04ce6dee6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-19 09:59:49 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!carpenter@nbs-vms
From: carpenter@nbs-vms (CARPENTER, ROBERT)
Newsgroups: net.ham-radio
Subject: RE: British hams on Six Meters
Message-ID: <1609@brl-tgr.ARPA>
Date: Thu, 19-Sep-85 12:59:49 EDT
Article-I.D.: brl-tgr.1609
Posted: Thu Sep 19 12:59:49 1985
Date-Received: Sun, 22-Sep-85 13:14:01 EDT
Sender: news@brl-tgr.ARPA
Lines: 23

Actually I can't answer the question about when, in the morning, the
Gs have to go off 6-meters.

As for transatlantic QSOs on six..... Yes there were quite a few
contacts between New England and UK on six on July 2. One or two contacts
were made from as far south as the Washington area.

There was another opening (also Es) on 30 July. This was from Philadelphia
on south, so we had a chance here in the DC area. I worked 6 Gs (including
GJ3YHU). KB3QM in southern Delaware claims to have worked 30! The opening had
weak but solid signals for at least an hour in this area. It moved down
the coast to northern Florida eventually. See Bill's "World above 50 MHz"
in October QST for more details. He also worked GW during this opening.

These openings all started as soon as the Gs could fire up, and on the
earlier one, at least, one of the Gs phoned this country before their
legal starting time to alert the W gang that the band was open.

Bob, W3OTC

From -807496976351087264
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,a1861d6aedddbb51,start
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,a1861d6aedddbb51,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-19 10:49:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ulysses.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!smb
From: smb@ulysses.UUCP (Steven Bellovin)
Newsgroups: net.ham-radio,net.video
Subject: FCC overrules zoning restrictions on ham antennas
Message-ID: <1104@ulysses.UUCP>

Date: Thu, 19-Sep-85 13:49:22 EDT
Article-I.D.: ulysses.1104
Posted: Thu Sep 19 13:49:22 1985
Date-Received: Fri, 20-Sep-85 05:59:27 EDT
Distribution: net
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 10
Xref: watmath net.ham-radio:3263 net.video:1526

The FCC has just ruled that local governments can't impose unreasonable
restrictions (via their zoning powers) on ham antennas. They said that
zoning restrictions would be limited to those that would still "reasonably
accomodate amateur communicates and represent the minimum practicable
regulation to accomplish the purpose of the local authority". The
particular case in point was a rule in Cerritos, Ca., that limited
the total number of antennas to three per property and also restricted
their type and size.

A similar ruling is under consideration for satellite dishes.

From 4188572165014548545
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,316e9a8206249581
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-19 11:28:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!CRC.DlosLV@Xerox.ARPA
From: CRC.DlosLV@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: 6-meter propagation beacon
Message-ID: <1615@brl-tgr.ARPA>
Date: Thu, 19-Sep-85 14:28:57 EDT
Article-I.D.: brl-tgr.1615
Posted: Thu Sep 19 14:28:57 1985
Date-Received: Sun, 22-Sep-85 13:16:15 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

bill,

     Thanks for the info on the new 6 mtr beacon. Unfortunately, there is
one here in the Dallas area on the same freq. Doubt if we will ever
hear the w2cap/b beacon here. will listen just the same.

     73
     Chuck...
     w5usj

From 2534916530844430155

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f6c1e84785190dd5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-19 12:29:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: WWVB anyone ???? (user comments)
Message-ID: <20495@mgweed.UUCP>
Date: Thu, 19-Sep-85 15:29:20 EDT
Article-I.D.: mgweed.20495
Posted: Thu Sep 19 15:29:20 1985
Date-Received: Fri, 20-Sep-85 06:11:07 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 101

To Phil Biehl and other interested parties:

Subject: receiving and using the 60 kHz WWVB transmissions

I have a home built WWVB rcvr that I have been using for about 10 years with good success. My location is near Chicago. A couple years ago, NBS worked on their WWVB transmitting system and the signal strength improved here greatly.

In order to use the signal as a frequency standard reference, you have to use it directly, so to speak. What this means is that you cannot use a superhet type design where the signal is mixed to another frequency by a local innacurate oscillator, so the receiver I use is a TRF type.

I am not sure where the schematic of my unit is so a lot of what follows is from memory.

The best antenna is a shielded tuned loop. Mine was made by winding about 22 turns of 22Ga plastic covered wire around a waste basket (about 3 feet diameter). The electrostatic shield was made by wrapping the loop in tin foil. The shield is connected to one side of the loop which is the ground side of the loop. Remember that the loop must be broken and not grounded at both ends or it will act as a shorted turn. The break in the shield can be either at the center or one end (it's not critical). The loop is tuned to 60 kHz with approx 2000pf mica cap. Tune it like you would a toroid inductor for audio: connect to a signal generator thru a 100k resistor and use a scope to monitor the signal across the loop.

The loop feeds a 2 stage (FET/PNP) amplifier which is in a metal box. The output is from a tuned circuit that provides a low impedance output to the coax. The 12 volts to run the preamp is fed up the coax from the rcvr. The rcvr itself is several stages of J-FET tuned amplifiers using 1 mh inductors which finally feeds some untuned stages to build the signal up to TTL level. At the rcvr input I use a 60 kHz crystal

as a filter which makes the bandwidth 1 or 2 Hz. While a narrow filter
is not absolutely necessary (especially if you are in a strong signal area),
it really helps. (H-P used a 15Hz wide mechanical filter in their VLF rcvr).

I can provide circuit dwgs to anyone interested. Were I to do it again,
I would certainly do some things differently. I have a much better preamp
circuit (also simpler) and I would probably use a PLL chip as the main
rcvr gain block.

There have been articles in ham publications regarding WWVB and using the signal
but I disagreed with many of their techniques.

It is best not to use the 60 kHz signal directly as a counter time base
since the rcvd signal has jitter on it. Also there is the diurnal phase
shift as well as the intentional phase advance/retard each hour which
is used as their "ID".

Commercial systems use the rcvd signal merely to compare a local "house"
standard against. Comparison is done over a fairly long period (like days)
for best results, or in some cases, continuously by observing the comparison
on a chart recorder.

My system consists of a 1 MHz oscillator in a proportionally controlled oven
as the house standard. This osc is used as the time base for my counter, clock,
and synthesizer. The 1 MHz osc is also divided by 10 to 100 kHz.
The 100 kHz local signal is then multiplied by 3 using a tripler
circuit (made using a padded down 455 kHz IF transformer), squared up again,
then divided by 5 (1/2 of a 7490) to provide my locally generated 60 kHz
signal. This and the rcvd signal are both fed into a comparator, which is
nothing more than a TTL flip-flop. One output of the flip-flop has a lowpass
filter on it which gives and average DC voltage reading related to the duty
cycle of the 60 kHz square wave. This DC voltage is observed on a voltmeter
and also feeds a chart recorder running at 4 inches per hour. Fine corrections
to the 1 MHz osc are made after observing the chart after a day or two to see
the trend of drift. The present 1 MHZ osc needs some work since it is slightly
affected by room temperature changes, however it does maintain an accuracy
of at least 1 part in 10 to the 10th. The oscillator control is by a 10 turn
pot with a counter dial which controls the bias on a varactor diode in the
crystal circuit. The osc ckt is made from dual gate FET's and buffered twice
within the oven.

The loop antenna is mounted in the attic. Tests showed that it worked just
as well in the ham shack, which is below ground level (but who wants a big
loop in the way). One stage of the rcvr (prior to limiting) feeds an "S"
meter to observe the signal strength.

I also added an AGC circuit to detect the 10dB amplitude shifts which
contain the BCD time code. I have not yet attempted to build a time
decoder. At this time I divide the 1MHz down and feed a standard digital
clock using a National clock chip (5314 maybe). So far the clock remains within
one second between CST to CDT time changes. The clock and osc run off a

4 amp/hour 12 volt nicad if power fails. The rcvr/comparator run off the charger/supply.

Would like to discuss the topic further with anyone interested and will be glad to furnish dwgs of my setup to those REALLY interested. Locally I am called "Bunky Bob's Batavia Bureau of Standards".

Using WWVB as reference sure beats using WWV on HF as a frequency standard. At my location, the BEST results that can be obtained on HF are 1 part in 10 to the 7th.

Bob K9EUI

From -8064818135089039501
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1e5451b60c6db0f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-19 12:48:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: 930/430 S meter mods & Saving the 2 meter band
Message-ID: <20497@mgweed.UUCP>
Date: Thu, 19-Sep-85 15:48:00 EDT
Article-I.D.: mgweed.20497
Posted: Thu Sep 19 15:48:00 1985
Date-Received: Fri, 20-Sep-85 06:11:20 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 32

I showed the articles from the GEARVAKF newsletter to a friend of mine (Bill, KA9HVU) and received the following response which may be of use to others:

"Yeah, I got the eye in my 430, but the author of the article is in dire need of training in modification applications. The job was much easier than I had expected, but I made some changes in the suggested proceedure. Removing the meter was quite simple with the aid of a MOTO-TOOL and a cutting blade. As for the bezel, it was easily cut with a deburring tool in an electric drill. I had a nice, almost new bezel in the junk box so cutting a new one from a SUCRETS can was not necessary (this also saved having to paint). The filament transformer is larger than I would like for a neat appearance, so I have it hung from the wires behind the rig - out of sight. This, however, limits the use of the 430 in the mobile which I ain't done yet."

Bill also gives some advice on preventing the explosion of the 2 meter band:

"A simple way to prevent the possible explosion of the 2 meter band would be to relieve the pressure that continues to build. It seems to me that a small

penetration of the band sufficient to release some of the pressure, but not so large that it would allow the escape of some of the 2 meter frequencies, would solve the problem nicely. The best place to make the penetration would be at the band edge where it could be closely monitored just in case it would start to tear and grow too large. As for a means of penetration, a shaft of suitable size with the ability to enlarge or shrink itself, and with a vent hole through its length could be inserted and left as long as necessary. The elastigmity of the band should prevent the escape of the shaft and if the vent was no longer required, then the hole could be plugged."

Relayed by K9EUI

From 2302535934882291481
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9af162a0123b17
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,a6935f5c9e0d19e,start
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1985-09-19 21:38:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!linus!philabs!cmcl2!harvard!talcott!panda!genrad!mit-eddie!cybvax0!
frog!hydra!die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio,net.video
Subject: Re: Theft is Theft
Message-ID: <129@hydra.UUCP>
Date: Fri, 20-Sep-85 00:38:14 EDT
Article-I.D.: hydra.129
Posted: Fri Sep 20 00:38:14 1985
Date-Received: Sun, 22-Sep-85 16:34:59 EDT
References: <128@hydra.UUCP>
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 64
Xref: linus net.ham-radio:2644 net.video:1445

And apparently private is private.

I had occasion to hear Sen. Gore's legislative assistant who wrote the changes to the communications act of 1934 that authorized reception of unencrypted cable feeds at a seminar at MIT. It was quite clear from the discussion that the mood in congress is to regard receiving any private radio transmission as strictly illegal, including such almost public things as network backhauls and the portions of network feeds to affiliates that aren't meant to be put on the air. The general legal situation was summed up: the satellite television viewing act created "a small and very carefully defined exception" to an otherwise absolute prohibition of reception of private communications. And further, the philosophical justification was not that cable TV feeds were a special case of private communications that could be made public because that served

a public good but rather that they were somehow not really private because of their broadcast nature and wide public distribution.

It seems clear that Sen. Leahy and Rep. Kastenmeier, who have filed a bill extending 2115 to cover most classes of radio transmission other than broadcast (including cordless phones), reflect a powerful sentiment in congress. It seems quite likely that receiving anything other than broadcast transmissions intended for general use may soon become major federal felonies. I have yet to take the time to read the text of their bill so I do not know whether it applies just to point to point or similar communications or whether it would apply to all non-broadcast radio communications such as police, fire, news crews, aircraft, ambulance and other such things so beloved of the millions of Americans who own scanners. It definately extends protection to data and record communications, however, and thereby closes that loophole in 2115.

I suspect that if a broad bill covering interception of almost everything sent by radio becomes law this act will be another of those unfortunate American laws that are enforced only at the discretion of prosecuters and likely will be used more as a method of harrassing and pressuring selected private citizens out of favor with the authorities than as a real means of controlling private listening. I regard such laws as very unfair because they are not uniformly or fairly enforced. They encourage disrespect for the law by making an innately private act that can never be effectively policed (and which many millions of citizens practice and accept as their right) a crime, and not only that but a crime which the law usually winks at.

After listening to the very economic arguments about scrambling cable feeds, I've come to the conclusion that the gentleman who claimed that it was cheaper to hire lawyers and lobbyists than buy cipher machines is right. Unfortunately, however, real security is only obtained by encryption. (I might add that the audio, data, and authorization side of the M/A Com Videocipher II seems to be impressively well secured - using DES, but the video is only lightly scrambled so watching pictures without sound will no doubt become common).

I am sorry to say that everything I hear convinces me that the very strong economic interests in protection of communications the cheap way (laws) will no doubt force national policy in the direction of draconian penalties rather than universal encryption. It is too bad that this approach which is more PR than substance is being substituted for a more effective cipher based one, but such is life...

David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.
uucp: decvax!frog!die

From -2307439794297727701
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,917bcff9e258a6e4,start

X-Google-Attributes: gid134694,public
X-Google-Thread: 11f2eb,917bcff9e258a6e4,start
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,e9af162a0123b17
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-19 22:04:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!cybvax0!frog!hydra!die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio,net.video,net.legal
Subject: Private is Private
Message-ID: <130@hydra.UUCP>
Date: Fri, 20-Sep-85 01:04:41 EDT
Article-I.D.: hydra.130
Posted: Fri Sep 20 01:04:41 1985
Date-Received: Sat, 21-Sep-85 06:01:07 EDT
References: <128@hydra.UUCP>
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 65
Xref: watmath net.ham-radio:3272 net.video:1530 net.legal:2367

And apparently private is private.

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I am sorry to say that everything I hear convinces me that the very strong economic interests in protection of communications the cheap way (laws) will no doubt force national policy in the direction of draconian penalties rather than universal encryption. It is too bad that this approach which is more PR than substance is being substituted for a more effective cipher based one, but such is life...

David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.
uucp: decvax!frog!die

From 3346644468835302918
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,917bcff9e258a6e4
X-Google-Attributes: gid134694,public
X-Google-Thread: 11f2eb,917bcff9e258a6e4
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,e9af162a0123b17
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-19 22:20:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!cybvax0!frog!hydra!die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio,net.video,net.legal
Subject: Re: Private is Private
Message-ID: <131@hydra.UUCP>
Date: Fri, 20-Sep-85 01:20:22 EDT
Article-I.D.: hydra.131

Posted: Fri Sep 20 01:20:22 1985
Date-Received: Sat, 21-Sep-85 06:01:50 EDT
References: <128@hydra.UUCP> <130@hydra.UUCP>
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 12
Xref: watmath net.ham-radio:3273 net.video:1531 net.legal:2368

>
>   And apparently private is private.
>

    And it is dangerous to post when expire is running - sorry
about the double posting - but it looked like the first one failed,
for a minute or two so I foolishly tried again...

          David I. Emery   Charles River Data Systems   617-626-1102
          983 Concord St., Framingham, MA 01701.
       uucp: decvax!frog!die

From -267963840577100450
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4923af92c11097de,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-20 06:57:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Dbennett%xmm-plexus01.amc@amc-hq.arpa
From: Dbennett%xmm-plexus01.amc@amc-hq.arpa
Newsgroups: net.ham-radio
Subject: Virginia Packet Users
Message-ID: <1625@brl-tgr.ARPA>
Date: Fri, 20-Sep-85 09:57:02 EDT
Article-I.D.: brl-tgr.1625
Posted: Fri Sep 20 09:57:02 1985
Date-Received: Sun, 22-Sep-85 16:16:32 EDT
Sender: news@brl-tgr.ARPA
Lines: 83

What I would like to do is invite everyone to send copies of known
packet radio users in their state. This way we can obtain a consolidated
listing of all known packet users. I don't think I have every seen such
a list and this mode of transmission would be a good way to do it.
To start the ball rolling here is what I have for the state of Virginia.

CALL	NAME	CITY/STATE	ST	PHONE #	MAILBOX	DIGIPEATER
K0LB	LARRY	DALE CITY	VA		W3IWI	WB4FQR-4

W0QDP	GARY	ORANGE COUNTY	VA		W3IWI	WB4JFI-5
N2JR	RICHARD	WARRENTON	VA	703-439-8109	W3IWI	WB4JFI-5
N3AKK	DICK	ARLINGTON	VA	703-524-1727	W3IWI	WB4JFI-5
N3RC	ROGER	ALEXANDRIA	VA		W3IWI	WB4JFI-5
N3RC	ROGER	ALEXANDRIA	VA	703-660-6607	W3IWI	WB4JFI-5
W3VH	ROLF	ARLINGTON	VA		W3IWI	WB4JFI-5
K4ARO	CARTER	PETERSBURG	VA			K4ARO-1
K4ARO-1	DIGIPEATER	RICHMOND	VA			
KC4B	JOHN	FAIRFAX	VA	703-273-2509	W3IWI	WB4JFI-5
W4CQI	CLIFF	WARRENTON	VA		W3IWI	WB4JFI-5
W4DO	HARRISON	CHARLOTTESVILLE	VA			K4KLQ-1
KF4DQ	DIGIPEATER	JARMAN CAP MTN	VA			
WB4DTD	IVAN	VIENNA	VA		W3IWI	WB4JFI-5
WD4EBH	CRAIG	DALE CITY	VA		W3IWI	WB4FQR-4
WD4ECK	STU	DALE CITY	VA	703-670-4252	W3IWI	WB4FQR-4
KA4ERP	?	FREDRICKSBURG	VA		W3IWI	WB4FQR-4
KA4ERP	JIM	FREDRICKSBURG	VA			
N4FHL	BEN	ROANOKE	VA			K4LKQ-1
N4FHL-1	DIGIPEATER	ROANOKE	VA			
WB4FQR-4	DIGIPEATER	DALE CITY	VA			
WB4GJZ	JOHN	WOODBRIDGE	VA		W3IWI	WB4FQR-4
AA4GM	?	?	VA		W3IWI	
K4GVO	JIM	FORREST	VA	804-525-4160		K4LKQ-1
WD4GYW	WALLY	MADISON HEIGHTS	VA	804-929-3535		K4LKQ-1
W4HCP	TOM	WATERFORD	VA		W3IWI	WB4JFI-5
K4HEX-1	DIGIPEATER	LYNCHBURG	VA			K4LKQ-1
KI4HQ	DON	VIENNA	VA		W3IWI	WB4JFI-5
KC4HR	LEW	STAFFORD	VA		W3IWI	WB4FQR-4
K4HWG	JACK	WOODBRIDGE	VA		W3IWI	WB4FQR-4
N4ICK	ANDRE	MCLEAN	VA		W3IWI	WB4JFI-5
WD4IRD	BOB	DALE CITY	VA	703-670-6738	W3IWI	WB4FQR-4
WB4JFI	TERRY	MCLEAN	VA	703-356-8334	W3IWI	WB4JFI-5
K4JST	GIL	CHARLES CITY	VA			
K4JUM	JOEL	WARRENTON	VA		W3IWI	WB4FQR-4
K4KMC	BOB	SPRINGFIELD	VA		W3IWI	WB4JFI-5
WA4KVX-1	DIGIPEATER	VIRGINIA BEACH	VA			
K4LKQ	BOB	LYNCHBURG	VA	804-845-8893		K4LKQ-1
K4LKQ-1	DIGIPEATER	LYNCHBURG	VA			K4LKQ-1
WD4LPG	SONNY	STAFFORD	VA		W3IWI	WB4FQR-4
WD4LWD	MARC	SPRINGFIELD	VA		W3IWI	WB4JFI-5
W4MIB	BILL	VIENNA	VA		W3IWI	WB4JFI-5
KA4MVO	MIKE	LYNCHBURG	VA	804-845-1649		K4LKQ-1
WB4NFB	BILL	BURKE	VA		W3IWI	WB4JFI-5
K4NGC	DON	DALE CITY	VA	703-670-4773	W3IWI	WB4FQR-4
KB4NQJ	?	?	VA		W3IWI	WB4FQR-4
W4NTG	GEORGE	WILLIAMSBURG	VA			K4UMI-5
WD4OLV	RICK	FORREST	VA	804-525-6648		K4LKQ-1
WB4ONL	DENNIS	LYNCHBURG	VA			K4LKQ-1
W4OTF	RAY	CHARLOTTESVILLE	VA			K4LKQ-1
W4PUJ	DICK	ARLINGTON	VA		W3IWI	WB4JFI-5
WB4QOJ	DIGIPEATER	ROANOKE	VA			K4LKQ-1
WD4SKQ	DAVID	WOODBRIDGE	VA		W3IWI	WB4FQR-4
N4SN	MILT	MANASSAS	VA		W3IWI	WB4FQR-4

WA4SNY	DAVE	LYNCHBURG	VA	804-845-4158		K4LKQ-1
NF4T	RICK	DALE CITY	VA	703-670-6504	W3IWI	WB4FQR-4
WG4T	BOB	KENTS STORE	VA			K4LKQ-1
KA4TMB	STEVE	MANASSAS	VA	703-369-1563	W3IWI	WB4FQR-4
K4TS	CHUCK	FREDRICKSBURG	VA		W3IWI	WB4FQR-4
WA4TSC	WES	MIDDLEBURG	VA			
WA4TVS	BILL	PARKSLEY	VA			K3TKJ-1
K4UMI	DAVE	GRAFTON	VA	804-898-5913		K4UMI-5
K4UMI-5	DIGIPEATER	HAMPTON	VA			
KA4URD	PAUL	RICHMOND	VA			K4ARO-1
KA4USE	JIM	DALE CITY	VA		W3IWI	WB4FQR-4
KR4V	JEAN	RICHMOND	VA			K4ARO-1
WQ4W	DON	DALE CITY	VA	703-670-3414	W3IWI	WB4FQR-4
WA4WBG	BILL	DALE CITY	VA	703-590-4699	W3IWI	WB4FQR-4
W4WWQ	PETE	FORREST	VA	804-525-1146		K4LKQ-1
WA4YPV	BOB	RICHMOND	VA			K4ARO-1
WD5DBC	HOWARD	BURKE	VA		W3IWI	WB4JFI-5
WB5MMB	SANDY	VIENNA	VA		W3IWI	WB4JFI-5
KB6BGE	DICK	ROSSLYN	VA		W3IWI	WB4JFI-5
K8MMO	DAVE	STERLING	VA	703-450-5284	W3IWI	WB4JFI-5

From -2848703562734238801
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b701f4775e8d667f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-20 08:05:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!decvax!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Ham Radio PR
Message-ID: <585@petrus.UUCP>
Date: Fri, 20-Sep-85 11:05:50 EDT
Article-I.D.: petrus.585
Posted: Fri Sep 20 11:05:50 1985
Date-Received: Sun, 22-Sep-85 05:49:06 EDT
Distribution: net
Organization: Bell Communications Research, Inc
Lines: 8

Amateur Radio is getting a lot of favorable media publicity in the wake
of the Mexican earthquake. Keep an eye on your local newspaper; I just saw
one "feature" story on amateur radio and the ARRL on the AP wire.

Now all we need are ways to get publicity WITHOUT having to have a major
disaster.

Phil

From 4633611236114484298

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b6f8b121afa99526
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-20 10:14:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site
videovax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!tekcrl!vice!tekfdi!videovax!bill
From: bill@videovax.UUCP (William K. McFadden)
Newsgroups: net.ham-radio
Subject: Re: VLF band question: (FCC rules and other comments)
Message-ID: <1449@videovax.UUCP>
Date: Fri, 20-Sep-85 13:14:22 EDT
Article-I.D.: videovax.1449
Posted: Fri Sep 20 13:14:22 1985
Date-Received: Sun, 22-Sep-85 06:50:09 EDT
References: <20476@mgweed.UUCP>
Reply-To: bill@videovax.UUCP (William K. McFadden)
Organization: Tektronix, Wilsonville OR
Lines: 11
Summary:

You can also get 1750 meter transmitters/receivers/transceivers in kit
and finished form from:

Panaxis Productions
P.O. Box 130
Paradise, CA. 95969
(916) 534-0417

Bill McFadden
Tektronix, Inc.

From 563790355701621921
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-20 11:31:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ecsvax.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!ecsvax!hes
From: hes@ecsvax.UUCP (Henry Schaffer)
Newsgroups: net.ham-radio,net.dcom
Subject: Re: Re: Listen to phone calls on your tvro (a small flame)
Message-ID: <462@ecsvax.UUCP>
Date: Fri, 20-Sep-85 14:31:52 EDT
Article-I.D.: ecsvax.462
Posted: Fri Sep 20 14:31:52 1985

Date-Received: Sun, 22-Sep-85 05:21:08 EDT
References: <338@nicmad.UUCP> <780@vortex.UUCP> <95@l5.uucp> <435@kitty.UUCP>
Organization: NC State Univ.
Lines: 16
Xref: watmath net.ham-radio:3274 net.dcom:1312

> ... However, if you are not
> doing anything illegal which would MOTIVATE a law enforcement agency to take
> this rather EXTREME step, then you really shouldn't lose any sleep over the
> possibility...
>
> +++ Larry Lippman @ Recognition Research Corp., Clarence, New York   +++
<mild flame on> - with respect to these quoted lines only
  A citizen should have stronger protections against abuse than this. One
can come up with many examples of mistaken identity, personal grudges, etc.
where a citizen was abused without having done anything illegal.
  If it is legal for police agencies to get this (e.g., dialed number) info,
then let's be up front about it. There shouldn't be an "expectation of
privacy" if it is not private info. I have no objection to using a party
line - but I should be told it is a party line.
<off>
--henry schaffer

From 6459786659895563853
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5abe9609fd449dc7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-20 16:32:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 alpha 4/15/85; site ubvax.UUCP
Path: utzoo!linus!philabs!prls!amdimage!amdcad!cae780!ubvax!hardwick
From: hardwick@ubvax.UUCP (Bob Hardwick)
Newsgroups: net.ham-radio
Subject: oscar program
Message-ID: <330@ubvax.UUCP>
Date: Fri, 20-Sep-85 19:32:53 EDT
Article-I.D.: ubvax.330
Posted: Fri Sep 20 19:32:53 1985
Date-Received: Wed, 25-Sep-85 07:02:28 EDT
Organization: Ungermann-Bass, Inc., Santa Clara, CA
Lines: 18

      If you want to use the W3IWI oscar program past 1985
      you have to add to the Sidereal Time table in the
      program. This is the needed data from 1985 to 1989,

      DATA 85 , 0.2766814244
      DATA 86 , 0.2760183054
      DATA 87 , 0.2753551864
      DATA 88 , 0.2746920657
      DATA 89 , 0.2767668578

The above are the Greenwich Sidereal Times on Jan 0.0 for
the years listed. I have also convereted the program to
fortran on the IBM PC. the fortran program runs 10 times
faster than the basic program.

Bob Hardwick WA6NFJ

From -7544640759167983708
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f8e16df641e70cb7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-22 09:08:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
FAC0395%UOFT01.BITNET@WISCVM.ARPA
From: FAC0395%UOFT01.BITNET@WISCVM.ARPA (Joe Feustle)
Newsgroups: net.ham-radio
Subject: DX
Message-ID: <1644@brl-tgr.ARPA>
Date: Sun, 22-Sep-85 12:08:47 EDT
Article-I.D.: brl-tgr.1644
Posted: Sun Sep 22 12:08:47 1985
Date-Received: Wed, 25-Sep-85 09:31:13 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

I'd be happy to contribute whatever I can to a "dx net". I get on
infrequently but sometimes work some choice stuff.

73 de N8AAT

From 7070443618773262411
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6ac28709101fbb56,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-22 16:39:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Hardie@MIT-MULTICS.ARPA
From: Hardie@MIT-MULTICS.ARPA (Maj. Douglas Hardie)
Newsgroups: net.ham-radio
Subject: RF Probes
Message-ID: <1647@brl-tgr.ARPA>
Date: Sun, 22-Sep-85 19:39:16 EDT
Article-I.D.: brl-tgr.1647
Posted: Sun Sep 22 19:39:16 1985
Date-Received: Wed, 25-Sep-85 10:03:22 EDT
Sender: news@brl-tgr.ARPA

Lines: 31

I was reading the Hints and Kinks in May 85 QST, article on Match Your RF Probe to Your Meter. There were several things I believe misleading and possibly wng in the article and the associated Editor's comments.

The calculations given for a 11M or 10M meter are fine, except that the meters I am familiar with have a 1M resistor in the DC probe. Since these RF probes replace the DC probe, the meter no longer has a 11M impedance. Hence it seems that one calculates the proper resistance for the dividor using the 11M for the meter, but then must add 1M to compensate for the missing probe resistor. When I do that for a 11M meter, I get the probe resistor of 5.556M for which I believe there is a standar 5.6M resistor that should be close enough. The Heathkit probe I have that was "designed" for my meter ignores the 1M resistor and uses a 4.7M divider resistor also.

Also the orientation of the diode in fig 1 seems to imply that the probe will put out a positive DC voltage. However, I find that it puts out a negative voltage. My Heathkit probe has the diode reversed and a quite differnet explination of its workings. It works, and no amount of playing with fig 1 or 2 made it put out a positive voltage.

The voltage divider (fig 3) in the Editor's comments I have tried and found very unsatisfactory. The capacitor C is effectively accross the bottom resistor in the dividor. Hence the division ratio is complex and frequency dependent. I tried to make that scheme work with two fixed resistors to give a 1/10 ratio and found that the same power output into a dummy load on 80 meters gave a very different probe voltage than on 10 meters. If I remember right, it was about a 50% variation. I never found a completely acceptable way to solve the divider problem, but ran across an article which recommended making a wire twist capacitor across the top resistors in the dividor to compensate.

From 2722159359521013652
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,c9c38d02824d9dfb,start
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,e9af162a0123b17
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-22 19:59:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!linus!philabs!cmcl2!harvard!think!mit-eddie!cybvax0!frog!hydra!die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio,net.video
Subject: Re: Theft is Theft
Message-ID: <133@hydra.UUCP>
Date: Sun, 22-Sep-85 22:59:44 EDT
Article-I.D.: hydra.133
Posted: Sun Sep 22 22:59:44 1985
Date-Received: Wed, 25-Sep-85 10:47:13 EDT

References: <128@hydra.UUCP>
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 45
Xref: linus net.ham-radio:2657 net.video:1459

>From the artificial intelligence of hplabs!hpscda!hpscdx!garyg
>Gary Gitzen
>Hewlett-Packard

>I saw your recent posting re

>   Theft is Theft.
>and concluded that you have obviously thrown away your TV set because
>it will receive signals that someone has paid to transmit.

>Your argument is specious.

Perhaps more accurately poorly phrased. Broadcast TV transmission, program material, and production are funded by people who want me to watch it and who do not charge a fee for normal home use. Many other signals are transmitted by organizations that are providing a service to subscribers who are expected to pay for that service. If I pirate that service for free then I am doing nothing to cover the costs of providing it, (what I meant by `paid to transmit'). By pirating the service I deny the provider just compensation for his costs in obtaining and transmitting the material, and also (another subtler point) his right to control who uses it and for what. I find it very hard to justify such an act from a moral standpoint, It seems to me that obtaining a service for free that cost someone many thousands of dollars to provide is theft pure and simple.

It is clear that some signals are provided for all to use, some distribute material meant for a group of specific subscribers, and some contain private material meant for one or more authorized recipiants and no one else. It is not clear, whatever the technical ease and simplicity, or the traditional American belief in "free public airwaves" that I have the moral right to use either subscription material or completely private material just because it was there. Granted there is a subtle argument about taking reasonable precautions to ensure privacy (which I strongly beleive means encryption now it is possible, relatively cheap, and does not significantly degrade signal quality), but I do not beleive one has a moral right to use information picked out of the ether that was not transmitted for one's use.

David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.
uucp: decvax!frog!die

From 6059782493158045262
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,500b3f6f4e692cc6,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-23 09:18:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!wmartin@Almsa-2
From: wmartin@Almsa-2 (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: New schedule for \"World of Radio\"
Message-ID: <1661@brl-tgr.ARPA>
Date: Mon, 23-Sep-85 12:18:59 EDT
Article-I.D.: brl-tgr.1661
Posted: Mon Sep 23 12:18:59 1985
Date-Received: Wed, 25-Sep-85 11:00:40 EDT
Sender: news@brl-tgr.ARPA
Lines: 26

Glenn Hauser's "World of Radio" program (an interesting and wide-ranging
half-hour weekly treatment of many diverse topics all related to radio,
with an emphasis on shortwave broadcasting), is changing its broadcast
schedule on WRNO Worldwide, the New Orleans shortwave station. These
changs are effective immediately -- one went into effect this last
weekend, and the other will occur next weekend.

The GMT Saturday morning (US Friday night) broadcast is moving earlier
to avoid poor propagation and interference at its former 0430 GMT time.
It will be aired at 0300 GMT Saturdays effective this next weekend
(that is 10 PM Friday Central Daylight Time, 27 Sept 85), but will still
be on its former frequency of 6185 kHz.

The Saturday night/GMT Sunday morning broadcast, formerly at 0130 GMT,
would be preempted by football games if it remained in that slot.
Therefore, it was moved to 2330 GMT Saturdays, which is 6:30 PM
Saturday Central Daylight Time. The frequency changes to 9770 kHz.
This already became effective on Saturday, 21 Sept 85.

The Sunday GMT 1300 broadcast on 9715 kHz (8 AM CDT Sundays) remains
unchanged.

These will all move one hour later in November with the US changeover
to standard time, by the way.

Will

From -2386976157553661159
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f8e16df641e70cb7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-23 09:34:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!YOUNG@DEC-MARLBORO.ARPA
From: YOUNG@DEC-MARLBORO.ARPA

Newsgroups: net.ham-radio
Subject: DX
Message-ID: <1662@brl-tgr.ARPA>
Date: Mon, 23-Sep-85 12:34:07 EDT
Article-I.D.: brl-tgr.1662
Posted: Mon Sep 23 12:34:07 1985
Date-Received: Wed, 25-Sep-85 11:01:06 EDT
Sender: news@brl-tgr.ARPA
Lines: 16

DL0MAR/9G showed up on 40 meters yesterday, around 7004.1, at around
2300Z. He was running JAs, listening up about 1 KHz. He then started
to listen up 5 KHz, and was working into all continents. I got him
at 2300Z. After about 10 minutes he went to 80 meters, around 3504.1,
listening up 1 to 2 KHz, working Europe and North America. The op
was Baldur, DJ6SI (I don't know why he's using a club callsign).
QSL is to DJ6SI direct. He is usually pretty good about getting the
proper permission (his 5X5BD operation counts) so this one is likely
to be good. In any case, WFWL (Work first, worry later).

The other interesting thing on 40 meters has been FT8XB, around
7011, at 0230Z or so. He sends slow (sounds like a straight key)
and you have to crank your keyer down to work him.

              Paul Young, K1XM

From -3917187608982559599
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5376dce8920a481a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-23 10:53:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!petrus!sabre!zeta!epsilon!gamma!ulysses!mhuxr!
mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 78 (FCC acts on PRB-1 - antenna rules)
Message-ID: <20548@mgweed.UUCP>
Date: Mon, 23-Sep-85 13:53:13 EDT
Article-I.D.: mgweed.20548
Posted: Mon Sep 23 13:53:13 1985
Date-Received: Fri, 27-Sep-85 07:14:35 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 20

qst de k9eui
hr arrl bulletin nr 78 from arrl headquarters
newington ct september 18, 1985

to all radio amateurs bt

in an fcc news release dated september 18, fcc announced favorable action on prb-1, the league's request for declaratory ruling preempting local antenna ordinances. in the september 16 action, fcc declared a limited preemption over state and local regulations, stating that such regulations which preclude amateur radio communications are in direct conflict with federal objectives and must be preempted. fcc declared that local antenna regulations must reasonably accomodate amateur radio communications and represent the minimum practicable regulations to accomplish the purpose of the local authority. see the arrl letter and qst for further details. ar

From 3503454275100427558
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6ac28709101fbb56
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-23 13:30:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: RF Probes
Message-ID: <1673@brl-tgr.ARPA>
Date: Mon, 23-Sep-85 16:30:06 EDT
Article-I.D.: brl-tgr.1673
Posted: Mon Sep 23 16:30:06 1985
Date-Received: Wed, 25-Sep-85 11:24:15 EDT
Sender: news@brl-tgr.ARPA
Lines: 15

People trying to make voltage dividers etc might make something of the following observation: If you have an R shunted with a C as input impedance of some device like a meter or amplifier, you can make it into a voltage divider / lowpass filter by putting an R shunted by an L in series with the original RC combination. If the R values are equal then choose L so that sqrt(L/C) = R, and the whole thing will look like EXACTLY R at ALL frequencies as seen from the input, while giving a 2:1 voltage division ratio at frequencies well below cutoff. Often the cutoff frequency comes out acceptable. Cutoff frequency is of course 1/(2*pi*sqrt(LC)).

The other approach is the capacitive compensation approach, which avoids the cutoff problem but which presents a capacitive input impedance.

73,
de W3IKG

From 8423835913232654123

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-23 13:49:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2(pesnta.1.3) 9/5/84; site epicen.UUCP
Path: utzoo!linus!decvax!decwrl!pyramid!nsc!cadtec!csi!epicen!jbuck
From: jbuck@epicen.UUCP (Joe Buck)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <218@epicen.UUCP>
Date: Mon, 23-Sep-85 16:49:37 EDT
Article-I.D.: epicen.218
Posted: Mon Sep 23 16:49:37 1985
Date-Received: Fri, 27-Sep-85 07:38:30 EDT
References: <338@nicmad.UUCP> <780@vortex.UUCP> <95@l5.uucp> <435@kitty.UUCP>
Organization: Entropic Processing, Inc., Cupertino, CA
Lines: 24
Xref: linus net.ham-radio:2668 net.dcom:1123 net.video:1464
Summary: Do you want to eliminate the 4th amendment?

> From: larry@kitty.UUCP (Larry Lippman)
> Date: 16 Sep 85 22:53:39 GMT
>
> I am certain that a number of people will be upset that their dialed
> number information COULD be obtained by a law enforcement agency without the
> benefit of any judicial proceeding authorizing same. However, if you are not
> doing anything illegal which would MOTIVATE a law enforcement agency to take
> this rather EXTREME step, then you really shouldn't lose any sleep over the
> possibility...

By this argument, there should be no 4th amendment. After all, if you're not
doing anything wrong, why should you fear a search of your house, or a tap
on your phone? Federal angencies have often been used in the recent past
to investigate legitimate political activity, rather than criminal activity.
For example, if the phone #'s of known radicals (I'm talking about people that
SAY radical things, not mad bombers) appear on my phone bill, what right
does the FBI have to know that? If they had to go to a judge and present
some evidence that I might be involved in criminal activity, and the judge
issues a warrant, then and only then should they be allowed to obtain "billing
information" or tap my phone.
--
Joe Buck | Entropic Processing, Inc.
UUCP: {ucbvax,ihnp4}!dual!epicen!jbuck | 10011 N. Foothill Blvd.
ARPA: dual!epicen!jbuck@BERKELEY.ARPA | Cupertino, CA 95014

From 6454825812125673849
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,1173b2416c1d5e1a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-23 14:01:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: 930/430 S meter mods & Saving the 2 meter band
Message-ID: <1674@brl-tgr.ARPA>
Date: Mon, 23-Sep-85 17:01:32 EDT
Article-I.D.: brl-tgr.1674
Posted: Mon Sep 23 17:01:32 1985
Date-Received: Wed, 25-Sep-85 11:26:26 EDT
Sender: news@brl-tgr.ARPA
Lines: 34

Re: 430 mods -

I have found that room can be found for most any modification if one uses the following simple procedure:

Obtain from the factory a matching empty housing and blank panel, preferably painted. Saw the original unit down the right-hand side with a band saw, taking care not to saw through too many circuit board foils, switch wafers, and the like. Often this can be avoided by bending these critical items out of the way of the saw track with gas pliers or vise-grips, before commencing the sawing operation. Saw down the opposite side of the empty housing, taking off just the side of the housing if maximum space is desired, or closer to the center line if a more compact modified unit is required. Weld the new empty housing extension onto the original TS-430 housing using Heliarc equipment for best results. To avoid warping or damage to sensitive solid-state components, care should be taken to minimize overall package temperature rise, and the entire assembly should be cooled quickly by plunging it into a water bath, preferably salt water, immediately upon completing the weld.

The weld seam may then be smoothed using a bench grinder for rough areas and a disk sander for the final finish. It may be necessary to touch up the painting if a clean appearance is desired. If so, paint adhesion will be improved if an etchant such as MetalPrep (basically phosphoric acid) is painted onto the bare metal surface and then rinsed off after allowing it to etch the metal for a few minutes. Take care not to drip too much of the acid inside the equipment as it may affect circuit board and connector reliability.

With these simple procedures, the experimenter can greatly expand the space available in the 430 and similar transceivers for custom circuit additions.

73,
John S., W3IKG

From -7416691685715072235
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,61f963f88ee79b3c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-23 20:09:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!petrus!sabre!zeta!epsilon!gamma!ulysses!mhuxr!
mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 82 (Mexico tfc info)
Message-ID: <20562@mgweed.UUCP>
Date: Mon, 23-Sep-85 23:09:38 EDT
Article-I.D.: mgweed.20562
Posted: Mon Sep 23 23:09:38 1985
Date-Received: Fri, 27-Sep-85 07:41:57 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 24

qst de k9eui
hr arrl bulletin nr 82 from arrl headquarters
newington ct september 23, 1985
to all radio amateurs bt

there is encouraging news from mexico. replies to health and
welfare inquiries sent to mexico are being received and
delivered by american amateurs. telephone service is slowly
being restored in the disaster areas, but citizens should not,
repeat not, attempt to use phone lines to call into mexico as
they are currently reserved for official communications only.
the u.s. state department is handling inquiries concerning u.s.
citizens in mexico at telephone 202 653 7959. american
amateurs are advised to continue routing all messages to mexico
through nts, the national traffic system, or through
independent nets. direct contact with mexico should be left to
the established emergency circuits. frequencies on which
organized emergency communications with mexico are already
established must be kept free of interference, and from
intrusion by well meaning bystanders. any further information
concerning this event will be announced through w1aw bulletins
ar

From 7585752278323601448
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,57af51ed372902ec,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-23 20:10:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!petrus!sabre!zeta!epsilon!gamma!ulysses!mhuxr!

mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 83 (CAN-AM cw contest)
Message-ID: <20563@mgweed.UUCP>
Date: Mon, 23-Sep-85 23:10:24 EDT
Article-I.D.: mgweed.20563
Posted: Mon Sep 23 23:10:24 1985
Date-Received: Fri, 27-Sep-85 07:32:02 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 11

qst de k9eui
hr arrl bulletin nr 83 from arrl headquarters
newington ct september 23, 1985
to all radio amateurs bt

the can am cw contest will be held as scheduled this coming
weekend, september 28 and 29. complete information appears on
page 80 of august qst.   the phone weekend will not be
rescheduled ar

From -3583750894729931732
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d906124cf524f9a7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-23 20:10:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!petrus!sabre!zeta!epsilon!gamma!ulysses!mhuxr!
mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 38
Message-ID: <20564@mgweed.UUCP>
Date: Mon, 23-Sep-85 23:10:51 EDT
Article-I.D.: mgweed.20564
Posted: Mon Sep 23 23:10:51 1985
Date-Received: Fri, 27-Sep-85 07:32:15 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 31

qst de k9eui
hr propagation forecast bulletin nr 38 from arrl headquarters
newington ct september 23, 1985
to all radio amateurs bt

if the solar flux continues through the balance of september at
levels sustained thus far, there will be a new monthly low for
this solar cycle, close to 70. even with the best months for

the northern hemisphere, the fall season, now at hand, this would mean little dx on 28 mhz, except on north south paths. considerably greater geographical coverage will be available on 21 mhz but only on daylight paths. even 14 mhz will be primarily a daylight band unless we have much higher flux levels. though propagation is improving on our lower frequencies, dx will become easier on the ears as electrical storms die down as cooler weather spreads over the northern hemisphere. our cold nights bring hot propagation on the lower frequencies except when geomagnetic activity is high. as predicted last week, we have had a rough time with high k and a indices since about september 10. no great improvement in this respect is likely until near the end of september. conditions change rapidly as surges of particles from the sun enter the earths atmosphere. contrary to what we might expect, auroral conditions can be quite severe in the low years of the solar cycle. the current trend toward high and erratic wwv k and a indices is bad news, unless you live in the higher latitudes and enjoy auroral dx on the vhf bands. american sunspot numbers for september 12 through 18 were between 12 and 18 with a mean of 9.1 ar

From -1801568902350367612
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de5b2775669380fb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-23 20:14:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!petrus!sabre!zeta!epsilon!gamma!ulysses!mhuxr!
mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin
Message-ID: <20565@mgweed.UUCP>
Date: Mon, 23-Sep-85 23:14:45 EDT
Article-I.D.: mgweed.20565
Posted: Mon Sep 23 23:14:45 1985
Date-Received: Fri, 27-Sep-85 07:32:28 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 11

qst de k9eui

sept 23, 1985

Sorry but there was no DX bulletin copied here this week.
Either they screwed up or else the propagation was bad
but several times this past week when I have tried to get
W1AW at 5pm local, they were not there. Will keep that in
mind in the future.....

From -3826811241763539920
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5775b929607b32b5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-24 04:54:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site hlwpb.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!hlwpb!lare
From: lare@hlwpb.UUCP (LH Eckenrode)
Newsgroups: net.ham-radio
Subject: DX heard this AM
Message-ID: <365@hlwpb.UUCP>
Date: Tue, 24-Sep-85 07:54:20 EDT
Article-I.D.: hlwpb.365
Posted: Tue Sep 24 07:54:20 1985
Date-Received: Wed, 25-Sep-85 03:31:48 EDT
Distribution: net
Organization: AT&T Bell Laboratories, Short Hills, NJ
Lines: 13

I heard the following stations this morning:

FREQ Call QTH OPR
3806 KC6JC So. Carolines Father Cav.
7288 VK9ZB Willis Is. Kim

Both were readable here in New Jersey.
Time: 6:30- 7:00 EDT

Larry Eckenrode
KD2NT
hlwpb!lare

From 5969142788120156811
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-24 09:27:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site hammer.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tektronix!
orca!hammer!seifert
From: seifert@hammer.UUCP (Snoopy)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"

Message-ID: <1517@hammer.UUCP>
Date: Tue, 24-Sep-85 12:27:34 EDT
Article-I.D.: hammer.1517
Posted: Tue Sep 24 12:27:34 1985
Date-Received: Fri, 27-Sep-85 03:00:08 EDT
References: <763@vortex.UUCP> <253@ccivax.UUCP>
Reply-To: seifert@hammer.UUCP (Snoopy)
Organization: The Daisy Hill Puppy Farm
Lines: 16
Xref: watmath net.dcom:1319 net.video:1544 net.ham-radio:3283

In article <253@ccivax.UUCP> rb@ccivax.UUCP (rex ballard) writes:

> Suppose the frequencies being used effected human health (X-Rays).
> Do you suppose we would allow the Commercial station to DEMAND payment
> for the priveledge of recieving these cancer causing rays?
> ...
> When I got my first General Class liscence, the frequencies now
> used for satellite and microwave transmissions were ham bands,
> now they want to charge for the use of the reciever!

Microwaves *do* effect human health. Can you say "cataract"?
(along with many other things)

Snoopy
tektronix!hammer!seifert
tektronix!tekecs!doghouse.TEK!snoopy

From -192597261731456044
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,18100f3da5706ff3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-29 11:52:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site ucbvax.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!spp
From: spp@ucbvax.ARPA (Stephen P Pope)
Newsgroups: net.ham-radio
Subject: test
Message-ID: <10234@ucbvax.ARPA>
Date: Thu, 29-Aug-85 14:52:45 EDT
Article-I.D.: ucbvax.10234
Posted: Thu Aug 29 14:52:45 1985
Date-Received: Sat, 31-Aug-85 06:22:48 EDT
References: <1040@brl-tgr.ARPA>
Distribution: net
Organization: University of California at Berkeley
Lines: 2

this is a test of net.ham-radio

From 3675882944470148131
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,74dd8650d2a8fb95
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-29 13:31:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: $Revision: 1.6.2.13 $; site hp2610.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!we53!busch!
wucs!wuphys!hp2610!scott
From: scott@hp2610.UUCP
Newsgroups: net.ham-radio
Subject: Re: puzzling question
Message-ID: <441300001@hp2610.UUCP>
Date: Thu, 29-Aug-85 16:31:00 EDT
Article-I.D.: hp2610.441300001
Posted: Thu Aug 29 16:31:00 1985
Date-Received: Sat, 31-Aug-85 08:27:42 EDT
References: <996@brl-tgr.UUCP>
Lines: 9
Nf-ID: #R:brl-tgr:-99600:hp2610:441300001:000:263
Nf-From: hp2610!scott   Aug 29 15:31:00 1985

I haven't received my Tech. license yet nor found the FCC ruling on the 12m freq. range either, but my HW-5400 indicates that 24.89-24.99 is the legal range for this band. I am interested in some others' response too

Jim Scott
St. Louis
H.P..

From -1441248431214201911
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11946d,9559e67137606a89,start
X-Google-Attributes: gid11946d,public
X-Google-Thread: 134694,9559e67137606a89,start
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,9559e67137606a89,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-29 13:41:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Satellite viewing "freedoms"
Message-ID: <763@vortex.UUCP>
Date: Thu, 29-Aug-85 16:41:10 EDT
Article-I.D.: vortex.763

Posted: Thu Aug 29 16:41:10 1985
Date-Received: Sat, 31-Aug-85 07:15:33 EDT
Organization: Vortex Technology, Los Angeles
Lines: 101
Xref: watmath net.dcom:1223 net.video:1447 net.ham-radio:3139

I think there's rather a lot of misconception floating around regarding this issue. Part of my work is in the satellite communications area so I track these issues pretty closely.

There have been a number of different legal events and laws regarding this area, and I'm not going to try specify them, but rather just explain the backround and outcome as I understand them.

First of all, the oft-quoted old Communications Act doesn't really say you can listen/watch to whatever you want. It essentially says you can receive "broadcast" signals so long as you don't divulge the contents nor receive "benefit" from them. Interpretations of this law have long held that intercepting point-to-point telephone microwave transmissions can be construed as wiretapping, by the way. I'm simplifying to some extent regarding the Act, but you get the idea.

Now, "benefit" can be defined in different ways. On one end, you might say you benefit only if you sell the signals/info you received and make money. On the other hand, it might be said that you benefit simply from enjoying the signals!

In practice, the current legal view has been shifting from a strict interpretation more like the former view towards a different concept. More and more, "benefit" is being viewed as being able to receive something for free that other people have to pay a fee to receive.

There are numerous complexities and exceptions. For example, if you scramble your signal, the current view is that you're not really "broadcasting" but really trying to do a multipoint feed to particular people. If you intended the signal for general reception, you wouldn't scramble. Laws now generally protect scrambled transmissions as being essentially "non-broadcast" entities. A recent California appeals case convicted someone of viewing unscrambled microwave MDS--but this case seems a bit cloudy and runs contrary to the general pattern--it may yet be overturned (MDS cases are often tricky, but I won't go into the details of this case here).

Now, back to satellites. The people who transmit the popular cable services say they are not broadcasting to the public--that they are providing a service for their cable system affiliates only. This view was somewhat difficult to support given that the public ended up watching these signals in great numbers on cable systems. The situation was complicated by the fact that many people did not have access to cable and had no alternative to receiving the signals

directly if they wanted to see them. This wouldn't have caused much trouble if the services had, by and large, been willing to deal with individuals. But most of them flatly refused to deal with other than cable entities, claiming the administrative hassles of dealing lots of individuals was too great. Of course, many people indeed bought dishes simply to avoid paying for cable, even when cable was available.

For a number of reasons, this restriction was eventually rejected by Congress. The decision was made (as I understand it) that most unscrambled satellite transmissions were indeed fair game to receive, but that the public viewing these indeed DID receive benefit from receiving them, since their counterparts who subscribed to cable had to pay.

The end result was the concept that you could watch pretty much whatever unscrambled transmissions you wanted, but if the signals were offered for sale to the general public at a fair and equitable price then you must pay for them. In other words, if a satellite service WERE WILLING to deal with you as an individual, and charged you an equitable fee in comparison to cable subscribers, you need to pay the fee since you are receiving benefit from the transmissions. If the service were unscrambled and refused to deal with you, then you were free to receive the service.

In practice, there are other issues involved also, and this is just my own interpretation of events--take it for whatever value you will, but I think I'm pretty close to the bottom-line facts. Right now there is some hangling between some satellite services and congressmen who supported the bills in questions over the matter of pricing. There are some claims that the fees being charged to individuals are much higher than the fees charged per subscriber to cable systems... but the services claim that this is equitable given the administrative overhead of billing and record keeping for individuals. This issue has yet to be fully resolved. Issues of scrambled vs. non-scrambled transmissions are also still somewhat hazy in areas.

Finally, I might add that I doubt very much that there would be a public outcry to repeal such restrictions. If anything, most people would probably support tighter restrictions. Most people don't have their own dishes, and pay for cable services. I suspect that most of these people (rightly or wrongly) detest the people who they perceive as getting for "free" what *they* have to pay for. In fact, if you brought it to a vote, I'll bet that the population would happily vote in many other restrictions on spectrum listening--such as law enforcement transmissions, portable telephones, etc. The mood of the country is generally conservative on these issues, so I suggest that you think carefully before trying to get the public at large involved in such telecommunications matters.

Please note that I'm not expressing an opinion one way or another about these particular issues, just passing along my understanding of the situation.

--Lauren--

From 3362753656572824627
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,18100f3da5706ff3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-30 06:45:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio
Subject: Re: Loss of fredom in communications!
Message-ID: <277@anasazi.UUCP>
Date: Fri, 30-Aug-85 09:45:43 EDT
Article-I.D.: anasazi.277
Posted: Fri Aug 30 09:45:43 1985
Date-Received: Thu, 5-Sep-85 08:20:33 EDT
References: <1040@brl-tgr.ARPA>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 24

> It has always been the case that everyone had the right to receive any
>signal being transmitted on any frequency using any kind of receiver.

Not true! It is my understanding that it has always been illegal to intercept
common carrier signals, even over the radio. This has been used for years
by Microwave Distribution System operators to prosecute unauthorized
reception of their TV signals (here in Phoenix, HBO). It is certainly in
the American tradition to allow anyone to listen to anything, but it has
not been so in the law for many decades.

>I was struck with horror and disbelief after reading this message. The
>implications of this ruling set the way for making it a crime to monitor
>radio signals unless the sender gives express permission to do so. I
>suppose this could lead to making it a crime to even own certain receiving
>equipment! I've seen this in other countries but NEVER thought it would
>happin here in FREE AMERICA!
>
>-Paul

--
John Moore (NJ7E)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
(602) 952-8205 (day or evening)

From 7463792990220519261
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,6b2b5cbad87183e3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-30 06:57:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: 12 meter band info
Message-ID: <20025@mgweed.UUCP>
Date: Fri, 30-Aug-85 09:57:31 EDT
Article-I.D.: mgweed.20025
Posted: Fri Aug 30 09:57:31 1985
Date-Received: Sat, 31-Aug-85 09:03:25 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 36

Since there seem to be questions about the 12 meter band, here is a repeat of the ARRL bulletins regarding the 12 meter band:

qst de k9eui
hr arrl bulletin nr 31 from arrl headquarters
newington ct april 26, 1985
to all radio amateurs bt

the 24 mhz or 12 meter band will be released to u.s. amateurs at 0001 utc on june 22, 1985. the 10 mhz or 30 meter band becomes permanent at the same time. both bands are exclusive in the u.s., but amateurs must avoid interference to stations outside the u.s. in the fixed service. full power will be permitted in the 12 meter band. at 30 meters, power continues to be restricted to 200 watts pep. mode subbands will be as shown in december 1984 qst, page 61. the 420 to 430 and 902 to 928 mhz matters proposed in the same docket will be dealt with in a further report and order at a later date. copies of the order will be available from arrl hq. next week. please include a s.a.s.e. with your request.

qst de k9eui
hr arrl bulletin nr 46 from arrl headquarters
newington ct june 21, 1985
to all radio amateurs bt

remember that the 24 mhz band becomes available at 0001 utc june 22. general, advanced and extra class licensees may use 1500 watts pep output on the band. the cw and rtty subband runs from 24.890 to 24.930 mhz, with cw, phone, fax, sstv and narrow band fm permitted from 24.930 to 24.990. contacts made on 24 mhz do not count for field day credit ar

From 7492476535239410911
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dc40b67a73fdc845,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-30 08:00:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!taylor.WBST@Xerox.ARPA
From: taylor.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Loss of freedom
Message-ID: <1128@brl-tgr.ARPA>
Date: Fri, 30-Aug-85 11:00:27 EDT
Article-I.D.: brl-tgr.1128
Posted: Fri Aug 30 11:00:27 1985
Date-Received: Sun, 1-Sep-85 12:31:55 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

YES, THIS MAY BE MORE IMPORTANT THEN THE OLD "RIGHT TO BEAR ARMS", REFRAIN!

73

JIM (W2OZH)

From 819387037691262290
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,41358a86551a3589
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-30 08:15:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!taylor.WBST@Xerox.ARPA
From: taylor.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Loss of Fredom... CC:
Message-ID: <1129@brl-tgr.ARPA>
Date: Fri, 30-Aug-85 11:15:38 EDT
Article-I.D.: brl-tgr.1129
Posted: Fri Aug 30 11:15:38 1985
Date-Received: Sun, 1-Sep-85 12:32:07 EDT
Sender: news@brl-tgr.ARPA
Lines: 8

PAUL, MY MESSAGE WAS:

I AGREE!

I WONDER WHAT THE POSITION OF THE "VOICE OF THE RADIO AMATEUR" = THE

ARRL, IS ON THIS LITTLE EROSION OF FREEDOM.

JIM (W2OZH)

From -6293088508233040866
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e342e4082998504,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11da26,8e342e4082998504,start
X-Google-Attributes: gid11da26,public
X-Google-ArrivalTime: 1985-08-30 09:34:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site iddic.UUCP
Path: utzoo!linus!philabs!prls!amdimage!amdcad!decwrl!decvax!tektronix!orca!iddic!
brucec
From: brucec@iddic.UUCP (Bruce W. Cheney)
Newsgroups: net.chess,net.ham-radio
Subject: Ham Radio Chess Net
Message-ID: <2153@iddic.UUCP>
Date: Fri, 30-Aug-85 12:34:03 EDT
Article-I.D.: iddic.2153
Posted: Fri Aug 30 12:34:03 1985
Date-Received: Mon, 2-Sep-85 09:08:17 EDT
Organization: Tektronix, Beaverton OR
Lines: 19
Xref: linus net.chess:767 net.ham-radio:2541

If you are interested in playing chess or discussing chess related
subjects and have an Amateur Radio license, please take note:

Starting September 3rd (US Tuesday) and every US Tuesday evening
after, there will be a CARI (Chess Amateur Radio International)
sponsored chess net on 14.267 Mhz at 0300 hours GMT (GMT Wednesday
AM). The net control station will be NI7M located near Portland
Oregon. The primary intention of this net is to serve West Coast
chess playing hams at a more convenient time than the current East
Coast and European nets, (0300 GMT translates to 8 pm PDT), but
check-ins from anywhere are encouraged.

You don't have to be a CARI member and you don't have to be a good
chess player. Hams who would like to LEARN to play chess are
encouraged to check in.

brucec (NI7M)
tektronix!iddic!brucec

From 5563272870743968238
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dc40b67a73fdc845
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-08-30 10:44:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!STEPHANY.WBST@Xerox.ARPA
From: STEPHANY.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Loss of freedom
Message-ID: <1137@brl-tgr.ARPA>
Date: Fri, 30-Aug-85 13:44:13 EDT
Article-I.D.: brl-tgr.1137
Posted: Fri Aug 30 13:44:13 1985
Date-Received: Sun, 1-Sep-85 12:36:24 EDT
Sender: news@brl-tgr.ARPA
Lines: 13

The reason for the loss of freedom to receive radio signals is due to
the fact that lawyers, if paid enough, can have any law or right
overturned for their clients. It is cheaper to pay the lawyers and
change the law than it is to put encoders on the signal. Note, the FCC
has gone on record as saying they will not licese receivers so all the
problems come under "theft of services".

But done worry. Within 5 years all TV will be digitally encoded, then
coding to restrict tapping will be very cheap, and very hard to decode
and we can forget the "freedom" stuff.

                    Joe N2XS

From -5957068960154211918
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,18100f3da5706ff3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-30 12:13:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@mitre-
bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: Loss of fredom in communications!
Message-ID: <1138@brl-tgr.ARPA>
Date: Fri, 30-Aug-85 15:13:36 EDT
Article-I.D.: brl-tgr.1138
Posted: Fri Aug 30 15:13:36 1985
Date-Received: Sun, 1-Sep-85 12:45:22 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

No they can't! The proposed amendment said nothing about allowing them

to USE the information. They can just receive it. You can encode it if you care.

-John S., W3IKG

From -1748991533636582599
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,21643b60c4533c8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-30 14:48:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site hpcnof.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!hpfcdc!hpfcla!hpcnof!jrc
From: jrc@hpcnof.UUCP
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <44500001@hpcnof.UUCP>
Date: Fri, 30-Aug-85 17:48:00 EDT
Article-I.D.: hpcnof.44500001
Posted: Fri Aug 30 17:48:00 1985
Date-Received: Thu, 5-Sep-85 07:39:01 EDT
References: <312@harvard.UUCP>
Organization: 30 Aug 85 15:48:00 MDT
Lines: 8

An interesting comment... which suggests that we need a net similar to this via packet radio --- with NO commercial interests. Maybe using micros as well as UNIX. Is there anything out there (in packet land) comparable to USENET?

Jim Conrad, KQ7B
hplabs!hpfcla!hpcnoa!j_conrad

From -1743053699746638436
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d28c8c00084d1a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-30 15:20:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 34
Message-ID: <20038@mgweed.UUCP>
Date: Fri, 30-Aug-85 18:20:52 EDT
Article-I.D.: mgweed.20038
Posted: Fri Aug 30 18:20:52 1985
Date-Received: Sun, 1-Sep-85 05:19:27 EDT

Organization: AT&T Information Systems - Montgomery Illinois
Lines: 50

qst de k9eui
hr dx bulletin nr 34 from arrl headquarters
newington ct august 30, 1985
to all radio amateurs bt

thanks to kb1be and the connecticut dx association for the following dx information.

st. pierre. a dxpedition by fp/k1rh and fp/w1ccn will be active on ssb and cw through september 10. operation will be on 80 through 10 meters, and suggested 75 meter frequencies are 3788 and 3795 khz. qsl to k1rh.

mauritania. 5t5sl, operated by 9x5sl, has been reported on ssb at 1700z.

madeira. dj2bw/ct3 will be active from september 1 to 15.

guinea bissau. j5wad is again active on 20 meter ssb and cw.

mali. tz6fs and tz6wc are still very active on 20 meter ssb. look for them on 14227 khz between 2000 and 2200 z.

christmas island. vk9xj and vk9xz can be found monday through friday at 1200z around 14170 to 14180 khz on ssb. also, five operators activated the club station, vk9xi.

auckland island. zl9aa will be active on 160 through 40 meters for two months.

chatham island. zl7aa is only on 10 and 80 meters.

sao tome. s92lb, luis, is still active daily on 14183 khz ssb around 2200 to 2330z. his license has been received at arrl hq for documentation purposes.

rare african. look for dj5rt, wilfred, to activate a rare african country in september. his last dxpedition was to 5x5, uganda, last spring.

ciskei. algoa branch members of the south african radio league will operate s42u from october 4 to 6 or 11 to 13 on 40, 20 and 15 meters. operation will be mostly cw, with some ssb. qsl to zs2u.

liechtenstein. hb9nl will operate hb0nl from september 15 to october 27 on all bands, 160 through meters, cw and ssb. qsl to hb9nl ar

From -8222215523203800602
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5746dc54b8f79d0e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-30 19:15:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!ihnp1!ihnp4!inuxc!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Re: contest results
Message-ID: <245@inuxi.UUCP>
Date: Fri, 30-Aug-85 22:15:57 EDT
Article-I.D.: inuxi.245
Posted: Fri Aug 30 22:15:57 1985
Date-Received: Sun, 1-Sep-85 12:16:37 EDT
References: <1023@brl-tgr.ARPA>
Organization: AT&T Consumer Products, Indianapolis
Lines: 28

> Has anyone received the results from CQ WORLD WIDE phone contest
> in 1984 yet? I would be interested to know the result from my
> operation in Malta as 9H3DN. I don't have the CQ magazine, so I
> think the info will arrive late here.
>
> - 73 de Kai / LA2TO

Lets see....straight from 9/85 CQ magazine.

9H3DN (only entry from Malta)

2,602,504 total points
3,616 QSO's
104 Zones
384 Countries

Multi-Single Winners
LZ7A (oprs lz's 2he 2df, 2po, 2cc, 2ua, 1a310/2)
7,243,456 points, 4345 qso;s 168 zones, 536 countries

you won a certificate, it seems, as you're score is highlighted. Will
send a copy of the article to you.

GOOD SCORE!!

Steve Wheatley, KU9C
ihnp4!inuxc!inuxi!wheatley

From 5368465074738746494

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,db7780cdab381fb8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-30 22:14:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!giansiracusa%sperry-
ctc.csnet@csnet-relay.arpa
From: giansiracusa%sperry-ctc.csnet@csnet-relay.a (Robert Giansiracusa)
Newsgroups: net.ham-radio
Subject: list addition
Message-ID: <1143@brl-tgr.ARPA>
Date: Sat, 31-Aug-85 01:14:39 EDT
Article-I.D.: brl-tgr.1143
Posted: Sat Aug 31 01:14:39 1985
Date-Received: Sun, 1-Sep-85 13:22:45 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

Please add me:

giansiracusa%Sperry-CTC.csnet@CSNET-RELAY.arpa

Thanks,
Bob

From -1103892359191014519
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,befbe92cb1edc373
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-01 09:35:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.8 $; site trsvax
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!pur-ee!uiucdcs!
convex!trsvax!mikey
From: mikey@trsvax
Newsgroups: net.ham-radio
Subject: Re: Ham Radio and Computer Networki
Message-ID: <52800066@trsvax>
Date: Sun, 1-Sep-85 12:35:00 EDT
Article-I.D.: trsvax.52800066
Posted: Sun Sep 1 12:35:00 1985
Date-Received: Wed, 4-Sep-85 06:06:12 EDT
References: <168@bunny.UUCP>
Lines: 8
Nf-ID: #R:bunny.UUCP:-16800:trsvax:52800066:000:155
Nf-From: trsvax!mikey   Sep 1 11:35:00 1985

Couldn't an encrypted data stream for the purposes of authentication be
considered as actual data, therefore it is not illegal?

mikey at trsvax
KA5MJQ

From 3238827336467477631
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bb727a2c1f6d51e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-01 09:40:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.8 $; site trsvax
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!pur-ee!uiucdcs!
convex!trsvax!mikey
From: mikey@trsvax
Newsgroups: net.ham-radio
Subject: Re: Radio activity
Message-ID: <52800067@trsvax>
Date: Sun, 1-Sep-85 12:40:00 EDT
Article-I.D.: trsvax.52800067
Posted: Sun Sep 1 12:40:00 1985
Date-Received: Wed, 4-Sep-85 06:06:34 EDT
References: <861@brl-tgr.ARPA>
Lines: 7
Nf-ID: #R:brl-tgr.ARPA:-86100:trsvax:52800067:000:170
Nf-From: trsvax!mikey   Sep 1 11:40:00 1985

What? You didn't see the cartoon in Newsweek (or was it Time) about the
Radio Shack AM/FM/CB/SW/Cassette/8-Track/Geiger-Counter the week after TMI??

mikey at trsvax

From 2728476999553522413
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27bbd9254b079977
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-01 11:41:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: Furor??
Message-ID: <771@vortex.UUCP>
Date: Sun, 1-Sep-85 14:41:28 EDT
Article-I.D.: vortex.771

Posted: Sun Sep 1 14:41:28 1985
Date-Received: Mon, 2-Sep-85 04:17:11 EDT
References: <1082@brl-tgr.ARPA>
Organization: Vortex Technology, Los Angeles
Lines: 6

Dialing a number one higher might not prove anything. I know
for a fact that circuits were busy out of LA to Phoenix. Note that
many CIRCUIT BUSY recordings may ring several times before the
voice announcement begins.

--Lauren--

From -7312340588026777191
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dc40b67a73fdc845
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-01 11:43:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: Loss of freedom
Message-ID: <772@vortex.UUCP>
Date: Sun, 1-Sep-85 14:43:43 EDT
Article-I.D.: vortex.772
Posted: Sun Sep 1 14:43:43 1985
Date-Received: Mon, 2-Sep-85 04:17:22 EDT
References: <1137@brl-tgr.ARPA>
Organization: Vortex Technology, Los Angeles
Lines: 5

"... Within 5 years all TV will be digitally encoded ..."

No way. Not in 5 years. Not in 10 years.

--Lauren--

From 232613304917877270
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,f11e3cc5b0e8a750,start
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750,start
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-02 21:05:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!cybvax0!frog!hydra!die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Listen to phone calls on your tvro
Message-ID: <125@hydra.UUCP>
Date: Tue, 3-Sep-85 00:05:37 EDT
Article-I.D.: hydra.125
Posted: Tue Sep 3 00:05:37 1985
Date-Received: Wed, 4-Sep-85 06:50:06 EDT
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 328
Xref: watmath net.ham-radio:3159 net.dcom:1238 net.video:1454

Yes it is possible, and not even very difficult.

Some years ago it was pointed out that 68 percent of long distance telephone trunks went by ground based microwave. And while the long distance carriers have been working (under some pressure from the NSA and White House) to convert these circuits to optical fibers or at least coaxial cable there are still many routes that use microwave or satellite hops. I don't know an exact figure but I think it would be reasonable to guess that at least 40-50 percent of long distance trunks include a microwave or satellite hop. And some 75% (approx) of long haul microwave relays use the 3.7-4.2 Ghz band which is readily receivable by a tvro.

Most long haul microwave systems use FM modulation and frequency division multiplexing (FDM) of single sideband supressed carrier voice channels. Some satellite systems also use this modulation. Unfortunately FM-FDM-SSB modulation is quite easy to receive with simple and widely available equipment. Recovering the contents of a specific channel is very easy, which opens up the possibility of monitoring random phone calls to a specific group of destinations or monitoring specific private line data or voice circuits (which are assigned to a multiplex slot for long periods of time).

The question of whether a TVRO could be used to monitor phone conversations has been raised on the net. The answer is that with the addition of a stable general coverage single sideband receiver (such as an ICOM R-71 or a Kenwood R-2000 or the receiver section of a modern transceiver) connected to the unfiltered and unclamped video output (provided for connecting stereo adapters and descramblers) a TVRO can be used to listen to FM-FDM multiplexed telephone signals from both celestial and ground based sources.

Further, with a stable down block down converter that converts to the UHF TV band and one of the scanner type receivers designed to cover this band one can also receive the some of the single channel per carrier (SCPC) signals that carry telephone circuits to more remote places (along with network radio feeds, Muzak, and various broadcast data services such as the AP and UPI news services). (Some signals

are dithered and require some form of closed loop afc to receive them).

This vulnerability has been well known in security circles for many years, but as the number of tvro systems has increased to over a million, the problem assumes a somewhat different perspective. In 1976 Mitre estimated that it would cost $50,000 + to intercept microwave telephone calls, and would require a 10 foot dish. In that era a 10 foot dish would attract much attention. Today one can buy a tvro system with a 75 K LNA and a 8-12 foot dish for $1000-1500, and almost nobody will give the system a second glance as tvro's are commonplace. A 75 K LNA beats a the 10-12 db noise figure receiver that Mitre based it's calculations by a very substantial amount. And the current generation of computer controllable general coverage ssb receivers is a much cheaper demultiplexing device than the synthezizer and selective voltmeter that seemed necessary in 1976.

The existance of all these millions of receivers that can pick up both celestial and ground based telephone circuits means that one should not presume that a long distance telephone call is private. And more important (because they are much easier to find in FDM complexes) nobody should assume that a private leased line is secure (unless the long distance carrier has specially routed it via lightwave (much more secure) or coaxial cable (somewhat more secure) for it's entire path. (Obviously conventional (and highly illegal) wiretaps also have to be considered if there is some reason to beleive that some individual or organization has a strong enough reason to be interested in your communications).

Background

Communications satellites carry telephone traffic in several formats. The principle formats are:

Multi Channel systems

1. FDMA - PSK - TDM - PCM.

   Used on a number of transponders on 4 and 12 Ghz satellites. Heavily used by private business for tie lines and other leased line services, sometimes mixed with data. Quite secure if encrypted. Not easily intercepted by private individuals

2. TDMA - PSK - TDM - PCM.

   Used on SBS (12 Ghz) satellites as the principle access technique. Therefore SBS Skyline service and some MCI service (they are now both owned by IBM) is protected this way. Used also on some 4 Ghz transponders. Very difficult for private individuals to intercept even

if not encrypted. Some circuits encrypted some not. TDMA is felt to be the heavy use satellite access technique of the future as it offers very efficiant use of transponder power and dynamic allocation of system capacity to those links which are currently active. When combined with encryption it is quite secure.

3. FDMA - FM - FDM - SSB.

Standard modulation used on almost all terrestrial long haul telephone microwave circuits. Used on several 4 Ghz domsat transponders and most multi channel Intelsat links. Wideband FM-FDM signals can be readily received by standard tvro receivers, and an individual channel can be easily picked out of the multiplex signal with a garden variety general coverage ssb comunications receiver. Very easy for private individuals to intercept.

4. CDMA - TDM - PCM otherwise know as spread spectrum.

CDMA or spread spectrum techniques are widely used on military satcom links because of their security and resistance to jamming. As far as I know the only commercial satcom use of such techniques is by Equatorial Communications to broadcast data streams to small (2-3 foot) dishes. Intercepting and decoding military spread spectrum signals is presumably nearly imposible even for large well equiped intelligence agencies. Intercepting Equatorial signals is quite possible, though it is reported that they will soon encrypt all the data they transmit.

Single channel systems

5. FDMA - FM otherwise known as SCPC - FM.

Single Channel Per Carrier is used to transmit one single nbFM telephone channel between two points. A transponder carries many such FM carriers at one time. Frequencies used are often coordinated by a central station when the call is set up, and may only used for the duration of the call. This technique is used for communications with remote places that rarely need more than a very few circuits at once. Can be relatively easily intercepted by a wide band scanner connected to a very stable block downconverter. Easy for private individuals to intercept.

6. FDMA - PCM otherwise known as SCPC - PCM or SPADE.

This technique is the international standard Intelsat method of establishing telephone connections between places that don't have enough traffic to warrent permanently assigned

FDM trunks. Each direction of each telephone call is assigned a channel by the central control station. Stations transmit a PSK keyed carrier on that channel for the duration of the call. Each carrier contains one 8 khz sampled PCM bitstream along with some error correction and sychronizing bits. As far as I know encryption is not used. The signal can be intercepted by a sophisticated individual but intercepting it requires a very large dish as the effective radiated power per carrier is very much less than domsat SCPC carriers use. A few domestic satcom SCPC users use PCM, probably with some form of encryption. Hard for a private individual to intercept.

7. FM - FDM - FM (Subcarriers on Video feeds)

As most TVRO owners discover, many of the video feeds contain additional subcarriers that carry unrelated or tangentially related material. Included amoung these are cue and coordination channels that may occasionally carry telephone like conversations. There are no regular telephone circuits on video subcarriers however.

On FM-FDM-SSB

All it takes to recover FM-FDM signals is a suitable wideband FM receiver connected to a stable general coverage ssb receiver that tunes the frequency range used for the baseband. Tvro receivers have the correct bandwidth for many such signals and often incorperate provisions for IF filters that can be used to better adapt the receiver to the narrow band signals found on some transponders. And modern general coverage receivers and transceiver receiver sections with synthezised tuning, digital frequency display, and narrow IF filters are well suited to recovering the audio on a particular channel.

Listening to FM-FDM-SSB signals can be accomplished by tuning the TVRO receiver to either a satellite transponder carrying a FM-FDM signal (this may involve restricting the IF bandwidth with a filter as some transponders carry more than one FDM-FM signal), or pointing the antenna at a nearby terrestrial microwave transmitter and tuning the receiver for maximum signal.

Once the FDM-FM signal has been tuned in, the single sideband receiver can be used to search the baseband (typically .3Mhz to 6 or 8 Mhz) for telephone conversations, data transmissions and other private line circuits. Individual channels will appear as usb or lsb signals at precise 4 khz intervals. In fact the whole baseband is organized into 12 channel groups, 60 channel supergroups, and 600 channel mastergroups according to a standard frequency plan (the AT&T plan as usual is different from the CCITT one used internationally)

Most channels have completely supressed carriers, although certain channels will seem to have a carrier in them (but slightly off

frequency) which is something called a pilot tone, used to monitor circuit continuity and control overall gain. Depending on how archiac the telephone trunk equipment is on a particular trunk, it may have a 2600 hz sf signalling tone in it when it is idle which is dropped when the channel is in use for a call. Trunks which use sf signalling also often use MFKP (multi-frequency key-pulsing - the famous blue box version of tone dialing) to pass telephone numbers on to the destination switch. More modern trunks use CCIS (common control interoffice signalling) which is a packet network replacement for the earlier and less secure in band signalling that uses separate signalling channels to carry all the signalling for all the trunks in a trunk route.

Obviously, a single signal usually carries only half a telephone conversation so it is necessary to use two receivers and TVRO's to pick up both sides of the call clearly. Receiving both sides of a terrestrial circuit requires a suitable location where both directions of transmission can be picked up, which usually means a site in line with the microwave path. Sometimes both directions of transmission from a repeater site can be monitored by a very nearby (less than a mile) receiver. Many telephone trunks have low enough echo return loss so that both parties can be heard even on when monitoring only one direction of transmission however, so it is quite possible to listen to both sides of some conversations with only one receiver. Both sides of a satellite FDM circuit can usually be found on the same bird but are sometimes not, and sometimes not even on FDM satcom at all.

In general, particularly on terrestrial signals, all the channels in a 12 channel group originate and terminate at the same place. The groups and supergroups that make up a mastergroup however often originate from several different places. Demodulation to baseband audio is generally done as few times as possible on a trunk or private line circuit that connects two places, the 12 channels of it's group are shifted to various frequencies within the baseband of the different satellite, microwave or coaxial cable FDM signals that carry it to it's destination, but at least with older multiplexing equipment the granularity of routing resolution is a usually a group (occasionally half a group), and all 12 of the channels in a group usually end up demodulated to audio at the same place.

Channels within a group are assigned to various purposes. Some may carry telephone trunks, some may carry private line data, some may carry private trunks that belong to large companies, and a certain percentage are reserved for use as spares. It has long been telephone company practice to route the telephone trunks between two switching centers over several different paths to supply redunancy in the event one path fails (and also to make it harder to intercept a particular call between the two switches). This means that any given FDM group may contain trunks from several different trunk groups rather than containing all the trunks from say Chicago to West Bend.

On PSK TDM

The most secure technique in commercial service, and probably

the technique that that will predominate on satellite links in the future, is TDM-PCM (time division multiplexed pulse code modulation) either phase shift keying (usually QPSK) a continuous carrier on a transponder that may have several such carriers on it (FDMA - frequency division multiple access) or keying a single carrier that occupies the whole transponder in bursts precisely timed so as to not overlap other carriers from other stations that it shares a transponder with (TDMA - time division multiple access).

Telephone traffic on TDM-PCM links is sampled 8000 times a second and converted into 8 bit binary values (in a sort of floating point format called A-law or u-Law companding that greatly expands the dynamic range from softest to loudest that the channel will handle). (There are other digitizing standards used on satellite phone links but the standard T carrier - D channel bank is widely used). Some number of these channels (often 24) are combined into a high speed serial bit stream (often 1.554 mb/s) by sending one sample from each channel in serial form as a string of 8 bits followed by a sample from the next channel and so forth. Sometimes this composite bit stream or the bit stream from individual channels is encrypted with a DES chip. Error correction and framing bits and sometimes special control channel bits are added. This digital bit stream is then scrambled (so it has more predictable transition statistics and little or no DC component) by a linear feedback shift register sequence. The resultant bit stream is used to PSK modulate a carrier which is uplinked to the satellite.

Receiving these FDMA-PSK-TDM-PCM digital transmissions requires complex rf modems, a large enough dish to get an acceptable signal to noise ratio (and BER), and often requires knowlage of the DES encryption keys used (unless you are a major intelligence agency and can break DES). While some such transmissions that aren't encrypted could in theory be monitored by a very sophisticated individual, particularly one who had access to the rf modem and multiplexing hardware used by the subscribers, the required expertise and technology is great enough so few if any such listeners exist. Presumably the only listeners to such transmissions are the intelligence agencies and perhaps industrial spies who can afford to buy the necessary hardware to listen to their competitors private circuits. And more and more users of such links are encrypting them with DES.

TDMA-PSK-TDM-PCM signals are much more complex than most FDMA-PSK-TDM-PCM signals. This is natural since all traffic is transmitted by having each station on the network transmit a burst of very high speed (tens of mb/s) data in an assigned time slot round robin fashion. Included in the burst is all of the traffic that station has with every other station on the network. Every other station monitors the all the bursts from stations it is in communication with and picks out the channels that correspond to it's incoming traffic. In many such systems burst lengths and time slots are dynamically assigned by a master ground station computer as calls are set up and terminated. Each station is capable of receiving and decoding the bursts transmitted by every other station it talks to, so if the channels are not encrypted it could monitor much of or all the traffic going through the transponder. In practice, however, the complex firmware and hardware make it difficult to accomplish this.

The burst formats are complex and contain error correction, status and control channels, call setup channels and so forth. And the bursts are scrambled just as in the continuous carrier TDM case. Intercepting and demodulating such a signal would be a major task and is probably something that has only been done (by intelligence agencies) by using perverted versions of the ground station hardware and firmware used by the system. In addition to the complexity of the task of sorting out the digital information and finding the right time slot from the right burst to retrieve the channel of interest, the very high speed fast lockon rf modems used to demodulate the bursts are themselves non-trivial devices. I suspect that even perverting the firmware in a legitimate ground terminal is complex enough so that no private individual or group could easily accomplish it without access to a lot of detailed non-published information (such as source of the firmware and precise details of the protocol and burst formats).

It has been said that SBS which uses such TDMA techniques on it's 12 Ghz system regards the signal format as complex enough so encryption is not necessary for at least some of the traffic it transmits. I doubt very much if a private individual has ever successfully monitored telephone traffic through this system (except perhaps by fiddling with a legitimate ground station).

From -2226740700327005705
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4bc9e42008275a25,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-03 00:55:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!qantel!hplabs!hp-pcd!orstcs!go
From: go@orstcs.UUCP (go)
Newsgroups: net.ham-radio
Subject: Re: Blown Modem
Message-ID: <13600002@orstcs.UUCP>
Date: Tue, 3-Sep-85 03:55:00 EDT
Article-I.D.: orstcs.13600002
Posted: Tue Sep 3 03:55:00 1985
Date-Received: Sun, 8-Sep-85 16:11:29 EDT
References: <1001@brl-tgr.UUCP>
Organization: Oregon State University - Corvallis, OR
Lines: 13
Nf-ID: #R:brl-tgr:-100100:orstcs:13600002:000:674
Nf-From: orstcs!go Sep 2 23:55:00 1985

Regarding the 40 meter RFI problem, I don't have any difficulty on 40. However, you should see the light show on my H-19 terminal

when I tune up toward the top of 80. Really fancy. Also, my
hard-disk drive does a dance or two at the same time. The comment
about the US Robotics modem also applies here on 80.

I am running a Galaxy III (300 w pep) into an inverted V (sort of lazy
inverted v). I fail to have any problems on any other equipment:
phones, other computers, etc. In fact, I have another Z80 machine
sitting right next to the rig (also 4mhz clock) and it NEVER suffers.
It is, however, far more sensitive to glitchy power. Makes no sense.

-Gary, Wa7shi.

From -1203349714714438410
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2ea4c543407200c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-03 05:13:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!CLEMENTS@BBNG.ARPA
From: CLEMENTS@BBNG.ARPA
Newsgroups: net.ham-radio
Subject: WA8DED v 0.9 TAPR code
Message-ID: <1179@brl-tgr.ARPA>
Date: Tue, 3-Sep-85 08:13:50 EDT
Article-I.D.: brl-tgr.1179
Posted: Tue Sep 3 08:13:50 1985
Date-Received: Thu, 5-Sep-85 07:47:23 EDT
Sender: news@brl-tgr.ARPA
Lines: 7

I have been running with the new WA8DED v 0.9 TAPR code in one of my
TNCs for a couple days. It is amazing to watch all the protocol
errors being committed by the original TAPR code. Easy to see with
the improved monitor mode of WA8DED's stuff.

73,
/Rcc

From 5137646149693075108
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7dab51330ac5f92a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-03 06:43:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!hoffmann%marie@mit-mc.arpa
From: hoffmann%marie@mit-mc.arpa (Ron M. Hoffmann)
Newsgroups: net.ham-radio

Subject: Isopole connections
Message-ID: <1183@brl-tgr.ARPA>
Date: Tue, 3-Sep-85 09:43:20 EDT
Article-I.D.: brl-tgr.1183
Posted: Tue Sep 3 09:43:20 1985
Date-Received: Thu, 5-Sep-85 07:59:50 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

Can anyone tell me what connector is used on the AEA
Isopole antenna. I am trying to do a little advanced
planning for when mine arrives.

73, Ron Hoffmann WA2EYC

From 5660952306033625263
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1985-09-03 10:00:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site terak.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!hao!
noao!terak!doug
From: doug@terak.UUCP (Doug Pardee)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <706@terak.UUCP>
Date: Tue, 3-Sep-85 13:00:14 EDT
Article-I.D.: terak.706
Posted: Tue Sep 3 13:00:14 1985
Date-Received: Thu, 5-Sep-85 20:22:18 EDT
References: <763@vortex.UUCP>
Organization: Calcomp Display Products Division, Scottsdale, AZ, USA
Lines: 19
Xref: watmath net.dcom:1248 net.video:1461 net.ham-radio:3166

This has no bearing on the legality/illegality of satellite reception,
but I am miffed at the attitude of TBS, ESPN, etc, that satellite dish
owners should pay for the privilege of viewing the commercials that
they carry.

I can understand the commercial-free services like HBO being upset, but
TBS, ESPN, MTV, etc appear to me to be similar to ABC, CBS, and NBC in
that they carry commercials to cover their costs.

But then, I'm also miffed that PBS thinks I should "contribute" to the
local station so that they can show commercials too. By the way,

why should they now have the privilege of using the channels which the
FCC had reserved for "non-commercial use only"?

I guess the commercial networks were right when they claimed, ten years
ago, that "pay TV" would simply be charging for the same services that
were already available on commercial broadcast "for free".
--
Doug Pardee -- CalComp -- {seismo!noao,decvax!noao,ihnp4}!terak!doug

From -8775253286046896684
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-03 11:14:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <777@vortex.UUCP>
Date: Tue, 3-Sep-85 14:14:53 EDT
Article-I.D.: vortex.777
Posted: Tue Sep 3 14:14:53 1985
Date-Received: Wed, 4-Sep-85 07:04:42 EDT
References: <125@hydra.UUCP>
Organization: Vortex Technology, Los Angeles
Lines: 7
Xref: watmath net.ham-radio:3160 net.dcom:1240 net.video:1456

It should be pointed out that monitoring telephone conversations
from either terrestrial or satellite links would almost certainly
be construed, under current law, as wiretapping. This is,
I believe, a federal crime (probably a felony), and not to be
taken lightly.

--Lauren--

From 50733068750286680
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82cf550795c601ff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-03 13:39:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!

decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!wjc@ll-vlsi
From: wjc@ll-vlsi (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <1198@brl-tgr.ARPA>
Date: Tue, 3-Sep-85 16:39:47 EDT
Article-I.D.: brl-tgr.1198
Posted: Tue Sep 3 16:39:47 1985
Date-Received: Fri, 6-Sep-85 03:47:35 EDT
Sender: news@brl-tgr.ARPA
Lines: 34

The Communications Act doesn't say you can't listen to whatever you want. It does say:

"Section 605 ... No person receiving or assisting in receiving, or transmitting or assisting in transmitting, any interstate or foreign communication by wire or radio shall divulge or publish the existence, contents, substance, purport, effect or meaning thereof,...to any person other than the addressee, his agent or attorney...or in response to a subpoena issued by a court of competent jurisdiction, or on demand or other lawful authority...and no person not being entitled thereto shall receive or assist in receiving any interstate or foreign communication by wire or radio and use the same or any information therein contained for his own benefit or for the benefit of another not entitled thereto...This section shall not apply to the receiving, divulging, publishing or utilizing the contents of any radio communication, which is transmitted by any station for the use of the general public, which relates to ships, aircraft, vehicles or persons in distress or which is transmitted by an Amateur Radio station or by a citizens band radio operator."

As long as you don't divulge, the Communications Act does not prohibit you from listening to anything. Further, the Act only applies to interstate and foreign communications. Thus, a point-to-point link within one state is not protected at all by the Act. Nonetheless, anyone with some listening or operating experience can tell you that radio transmissions don't really care about political boundaries.

Finally, upon this reading of Section 605, I noticed that the Act doesn't prohibit a scanner listener from telling his friend that he just heard about a fire or some other life-threatening situation. After all, those are radio communications relating to persons in distress.

Bill
N1CPK

From 7517643681559867812
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3783d3f92bd04720,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-04 02:25:52 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!Crawford@DCA-EMS
From: Crawford@DCA-EMS
Newsgroups: net.ham-radio
Subject: cw info
Message-ID: <1208@brl-tgr.ARPA>
Date: Wed, 4-Sep-85 05:25:52 EDT
Article-I.D.: brl-tgr.1208
Posted: Wed Sep 4 05:25:52 1985
Date-Received: Fri, 6-Sep-85 04:22:29 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

i am interested in putting together a cw transmission
and reception capability with an ic-751 and macintosh
computer. dont want to buy an expensive terminal unit, so
i want to make a simple interface and program the mac.
any expereinces doing this?
probably the most helpful info would be a cw reception
algorithm for receiving manually transmitted morse code at
any speed from 3 to 60 wpm
thanks and 73
jerry k7upj

From 9094136160654024966
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-04 07:48:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site nicmad.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!genrad!panda!talcott!
harvard!seismo!uwvax!astroatc!nicmad!brown
From: brown@nicmad.UUCP
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <338@nicmad.UUCP>
Date: Wed, 4-Sep-85 10:48:43 EDT
Article-I.D.: nicmad.338
Posted: Wed Sep 4 10:48:43 1985
Date-Received: Fri, 6-Sep-85 03:11:32 EDT
References: <125@hydra.UUCP> <777@vortex.UUCP>
Reply-To: brown@nicmad.UUCP (Mr. Video)
Organization: Nicolet Instrument Corp. Madison WI
Lines: 17
Xref: watmath net.ham-radio:3168 net.dcom:1250 net.video:1463

In article <777@vortex.UUCP> lauren@vortex.UUCP (Lauren Weinstein) writes:
>It should be pointed out that monitoring telephone conversations
>from either terrestrial or satellite links would almost certainly
>be construed, under current law, as wiretapping. This is,
>I believe, a federal crime (probably a felony), and not to be
>taken lightly.
>
>--Lauren--

Fortunately it is not wiretapping. Since it is on the open airwaves,
a different set of rules take over. You can receive the signal, you can
listen to it, but you cannot tell anyone the contents of what you heard.
It is exactly like listening to police/fire. You can, but don't tell
anyone the contents of the communications.
--

Mr. Video   {seismo!uwvax!|!decvax|!ihnp4}!nicmad!brown

From -2392267110382952628
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7a36a5a2f9b531d4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-04 10:15:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site iddic.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!orca!iddic!brucec
From: brucec@iddic.UUCP (Bruce W. Cheney)
Newsgroups: net.ham-radio
Subject: Ham Radio Chess Net
Message-ID: <2157@iddic.UUCP>
Date: Wed, 4-Sep-85 13:15:55 EDT
Article-I.D.: iddic.2157
Posted: Wed Sep 4 13:15:55 1985
Date-Received: Thu, 5-Sep-85 10:04:43 EDT
Organization: Tektronix, Beaverton OR
Lines: 21

If you are interested in playing chess or discussing chess related
subjects and have an Amateur Radio license, please take note:

Starting September 3rd (US Tuesday) and every US Tuesday evening
after, there will be a CARI (Chess Amateur Radio International)
sponsored chess net on 14.267 Mhz at 0300 hours GMT (GMT Wednesday
AM). The net control station will be NI7M located near Portland
Oregon.   The primary intention of this net is to serve West Coast
chess playing hams at a more convenient time than the current East
Coast and European nets, (0300 GMT translates to 8 pm PDT), but

check-ins from anywhere are encouraged.

You don't have to be a CARI member and you don't have to be a good chess player. Hams who would like to LEARN to play chess are encouraged to check in.

brucec (NI7M)
tektronix!iddic!brucec

From -6270330802035549815
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 168ea8,1de64ebb9ea45042,start
X-Google-Attributes: gid168ea8,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-04 10:50:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site lanl.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!genrad!panda!talcott!harvard!seismo!cmcl2!lanl!djw
From: djw@lanl.ARPA
Newsgroups: net.ham-radio,net.dcom,net.video,net.news.stargate
Subject: Re: Listen to phone calls on your tvro
Message-ID: <30538@lanl.ARPA>
Date: Wed, 4-Sep-85 13:50:48 EDT
Article-I.D.: lanl.30538
Posted: Wed Sep 4 13:50:48 1985
Date-Received: Fri, 6-Sep-85 03:37:31 EDT
References: <125@hydra.UUCP>
Reply-To: djw@a.UUCP (David Wade)
Distribution: net
Organization: Where God decreed skies should be purple and the beaches are 1000 miles long.
Lines: 12
Xref: watmath net.ham-radio:3171 net.dcom:1254 net.video:1466 net.news.stargate:194

The $350-$500 Stargate project hardware that Lauren Weinstein (sp?) is working on would be quite useable here; don't cha think?

I believe that you overrate the expense and difficulty factors; but, I can't see any reason to do most of this listening even though it would be quite easy. BUT; with the downlink from Usenet on WTBS's subbands and free, there is a very real probability that I will obtain one of Lauren's boards to go with my tvro setup and my (as yet imaginary) general coverage receiver and my MacIntosh...

Dave Wade

WB5PFS

From 5241881814593054827
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1985-09-04 11:58:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!prg
From: prg@mgweed.UUCP (Phil Gunsul)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <20145@mgweed.UUCP>
Date: Wed, 4-Sep-85 14:58:50 EDT
Article-I.D.: mgweed.20145
Posted: Wed Sep 4 14:58:50 1985
Date-Received: Fri, 6-Sep-85 05:02:31 EDT
References: <125@hydra.UUCP> <777@vortex.UUCP>
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 10
Xref: watmath net.ham-radio:3175 net.dcom:1257 net.video:1468

[Ring.... ring...]

I don't know where you are getting your law advice from, Lauren, but
it is NOT illegal to listen in to the phone calls that are transmitted
over the satellite or ground microwave repeaters. It WOULD be illegal
to discuss what you heard with another person, or use the information
to your benefit.

Phil Gunsul -- WB9AAX

From 308283789859244153
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-04 14:04:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!genrad!panda!talcott!
harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)

Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <1229@brl-tgr.ARPA>
Date: Wed, 4-Sep-85 17:04:15 EDT
Article-I.D.: brl-tgr.1229
Posted: Wed Sep 4 17:04:15 1985
Date-Received: Fri, 6-Sep-85 03:35:38 EDT
References: <125@hydra.UUCP> <777@vortex.UUCP> <338@nicmad.UUCP>
Organization: Ballistic Research Lab
Lines: 21
Xref: watmath net.ham-radio:3170 net.dcom:1253 net.video:1465

> In article <777@vortex.UUCP> lauren@vortex.UUCP (Lauren Weinstein) writes:
> >It should be pointed out that monitoring telephone conversations
> >from either terrestrial or satellite links would almost certainly
> >be construed, under current law, as wiretapping. This is,
> >I believe, a federal crime (probably a felony), and not to be
> >taken lightly.
> >
> >--Lauren--
>
> Fortunately it is not wiretapping. Since it is on the open airwaves,
> a different set of rules take over. You can receive the signal, you can
> listen to it, but you cannot tell anyone the contents of what you heard.
> It is exactly like listening to police/fire. You can, but don't tell
> anyone the contents of the communications.
> --
Only partially right, Captain Video.   Wiretapping is different from the
communications laws (by the way, is the topic of discussion and your point
is only one of the opinions on how that law works). By your own reasoning
if I put a big coil around the the telephone line coming out of your house
and inductively pick up your signal, then it isn't wire tapping either, which
is not the case.

From -5251214611949465611
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82cf550795c601ff
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-04 14:52:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!vortex!lauren@rand-
unix.ARPA
From: lauren@rand-unix.ARPA
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <1232@brl-tgr.ARPA>
Date: Wed, 4-Sep-85 17:52:22 EDT
Article-I.D.: brl-tgr.1232
Posted: Wed Sep 4 17:52:22 1985
Date-Received: Sat, 7-Sep-85 04:03:11 EDT

Sender: news@brl-tgr.ARPA
Lines: 12

Not that I'm necessarily supporting this interpretation, but as
I explained earlier the courts have been interpreting the word
"benefit" rather broadly--that's the basis for the new restrictions.

Also, most point-to-point transmissions are covered by various
court interpretatons of the Act into "wiretapping" protection
areas.

Remember that the Act alone doesn't define the state of the law--
the way the COURTS interpret that act and build up case law does.

--Lauren--

From -4739371694348425410
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6f6f06adc8d48c5c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-04 16:57:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!FONER%MIT-OZ@MIT-MC.ARPA
From: FONER%MIT-OZ@MIT-MC.ARPA (Leonard N. Foner)
Newsgroups: net.ham-radio
Subject: Schematics for stereo FM modulator needed
Message-ID: <1237@brl-tgr.ARPA>
Date: Wed, 4-Sep-85 19:57:59 EDT
Article-I.D.: brl-tgr.1237
Posted: Wed Sep 4 19:57:59 1985
Date-Received: Sat, 7-Sep-85 04:26:15 EDT
Sender: news@brl-tgr.ARPA
Lines: 47

If you're not a hardware person, you might as well stop reading right
now. This is being sent to the above strange combination of lists
because I have no access to UUCP's net.electronics. If some kind soul
could forward this message there as well (once only!), please do.

I'm going to be driving a large hunk of coax with taps off it with FM
multiplex stereo. The cable already has normal video RF on it; I
intend to modulate in the normal broadcast FM band, between channels 6
and 7 (88 to 108 MHz). The idea is to have a private FM stereo
network that anyone with an FM receiver can listen to off the cable
(analogous to cable TV, which is already on the coax).

Unfortunately, I'm not an RF engineer, and my interest in *analog*
high speed circuits was a) as a hobby, and b) quite some years ago.
Hence, I'm very out-of-date on how to drive such a beastie. There
must be a better way than the many-discrete-components ideas I can

generate.

What I want are references to schematics which would show how to do this. The lower the cost per transmitter, the better. What with stereo FM on videotapes now, it's possible that someone's made a chip to do the modulation, now that consumers might be generating FM. (I *know* the demodulators are a dime a dozen. This is different.)

If there does not exist a chip around somewhere, I'd appreciate pointers to recent articles on building cheap stereo FM transmitters. The ideal transmitter would be one whose transmit frequency can be programmed with a DIP switch (i.e., a synthesized transmitter that divides down the carrier and PLL locks it to a crystal).

As a part of that last piece, I'd love to hear about divide-by-n chips that are programmable from 1 to 256 via some eight-bit input, and can divide down an input frequency of 110 MHz or lower. If no such exist, I can take a slower part and put a fast flipflop in front of it, hence making even 50 or 25 MHz parts usable but inferior to one that's really fast enough. (This may not be a big problem, though, since 64 different frequencies is plenty given recommended transmitter spacing and the width of the band.)

This *must* be a solved problem. I'd hate to reinvent the wheel, whatever I do. Can anyone point me to the relevant literature? Please reply directly to me, since I'm not on all of the above lists, and hold CC'ing the list unless you think it's of general interest.

Thanx much!

<LNF>

From -6231351347313808904
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1985-09-04 19:49:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <779@vortex.UUCP>
Date: Wed, 4-Sep-85 22:49:53 EDT
Article-I.D.: vortex.779
Posted: Wed Sep 4 22:49:53 1985

Date-Received: Fri, 6-Sep-85 03:32:34 EDT
References: <706@terak.UUCP>
Organization: Vortex Technology, Los Angeles
Lines: 38
Xref: watmath net.dcom:1252 net.video:1464 net.ham-radio:3169

Not to justify their actions, but at least some of the commercial-laden
services aren't all that happy about doing scrambling, but are having
their arms bent by others. In particular, the sports suppliers are
upset about not having control over the markets in which things run
(they already demand that some cable companies black out some programs,
but they can't do that with TVRO people). Also, the copyright holders
of most movies and old TV shows are starting to get very testy. They're
demanding a cut from everyone watching those old programs. What makes
satellite transmission of "The Munsters" different than watching it
on a local station?--the answer is easy: When a local station buys
a program like that, they pay a fee based on their market share. If
you're in LA or NYC, it's a big fee, since they're the two biggest
markets in the country. But if you run your operation out of a smaller
city... like Atlanta (WTBS) or WOR (Secauscus, NJ) you pay much
less than a station in LA that only sends to the Los Angeles Metro area.
Yet, these satellite superstations like WTBS, WOR, and WGN are sending
to the entire country, not just one city! The program suppliers feel
that they're getting cheated by not being able to charge the kind
of fees that they would for conventional network airing.

There are other complexities, but the end result is that there is
considerable pressure on many of the non-pay operations to
collect some fees and send them back to the program suppliers and
copyright holders.

Some services will never scramble. You should always be able
to watch TBN (blechh!), University Network (Dr. Gene Scott--
very interesting at times), C-SPAN, etc. But so long as there
are copyright holders who want a piece of the pie, even the
non-pay operations will be under pressure to scramble.

On the other hand, as I reported in another list recently, the HBO
scrambling experiments are having serious problems (MA/COM $400
decoders, DES audio encryption) and the industy is sitting back
to see how HBO comes out before they make initial moves in the
scrambling direction.

--Lauren--

From -3215394406418791071
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-Thread: 134694,9559e67137606a89

X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1985-09-04 19:58:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site nicmad.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!
uwvax!astroatc!nicmad!brown
From: brown@nicmad.UUCP
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <345@nicmad.UUCP>
Date: Wed, 4-Sep-85 22:58:21 EDT
Article-I.D.: nicmad.345
Posted: Wed Sep 4 22:58:21 1985
Date-Received: Fri, 6-Sep-85 03:52:53 EDT
References: <763@vortex.UUCP> <706@terak.UUCP>
Reply-To: brown@nicmad.UUCP (Mr. Video)
Organization: Nicolet Instrument Corp. Madison WI
Lines: 6
Xref: watmath net.dcom:1256 net.video:1467 net.ham-radio:3173

Carefull. The networks may be 'free', but at least HBO, etc, doesn't
cut up the movie and insert commercials or cut out the juicy bits.
They may be free, but they are prudish.
--

Mr. Video   {seismo!uwvax!|!decvax|!ihnp4}!nicmad!brown

From 4383271753995715711
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 10cb58,a767c261f2bddf60,start
X-Google-Attributes: gid10cb58,public
X-Google-Thread: 151e61,a767c261f2bddf60,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,a767c261f2bddf60,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1985-09-05 07:00:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sphinx.UChicago.UUCP
Path: utzoo!decvax!bellcore!petrus!sabre!zeta!epsilon!gamma!ulysses!mhuxr!mhuxt!
houxm!ihnp4!gargoyle!sphinx!west
From: west@sphinx.UChicago.UUCP (Steve Westfall)
Newsgroups: net.wanted,na.forsale,net.ham-radio
Subject: FOR SALE - Ham Radio Station & Oscilloscope - Price Slashed
Message-ID: <1093@sphinx.UChicago.UUCP>
Date: Thu, 5-Sep-85 10:00:18 EDT
Article-I.D.: sphinx.1093
Posted: Thu Sep 5 10:00:18 1985
Date-Received: Fri, 6-Sep-85 03:27:07 EDT
Organization: U. Chicago - Computation Center
Lines: 32
Xref: sabre net.wanted:981 na.forsale:173 net.ham-radio:598

For Sale: Ham Radio Station and Oscilloscope

PRICE SLASHED!

Icom IC-720A transceiver with narrow CW filter
Icom PS-15 power supply
Icom IC-SM5 desk microphone
Icom hand-held microphone (not used for mobile operation)
AEA AMT-1 Rtty/Amtor computer interface
Astron RS-7A 12 volt dc power supply (for AMT-1)
Hustler vertical antenna (80, 40, 20, 15, 10 meters)
Heath IO-4105 oscilloscope (5 MHz, single trace)

The transceiver is in very good condition and has never been used for mobile operation. The oscilloscope is in mint condition because it has received practically no use since construction (it was certified by Heath as in perfect working order). The AMT-1 will work with most microcomputers that have some kind of terminal program for communicating with other computers.

I prefer to sell everything as a package for $1150.00 (I'll pay the shipping), but will consider offers for separate items.

Call me at 312-962-6091 (Mon - Fri, 8:00am - 4:00 pm CST) or 312-947-9544 (Mon - Fri, 5:30 pm - 10:00 pm CST, or all day on weekends).

--
Steve Westfall, WA5MZI Uucp: ihnp4!gargoyle!sphinx!west
Senior Staff Analyst Bitnet: staff.westfall@UChicago.bitnet
U. of Chicago Computation Center Mailnet: staff.westfall@UChicago.Mailnet

From -2142722712870583149
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82cf550795c601ff
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-05 07:45:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!ptb@mitre-bedford.ARPA
From: ptb@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <1254@brl-tgr.ARPA>
Date: Thu, 5-Sep-85 10:45:18 EDT
Article-I.D.: brl-tgr.1254
Posted: Thu Sep 5 10:45:18 1985
Date-Received: Sun, 8-Sep-85 04:38:53 EDT
Sender: news@brl-tgr.ARPA
Lines: 16

>Not that I'm necessarily supporting this interpretation, but as
>I explained earlier the courts have been interpreting the word
>"benefit" rather broadly--that's the basis for the new restrictions.
>
>Also, most point-to-point transmissions are covered by various
>court interpretatons of the Act into "wiretapping" protection
>areas.
>
>Remember that the Act alone doesn't define the state of the law--
>the way the COURTS interpret that act and build up case law does.

Somewhere I have heard that if even a PART OF a transmission goes over
the phone lines, then tapping in has been construed as wiretapping.

Peter, WA1SNH
(ptb@mitre-bedford)

From -5407475994674667514
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dc40b67a73fdc845
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-05 08:40:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!STEPHANY.WBST@Xerox.ARPA
From: STEPHANY.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Loss of freedom
Message-ID: <1255@brl-tgr.ARPA>
Date: Thu, 5-Sep-85 11:40:37 EDT
Article-I.D.: brl-tgr.1255
Posted: Thu Sep 5 11:40:37 1985
Date-Received: Sun, 8-Sep-85 04:39:04 EDT
Sender: news@brl-tgr.ARPA
Lines: 16

re: "... Within 5 years all TV will be digitally encoded ..."

No way. Not in 5 years. Not in 10 years.

Explanation: Sorry. What was meant was that all satellite TV in the
feeder channels would be digital. A conference 2 years ago standardize
the TV digital code for exchanging pictures between nations. I agree
that local home TV will not be digitally encoded in the near future. We
will go to the 1025 line system probably with 2.5/1 aspect ratio first.
Since Panasonic has a total digital TV set that can accept any TV
standard, 525,625 and 1025 line, and deliver a 1025 line picture, the
switch to, possibly, a totally digital TV on cable and satellite may be
very soon. I agree that on-the-air local TV may be considerably delayed
in the switch.

Joe N2XS

From 413201992722054599
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82cf550795c601ff
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-05 09:05:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
FAC1154%UOFT01.BITNET@WISCVM.ARPA
From: FAC1154%UOFT01.BITNET@WISCVM.ARPA (James Apsey)
Newsgroups: net.ham-radio
Subject: Re: Satellite viewing \"freedoms\"
Message-ID: <1257@brl-tgr.ARPA>
Date: Thu, 5-Sep-85 12:05:17 EDT
Article-I.D.: brl-tgr.1257
Posted: Thu Sep 5 12:05:17 1985
Date-Received: Sun, 8-Sep-85 04:39:15 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

What's wrong with prudishness in programs on commercial TV and HBO that
are available to so many eyes and minds of the latch-key kids set?

Jim, K8JA

From -6020432596340675220
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7dab51330ac5f92a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-05 10:31:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 Unisoft-Cosmos; site kepler.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!qantel!hplabs!well!
micropro!kepler!mojo
From: mojo@kepler.UUCP (Morris Jones)
Newsgroups: net.ham-radio
Subject: Re: Isopole connections
Message-ID: <213@kepler.UUCP>
Date: Thu, 5-Sep-85 13:31:08 EDT
Article-I.D.: kepler.213
Posted: Thu Sep 5 13:31:08 1985
Date-Received: Sun, 8-Sep-85 04:37:15 EDT
References: <1183@brl-tgr.ARPA>
Reply-To: mojo@kepler.UUCP (mojo)
Organization: MicroPro Int'l Corp., San Rafael, CA
Lines: 8

Sorry Ron, my mailer can't cope with your fancy address...

My Isopole has a "UHF" SO-238 connector on it.

--
Mojo
... Morris Jones, MicroPro Product Development
{dual,ptsfa,hplabs}!well!micropro!kepler!mojo

From 1270301673865908734
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-05 12:13:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio,net.dcom,net.video
Subject: Re: Listen to phone calls on your tvro
Message-ID: <780@vortex.UUCP>
Date: Thu, 5-Sep-85 15:13:55 EDT
Article-I.D.: vortex.780
Posted: Thu Sep 5 15:13:55 1985
Date-Received: Fri, 6-Sep-85 05:23:30 EDT
References: <338@nicmad.UUCP>
Organization: Vortex Technology, Los Angeles
Lines: 19
Xref: watmath net.ham-radio:3176 net.dcom:1258 net.video:1469

As far as I know, the laws on wiretapping and wire fraud do not require
that the material actually be on a wire. Intercepting of telephone
conversations off of a point-to-point microwave transmission
is apparently legally considered to be wiretapping. I believe that the
same case law will cover telephone coversations on satellites.

Over the years I've read of a number of cases of successful
prosecutions of people who were monitoring microwave sidelobes
for telephone conversations. Felony convictions as I recall.

It's amazing how naive some people are about communications issues.
The Communciations Act doesn't create the entire universe. It is
subject to interpretation by the courts, interaction with other
laws, and the buildup of case law over time. The intersection of
all these aspects create the current legal environment. Simplistic
readings of the Act will almost always be in error when it comes
to real world cases.

--Lauren--

From 7227744238545389986
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-Thread: 168ea8,1de64ebb9ea45042
X-Google-Attributes: gid168ea8,public
X-Google-ArrivalTime: 1985-09-05 14:12:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio,net.dcom,net.video,net.news.stargate
Subject: Re: Listen to phone calls on your tvro
Message-ID: <782@vortex.UUCP>
Date: Thu, 5-Sep-85 17:12:37 EDT
Article-I.D.: vortex.782
Posted: Thu Sep 5 17:12:37 1985
Date-Received: Fri, 6-Sep-85 05:41:51 EDT
References: <30538@lanl.ARPA>
Organization: Vortex Technology, Los Angeles
Lines: 20
Xref: watmath net.ham-radio:3178 net.dcom:1259 net.video:1470
net.news.stargate:195

The Stargate hardware doesn't include a TVRO! It's decoding and
buffering equipment for the particular vertical interval signals
on which Stargate resides. It has nothing to do with receiving
other sorts of signals.

By the way, just to correct a point of fact--the service (if it ever
becomes a service as opposed to an experiment) won't be "free"--there
will have to be some (hopefully quite modest) monthly fee associated
with the service. The data (due to the very design of the vertical
interval system) will already be pretty heavily scrambled. Some
sort of fee is absolutely necessary since we are NOT being given
the channel bandwidth in the vertical interval for free forever!

At such a time as we go into a service mode, then we're going to
have to pay the uplink people for the use of that bandwidth. Luckily,
since they consider Stargate to be an extremely interesting and unique
"electronic publishing" non-profit-type project, we will be
paying fees much, much less than what would normally be the case.

--Lauren--

From 4403186032718862345
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11946d,9559e67137606a89
X-Google-Attributes: gid11946d,public
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1985-09-05 14:23:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!prg
From: prg@mgweed.UUCP (Phil Gunsul)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <20166@mgweed.UUCP>
Date: Thu, 5-Sep-85 17:23:10 EDT
Article-I.D.: mgweed.20166
Posted: Thu Sep 5 17:23:10 1985
Date-Received: Sat, 7-Sep-85 05:18:21 EDT
References: <763@vortex.UUCP> <706@terak.UUCP>
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 20
Xref: watmath net.dcom:1262 net.video:1472 net.ham-radio:3181

[....]

I have found that I am listening to my satellite dish much more than
watching it lately. I suggest anyone with a dish get off Galaxy I
for a while and listen to Keith Lamonica on Telstar 303 (a couple of
degrees East of where Comstar D4 was), transponder 18. The program
is a "call in" type and really generates some interesting conversations.
He is on each evening from 8:00 P.M. central time until 10, 11 or 12,
whenever things die down! On Sunday evenings, he is starting to have
video, although I think I like just the call in better.

I would like to hear from any other individuals who have been listen
to him... If you value your _RIGHT_ to own and operate your own
Earth station, I suggest you listen in!

Happy dish fishing!!

Phil Gunsul -- WB9AAX

From 7395695879473956057
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,9559e67137606a89

X-Google-Attributes: gid11946d,public
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1985-09-05 17:10:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!hao!
noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.dcom,net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <284@anasazi.UUCP>
Date: Thu, 5-Sep-85 20:10:52 EDT
Article-I.D.: anasazi.284
Posted: Thu Sep 5 20:10:52 1985
Date-Received: Sat, 7-Sep-85 07:24:07 EDT
References: <763@vortex.UUCP> <706@terak.UUCP>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 15
Xref: watmath net.dcom:1263 net.video:1473 net.ham-radio:3182

In article <706@terak.UUCP> doug@terak.UUCP (Doug Pardee) writes:
>This has no bearing on the legality/illegality of satellite reception,
>but I am miffed at the attitude of TBS, ESPN, etc, that satellite dish
>owners should pay for the privilege of viewing the commercials that
>they carry.

Doug,
     Have you been to a movie lately? The last time I went to the
theatre, I paid 5 bucks to sit through 15 minutes of commercials before
the movie started. The pay TV folks are no different.

--
John Moore (NJ7E)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
(602) 952-8205 (day or evening)

From -6990791548224626196
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,519e434f385d13c7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-05 18:30:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!wmartin@Almsa-2
From: wmartin@Almsa-2 (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: Re: SWL Antenna
Message-ID: <1272@brl-tgr.ARPA>
Date: Thu, 5-Sep-85 21:30:38 EDT
Article-I.D.: brl-tgr.1272

Posted: Thu Sep 5 21:30:38 1985
Date-Received: Sun, 8-Sep-85 10:27:23 EDT
Sender: news@brl-tgr.ARPA
Lines: 37

Though the plain long-wire (or "inverted-L" or "random-wire") antenna
usually works best for general SWLing, there are others, like the trap
dipole you mentioned, that are better for the shortwave broadcast bands
or for certain physical facilities. There are quite a few ham-oriented
books on antennae, but for the SWL, they spend too much time and effort
on models that handle the power of a transmitter feeding through them.
For the cost of a couple overseas postcards, though, you can get some
info from a couple good sources:

The BBC's "Waveguide" program this week just discussed a new leaflet
they are printing called "Aerials", which is an introduction to the
subject. They also mentioned that their engineering staff has a separate
antenna-information booklet or handout. Ask for both of these by sending
a postcard to:

Waveguide
BBC World Service
Bush House
London, England (there is a postal code, but I don't know it; this
                 work OK as is)

Also, Radio Nederland has a lot of printed material on antennae, radios,
DXing, etc. Ask for their info on antennas, and also ask for the
Receiver Shopping List and the Publications List. Write to:

Media Network
Radio Nederland
PO Box 222
Hilversum, Holland (again, I think there is a postal code, but this will
                    do by itself, I'm sure, even if there is)

Myself, I've always used the simple longwire; I've never had a house
where the layout of the yard allowed erecting a [somewhat] directional antenna
(like a trap dipole) in the right direction to optimize reception of
what I was most interested in receiving.

Regards, Will

From 935167890978190428
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dc40b67a73fdc845
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-05 21:18:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!vortex!lauren@rand-unix.ARPA
From: lauren@rand-unix.ARPA

Newsgroups: net.ham-radio
Subject: Re: Loss of freedom
Message-ID: <1274@brl-tgr.ARPA>
Date: Fri, 6-Sep-85 00:18:35 EDT
Article-I.D.: brl-tgr.1274
Posted: Fri Sep 6 00:18:35 1985
Date-Received: Sun, 8-Sep-85 10:31:37 EDT
Sender: news@brl-tgr.ARPA
Lines: 26

Sorry, I gotta disagree even with your clarified comment.

I see no evidence that the conventional cable satellite services
have any desire to convert to digital systems. Perhaps a premium
service or two may play with high-resolution systems, but even
that is questionable in terms of economic viability.

Remember that once scrambling is in place and people are buying
descramblers, those millions of TVRO stations represent a significant
commercial market for the carriers and their advertisers/operations.
I don't expect to see digital TV transmission make signficant inroads
except possibly in international traffic, where the number of
transmit/receive points is fairly small.

Another issue is the extreme unwillingness of most cable systems
to make new capital purchases for their systems (say, for digital
TV equipment) unless it has immense immediate profit.

Digital TV may leak into the marketplace over time. But given
the inertia and marketplace (and even political!) pressure of
the 10's of millions of people (and cable companies) with
conventional equipment, I expect the process to be extremely
slow except in very specialized situations. The time scale?
Maybe 10-15 years. Maybe longer.

--Lauren--

From 742206372375081218
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,9559e67137606a89
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,9559e67137606a89
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-06 06:43:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site unccvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ucbvax!decvax!mcnc!
unccvax!dsi
From: dsi@unccvax.UUCP (Dataspan Inc)
Newsgroups: net.video,net.ham-radio
Subject: Re: Satellite viewing "freedoms"
Message-ID: <283@unccvax.UUCP>

Date: Fri, 6-Sep-85 09:43:17 EDT
Article-I.D.: unccvax.283
Posted: Fri Sep 6 09:43:17 1985
Date-Received: Sun, 8-Sep-85 04:58:42 EDT
References: <763@vortex.UUCP>, <706@terak.UUCP>
Organization: UNC-Charlotte
Lines: 56
Xref: watmath net.video:1475 net.ham-radio:3189

Frankly, I am miffed at the FCC's asinine position which still segregates spectrum space into "educational" and "commercial." Remember when all the NYC V's bought out Channel 13 and made it WNET. Nothing like buying off a competitor, right? Now, I hear from very reliable sources, that they are running ads stating that you can get "thirties on Thirteen." Imagine that, a PUBLIC TV station selling "sponsorships."

Then there are those religious broadcasters who run essentially paid religious broadcasting (soliciting donations) in both parts of the FM band. (See my recent flamage in net.music about this...down boy...down!)

Then there are those jerks who are lining up to get a UHF station in your town, radiate 3 watts out of a plastic coathanger on top of a Hechinger's TV antenna mast pole, and whine and complain about "must carry." To hell with must carry! My cable system has excess capacity of 30+ channels! I wouldn't mind getting a real NBC Affiliate in Charlotte (WXII Winston Salem... Cablevision of Charlotte, are you listening?). After all, you can get PTL club on our cable system on 5 different channels. Is this diversity?

Speaking about educational TV and radio, I think the FCC should take a very long and hard look at monopolizing of channels. For example the State of North Carolina has 8 (count em, 8) public TV stations which do a fine job, thank you. However, they all operate with less than maximum facilities (like 300 kw visual) on UHF. Educational broadcasters should not be given carte blanche in spectrum utilization, but rather be encouraged to use MAXIMUM TOWER AND POWER to reach their viewers. I can't believe for one minute that it costs more money to put up one 5MW UHF station in Clemmons, N.C. to cover what channel 17 (Linville) and channel 26 (Winston-Salem) does now! And, I don't feel one bit sorry for their complaints about money when UNC operates channel 58 Concord, NC and someone else operates WTVI (42) Charlotte... not to mention the public TV station in Rock Hill. Can you imagine what a conniption fit the FCC would raise if, say, channel 45 in Belmont and channel 3 in Charlotte (equally as close) were both CBS Affiliates ?

Segregation of the ether has had exactly the effect which Netwon Minow said: it turned commercial TV into a vast wasteland. Knowing that their brothers below 92.1 mHz and on the "*" TV channels would take care of "culture" and "limited commercials" and "no editorializing (hmmmm?)" the major networks were given free run over their affiliates to bring us such wonders as a Double Shot of "The Lone Ranger" and dreck like "Sliver Spoons".

I've no objection whatsoever to the programming or ideals of public TV

and radio. What I have an objection to is the segregation of the ether that serves no purpose whatsoever but to perpetuate 80% of the FM band being the RFI that it generally is. I also violently object to those fundraising campaigns that public stations feel they need. Until our local public FM station stops compressing the crap out of classical music, I think they should send ME money, so I can build my basic repertoie collection and listen to music the way it was performed in the first damn place.

(Gosh, this feels great!)
David Anthony
CDE
DataSpan, Inc

From 1265301702380452101
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,f11e3cc5b0e8a750
X-Google-Attributes: gid11946d,public
X-Google-Thread: 168ea8,1de64ebb9ea45042
X-Google-Attributes: gid168ea8,public
X-Google-Thread: 134694,f11e3cc5b0e8a750
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1985-09-06 06:48:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site unccvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ucbvax!decvax!mcnc!
unccvax!dsi
From: dsi@unccvax.UUCP (Dataspan Inc)
Newsgroups: net.ham-radio,net.dcom,net.video,net.news.stargate
Subject: Re: Listen to phone calls on your tvro
Message-ID: <284@unccvax.UUCP>
Date: Fri, 6-Sep-85 09:48:39 EDT
Article-I.D.: unccvax.284
Posted: Fri Sep 6 09:48:39 1985
Date-Received: Sun, 8-Sep-85 04:59:48 EDT
References: <30538@lanl.ARPA>, <782@vortex.UUCP>
Organization: UNC-Charlotte
Lines: 21
Xref: watmath net.ham-radio:3190 net.dcom:1266 net.video:1476
net.news.stargate:196

    It seems that I remember a case involving a youth who intercepted a wireless telephone call from a neighbour. This kid evidently was able to pick up one side of the wireless phone call because it was above the AM band. The subject of the calls were arrangements to purchase and distribute cocaine. This child told his mother, who called the police; which in turn spent several more days listening. THIS WAS NOT HELD TO BE WIRETAPPING because the radio facilities were not common carrier but part 15 devices. They got a conviction (and one of the principal defences of the coke trafficker was that it was an illegal wiretap).

Interception of common carrier telephone facilities, wire, coax, microwave, satellite, whatever; I am assured by a prominent Washington attorney, is technically wiretapping.

David Anthony
CDE
DataSpan, Inc

P.S. I didn't realize that the satellite calls were SSB/FDM. How many percent are using FDM and how many TDM-digital?

From 7911620965160940273
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,afd36fa9172be299,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-09-06 08:02:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA (Richard Shapiro)
Newsgroups: net.ham-radio
Subject: re: SWL antenna
Message-ID: <1284@brl-tgr.ARPA>
Date: Fri, 6-Sep-85 11:02:34 EDT
Article-I.D.: brl-tgr.1284
Posted: Fri Sep 6 11:02:34 1985
Date-Received: Mon, 9-Sep-85 01:23:18 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

In answer to Jerry Ruhno (my mail system doesn't like your address so I'm sending this to the full distribution list):

I recommend that you continue to use your longwire, string it up outside in the clear and get a simple antenna tuner (MFJ makes one for ~$35). This should do as well as a trapped dipole on the bands the dipole is tuned for and better elsewhere. You'll have to twiddle two more knobs for optimal reception but it's worth it.

I'd be interested to hear your opinions of the 2010 by the way (especially the performance of the synchronous ECSS).

Richard Shapiro/RSHAPIRO@BBNA

From 4340212131568218657
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11e3cc5b0e8a750
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-09-06 08:23:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!wjc@ll-vlsi
From: wjc@ll-vlsi (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: Re: Listen to phone calls on your tvro
Message-ID: <1286@brl-tgr.ARPA>
Date: Fri, 6-Sep-85 11:23:17 EDT
Article-I.D.: brl-tgr.1286
Posted: Fri Sep 6 11:23:17 1985
Date-Received: Mon, 9-Sep-85 01:23:31 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

It would be interesting to see citations of some of those cases.

Bill
N1CPK

From -4856286699063990718
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7522ef0f85f652a5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 10:34:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!carpenter@nbs-vms
From: carpenter@nbs-vms (Carpenter, Robert)
Newsgroups: net.ham-radio
Subject: List of Canadian FM BC Stations Wanted
Message-ID: <511@brl-tgr.ARPA>
Date: Thu, 8-Aug-85 13:34:54 EDT
Article-I.D.: brl-tgr.511
Posted: Thu Aug 8 13:34:54 1985
Date-Received: Sun, 11-Aug-85 04:28:29 EDT
Sender: news@brl-tgr.ARPA
Lines: 24

Last Sunday evening I was in darkest Eastern Shore Maryland, coming back
from "the shore" and tuning across the FM BC band. I discovered French-
speaking stations strong enough to cover up the Washington/Baltimore
stations on 88.5 and 89.3 MHz. Since there is no station here on 88.1 (except
a 10 watter), the Canadian station on that frequency was Q5. I didn't
get any calls, but they did mention Montreal, etc.

I have tried to find a frequency/power/location listing for Canadian FM
BC stations without luck. The 1985 Broadcasting Yearbook is hopeless.
The World Radio Television Handbook (about 1983) is worse. Can anyone

suggest a current reliable source?

This experience was especially frustrating since I was 2 hours from home
and SURE that 6 and probably 2 were open for sporadic E propagation.
In fact they were, and someone worked Spain cross-band 6 to 10. The
Spanish aren't allowed on 6.

Thanks in advance.

Bob, W3OTC <carpenter@nbs-vms.arpa>

From -7718689446686553456
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f14da92f77113b18
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 10:45:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!vortex!
lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: vertical intervals
Message-ID: <736@vortex.UUCP>
Date: Thu, 8-Aug-85 13:45:27 EDT
Article-I.D.: vortex.736
Posted: Thu Aug 8 13:45:27 1985
Date-Received: Mon, 12-Aug-85 03:19:04 EDT
References: <52800063@trsvax>
Organization: Vortex Technology, Los Angeles
Lines: 5

You don't mean channel 9 from Atlanta, you mean channel 9 from
Chicago (WGN). In any case, the current status is that the carrier
owns the vertical interval, not the station.

--Lauren--

From -4837739602619913569
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,afcb09b818237c0f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 11:18:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Geoff@SRI-CSL.ARPA
From: Geoff@SRI-CSL.ARPA (the tty of Geoffrey S. Goodfellow)
Newsgroups: net.ham-radio
Subject: Re: for sale

Message-ID: <515@brl-tgr.ARPA>
Date: Thu, 8-Aug-85 14:18:55 EDT
Article-I.D.: brl-tgr.515
Posted: Thu Aug 8 14:18:55 1985
Date-Received: Sun, 11-Aug-85 04:29:46 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

posting things for'for sale' via the ARPANET constitutes private
and personal gain at gov't expense and is hence not allowed.

may i suggest you retract your announcement.

g

From -6697222821125331341
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,df6063884992efe7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 11:37:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA (Richard Shapiro)
Newsgroups: net.ham-radio
Subject: not for sale
Message-ID: <517@brl-tgr.ARPA>
Date: Thu, 8-Aug-85 14:37:32 EDT
Article-I.D.: brl-tgr.517
Posted: Thu Aug 8 14:37:32 1985
Date-Received: Sun, 11-Aug-85 06:04:18 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

I am informed that it is illegal to offer things for sale via ARPANET.
My apologies; consider this a retraction of my last message.

R. Shapiro

From 2541360449752860698
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aac0f144e65aed0d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 12:02:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Morton Jim@LLL-MFE.ARPA
From: Morton Jim@LLL-MFE.ARPA
Newsgroups: net.ham-radio
Subject: YAESU RIG QUESTION

Message-ID: <522@brl-tgr.ARPA>
Date: Thu, 8-Aug-85 15:02:14 EDT
Article-I.D.: brl-tgr.522
Posted: Thu Aug 8 15:02:14 1985
Date-Received: Sun, 11-Aug-85 06:05:59 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

I have an oppertunity to pick up a used YAESU FTDx400 tranciever. I would appreciate any information regarding its good and bad points as well as estimates of its dollar value. The rig I am looking at does not transmit, the final amp heaters do not come on. The reciever works and i like it better than the National NCX-3 I have now. I am assuming that i will be able to fix the transmitter. The rig includes a matching speaker and external VFO. Thanks in advance for any information;

Jim Morton "MORTON JIM @ LLL-MFE"

From -2560696815842254266
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,adf840871d8685d3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 15:06:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
FAC0392%UOFT01.BITNET@WISCVM.ARPA
From: FAC0392%UOFT01.BITNET@WISCVM.ARPA (Len Brady)
Newsgroups: net.ham-radio
Subject: Add to Mailing List
Message-ID: <543@brl-tgr.ARPA>
Date: Thu, 8-Aug-85 18:06:05 EDT
Article-I.D.: brl-tgr.543
Posted: Thu Aug 8 18:06:05 1985
Date-Received: Sun, 11-Aug-85 05:42:29 EDT
Sender: news@brl-tgr.ARPA
Lines: 3

Please add me to the Ham Radio Mailing List. Tks es 73.

L. Brady KF8J

From -8579395720070081874
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1fd9cbd9b2ac8f5c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 15:51:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!WBD.TYM@OFFICE-2

From: WBD.TYM@OFFICE-2 (William Daul / McDonnell-Douglas / APD-ASD)
Newsgroups: net.ham-radio
Subject: Re: Where can I get a Picturephone?
Message-ID: <547@brl-tgr.ARPA>
Date: Thu, 8-Aug-85 18:51:02 EDT
Article-I.D.: brl-tgr.547
Posted: Thu Aug 8 18:51:02 1985
Date-Received: Sun, 11-Aug-85 07:27:25 EDT
Sender: news@brl-tgr.ARPA
Lines: 2

I would like to suggest you send your note to human-nets@rutgers.arpa. I would also like to know what you learn. Thanks, --Bi\\

From -6712249045326602622
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bce1213ff6f32131,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 16:04:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!schmalz@yuma
From: schmalz@yuma (Rich Schmalzbach [USAISC - Appl Engr])
Newsgroups: net.ham-radio
Subject: FILLING HOLES
Message-ID: <548@brl-tgr.ARPA>
Date: Thu, 8-Aug-85 19:04:58 EDT
Article-I.D.: brl-tgr.548
Posted: Thu Aug 8 19:04:58 1985
Date-Received: Sun, 11-Aug-85 07:27:43 EDT
Sender: news@brl-tgr.ARPA
Lines: 25

JIM (KY2D),

Having gone through the removal of a roof mount similar to the one you describe I would suggest the following:

1. Purchase some HARDWOOD doweling the size (or slightly larger) than the holes left by the screws.

2. Bore out the holes to ensure a snug fit for the dowels.

3. After covering the dowels with roof tar, drive them into the holes.

4. Then liberally apply additional roof tar over the dowels.

NOTE: If you drive the dowel in too low water will have a tendency to puddle over the dowel head, therefore, it is better to leave about 1/4" dowel above the roof line.

I learned the above through personnal experiance, and now sleep in a dry

bedroom.

Good Luck,

73's
Rich (WA6PEZ)

From 712355481326570300
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,be34a1cee99438b7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 16:19:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!price%marlin@Nosc
From: price%marlin@Nosc (James N. Price)
Newsgroups: net.ham-radio
Subject: Re: Canadian FM BC stations
Message-ID: <550@brl-tgr.ARPA>
Date: Thu, 8-Aug-85 19:19:18 EDT
Article-I.D.: brl-tgr.550
Posted: Thu Aug 8 19:19:18 1985
Date-Received: Sun, 11-Aug-85 07:28:20 EDT
Sender: news@brl-tgr.ARPA
Lines: 22

All North American AM and FM band broadcast stations (as well as
TV) are listed in the excellent "North American Radio and TV
Station Guide" by Vane Jones, available most anywhere that
carries Sams books. Or you can buy it directly from Vane Jones
in Indiana. If you want his address, I will put it on the net.
The book lists lots of useful information for the BC DXer
(day/night power, networks/formats, impending frequency changes,
etc) without being cumbersome or expensive.

73rds--Jim Price, K6ZH
(619) 225-2665
PRICE@NOSC.ARPA

From 4425067675780099293
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,9106998fde76fae5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 16:36:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!jstarr@anad
From: jstarr@anad (James Starr USAISC Anniston)
Newsgroups: net.ham-radio
Subject: ROOF MOUNT TOWER
Message-ID: <552@brl-tgr.ARPA>
Date: Thu, 8-Aug-85 19:36:44 EDT
Article-I.D.: brl-tgr.552
Posted: Thu Aug 8 19:36:44 1985
Date-Received: Sun, 11-Aug-85 07:28:56 EDT
Sender: news@brl-tgr.ARPA
Lines: 37

Hi Rick.

..

Guess I had better get into this roof mount tower bit as I have had lots of experence in this.

When I was in the army (22 years) we were always moving from place to place, many times in government quarters. There was very little you could do when it cant to installing anything even semi-permanantly.

I took a 10 ft roof mount tower section, bolted the legs to 2X8s 10 ft long. Then I manhandled it 'till it was straddle the roof peak. Then I guyed the tower to each roof corner (4 times). Then I put a 15 meter beam on a 10 foot mast section (with a rotor) above the tower, plus a 6 element 2 meter beam 5 ft above that!!

Next I guyed from the rotor to the same place the tower was guyed. Now this sounds like a huge mass (not mess) not to bolted down, but by keeping all the guys tight I used this set-up on several houses with nary an incedent of any type.

With 2 sets of guys (one at the top and one at the middle) there was no chance for the wind to get any lever action to topple the mess.

The trick (I guess) was ALWAYS making sure ALL the guys were tight!

This survived much rough weather including huricane force winds that up-rooted 2 trees in my front yard.

Jim Starr

WA4QLB

From -978340948197355850
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,542abc8487fabc3a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-09 03:30:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!iddic!
brucec%tektronix.csnet@csnet-relay.arpa
From: brucec%tektronix.csnet@csnet-relay.arpa
Newsgroups: net.ham-radio
Subject: Re: Roof Mounting a Beam Antenna
Message-ID: <569@brl-tgr.ARPA>
Date: Fri, 9-Aug-85 06:30:33 EDT
Article-I.D.: brl-tgr.569
Posted: Fri Aug 9 06:30:33 1985
Date-Received: Mon, 12-Aug-85 01:24:55 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

Thanks for your reply, the information was quite detailed and
helpful. Maybe we'll meet on the air sometime ??

Bruce Cheney NI7M
tektronix!iddic!brucec

From -5467403174586657002
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6eb9c65f91d5fe47,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-09 07:27:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.8 $; site trsvax
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!pur-ee!uiucdcs!
convex!trsvax!mikey
From: mikey@trsvax
Newsgroups: net.ham-radio
Subject: Re: REQUEST FOR A BOOK
Message-ID: <52800065@trsvax>
Date: Fri, 9-Aug-85 10:27:00 EDT
Article-I.D.: trsvax.52800065
Posted: Fri Aug 9 10:27:00 1985
Date-Received: Sat, 24-Aug-85 03:19:13 EDT
References: <3477@decwrl.UUCP>
Lines: 9
Nf-ID: #R:decwrl.UUCP:-347700:trsvax:52800065:000:222
Nf-From: trsvax!mikey   Aug 9 09:27:00 1985

The 'Weather Satelite Handbook' was still available through Wayne Green
books a few months ago. Have you tried their 800 number? I doubt
you'll find someone to part with one, it's pretty good.

mikey at trsvax
KA5MJQ

From -2653896848321650982
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,542abc8487fabc3a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-09 14:52:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Karz.Wbst@Xerox.ARPA
From: Karz.Wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Roof Mounting a Beam Antenna
Message-ID: <588@brl-tgr.ARPA>
Date: Fri, 9-Aug-85 17:52:10 EDT
Article-I.D.: brl-tgr.588
Posted: Fri Aug 9 17:52:10 1985
Date-Received: Mon, 12-Aug-85 05:47:24 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

Concerning sealing the holes when a roof mounted tripod is removed:

When I roof mounted my beam (Message of August 6 with the creative
spelling of "joist" and "lintel"), I missed the joists with a few holes
and had to seal them up. My approach was to drive a short length of
roofing cement coated wooden dowel (purchased at any hardware store)
into the hole so that the top of the dowel was recessed about 1/4"
below the roof surface. I then filled the space above the dowel with
more roofing cement. I've had no problems whatever with this kind of
patch.

73
Bob Karz
K2OID

From -6918195941537794153
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,542abc8487fabc3a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-09 15:11:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Karz.Wbst@Xerox.ARPA

From: Karz.Wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Roof Mounting a Beam Antenna
Message-ID: <589@brl-tgr.ARPA>
Date: Fri, 9-Aug-85 18:11:47 EDT
Article-I.D.: brl-tgr.589
Posted: Fri Aug 9 18:11:47 1985
Date-Received: Mon, 12-Aug-85 05:49:08 EDT
Sender: news@brl-tgr.ARPA
Lines: 13

Bruce,

Meeting on the air sounds like a great idea. I have a TS930s operating barefoot with the capability to operate 80 through 10 meters. I would think that 20CW about 0200 UTC would be a good place to start with movement to the phone band if conditions permit. I'm free most evenings at that time.

Let me know.

73
Bob Karz
K2OID

From -939639331086195061
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2163be6158cf034f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-12 02:02:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site ucbvax.ARPA
Path: utzoo!linus!decvax!decwrl!ucbvax!woodson
From: woodson@ucbvax.ARPA (Chas Woodson)
Newsgroups: net.ham-radio
Subject: Two-meter antenna for MB car
Message-ID: <9845@ucbvax.ARPA>
Date: Mon, 12-Aug-85 05:02:42 EDT
Article-I.D.: ucbvax.9845
Posted: Mon Aug 12 05:02:42 1985
Date-Received: Wed, 14-Aug-85 00:55:21 EDT
Organization: University of California at Berkeley
Lines: 6
Keywords: Two-meter antenna MB

Does anyone have some advice regarding a two meter antenna for my MB car. It has a motorized Hershberger antennna which I have thought of trying to use, but is seems a difficult problem. I am considering a "disguised" antenna from Antenna Specialists which uses a splitter to allow use by BC/FM radio.

From 6141281587326132035
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d4baa07666f745,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-12 02:09:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site ucbvax.ARPA
Path: utzoo!linus!decvax!decwrl!ucbvax!woodson
From: woodson@ucbvax.ARPA (Chas Woodson)
Newsgroups: net.ham-radio
Subject: vertical antennas
Message-ID: <9846@ucbvax.ARPA>
Date: Mon, 12-Aug-85 05:09:49 EDT
Article-I.D.: ucbvax.9846
Posted: Mon Aug 12 05:09:49 1985
Date-Received: Wed, 14-Aug-85 01:08:24 EDT
Organization: University of California at Berkeley
Lines: 3
Keywords: vertical antenna radio

Anyone have any thoughts on how 3 or 4 phased verticals would compare
to a 3 element beam?

From 6511543424938999976
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,20683964576dd061
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-12 11:18:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio
Subject: Re: new ICOM IC-R7000 25-1300 MHz receiver! (&FRG 9600 too)
Message-ID: <262@anasazi.UUCP>
Date: Mon, 12-Aug-85 14:18:19 EDT
Article-I.D.: anasazi.262
Posted: Mon Aug 12 14:18:19 1985
Date-Received: Thu, 15-Aug-85 00:21:47 EDT
References: <643@ihu1h.UUCP>
Reply-To: john@anasazi.UUCP (John Moore)
Distribution: net
Organization: Anasazi, Phoenix Az.
Lines: 23
Summary: R7000 Missing Computer Control

In article <643@ihu1h.UUCP> parnass@ihu1h.UUCP (Bob Parnass, AJ9S) writes:
>x
>   ICOM IC-R7000 VHF/UHF RECEIVER
>
>   the recent ANARC   convention in   Milwaukee. From the
>   spec sheet   given me, this radio will give Yaesu a

run
> for its money.
>
> The new R7000 looks just like its hf cousin, the R71A,

I hear that a computer controlled interface for the R71A will be
published in September or October Popular Communications. I hope
that it will also work for the R7000, since the %$#(!!) ICOM
folks left it out and won't even talk about it!
  Also, the specs I saw at HAMCON (Long Beach 8/10) were continuous
coverage from 25-2000 MHZ, with specs guaranteed to 1300 MHz.
  By the way, I saw the Yaesu FRG-9600 running under computer
control at the convention, and it is FAST (20-50 channels/sec)! However,
if someone can kludge the same capability ine of lab equipment.
--
John Moore (NJ7E)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
(602) 952-8205 (day or evening)

From -3410902847971642547
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8b79e852abdd1ff6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-12 13:52:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Mobile rig mounting
Message-ID: <645@brl-tgr.ARPA>
Date: Mon, 12-Aug-85 16:52:00 EDT
Article-I.D.: brl-tgr.645
Posted: Mon Aug 12 16:52:00 1985
Date-Received: Mon, 19-Aug-85 05:32:01 EDT
References: <468@brl-tgr.ARPA>
Organization: Ballistic Research Lab
Lines: 10

> Has anyone tried to mount a rig in a Ford van? I want to install a 2
> mtr rig in a new van, but the logical place (radio location) has been
> eliminated by XYL. There is essentally no way to mount it under the
> dash near the driver withoug interfearing with driving, and the other
> side of the engine cover is too far away to see or use when driving.
>
Our Ford Van in the Fire deparment has the siren and radio controls
bolted to the back of the engine cover between the two seats.

-Ron

From -4938762116583148799

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2fe7dfe2820e82e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-13 05:11:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!iddic!
brucec%tektronix.csnet@csnet-relay.arpa
From: brucec%tektronix.csnet@csnet-relay.arpa
Newsgroups: net.ham-radio
Subject: Potential Sked
Message-ID: <663@brl-tgr.ARPA>
Date: Tue, 13-Aug-85 08:11:59 EDT
Article-I.D.: brl-tgr.663
Posted: Tue Aug 13 08:11:59 1985
Date-Received: Mon, 19-Aug-85 05:41:15 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

Bob;

I might suggest 15 mtrs instead of 20. Starting out w/CW and then
moving up sounds good, I haven't done any CW for a long time and
would like to get back in practice.

0200 (which is 1900 hrs PDT) is OK except Mon. and Wed. On those
days I have masters swim practice which lasts until about 19:30.

Just as a check on netmail delay, I am sending this at 9:45 am 8/12/85.

NI7M
Bruce Cheney

From 5952215196073063418
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2484acd45292080f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-13 15:34:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: antennas
Message-ID: <684@brl-tgr.ARPA>
Date: Tue, 13-Aug-85 18:34:51 EDT
Article-I.D.: brl-tgr.684
Posted: Tue Aug 13 18:34:51 1985
Date-Received: Mon, 19-Aug-85 05:55:28 EDT
Sender: news@brl-tgr.ARPA
Lines: 74

Re: phased verticals.

As I have noted previously on the net, I have had excellent results with a single, center-fed vertical on 20-15-10. This one is 32 feet long, which is about as long as I can string up in the trees in my yard. If you are going to use a self-supporting antenna (or at least the top half) you can approach twice the tree height, or around 40 meters of height. This would allow you to use the antenna even on 80 meters as a half-wave vertical. Certainly 40 meters would be within your reach.

I have found center feeding with open wire line (or twinlead) to work quite well. Theoretically and practically, it has the advantage that you don't have any losses due to feeding RF currents directly through lossy ground, as you would with any end-feeding scheme. End feeding a half wave is not as bad as for a quarter wave, as the radiation resistance seen at the end of a half wave is quite high, requiring relatively low current for a given power level, and therefore inducing less power loss in the (fixed) ground resistance than the high currents needed to feed a quarter wave would induce. However, center feeding is even better because the entire transmitter output is fed into useful, radiating antenna wire instead of ground. The only losses you are absolutely stuck with are (1) currents induced in the ground and other objects by radiative coupling and (2) losses in the antenna wire and feedline, connectors, tuners, etc. (2) can be reduced to essentially nothing by spending money and by attention to detail and (1) can be reduced to nearly nothing by getting the antenna up away from ground a bit. Even with it nearly touching ground, however, my experience indicates that (1) is a fairly insignificant loss at least at my location. (It would depend on ground conductivity.)

It appears to me also that the use of a half-wave or longer radiator results in a better pattern especially for low-angle radiation. Look at the plots of half-wave verticals over ideal lossless ground for some clues as to how to pick up big gains on the horizon or near it. Then compare with the similar curves for quarter waves to see how to lose low-angle power. It looks to me as if a half wave has a significant advantage over a quarter wave in producing radiation at low angles.

I have pondered the problem of how to feed an array of such antennas. The best solution I can come up with for multi-band operation is to install a rack full of tuners, one per antenna, and tune them all up for the band of interest so that the tuner inputs look like 50 ohms pure resistive. Then you can switch in 50-ohm coax sections to your heart's content to obtain the desired phasing. If you are rich enough to use automatic antenna tuners, this wouldn't even be especially inconvenient. Of course then you could afford a tower and a stack of monobanders instead!

Once you have tamed the impedance problem by using tuners, you still have the problem of how to set up the phasing. The problem is that the antenna spacing is a different fraction of a wavelength on different bands. Maybe you should let your microcomputer model the array in its little mind and select a phasing scheme which it likes and then switch in the proper lengths of coax with a set of relays under its control. Then you never even need to know how it

did it, as long as you like the pattern it draws for you on its screen.
I suppose while we are dreaming it could also learn how to set up all the tuners for each operating frequency of interest and store all this away for future use. It could either display the settings for you to crank in or else it could tune up the proper settings for you with motors under its control.

If you don't like a rack of tuners, there are cheaper ways to phase things, but they may be difficult to figure out for multiple bands. The Sterba Curtain or Bobtailed Curtain are examples of cheap ways to phase radiators on a single band for a single direction. The W8JK array may also give you some ideas. A single pair of radiators in the 8JK configuration will give you about 4 dB of gain and can be fed with a single tuner. You ought to be able to get about 7 dB of gain from a set of four radiators fed according to the 8JK concept. However, I don't see any easy way of getting this much gain in multiple directions without a fully flexible phasing scheme (which always makes me think of the tuners and the coax switches).

I would be interested to hear what else you come up with or to fill in details which are not obvious to you from the above.

73,
John S., W3IKG

From -7909594170709443383
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2fe7dfe2820e82e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-14 00:40:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Karz.Wbst@XEROX.ARPA
From: Karz.Wbst@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Potential Sked
Message-ID: <686@brl-tgr.ARPA>
Date: Wed, 14-Aug-85 03:40:44 EDT
Article-I.D.: brl-tgr.686
Posted: Wed Aug 14 03:40:44 1985
Date-Received: Mon, 19-Aug-85 05:56:19 EDT
Sender: news@brl-tgr.ARPA
Lines: 21

Bruce,

First, I received your message 8:11 AM EDT, so delivery is nearly 20 hours.

Assuming you won't receive this in time for tonight (Tuesday, Aug 13), I suggest we try for Thursday, Aug 15. Lets use 15 meters as you suggest, but the band is often quite dead by 2200 local time (0200 UTC) here in the East. Just in case, lets start at 21.06 Mhz with a QSY to 14.06 at 0215 UTC if we haven't hooked up by then. I'll listen Friday, August 16

as well, but I'll be out of town for the next few days after that, so
the next I'll be available is Thursday, August 22.

I'll keep the CW slow, but hopefully we can make a solid phone contact
which would enable us to convey more information (hi).

73 es hpe to c u Thursday nite.

Bob
K2OID

From -8454428280632219239
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2fe7dfe2820e82e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-14 00:49:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Karz.Wbst@XEROX.ARPA
From: Karz.Wbst@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Potential Sked
Message-ID: <687@brl-tgr.ARPA>
Date: Wed, 14-Aug-85 03:49:06 EDT
Article-I.D.: brl-tgr.687
Posted: Wed Aug 14 03:49:06 1985
Date-Received: Mon, 19-Aug-85 05:57:02 EDT
Sender: news@brl-tgr.ARPA
Lines: 21

Bruce,

First, I received your message 8:11 AM EDT, so delivery is nearly 20
hours.

Assuming you won't receive this in time for tonight (Tuesday, Aug 13), I
suggest we try for Thursday, Aug 15. Lets use 15 meters as you suggest,
but the band is often quite dead by 2200 local time (0200 UTC) here in
the East. Just in case, lets start at 21.06 Mhz with a QSY to 14.06 at
0215 UTC if we haven't hooked up by then. I'll listen Friday, August 16
as well, but I'll be out of town for the next few days after that, so
the next I'll be available is Thursday, August 22.

I'll keep the CW slow, but hopefully we can make a solid phone contact
which would enable us to convey more information (hi).

73 es hpe to c u Thursday nite.

Bob
K2OID

From -2165055267903409462
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,424bbb977120b78a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-14 21:32:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site im4u.UUCP
Path: utzoo!decvax!linus!philabs!cmcl2!seismo!ut-sally!im4u!riddle
From: riddle@im4u.UUCP
Newsgroups: net.ham-radio
Subject: International League of Esperantist Hams
Message-ID: <418@im4u.UUCP>
Date: Thu, 15-Aug-85 00:32:46 EDT
Article-I.D.: im4u.418
Posted: Thu Aug 15 00:32:46 1985
Date-Received: Sat, 17-Aug-85 21:15:55 EDT
Distribution: na
Organization: U. of Tx. at Houston-in-the-Hills
Lines: 19
Ham-And-Swiss: "Bob"

Interested in communicating about and via amateur radio with hams from all over the world, many of whom don't speak English? The Internacia Ligo de Esperantistaj Radio-Amatoroj is set up to help you do just that, using the international language Esperanto. For more information, contact: W2CIL E. Lindberg, UEA FD Buffalo, New York.

Learning enough Esperanto for simple correspondence and beginning conversation should be a matter of a few weeks of occasional spare-time study. The simplest way to get started with Esperanto is by the free correspondence course offered by the Esperanto Information Center. For the first lesson, send an SASE to: Verda Stelo, 410 Darrell Road, Hillsborough, CA 94010, USA; or reply to me by e-mail for an ascii version.

[An announcement along these lines may have appeared here some months back;
if so, sorry for the repetition.]

--- Prentiss Riddle ("Aprendiz de todo, maestro de nada.")
--- {ihnp4,harvard,seismo,gatech}!ut-sally!riddle riddle@ut-sally.UUCP
--- riddle@ut-sally.ARPA, riddle%zotz@ut-sally, riddle%im4u@ut-sally

From 3080908799066554554
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a7ff2e90dafd408,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,4a7ff2e90dafd408,start
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1985-08-15 05:02:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site bunny.UUCP

Path: utzoo!linus!philabs!cmcl2!seismo!harvard!bunny!epm0
From: epm0@bunny.UUCP (Erik Mintz)
Newsgroups: net.ham-radio,net.aviation
Subject: Re: SALYUT_7 SWLING
Message-ID: <163@bunny.UUCP>
Date: Thu, 15-Aug-85 08:02:15 EDT
Article-I.D.: bunny.163
Posted: Thu Aug 15 08:02:15 1985
Date-Received: Mon, 19-Aug-85 07:28:16 EDT
References: <3596@decwrl.UUCP>
Organization: GTE Laboratories, Waltham, MA
Lines: 40
Xref: linus net.ham-radio:2450 net.aviation:1718

>
> The follow is the Keplerian Element Set an previously know
> frequencies use by SLYUT_7.   I have not hear them yet but
> what I understand there is a good chance one may hear them
> off the coast of New England as they talk to the "Russian
> fishing fleet :)"
>
> freq. most likely on
> 121.750 mhz WBFM actively reported freq.
> 142.400 mhz WBFM actively reported freq.
> 162.000 mhz WBFM TEL data
> 192.000 mhz WBFM (tobad for chan 9)
>
> less likely but possible
> 121.500 mhz
> 121.625 mhz
> 142.417 mhz
> 142.600 mhz
> 18.000/18.060 mhz am
> 15.008 mhz
> 20.008 mhz
>
>   ...
>   ...
>

Several of these frequencies are in the aircraft band.

121.5 is the civilian aircraft emergency frequency. I thought this was
by international convention. I would be very surprised to find anyone
transmitting routine messages on it. I certainly have never heard any.

In fact, I thought that the whole band between 118 MHz and 135 MHz was
alloted to aircraft operations. Can anyone correct me on this?

--
Erik Mintz

ARPA or CSnet : epm0%gte-labs.csnet@csnet-relay

UUCP: ...harvard!bunny!epm0

From 4782793930419264940
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d15c036dda1cdcf1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-15 07:39:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!IAIPS-ACIPS@USC-ISI.ARPA
From: IAIPS-ACIPS@USC-ISI.ARPA
Newsgroups: net.ham-radio
Subject: REQUEST FOR NET ACCESS
Message-ID: <718@brl-tgr.ARPA>
Date: Thu, 15-Aug-85 10:39:59 EDT
Article-I.D.: brl-tgr.718
Posted: Thu Aug 15 10:39:59 1985
Date-Received: Mon, 19-Aug-85 07:55:22 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

REQUEST ACCESS TO NET.HAM-RADIO AND INSTRUCTIONS ON GAINING
ACCESS AND OPERATION.

ANY INFORMATION REQUIRED WILL BE PROVIDED UPON REQUEST.

GEORGE A. BOWLEY
W1TQS
NAVAL INTELLIGENCE COMMAND

From -8610387395128294762
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9cd4be06e7a01f4f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-15 10:32:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Dbennett%xmm-plexus01.amc@amc-
hq.arpa
From: Dbennett%xmm-plexus01.amc@amc-hq.arpa
Newsgroups: net.ham-radio
Subject: Xerox 820
Message-ID: <724@brl-tgr.ARPA>
Date: Thu, 15-Aug-85 13:32:44 EDT
Article-I.D.: brl-tgr.724
Posted: Thu Aug 15 13:32:44 1985
Date-Received: Mon, 19-Aug-85 07:58:24 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

Does anyone know where I can obtain modification information for the Xerox-820 computer. Such as Double Density Mod, Hard Disk Mod, etc. I have two Xerox-820 computers on order and plan on using them for Packet Gateway capability and Packet Bulletin Board .

Also are there any monthly publications out there for the Xerox-820.

From -1492373655680848847
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cbfb86bdec15a5f5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-15 11:46:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!jeffr@sri-spam
From: jeffr@sri-spam (Jeff Rininger)
Newsgroups: net.ham-radio
Subject: Reverse TVI [:-}] ?
Message-ID: <726@brl-tgr.ARPA>
Date: Thu, 15-Aug-85 14:46:32 EDT
Article-I.D.: brl-tgr.726
Posted: Thu Aug 15 14:46:32 1985
Date-Received: Mon, 19-Aug-85 07:59:17 EDT
Sender: news@brl-tgr.ARPA
Lines: 13

I am having problems with signals from my (and my neighbors) televisions getting into my HF radio gear. What I am experiencing is "howling" signals spaced about 15 khz. across the HF spectrum; 20 meters seems to be the worst. I am using a Butternut vertical, and Atlas, Ten Tec and Heath radios.

I would appreciate hearing from anyone who has an idea how I can eliminate this "reverse TVI" problem.

Tnx es 73

Jeff Rininger (jeffr@sri-spam)
KA6ZBU

From 6599457963206936676
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9cd4be06e7a01f4f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-16 07:34:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!CRC.DlosLV%xerox.arpa@amc-hq.arpa
From: CRC.DlosLV%xerox.arpa@amc-hq.arpa
Newsgroups: net.ham-radio

Subject: Re: Xerox 820
Message-ID: <751@brl-tgr.ARPA>
Date: Fri, 16-Aug-85 10:34:53 EDT
Article-I.D.: brl-tgr.751
Posted: Fri Aug 16 10:34:53 1985
Date-Received: Sat, 24-Aug-85 01:31:17 EDT
Sender: news@brl-tgr.ARPA
Lines: 16

Probably the best source of information for the 820 is a magazine called "Micro Cornucopia". There have been many articles about the things you mentioned in back issues.

Micro Cornucopia
P.O. Box 223
Bend, OR 97709
(503) 382-8048

Other than that, we have published a few minor items in our VIP newsletter here in the Vendor Programs Group at Xerox, Lewisville, TX. Nothing of a highly technical nature though.

Chuck Carpenter

From -5032389041001951889
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b6361a99d45cc7f8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-16 09:46:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA (Richard Shapiro)
Newsgroups: net.ham-radio
Subject: re-posting
Message-ID: <764@brl-tgr.ARPA>
Date: Fri, 16-Aug-85 12:46:42 EDT
Article-I.D.: brl-tgr.764
Posted: Fri Aug 16 12:46:42 1985
Date-Received: Sat, 24-Aug-85 01:32:36 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

Not long ago someone posted a review of the new ICOM VHF/UHF receiver. I neglected to save this and would like to see it again -- if someone could send me a copy (rshapiro@bbna.arpa) I'd appreciate it.

Also last night on Radio Netherlands there was a fairly negative review of the Yaesu VHF/UHF radio. Does anyone have info or

opinions about this model?

R. Shapiro

From -4503338561547653937
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5c18e075dd7d864,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-16 10:04:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA (Richard Shapiro)
Newsgroups: net.ham-radio
Subject: 1981 WRTH
Message-ID: <765@brl-tgr.ARPA>
Date: Fri, 16-Aug-85 13:04:28 EDT
Article-I.D.: brl-tgr.765
Posted: Fri Aug 16 13:04:28 1985
Date-Received: Sat, 24-Aug-85 01:32:49 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

If anyone in Boston/Cambridge area has a copy of the 1981 World Radio
TV Handbook and would consider loaning it to me for a few hours
(I'm interested in reading a few of the equipment reviews), please
let me know:

RSHAPIRO@BBNA.ARPA
Richard Shapiro/BBN Labs/Cambridge MA/497-3686

From -8014754353951619229
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4f7e0ff0df97b233,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-16 10:08:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site npois.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!npois!jrm
From: jrm@npois.UUCP (hk)
Newsgroups: net.ham-radio
Subject: Ham Radio Auction
Message-ID: <397@npois.UUCP>
Date: Fri, 16-Aug-85 13:08:58 EDT
Article-I.D.: npois.397
Posted: Fri Aug 16 13:08:58 1985
Date-Received: Mon, 19-Aug-85 08:35:58 EDT

Organization: ATTIS, Neptune, NJ
Lines: 8

The Old Bridge Radio Association, Old Bridge New Jersey is
holding a Ham Radio auction at the KofC Hall on Pace Street
in Old Bridge (near route 18 south) beginning at 10 AM on
Sunday, September 8, 1985. Admission $3. Talk-in on Old
Bridge repeater - 147.12+600. This is about 7 miles south
of NJ Turnpike exit 9. Doors open to sellers at 8AM and
to buyers at 9AM.

Jim WA2HPD

From -7457167471550288013
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cc69aea69e7f1cbb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-16 11:18:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!sivagnan%bgsu.csnet@csnet-relay.arpa
From: sivagnan%bgsu.csnet@csnet-relay.arpa (Vasanthan Sivagnanadasan)
Newsgroups: net.ham-radio
Subject: deletion from mailing list
Message-ID: <768@brl-tgr.ARPA>
Date: Fri, 16-Aug-85 14:18:19 EDT
Article-I.D.: brl-tgr.768
Posted: Fri Aug 16 14:18:19 1985
Date-Received: Sat, 24-Aug-85 01:33:16 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

Please remove me from your mailing list
thank you

sivagnan@BGSU

From 1344122724689394671
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7f2e8d25171bb91d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-16 22:29:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site ucbvax.ARPA
Path: utzoo!linus!decvax!decwrl!ucbvax!woodson
From: woodson@ucbvax.ARPA (Chas Woodson)
Newsgroups: net.ham-radio
Subject: 2-meter operation in England
Message-ID: <9954@ucbvax.ARPA>
Date: Sat, 17-Aug-85 01:29:37 EDT

Article-I.D.: ucbvax.9954
Posted: Sat Aug 17 01:29:37 1985
Date-Received: Mon, 19-Aug-85 21:56:58 EDT
Organization: University of California at Berkeley
Lines: 7
Keywords: ham-radio 2-meter England

I am about to make a trip to England and would like to operate two meters
with my HT. I have a G0 licence.

Do I recall correctly that the repeaters there require a 1500 Hz tone burst.
I suppose outboard devices are sold there. Is there any easy way to
make one?

From -6228218128239427657
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4c9fe95a011c6a5c,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,4c9fe95a011c6a5c,start
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1985-08-17 21:34:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.analog,net.ham-radio
Subject: Current Measurement, Solar Power
Message-ID: <266@anasazi.UUCP>
Date: Sun, 18-Aug-85 00:34:46 EDT
Article-I.D.: anasazi.266
Posted: Sun Aug 18 00:34:46 1985
Date-Received: Sat, 24-Aug-85 01:36:08 EDT
Distribution: net
Organization: Anasazi, Phoenix Az.
Lines: 19
Xref: watmath net.analog:424 net.ham-radio:3077

    I am working on a project for a solar powered radio site. We need
(for obvious reasons) to be able to measure battery charging currents. The
solar system is charging a 12 Volt battery. A TTL uC (68705R3) will be
used for telemetry, and it has an 8 bit ADC with 0-5V input range. The
question is: How can I measure the charging currents (0-200 Amps) to 5%
accuracy without incurring significant voltage drop, and using the
ADC described above? Does anyone know of current transducers which are
commercially available? (We would rather buy than build unless the solution
is pretty simple - the site is accessible only by helicopter and is not
a great place for experimenting.)

John Moore (NJ7E)

{decvax|ihnp4|hao}!noao!terak!anasazi!john
(602) 952-8205 (day or evening)
--
John Moore (NJ7E)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
(602) 952-8205 (day or evening)

From 3849426279760735139
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f57cdbb7ad022062,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-19 06:48:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!carpenter@nbs-vms
From: carpenter@nbs-vms (Carpenter, Robert)
Newsgroups: net.ham-radio
Subject: Response to KA9Q
Message-ID: <794@brl-tgr.ARPA>
Date: Mon, 19-Aug-85 09:48:14 EDT
Article-I.D.: brl-tgr.794
Posted: Mon Aug 19 09:48:14 1985
Date-Received: Fri, 23-Aug-85 05:03:08 EDT
Sender: news@brl-tgr.ARPA
Lines: 13

Sorry, but I couldn't get through to KA9Q directly... somewhere along
the way "petrus" was unknown.

Yes, Phil, I remember you when I was more active in AMSAT, especially
the fine Earth-from-Satellite animation you produced.

73,

Bob W3OTC

From -1480821699980412054
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,722cc80654a3f768,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-19 08:32:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!
whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: arrl bulletin nr 71 (HAMS GET 902-928 MHZ !!!!!!)
Message-ID: <19735@mgweed.UUCP>
Date: Mon, 19-Aug-85 11:32:35 EDT
Article-I.D.: mgweed.19735
Posted: Mon Aug 19 11:32:35 1985
Date-Received: Fri, 23-Aug-85 06:51:48 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 19

qst de k9eui
hr arrl bulletin nr 71 from arrl headquarters
newington ct august 14, 1985
to all radio amateurs bt

acting on pr docket 84 960, fcc has announced the availability of 902 to 928 mhz for use by all radio amateurs above the novice class, effective at 0001 utc september 28, 1985. amateur use of the new band must be on a secondary, non interference basis. emission types n0n, a1a, a2a, a2b, a3e, a3c, a3f, f1b, f2b, f3e, g3e, f3c, f3f, f8e and p0n have been authorized. in a related action, fcc restricted use of the 902 to 928 mhz band at the white sands missile range. amateur use of the band is prohibited inside the range, and use for 150 miles outside the range is restricted to a maximum transmitter peak envelope power of 50 watts. see qst for further details
ar

From -4294920172051348688
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,336ce10dbd6aab9a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-19 08:34:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 72 (420-430 MHz restrictions)
Message-ID: <19736@mgweed.UUCP>
Date: Mon, 19-Aug-85 11:34:24 EDT
Article-I.D.: mgweed.19736
Posted: Mon Aug 19 11:34:24 1985
Date-Received: Fri, 23-Aug-85 06:52:51 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 15

qst de k9eui
hr arrl bulletin nr 72 from arrl headquarters
newington ct august 14, 1985

to all radio amateurs bt

in further action on pr docket 84 960, effective at 0001 utc september 28, 1985, fcc has removed the segment 420 to 430 mhz from the amateur radio service north of line a. line a begins at aberdeen, wa, runs through the southernmost point of duluth, mn, continues through the southernmost point of bangor, me, and terminates at the southernmost point of searsport, me. qst carried background information in happenings, december 1984 qst, and will carry further details ar

From -5736781787877298276
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7e157d4e47d96e5c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-19 08:34:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 33
Message-ID: <19737@mgweed.UUCP>
Date: Mon, 19-Aug-85 11:34:54 EDT
Article-I.D.: mgweed.19737
Posted: Mon Aug 19 11:34:54 1985
Date-Received: Fri, 23-Aug-85 06:53:32 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 36

qst de k9eui
hr propagation forecast bulletin nr 33 from arrl headquarters newington, ct august 19, 1985
to all radio amateurs bt

from august 11 through 18 the solar flux was never higher than 68. there were five days of 67, and on the 17th a 9 year low record of 66 was recorded. we have to go back to july 1976, to find the only other 66 of this sunspot cycle, which actually began early in that month. to place this information in proper perspective, it should be pointed out that the first 66 in the down side of cycle 20 came in may 1976, and there were monthly solar flux averages in the low 70s as far back as december 1975.

the continuous solar flux record goes back only to early 1947. it shows that cycles 18, 19, 20 and 21 are all quite different from one another. the record does not necessarily indicate an early end for cycle 21, though something less than an 11 year life does now appear as a likely possibility, to be discussed

in these bulletins later as more evidence is obtained.

though no spots have been seen on the sun since a very small one appeared on august 10 and was gone the next day, a moderate flux rise is expected this week, probably peaking around the 26th. there is normally a gradual improvement in the dx picture in august, as the sun becomes more favorably positioned for the northern hemisphere. dx activity should pick up slightly on 21 and 24 mhz, and some north south dx should show on 28 mhz. even small solar flux variations will show more effect on propagation after early september.

american sunspot numbers for august 8 to 14 were between 0 and 12 with a mean of 6 ar

From -8874296571344413298
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,22da22b2b6bf3e4e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-19 10:17:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site timeinc.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!timeinc!dwight
From: dwight@timeinc.UUCP (Dwight Ernest)
Newsgroups: net.ham-radio
Subject: SWL Scheds Wanted for Deutsche Welle & Austrian Radio
Message-ID: <433@timeinc.UUCP>
Date: Mon, 19-Aug-85 13:17:22 EDT
Article-I.D.: timeinc.433
Posted: Mon Aug 19 13:17:22 1985
Date-Received: Tue, 20-Aug-85 22:10:30 EDT
Reply-To: dwight@timeinc.UUCP (Dwight Ernest)
Distribution: net
Organization: Time Inc. (Edit Tech), New York
Lines: 16

I'm looking for current brief summaries of schedules for English
and German language broadcasts to North America from Radio Deutsche
Welle (the Voice of [West] Germany) and Radio Austria (don't know
its formal name) in the 2200-0300 UTC timeframe. Can anyone help?
I am particularly interested in on-the-air German language coursework
and also in news of Germany and Austria. Thanks in advance!
--

--Dwight Ernest KA2CNN \ Usenet:...vax135!timeinc!dwight
Time Inc. Edit./Prod. Tech. Grp., New York City
Voice: (212) 554-5061 \ Compuserve: 70210,523
Telemail: DERNEST/TIMECOMDIV/TIMEINC \ MCI: DERNEST

"The opinions expressed above are those of the writer and do not necessarily
reflect the opinions of Time Incorporated."

From -7100990161382750349
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f5c548d0e1312435,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-19 15:29:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site shark.UUCP
Path: utzoo!decvax!harpo!whuxlm!whuxl!houxm!vax135!cornell!uw-beaver!tektronix!
orca!shark!philb
From: philb@shark.UUCP (Phil Biehl N7FWL)
Newsgroups: net.ham-radio
Subject: ICOM IC-27H Problems
Message-ID: <1506@shark.UUCP>
Date: Mon, 19-Aug-85 18:29:57 EDT
Article-I.D.: shark.1506
Posted: Mon Aug 19 18:29:57 1985
Date-Received: Wed, 21-Aug-85 09:21:25 EDT
Distribution: na
Organization: Tektronix, Wilsonville OR
Lines: 27

I purchased a IC-27H about 8 months ago and installed it into my
cassette slot of my dashboard. The +12V cable is directly attached
to the positive battery post and the ground to the chassis. The
antenna is a motorola 1/4 wave mounted on a through hole mount
in the center of the roof.

Here's the rub: over a period of about one month I have noticed a
drop in the low power level. I drive out of town every day and
when talking to fellow hams noticed that they complained about
noise and flutter on my signal at progressivly closer points to
the repeater we frequent. Upon getting very frustrated with this
I attached a wattmeter and found the high power level was ~40 watts.
Good enough, checking low power showed ~3.5 watts. Again, good enough.
Now this was with the engine turned OFF. When I fired up the engine
(big 1600cc Toyota) the high power reading remained the same but
low power went to 0.1 - 0.2 watts!!!! Thinking a power line noise
problem existed I checked the battery line with my trusty Tek
scope and found noise but nothing over 1/2V. Nothing to worry about
in my book.

Now I'm about out of ideas. Does any one else have this problem
and if so HOW DID YOU FIX IT??? Anyone have any other ideas??
Any help is appreciated!!

TNX, 73
Phil Biehl, N7FWL

From 6552647048146852132

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,22da22b2b6bf3e4e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-20 07:29:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxu.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!houxu!jhv
From: jhv@houxu.UUCP (James Van Ornum)
Newsgroups: net.ham-radio
Subject: Re: SWL Scheds Wanted for Deutsche Welle & Austrian Radio
Message-ID: <662@houxu.UUCP>
Date: Tue, 20-Aug-85 10:29:35 EDT
Article-I.D.: houxu.662
Posted: Tue Aug 20 10:29:35 1985
Date-Received: Sat, 24-Aug-85 00:33:56 EDT
References: <433@timeinc.UUCP>
Organization: AT&T Information Systems, Holmdel, NJ
Lines: 5

<munch, munch>

The Austrian Radio broadcasts on 6 MHz and 9.635 MHz from 0130 to 0155 GMT.

     Jim Van Ornum

From -8331109015846918359
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,452a63526ca52e32,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-20 09:36:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site hpfcmt.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!hpfcdc!hpfcla!ron
From: ron@hpfcla.UUCP
Newsgroups: net.ham-radio
Subject: Traffic Format Req.
Message-ID: <19700007@hpfcmt.UUCP>
Date: Tue, 20-Aug-85 12:36:00 EDT
Article-I.D.: hpfcmt.19700007
Posted: Tue Aug 20 12:36:00 1985
Date-Received: Wed, 28-Aug-85 21:06:40 EDT
Organization: 20 Aug 85 10:36:00 MDT
Lines: 27

I thought this would be easy but....

I am looking for the standard format for Amateur Radio messages handled
in the net systems. I have listened in to several sessions and some
of the messages passed and still have some questions.

1. What is the "proper" format for the messages ?

2. What are the rules for word count within the message ?

3. Where can I get a list of the standard "ARL __" message
   abbreviations ?

About 10 years ago I had this stuff but I don't remember where it came
from. I will be using my 2m HT on a camping trip to send whereabouts to
the wife and would like to be an orderly traffic originator.

Thanks for the responses (in advance)

Ron Miller   WB4UWH
H-P
Ft. Collins Systems Div
Ft. Collins Colo

at {ihnp4}hpfcla!ron

From 3012382456203532239
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,befbe92cb1edc373,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-20 11:58:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!carpenter@nbs-vms
From: carpenter@nbs-vms
Newsgroups: net.ham-radio
Subject: Re: Ham Radio and Computer Networking
Message-ID: <824@brl-tgr.ARPA>
Date: Tue, 20-Aug-85 14:58:47 EDT
Article-I.D.: brl-tgr.824
Posted: Tue Aug 20 14:58:47 1985
Date-Received: Fri, 23-Aug-85 05:41:09 EDT
Sender: news@brl-tgr.ARPA
Lines: 18

Hello Dan,

Welcome....

The real hitch in all the great ideas of using Ham Radio for networking
is that Ham Radio must be REALLY noncomercial. You can't use it to
conduct business, talk TO your business, etc., etc. Thus, putting
an amateur link in something like THIS network would be next to impossible.

Sorry, but that is how I understand the rules (and practice) to be.

73,

Bob W3OTC

From -846723270448636684
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a7ff2e90dafd408
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,4a7ff2e90dafd408
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1985-08-20 15:48:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site watcgl.UUCP
Path: utzoo!watmath!watnot!watcgl!dmmartindale
From: dmmartindale@watcgl.UUCP (Dave Martindale)
Newsgroups: net.ham-radio,net.aviation
Subject: Re: SALYUT_7 SWLING
Message-ID: <2384@watcgl.UUCP>
Date: Tue, 20-Aug-85 18:48:27 EDT
Article-I.D.: watcgl.2384
Posted: Tue Aug 20 18:48:27 1985
Date-Received: Sat, 24-Aug-85 00:25:51 EDT
References: <3596@decwrl.UUCP> <163@bunny.UUCP>
Reply-To: dmmartindale@watcgl.UUCP (Dave Martindale)
Organization: U of Waterloo, Ontario
Lines: 32
Xref: watmath net.ham-radio:3070 net.aviation:1895

In article <163@bunny.UUCP> epm0@bunny.UUCP (Erik Mintz) writes:
>>
>> The follow is the Keplerian Element Set an previously know
>> frequencies use by SLYUT_7.
>>
[.....]
>>
>> less likely but possible
>> 121.500 mhz
>> 121.625 mhz
>> 142.417 mhz
>> 142.600 mhz

>Several of these frequencies are in the aircraft band.
>
>121.5 is the civilian aircraft emergency frequency. I thought this was
>by international convention. I would be very surprised to find anyone
>transmitting routine messages on it. I certainly have never heard any.
>
>In fact, I thought that the whole band between 118 MHz and 135 MHz was
>alloted to aircraft operations. Can anyone correct me on this?

Perhaps the 121.5 access is receive-only? Or perhaps it does transmit
on 121.5 when it is being used for search-and-rescue work?

As I understand it, the SARSAT program operates by having a satellite
pick up transmissions on 121.5 and rebroadcast them to a ground station
(I don't know if any frequency change is involved) where, from the
known position of the satellite and the Doppler shift of the received
signal, the ground location of the transmitter is calculated.

Anyone have a better understanding of it?

From -4232785687158060768
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,befbe92cb1edc373
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-20 16:05:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site bunny.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!bunny!epm0
From: epm0@bunny.UUCP (Erik Mintz)
Newsgroups: net.ham-radio
Subject: Re: Ham Radio and Computer Networking
Message-ID: <168@bunny.UUCP>
Date: Tue, 20-Aug-85 19:05:43 EDT
Article-I.D.: bunny.168
Posted: Tue Aug 20 19:05:43 1985
Date-Received: Fri, 23-Aug-85 07:12:39 EDT
References: <312@harvard.ARPA>
Distribution: net
Organization: GTE Laboratories, Waltham, MA
Lines: 21

>
> It would also be great to allow remote login over the airwaves. This
> would definitely provide some security problems. Anything private can
> of course be encrypted (if there aren't laws against that -- are there?).

I am new to ham radio also. However, as I study the regulations
for my exam, I notice part 97.117 of the FCC regulations governing
amateur radio:

"The transmission by radio of messages in codes or ciphers in domestic
and international communications to or between amateur stations is
prohibited. All communications regardless of type of emissions employed
shall be in plain language except that generally recongnized
abreviations established by regulation or custom and usage are
permissible as are any other abreviations or signals where the intent is
not to obscure the meaning but only to facilitate communications."
--
Erik Mintz

ARPA or CSnet : epm0%gte-labs.csnet@csnet-relay
UUCP: ...harvard!bunny!epm0

From -2035103393193568866
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6135a4c08d87a133,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-21 05:40:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxu.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!houxu!jhv
From: jhv@houxu.UUCP (James Van Ornum)
Newsgroups: net.ham-radio
Subject: Radio Deutsche Welle
Message-ID: <663@houxu.UUCP>
Date: Wed, 21-Aug-85 08:40:32 EDT
Article-I.D.: houxu.663
Posted: Wed Aug 21 08:40:32 1985
Date-Received: Sat, 24-Aug-85 03:25:24 EDT
Organization: AT&T Information Systems, Holmdel, NJ
Lines: 8

<munch, munch>
Radio Deutsche Welle broadcasts to North America in English
from 0100 to 0150 GMT on 6.085, 6.040, 6.145
               9.545, 9.565
              11.785 MHz
per their sign on last night.

     James Van Ornum, AT&T Information Systems, houxu!jhv

From 1840130265968079168
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9cd4be06e7a01f4f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-21 05:42:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site pedsgd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!petsd!pedsgd!bobh
From: bobh@pedsgd.UUCP (Bob Halloran)
Newsgroups: net.ham-radio
Subject: Re: Xerox 820
Message-ID: <238@pedsgd.UUCP>
Date: Wed, 21-Aug-85 08:42:39 EDT
Article-I.D.: pedsgd.238
Posted: Wed Aug 21 08:42:39 1985
Date-Received: Sat, 24-Aug-85 03:44:10 EDT
References: <724@brl-tgr.ARPA>
Reply-To: bobh@pedsgd.UUCP (Bob Halloran)
Organization: Perkin-Elmer, Tinton Falls, NJ
Lines: 25

Organization : Perkin-Elmer DSG, Tinton Falls NJ

In article <724@brl-tgr.ARPA> Dbennett%xmm-plexus01.amc@amc-hq.arpa writes:
>Does anyone know where I can obtain modification information for the Xerox-820
>computer. Such as Double Density Mod, Hard Disk Mod, etc. I have two Xerox-820
>computers on order and plan on using them for Packet Gateway capability and
>Packet Bulletin Board .
>
>Also are there any monthly publications out there for the Xerox-820.

The best magazine I know of for 820 hackers is Micro Cornucopia. They
publish bi-monthly, and have a regular 820 column. Many vendors for
the 820/Big Board market seem to advertise there. They can be reached
at POB 223, Bend OR 97709, (503)382-8048.

Good luck.

Bob Halloran
Sr MTS, Perkin-Elmer DSG
==========
UUCP: {ihnp4, decvax, ucbvax}!vax135!petsd!pedsgd!bobh
USPS: 106 Apple St M/S 305, Tinton Falls NJ 07724
DDD: (201) 758-7000

Disclaimer: My opinions are my own.
Quote: "History is made at night. Character is what you are in the Dark."

From 5143906322239471987
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,befbe92cb1edc373
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-21 06:38:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!ptb@Mitre-Bedford
From: ptb@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: Ham Radio and Computer Networking
Message-ID: <836@brl-tgr.ARPA>
Date: Wed, 21-Aug-85 09:38:53 EDT
Article-I.D.: brl-tgr.836
Posted: Wed Aug 21 09:38:53 1985
Date-Received: Sat, 24-Aug-85 23:59:37 EDT
Sender: news@brl-tgr.ARPA
Lines: 39

Not only must it be noncommercial, but NO ENCRYPTION is allowed.
97.117 states "The transmission by radio of messages in codes or
ciphers in domestic and international communications to or between
amateur stations is prohibited...."

We have been trying to figure out how to allow a kind of remote-login facility here, wrestling with things like security requirements and the FCC rules.

We have come up with some partial solutions in regards to "hooking it up" (over a LAN) to one host only, and warning people that it must only be used for educational purposes. (This seems to be the one purpose that both the FCC and my work place will allow.) The capability is not currently operational.

Some of our solutions deal with one-way BIUs, extra security on the "host", and a one-time numeric password idea that I would rather not put over the net to everyone. If you want, give me a call, and we could discuss what we have been doing here. Are you at Harvard University? That is within a reasonable distance to get together and have an "eyeball".

One should also note that the amateur bulletin boards of the W0RLI vintage DO ALLOW remote "login", however, they are public access systems. They rely on the requirement for stations to ID themselves, not use false callsigns, etc. to figure out who they are talking to.

As far as secrecy of messages goes, I would say "forget it" when you are dealing with amateur radio. The TAPR boards have readily available a "listen and type out everything you hear" mode, and the law does not help at all either (Amateur radio is one of two services that does not have the secrecy of communications protection of the Communications Act of 1934).

73, and good luck,

Peter Baldwin
(ptb@mitre-bedford)
(617) 271 - 2886   (local call from the Boston area)

From -5040134898983743559
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f6e5666b0cc8a869,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 10cb58,f6e5666b0cc8a869,start
X-Google-Attributes: gid10cb58,public
X-Google-ArrivalTime: 1985-08-21 06:49:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sphinx.UChicago.UUCP
Path: utzoo!decvax!harpo!whuxlm!whuxl!houxm!ihnp4!gargoyle!sphinx!west
From: west@sphinx.UChicago.UUCP (Steve Westfall)
Newsgroups: na.forsale,net.ham-radio
Subject: FOR SALE: Ham Radio Station, Oscilloscope
Message-ID: <1026@sphinx.UChicago.UUCP>
Date: Wed, 21-Aug-85 09:49:21 EDT
Article-I.D.: sphinx.1026
Posted: Wed Aug 21 09:49:21 1985

Date-Received: Thu, 22-Aug-85 08:37:26 EDT
Organization: U. Chicago - Computation Center
Lines: 30

For Sale: Ham Radio Station and Oscilloscope

Icom IC-720A transceiver with narrow CW filter
Icom PD-15 power supply
Icom IC-SM5 desk microphone
Icom hand-held microphone (not used for mobile operation)
AEA AMT-1 Rtty/Amtor computer interface
Astron RS-7A 12 volt dc power supply
Hustler vertical antenna (80, 40, 20, 15, 10 meters)
Heath IO-4105 oscilloscope (5 MHz, single trace)

The transceiver is in very good condition and has never been used for mobile operation. The oscilloscope is in mint condition because it has received practically no use since construction (it was certified by Heath as in perfect working order). The AMT-1 will work with most microcomputers that have some kind of terminal program for communicating with other computers.

I prefer to sell the whole group as a package for $1500 (I'll pay the shipping), but will consider other offers.

Call me at 312-962-6091 (Mon - Fri, 8:00am - 4:00 pm CST) or 312-947-9544 (Mon - Fri, 5:30 pm - 10:00 pm CST, or all day on weekends).

--
Steve Westfall, WA5MZI Uucp: ihnp4!gargoyle!sphinx!west
Senior Staff Analyst Bitnet: staff.westfall@UChicago.bitnet
U. of Chicago Computation Center Mailnet: staff.westfall@UChicago.Mailnet

From 6027123355480230822
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ff670fd96e9a565e,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,ff670fd96e9a565e,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1985-08-21 08:07:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!harvard!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.columbia,net.ham-radio
Subject: Shuttle Keplerian Elements (question)
Message-ID: <271@anasazi.UUCP>
Date: Wed, 21-Aug-85 11:07:59 EDT
Article-I.D.: anasazi.271

Posted: Wed Aug 21 11:07:59 1985
Date-Received: Sun, 25-Aug-85 03:03:17 EDT
Distribution: net
Organization: Anasazi, Phoenix Az.
Lines: 11
Xref: watmath net.columbia:1609 net.ham-radio:3108

OOPS... My previous posting on this lost the first line. Apologies to those who had to read it. Let's see if this works better:

I would like to find out how to get Keplerian elements for shuttle missions other than those carrying ham operators. Anyone know how?

--
John Moore (NJ7E)
{decvax|ihnp4|hao}!noao!terak!anasazi!john
(602) 952-8205 (day or evening)

From 5701647505283399226
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,839bc498cb0d1439,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,839bc498cb0d1439,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 124863,839bc498cb0d1439,start
X-Google-Attributes: gid124863,public
X-Google-Thread: 12f221,839bc498cb0d1439,start
X-Google-Attributes: gid12f221,public
X-Google-ArrivalTime: 1985-08-21 08:21:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site unccvax.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!unccvax!dsi
From: dsi@unccvax.UUCP (Dataspan Inc)
Newsgroups: net.analog,net.misc,net.music,net.ham-radio
Subject: FCC announces 80-90 channels
Message-ID: <272@unccvax.UUCP>
Date: Wed, 21-Aug-85 11:21:06 EDT
Article-I.D.: unccvax.272
Posted: Wed Aug 21 11:21:06 1985
Date-Received: Sat, 24-Aug-85 14:53:41 EDT
Organization: UNC-Charlotte
Lines: 31
Xref: watmath net.analog:426 net.misc:8450 net.music:8918 net.ham-radio:3083

ATTENTION !!!!!
   Ham radio operators who want a commercial station...
   Music lovers tired of 'Joy' 'Magic' 'Evergreen' and Madonna
   Kate Bush lovers who think that these towns can support
     such a thing
   People who wanted to know exactly where the heartland of
     America is

I am posting to net.analog the FCC lottery results for the 683 80-90 FM channels opened up beginning in October. NOW IS YOUR CHANCE to own your very own RADIO STATION, and to change the face of broadcasting forever...especially you people in net.music, who could stand to own a few radio stations.

Best of all, they're FM !!!!!!!!

At worst, the towns make for some interesting reading. If you know of any of these places, and their populations are under 1000, please let me know (I'm curious about how many of these are swamps and intersections of highways with a residential population of 39).

There are also details of how the assignments were arrived at, and how you can compute where the transmitter has to go (a few of these really are limited to an area of 1 - 2 sq miles or so, the area being in a genuine, 8 foot deep, swampola!)

Happy Filing !

David Anthony
Chief Development Engineer
DataSpan, Inc

From 4095249441031245267
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27bff2412da13191,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-21 09:43:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!Michael.Chepponis@CMU-CS-C.ARPA
From: Michael.Chepponis@CMU-CS-C.ARPA (Mike Chepponis)
Newsgroups: net.ham-radio
Subject: Ham Encryption
Message-ID: <844@brl-tgr.ARPA>
Date: Wed, 21-Aug-85 12:43:21 EDT
Article-I.D.: brl-tgr.844
Posted: Wed Aug 21 12:43:21 1985
Date-Received: Sun, 25-Aug-85 00:00:05 EDT
Sender: news@brl-tgr.ARPA
Lines: 42

I think it is noteworthy to look at section 97.69, Digital Communications.

Paragraph (c) subsection 1: "In addition to the above provisions, the use of ANY <emphasis mine> digital code is permitted on amateur frequencies above 50 MHz, except those on which only A1 emission is permitted, subject to the following requirements:

(1) Communications using such digital codes are authorized for domestic operation only (communications between points within areas where radio services are regulated by the U.S Federal Communications Commission), except when special arrangements have been made between the United States and the administration of any other country concerned.

(2) <Deals with bandwidth restrictions. Notably: any BW permitted above 1240 MHz as long as sidebands stay in band.>

(3) A description of the digital code and the modulation technique shall be included in the station log during all periods of use and shall be provided to the Commission on request.

(4) When deemed necessary by an Engineer-in-charge of a Commission field facility to assure compliance with the rules of this part, a station licensee shall:

(i) Cease the transmission of digital codes authorized under this paragraph.

(ii) Restrict the transmission of digital codes authorized under this paragraph to the extent instructed.

(iii) Maintain a record, convertible to the original information (voice, text, image, etc.), of all coded communications transmitted under authority of this paragraph."

I'm not sure I understand the intent of these rules, but it would seem to allow user-to-computer communications using encryption PROVIDED that a record of all such communications was kept. Any opinions?

73, -Mike, k3mc

From 5462452226270371753
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,98535e4c58f77a98,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-21 09:56:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!cassen@AEROSPACE.ARPA
From: cassen@AEROSPACE.ARPA (Quent Cassen)
Newsgroups: net.ham-radio
Subject: Mailing List
Message-ID: <845@brl-tgr.ARPA>
Date: Wed, 21-Aug-85 12:56:44 EDT
Article-I.D.: brl-tgr.845
Posted: Wed Aug 21 12:56:44 1985

Date-Received: Sun, 25-Aug-85 00:01:20 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

Please remove my name from your mailing list.

Thanks,

Quent, N6AF

From 5044484032729335787
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27bff2412da13191
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-21 10:20:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!clements@bbnccq.ARPA
From: clements@bbnccq.ARPA (Bob Clements)
Newsgroups: net.ham-radio
Subject: Re: Ham Encryption
Message-ID: <853@brl-tgr.ARPA>
Date: Wed, 21-Aug-85 13:20:07 EDT
Article-I.D.: brl-tgr.853
Posted: Wed Aug 21 13:20:07 1985
Date-Received: Sun, 25-Aug-85 00:00:56 EDT
Sender: news@brl-tgr.ARPA
Lines: 21

Regarding Mike's comment that 97.69(c) permits the domestic use of
any digital code, subject to certain restrictions:

I think that the context of the rest of the section, and of the rulemaking
in which that section was created, makes it clear that the use of the
word "code" does NOT allow for encryption. It is used in the
sense of American Standard CODE for Information Interchange (ASCII), or
the Baudot code (or Murray code) or Hollerith code or whatever.

In my comments filed to FCC during that rulemaking, I suggested that
a group of hams might have a pile of Friden FIO-DEC flexowriters
or some other totally obscure devices which use an oddball code. I said
that it seemed to me to be in the public interest to let them use
such devices, as long as there was no intent to be secretive about the
communication and as long as they used a standard means of ID'ing their
stations, such as Morse or ASCII or voice.

It looks like they bought my argument. I think that's what this section,
quoted by K3MC, means.

73, /Rcc, K1BC

From 2808282943825894612
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27bff2412da13191
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-21 10:52:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!Michael.Chepponis@CMU-CS-C.ARPA
From: Michael.Chepponis@CMU-CS-C.ARPA (Mike Chepponis)
Newsgroups: net.ham-radio
Subject: Re: Ham Encryption
Message-ID: <857@brl-tgr.ARPA>
Date: Wed, 21-Aug-85 13:52:25 EDT
Article-I.D.: brl-tgr.857
Posted: Wed Aug 21 13:52:25 1985
Date-Received: Sun, 25-Aug-85 00:02:53 EDT
Sender: news@brl-tgr.ARPA
Lines: 17

Bob, I believe you are right about the encryption issue - the purpose of
encryption it to INTENTIONALLY obscure the meaning of the bits. In the
beginning of 97.69, it says "These digital codes may be used for such
communications as (but not limited to) radio teleprinter and other objects,
transference of computer programs or direct computer-to-computer communications
and communications is various types of data networks (including so-called
'packet switching' systems); provided that such digital codes are not intended
to obscure the meaning of, but are only to facilitate, the communications, and
further provided that such operation is carried out with other regulations
set forth in this part."

So, it seems like sending Huffman-coded text files (to reduce time &/or BW
requirements) would be perfectly legal, but sending Huffman-coded text files
for the purpose of encryption would be illegal.

Does this seem like a gray area? -Mike, k3mc

From 554859288741664728
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27bff2412da13191
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-21 12:30:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!wjc@ll-vlsi
From: wjc@ll-vlsi (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: Re: Ham Encryption
Message-ID: <860@brl-tgr.ARPA>

Date: Wed, 21-Aug-85 15:30:15 EDT
Article-I.D.: brl-tgr.860
Posted: Wed Aug 21 15:30:15 1985
Date-Received: Sun, 25-Aug-85 00:03:19 EDT
Sender: news@brl-tgr.ARPA
Lines: 30

It wasn't too many years ago that the only digital codes allowed for Amateur transmission were International Morse, American Morse, and Baudot. Then the FCC allowed ASCII, and eventually AMTOR and "any digital code above 50.0 MHz."

I interpret those rules to have meant that before the allowance of arbitrary digital codes, it would have been illegal to transmit raw binary object code from your microcomputer over your packet-radio setup. It would have been legal, say, to transmit ASCII-coded representations of the hexadecimal characters that made up your object code. I believe the new rules are intended to permit the efficient transfer of data. After all, it only takes 8 bits of raw binary to send 8 bits of data as opposed to 16 bits of ASCII (i.e. two hex characters represented in ASCII). Also, the new rules permit experimentation with techniques such as Huffmann (Huffman?) codes for data compaction and convolutional codes for error correction.

The FCC has given us permission to experiment with modern techniques with the intent of increasing the usefullness and efficiency of digital communications. We must remember, however, that one of our rules (I don't have the number handy) forbids us from taking steps to hide or obscure the meaning of our transmissions. I know that there may be little chance of ever being charged with a violation of this rule as a result of your use of data encryption, although the probability might be about the same as for those fellows who get caught running 10 kW. The point is, if the FCC asks why it can't make heads or tails of your transmission, you better be able to hand them a paper explaining how your technique furthers the efficiency of Amateur communications. If you don't have a good answer, you may end up reading about yourself in the Happenings column in QST.

Bill
N1CPK

From -1010078518079348898
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bb727a2c1f6d51e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-21 13:00:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!hoffmann%marie@mit-mc.MIT.EDU
From: hoffmann%marie@mit-mc.MIT.EDU (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Radio activity
Message-ID: <861@brl-tgr.ARPA>
Date: Wed, 21-Aug-85 16:00:11 EDT

Article-I.D.: brl-tgr.861
Posted: Wed Aug 21 16:00:11 1985
Date-Received: Sun, 25-Aug-85 00:01:09 EDT
Sender: news@brl-tgr.ARPA
Lines: 25

I know that this isn't a particularly ham radio item
but I figured that hams would get as much a chuckle
out of it as anyone else.

From page 144 of the 1986 Radio Shack catalog, upper
left hand corner:

> "Radiation Monitor/Alarm...
>
> Like a smoke alarm alerts you to fire, this system
> warns of the occurrence of a nuclear incident early
> enough for taking intelligent, planned and effective
> action to protect yourself and your family.
> Continuously monitors the air for Gamma and X-rays.
> Exposure in excess of 4 milli-Rem/hour, about 1/25th
> of the dose necessary to cause any discernible
> effects, triggers the alarm. Includes graph for
> calculating actual exposure level. LED and audible
> alarm indicated when to replace battery. Reset/mute
> button. Mounts anywhere. Requires 9V cell. $39.95".

Actually, after thinking about it, I'm not sure whether to
laugh or cry.

Ron Hoffmann, WA2EYC

From 4305460191762276239
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ee4478a30a8e86ad,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-21 14:03:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!DSDC-SDT2@GUNTER-ADAM.ARPA
From: DSDC-SDT2@GUNTER-ADAM.ARPA (Walt Livingston)
Newsgroups: net.ham-radio
Subject: CV-89 TU
Message-ID: <866@brl-tgr.ARPA>
Date: Wed, 21-Aug-85 17:03:56 EDT
Article-I.D.: brl-tgr.866
Posted: Wed Aug 21 17:03:56 1985
Date-Received: Sun, 25-Aug-85 00:03:44 EDT
Sender: news@brl-tgr.ARPA
Lines: 16

H E L P !!!

  I recently acquired a CV-89 Terminal Unit for FSK transmissions. I don't have any documentation or specs. Does anyone out there know of this piece of gear. Is it easily convertable to AFSK (I want to use it on 2-meters attached to my Commodore 64). I run a TS-120 HF rig, and don't really know if it will handle FSK vs AFSK (power-wise).
Can anyone out there give me some technical poop on this equipment ??

  Many thanks in advance....

Walt, WA4YCM
Prattville, Alabama

From 5962086881261939751
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cd097b1a81b43435,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-22 09:29:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site cbnap.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!cbnap!gws
From: gws@cbnap.UUCP (Gary W. Sanders (N8EMR))
Newsgroups: net.ham-radio
Subject: (LONG) fun-n-games (LONG)
Message-ID: <45@cbnap.UUCP>
Date: Thu, 22-Aug-85 12:29:37 EDT
Article-I.D.: cbnap.45
Posted: Thu Aug 22 12:29:37 1985
Date-Received: Sat, 24-Aug-85 17:20:31 EDT
Distribution: net
Organization: AT&T Bell Labs Columbus,Ohio
Lines: 136

6/84
GEARVAKf News (Where the "f" is silent)

In this issue--

        SCIENTISTS SAY 2 METER BAND MAY BLOW UP

        RICHARD NIXON SEEKS WHITE HOUSE POST

        ADDING A "MAGIC EYE" TUNING TUBE TO THE TS-920S

        FCC LAUNCHES CALLSIGN STUDY

        TWO METER BAND EXPLOSION IMMINENT

SCIENTISTS SAY 2 METER BAND MAY BLOW UP

Scientists at the international Academy of Amateur Radio in Blue Bank, Sunderland, held a news conference today to reveal the results of a study which shows that the amateur radio two-meter band is on the verge of a violent explosion. The impending catastrophe was announced by Dr. Flaubert L'Spigot, Acad president. "Eet eez a beeg dangair zat zee two meetair band weel blowing up in zee face of zose who using eet," said Dr. L'Spigot. The good doctor's remarks were interpreted for the press by the Academy's press secratary, Ms. Pamela Sue Teton. "What Dr. L'Spigot said was that the two meter band might blow up soon," said Ms. Teton. When asked what Dr. L'Spigot meant by his statement, Ms. Teton explained that she did not have the faintest idea. At this point, all reporters know is that there is a possibility that the two meter band may blow up soon, but only those who understand some sort of foreign language know when or why. For more information be sure to stay tuned to this newsletter.

RICHARD NIXON SEEKS WHITE HOUSE POST

At a clandestine hideout meeting last Wednesday, an unnamed sorce told GEARVAKf Bulletin reporters that former President Richard M. Nixon is looking for a White House post to make his retirement years more meaningful. The post he would like to have, says the unnamed sorce, is one of those that holds up the roof on the North Portico at the White House. President Nixon wants the post to use in the redecoration of his New York condominium apartment.

CONSTRUCTION ARTICLE
-ADDING A "MAGIC EYE" TUNING TUBE TO THE TS-930

As most owners know, the Kenwood TS-930 is a fine rig with the exception that the built in S-meter is poor in appearance and awckward to use. With little difficulty, however, the S-Meter can be replaced by a sophisticated, green "magic eye" tuning tube as used in Gonset Communicators in years past. The electrical changes are simple. The existing S-Meter can be removed with a pry-bar or wood chisel. The front panel opening is then enlarged with a rat-tail file, and the "magic eye" tube is fixed in place with white "medical" adhesive tape. Use tinsnips to cut an empty Sucrets can to form a new bezel. Paint it grey for a professional appearance. The filimant transformer for the 6E5 tuning tube can be obtained from any junk TV set and mounted on the top cover of the transciever, 2 1/4 inches in from the right rear corner.

-N4GG-

FCC LAUNCHES CALLSIGN STUDY

Mr. Knurled F. Lywheel, spokesperson for the computer operations at the FCC, yesterday announced the start of a three-month study into new callsign allocations for the Amateur Radio Service. "Following the trend of the past few years," he said, "we will be changin?rall callsigns into a format that makes it easier for the FCC computer." (A Univac model 1-A) The study will determine if binary, hexadecimal or machin? language callsigns will be easiest. A typical Callsign like W1ABC will be changed to 1011000010110, 6A33EBO, or !&#??X-@ depending on the system finally selected.

-N4GG-

TWO METER BAND EXPLOSION IMMINENT

According to observations made at the GEARVAKf Scientific Studies Committee's Mt. St. Lishnus Observatory at Mt. Idy, Ohio, the two meter amateur band is in grave danger of violent destruction due to radio frequency overpressure. Said Studies Committee Charip'son, Dr. Arvuell U. Harnishe, Co-disoverer of the Harnish-Lishnus Effect, "It seems to me that the 2 meter band is on the verge of going ka-boom!" Dr. Harnishe explained that the build-up of radio frequency over-pressure has been going on for a long time, particularly since the marketing of supersenitive two meter recievers incorporated in the thousands of 2 meter transcievers sold. "What apparently is happening," said Dr. Harnishe, "is that the new recievers are not taking very much RF energy out of the 2 meter band because they don't require much signal to produce good readability at the speaker. "That being the case," he went on, "an excess amount of RF has been building up on the two meter band for many years due to the new, more sensitive recievers. Although the RF levels have been building up, Dr. Harnishe believes that there was plenty of rroom on the band to accomidate the excess RF due to a certain degree of elastmgity in the band. Elso, he pointed out that there has been a certain amount of leakage on the band which has acted as a saftey valve, until now. "What triggered the crisis ," Harnishe said, "were two events: first was the launch of OSCAR 10, which poured a great deal of downlink energy onto two meters for up to six hours per day without let up. The second was the W5LFL operation from the spacecraft Columbia. During the Space shuttle mission, so much RF was pumped into the two meter band by hams wanting to QSO with Owen that the band was stretch beyond it's elastic limit." According to Dr. Harnishe's Scientific Studies Committee Study Team, the two meter band began to show strech marks on the shuttles 79th pass. By the time the mission ended, the danger of expolsion was only averted by the cooling effect of frigid weather which overtook the country at the time. Even though two meter activity has returned to normal, the danger still exists because the newest crop of recievers are still more sensitive and require almost no RF in order to make a signal audible. That could cause a greater buildup of RF pressure on the band until it expoldes. Said Dr. Harnishe, "An explosion of the

band will cause widespread damage to all adjacent VHF frequencies and might irreparably damage two meters for all time. The only remedy for this crisis," he said, "is either to short circuit two meters to ground-- something we haven't figured out how to do, yet--or get everybody to o listen on two meters, preferably with very old recievers, and not transmit for at least six months." Noting that in some areas of the country this practice has been given a successful try, Dr. Harnishe is advocating that repeater groups in all big cities, particularly in and around Los Angeles, give the no-transmit idea a try.

-WB7TGQ-

--
test of sig file

From 4489588705730272337
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fcaa88a46326216a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-22 09:38:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 Unisoft-Cosmos; site kepler.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!decwrl!Glacier!well!
micropro!kepler!mojo
From: mojo@kepler.UUCP (Morris Jones)
Newsgroups: net.ham-radio
Subject: Re: Ham Radio and Computer Networking
Message-ID: <175@kepler.UUCP>
Date: Thu, 22-Aug-85 12:38:39 EDT
Article-I.D.: kepler.175
Posted: Thu Aug 22 12:38:39 1985
Date-Received: Sun, 25-Aug-85 01:05:22 EDT
References: <312@harvard.ARPA>
Reply-To: mojo@kepler.UUCP (mojo)
Distribution: net
Organization: MicroPro Int'l Corp., San Rafael, CA
Lines: 26

In article <312@harvard.ARPA> winkler@harvard.ARPA (Dan Winkler) writes:
>[eager to use packet radio to network computers]
>
>But regardles of whether anyone wants these services, I'm asking if
>they're possible. Can the airwaves serve as a cheap, fast, secure,
>computer network?

Yes they can. And they are, but under the normal restrictions of the Amateur
Radio regulations, which might put a bit of a damper on your enthusiasm.

Amateur Radio may not be used to conduct the normal business activities
of any business -- profit or non-profit. And Amateur Radio transmissions
must be in plain text, not encrypted, though any standard communications

code may be used. (I'm sure if I'm not current on my regulations I'll be told.)

That pretty much leaves out most of the USENET newsgroups, and a great deal of the UUCP mail traffic. Though USENET is probably closer to qualifying for distribution by Amateur Radio than anything else I've encountered.

de Mojo aa4kb
--
Mojo
... Morris Jones, MicroPro Product Development
{dual,ptsfa,hplabs}!well!micropro!kepler!mojo

From -7405835921930626768
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,acd517511b492315,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-22 10:31:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Reverse TVI comments
Message-ID: <19798@mgweed.UUCP>
Date: Thu, 22-Aug-85 13:31:22 EDT
Article-I.D.: mgweed.19798
Posted: Thu Aug 22 13:31:22 1985
Date-Received: Sun, 25-Aug-85 04:00:29 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 17

I have had the same problem with reverse TVI. In my case, the problem set is my own RCA XL-100. While it has a power transformer, the chassis is not isolated from ground. The primary has an autotransformer connection (about 200V I think) that is used for powering the deflection circuits so one side of the line cord connects to the chassis. Besides this, the case is non metallic and offers no shielding at all.

A good deal of the radiated horizontal deflection signal is via the AC line and a good grounded line filter will help. You did not state if the TV sets were using twin lead or coaxial antenna systems or connected to a cable system. Mine is fed with 300 ohm line and a TVI preventing type hi-pass filter in the lead-in helps reduce the radiation from the set also. I would think that 20 meter traps in the sets antenna system might help too.

Bob K9EUI

From -3443296526549978152

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,98936a494b6e6d60,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-22 10:35:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Aug 25 Hamfest notice
Message-ID: <19799@mgweed.UUCP>
Date: Thu, 22-Aug-85 13:35:49 EDT
Article-I.D.: mgweed.19799
Posted: Thu Aug 22 13:35:49 1985
Date-Received: Sun, 25-Aug-85 04:01:03 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 9

HAMFEST NOTICE:

This Sunday, Aug 25, is the date for the annual Fox River Radio League
hamfest to be held, as usual, at the Kane County fairgrounds on Randall
Road in St. Charles, IL. It is between IL. Routes 38 and 64.

Bob K9EUI

From -8874934534186191827
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4d473f9ae9cc38d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-22 10:37:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: help needed on rig price (SB-200)
Message-ID: <19800@mgweed.UUCP>
Date: Thu, 22-Aug-85 13:37:41 EDT
Article-I.D.: mgweed.19800
Posted: Thu Aug 22 13:37:41 1985
Date-Received: Sun, 25-Aug-85 04:01:29 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 6

I have a Heath SB-200 transciever with AC and mobile supplies and base
speaker for sale. Anyone know what this stuff is worth these days????

Bob k9EUI

From 2945165066074041834
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,befbe92cb1edc373
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-22 10:48:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Re: Ham Radio and Computer Networking
Message-ID: <477@petrus.UUCP>
Date: Thu, 22-Aug-85 13:48:14 EDT
Article-I.D.: petrus.477
Posted: Thu Aug 22 13:48:14 1985
Date-Received: Sat, 24-Aug-85 16:33:29 EDT
References: <312@harvard.ARPA> <168@bunny.UUCP>
Distribution: net
Organization: Bell Communications Research, Inc
Lines: 26

> "The transmission by radio of messages in codes or ciphers in domestic
> and international communications to or between amateur stations is
> prohibited. All communications regardless of type of emissions employed
> shall be in plain language except that generally recongnized
> abreviations established by regulation or custom and usage are
> permissible as are any other abreviations or signals where the intent is
> not to obscure the meaning but only to facilitate communications."

There has been considerable discussion on the topic of authentication vs
encryption in the amateur service. So far, the consensus is that the FCC
doesn't prohibit the use of codes as long as they are for the purpose of
authenticating the sender and not for the purposes of hiding what he's
saying. A precedent: touch tone codes for repeater control and so forth.
(There is a special exception that allows encryption on amateur satellite
control links, but that doesn't apply here.)

Paul Newland, AD7I, presented a paper suggesting several possible schemes
in this year's ARRL Computer Networking Conference. The basic idea is to
calculate some function over a packet, encrypt it and send it along with
the packet (which would be in plain text). Any modification or forgery
of the packet would likely cause the encrypted check number not to match.
You might think of this as a "checksum" or "CRC" function whose intent
is to protect against intentional corruption by an intelligent human
instead of random corruption by natural processes like noise.

Phil

From -3219571926771692576
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27bff2412da13191

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-22 12:04:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Ham Encryption
Message-ID: <893@brl-tgr.ARPA>
Date: Thu, 22-Aug-85 15:04:01 EDT
Article-I.D.: brl-tgr.893
Posted: Thu Aug 22 15:04:01 1985
Date-Received: Sat, 24-Aug-85 18:04:39 EDT
References: <853@brl-tgr.ARPA>
Organization: Ballistic Research Lab
Lines: 7

> I think that the context of the rest of the section, and of the rulemaking
> in which that section was created, makes it clear that the use of the
> word "code" does NOT allow for encryption. It is used in the
> sense of American Standard CODE for Information Interchange (ASCII), or
> the Baudot code (or Murray code) or Hollerith code or whatever.

You left out MORSE.

From -5836168663123493888
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,befbe92cb1edc373
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-22 12:10:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: Ham Radio and Computer Networking
Message-ID: <752@vortex.UUCP>
Date: Thu, 22-Aug-85 15:10:21 EDT
Article-I.D.: vortex.752
Posted: Thu Aug 22 15:10:21 1985
Date-Received: Sat, 24-Aug-85 17:27:42 EDT
References: <312@harvard.ARPA>
Organization: Vortex Technology, Los Angeles
Lines: 30

The ham bands have a number of very significant limitations as
far as computer networking is concerned:

1) No traffic that is even a little bit commercial can be transmitted.
   Much Usenet traffic falls into the "somewhat commercial" area,

including queries from people working for some company for some software or product, other people announcing software and products, etc. Job announcements, etc. also fall into this area. In general, there is a lot of content on Usenet that would be considered commercial under FCC rules.

2) Rules for content (no libelous, copyrighted, obscene, etc.) material are very strict.

3) No unscreened third-party traffic may be transmitted on the ham bands. Virtually all netnews materials, other than particular articles written by the person owning the radio him/herself, would fall into this category! A ham would have to sit there and screen every article before initial transmission into the ham bands, and would also in practice be taking responsiblity for the "legality" of those messages under points (1) and (2) above. A pretty risky situation.

4) Encryption for the purpose of obscuring message contents is absolutely forbidden on the ham bands.

As you can see, the rules governing the ham bands are fairly strict and introduce a number of VERY significant limitations.

--Lauren--

From -607585902201100474
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd8e02b93e6e36,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-23 06:23:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!pur-ee!mahler
From: mahler@pur-ee.UUCP (Steve Mahler)
Newsgroups: net.ham-radio
Subject: TAPR TNC I For Sale
Message-ID: <3193@pur-ee.UUCP>
Date: Fri, 23-Aug-85 09:23:14 EDT
Article-I.D.: pur-ee.3193
Posted: Fri Aug 23 09:23:14 1985
Date-Received: Sun, 25-Aug-85 00:18:09 EDT
Reply-To: mahler@pur-ee.UUCP (Steve mahler)
Organization: Electrical Engineering Department , Purdue University
Lines: 11
Summary:

<vox>
FOR SALE .... TAPR TNC I (Rev 2 Board, upgraded to 3.3 software) with 5 volt regulator off board. No, I'm not dropping packet but just selling one of two TNC I's (need the money). Its serial number is in the 11 hundred range, and was operated without

any failures from the first power-up. Manual included.
$185 and I pay shipping.

(317)-494-3373 weekdays or {decvax|ucbvax|inuxc}!pur-ee!mahler

73 ... Steve, N9DRR

From -7309744180501822104
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cbfb86bdec15a5f5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-23 06:36:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site genat.UUCP
Path: utzoo!utcs!mnetor!genat!george
From: george@genat.UUCP (George Gorsline)
Newsgroups: net.ham-radio
Subject: Re: Reverse TVI [:-}] ?
Message-ID: <2503@genat.UUCP>
Date: Fri, 23-Aug-85 09:36:28 EDT
Article-I.D.: genat.2503
Posted: Fri Aug 23 09:36:28 1985
Date-Received: Sat, 24-Aug-85 03:23:44 EDT
References: <726@brl-tgr.ARPA>
Organization: Genamation Inc. (Toronto Ontario, Canada)
Lines: 51

> I am having problems with signals from my (and my neighbors) televisions
> getting into my HF radio gear. What I am experiencing is "howling"
> signals spaced about 15 khz. across the HF spectrum; 20 meters seems to
> be the worst. I am using a Butternut vertical, and Atlas, Ten Tec and
> Heath radios.
>
> I would appreciate hearing from anyone who has an idea how I can eliminate
> this "reverse TVI" problem.
>
>   Tnx es 73
>
>   Jeff Rininger (jeffr@sri-spam)
>   KA6ZBU

I tried to mail a response, but the path didn't make it...

What you have is ITV - the 15.75 kHz horizontal oscillator is radiating and
giving you the problem. It isn't too easy to live with. Some ideas:

1. If you disconnect the antenna, does it go away? If so, its coming via
    radiation. Add a high-pass filter to the TV, and a ferrite rod or
    toriod on the power cord. If the set has a metal chassis [dream on],
    then ground it but carefully as AC cord reversal could be a shock
    hazard.

2. If its coming via the power line, the above is useful as well as a line
    filter on the rig [computer surge suppressors often work well]. A
    good ground especially on a vertical is always helpful. Mounting the
    vertical on the roof so its above the "view" of the TVs should help.

Finally, you may have to live with it. In a dense urban area you will have
all sorts of crud you can't eliminate and all sorts of nasty things you do
to your neighbours as the result of being *VERY* close. An expense ricebox
with good blanking and using hardline or 100% coverage coax to a balun on
on a dipole or a reasonable radial system on a vertical are helpful, but
ultimately you gotta live with it. I know from ten years of living in
a row house with the antenna (beam) on the roof, 75 m from a 110 KV power
line in downtown Toronto - oh I forgot the hill too! But, DXCC and good
hamming is a matter of making do and forgetting about those W5s with the
200' towers in the quiet country! It also means you sometimes have to
call twice to crack the pile HI HI!

GL es 73,

--
     George Gorsline, Jr. VE3FIU / K8HI
     One of the VE3YDX gang... Y DX? Because it's there(~Y)!

     Genamation, 351 Steelcase Rd. West, Markham Ontario L3R 3W1
     {allegra|linus|ihnp4|...}!utzoo!mnetor!genat!george
     (416) 475-9434

From 3097678726264298543
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,97f546aa2d58faea,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-23 09:37:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!price%marlin@nosc.ARPA
From: price%marlin@nosc.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: Re: FCC announces 80-90 channels
Message-ID: <920@brl-tgr.ARPA>
Date: Fri, 23-Aug-85 12:37:21 EDT
Article-I.D.: brl-tgr.920
Posted: Fri Aug 23 12:37:21 1985
Date-Received: Sun, 25-Aug-85 00:35:20 EDT
Sender: news@brl-tgr.ARPA
Lines: 19

Sir--I would be VERY interested in seeing the FM station list, but
I am not enough of a hacker to know how to read it on net.analog.
Lord knows I've tried, but I have no idea how to get to the article
selection level in net.analog where I can find the header of your

message and thence read it.

So, could you either post it here on net.ham-radio, send me a copy
(PRICE@NOSC.ARPA), or tell me EXACTLY how to get to it via readnews,
please?

Sorry to sound like such a novice, but on computers, I am! Thanx--

Jim Price, K6ZH, San Diego, CA
(619) 225-2665

P.S. Please don't tell me to read the "readnews" documentation as
I did and I still have no idea how to read news!

From 316581671488153205
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,45fbf84edf4fe42a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-23 09:55:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!ulysses!gamma!epsilon!zeta!
sabre!petrus!bellcore!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA (Richard Shapiro)
Newsgroups: net.ham-radio
Subject: seeking reviews/opinions
Message-ID: <922@brl-tgr.ARPA>
Date: Fri, 23-Aug-85 12:55:46 EDT
Article-I.D.: brl-tgr.922
Posted: Fri Aug 23 12:55:46 1985
Date-Received: Mon, 26-Aug-85 00:44:27 EDT
Sender: news@brl-tgr.ARPA
Lines: 15

I'm looking for reviews and opinions of the Sony ICF-2002 and ICF-2010
(the WRTH reviews I've already read). Reports of personal experience
with these would be nice...Also does anyone know the story on the
availability of the 2010? I can't find any locally in the Boston area.
EEB doesn't have them at the moment either.

Comparisons of these radios with the Uniden CR2021 especially welcome.

Many thanks,

R. Shapiro

p.s. The 2002 is known outside N. America as the 7600D. The 2010 is,
I believe, known as the 2001D outside N. America.

From -2751474065676587078
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,413b7dac8473de44,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-23 15:31:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 33
Message-ID: <19831@mgweed.UUCP>
Date: Fri, 23-Aug-85 18:31:26 EDT
Article-I.D.: mgweed.19831
Posted: Fri Aug 23 18:31:26 1985
Date-Received: Sun, 25-Aug-85 03:14:59 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 46

NOTE: Due to many requests, I will again attempt to post the
weekly DX bulletin. Propagation is not always ideal and I cant
always get it within the 24 hrs they have it, but I will try.
I am not responsible for any typos in the text due to QSB/QRM.

Bob, K9EUI

qst de k9eui
hr dx bulletin nr 33 from arrl headquarters
newington, ct august 23
to all radio amateurs bt

sao tome. s92lb is still active on weekdays. look for him on
14183 khz between 2200 and 2330z.

galapagos islands. a dxpedition signing hc1bi will be active on
all bands and modes through august 24. qsl via quito radio
club, p.o. box 289, quito, ecuador.

kerguelen islands. look for ft8xb on 20 meter ssb between 0400
and 0600z.

luxembourg. pi4hsb/lx will be active through august 26.

north cook islands. zk1wl, operated by zl3afh, expects to be
active through the end of the year.

willis island. watch for vk9zb on the p29js net at 0700z, as
well as on 40 and 75 meters between 1000 and 1100z.

uganda. jerry, 5x5vk, is back in uganda and active on 20 meter

ssb from 1800 to 1930z.

mali. tz6fs and tz6wc, a yl, are now active in mali. qsl via
dl4bc.

christmas island. vk9xj looks for north americans on 20 meter
ssb from 1200 to 1300z.

asia contest. dont forget the all asia cw contest august 24
and 26.

cayman islands. zf2bn, operated by w4het, is now active ar

From -539892786138301568
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13375c,4a7ff2e90dafd408
X-Google-Attributes: gid13375c,public
X-Google-Thread: 151e61,4a7ff2e90dafd408
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-23 17:59:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site joevax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!pyuxww!pyuxa!bambi!joevax!danny
From: danny@joevax.UUCP (Dan Kahn)
Newsgroups: net.ham-radio,net.aviation
Subject: Re: SALYUT_7 SWLING
Message-ID: <42@joevax.UUCP>
Date: Fri, 23-Aug-85 20:59:19 EDT
Article-I.D.: joevax.42
Posted: Fri Aug 23 20:59:19 1985
Date-Received: Sun, 25-Aug-85 00:26:42 EDT
References: <3596@decwrl.UUCP>, <163@bunny.UUCP>
Organization: Bell Communications Research, Inc.
Lines: 12
Xref: watmath net.ham-radio:3105 net.aviation:1911

Regarding the aircraft-band freq's listed for Salyut 7:

121.75 MHz is used (at least in North America) exclusively for
ground control (tower to aircraft on ground). Nevertheless, the
Russian cosmonauts do use it for spacecraft-to-ground: I have heard
them on this freq.

As for 121.5 MHz, I too would be very surprised to find the
Russians using it for anything other than emergency communications.

From 3568405715960342678
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27bff2412da13191

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-24 13:28:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Re: Ham Encryption
Message-ID: <479@petrus.UUCP>
Date: Sat, 24-Aug-85 16:28:27 EDT
Article-I.D.: petrus.479
Posted: Sat Aug 24 16:28:27 1985
Date-Received: Sun, 25-Aug-85 12:59:23 EDT
References: <860@brl-tgr.ARPA>
Organization: Bell Communications Research, Inc
Lines: 24

We are fortunate that the encryption prohibition is worded the way that
it is, with the key point being whether there is intent to obscure the
meaning of a message. This allows us complete freedom to experiment with any
sophisticated, nonstandard encoding method we choose without worrying
about difficult it might be to monitor. As long as it serves some valid
communication purpose other than hiding the message, we're OK.

A case in point is the 9600 baud FSK modem design by Steve Goode, K9NG.

Steve's biggest problem was to get rid of the DC components in a data stream;
this simplifies the design greatly, since you can use AC coupling and not
worry about things like op-amp offsets, crystal tolerances, etc. One
approach is Manchester encoding, but this effectively doubles the bandwidth
required for the signal. Steve's solution was to add a pseudo-random stream
to the data at the transmitter, removing it at the receiver. In the
commercial world, this technique is commonly known as "bit scrambling", a
term with unfortunate connotations. (The technique DOES resemble an
encryption system, although one based on a linear feedback shift register
would be very easy to break.) However, since Steve's intent is not to obscure
the meaning of a message but rather to simplify the hardware design, it is
acceptable. (Of course, it also helps that he published the algorithm and
encoding/decoding circuit at the last ARRL packet radio conference.)

Phil

From 6792006274211305584
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e2e1e94946142c60,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-24 23:24:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxa.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!houxa!pmbs
From: pmbs@houxa.UUCP (P.BILODEAU)
Newsgroups: net.ham-radio

Subject: TS 520 For Sale
Message-ID: <767@houxa.UUCP>
Date: Sun, 25-Aug-85 02:24:18 EDT
Article-I.D.: houxa.767
Posted: Sun Aug 25 02:24:18 1985
Date-Received: Mon, 26-Aug-85 00:43:05 EDT
Organization: Bell Communications Research, Inc.
Lines: 15

FOR SALE: Kenwood TS-520 in excellent condition. Available with
or without DG5 digital display. Reason for sale--
owner has upgraded radios. Radio and display currently
in use until owner goes south for the winter.

Price $500.00 for both the radio and display.
$400.00 for the radio. $125 for the DG5.

For more information please contact N1CFI
Maurice Bilodeau
Rt1 Box 1756
Oakland, Maine 04965
207-465-2796

From 5345887279486986323
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,97f546aa2d58faea
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-25 12:18:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA
Newsgroups: net.ham-radio
Subject: FCC announces 80-90 channels
Message-ID: <962@brl-tgr.ARPA>
Date: Sun, 25-Aug-85 15:18:01 EDT
Article-I.D.: brl-tgr.962
Posted: Sun Aug 25 15:18:01 1985
Date-Received: Wed, 28-Aug-85 02:01:06 EDT
Sender: news@brl-tgr.ARPA
Lines: 15

Now available to Arpa/Milnet readers, via FTP is:

Filename Type Bytes CRC

SIMTEL20 directory MICRO:<CPM.HAMRADIO>
FCC.LOTTERY.1 ASCII 16515 7458H

David Anthony <decvax!mcnc!unccvax!dsi@Ucb-Vax.ARPA> recently posted

this list of the FCC lottery results for the 683 80-90mHz FM channels
opened up beginning in October.

There are also details of how the assignments were arrived at, and how
you can compute where the transmitter has to go (a few of these really
are limited to an area of 1 - 2 sq miles or so, the area being in a
genuine, 8 foot deep, swamp).

From 3139686759246237358
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cbd169d313e21ede,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-25 12:24:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!decvax!decwrl!spar!turtlevax!
weitek!mae@Ucb-Vax.ARPA
From: mae@Ucb-Vax.ARPA
Newsgroups: net.ham-radio
Subject: Re: DC-DC converter ICs - try MC145406 instead of 1488
Message-ID: <963@brl-tgr.ARPA>
Date: Sun, 25-Aug-85 15:24:46 EDT
Article-I.D.: brl-tgr.963
Posted: Sun Aug 25 15:24:46 1985
Date-Received: Thu, 29-Aug-85 06:12:02 EDT
Sender: news@brl-tgr.ARPA
Lines: 13

In article <301@cmu-cs-g.ARPA>, monta@cmu-cs-g.ARPA (Peter Monta) writes:
> Are there ICs which convert +5V to +15V and -15V, at about 40mA each?
> This would be very convenient for providing RS-232 signal levels;
> often this is the only place such voltages are needed. (1488s require
> about 40mA at each voltage.)   ------

You might be interested in a new part from Motorola, it's the
MC145406. It's a CMOS tranceiver that combines the functions of the
1488 and 1489. It contains 3 drivers and 3 receivers. It runs on +-5
V. And it uses 1/10 the power of the 1488. Price is $1.59 in 100-unit
quantities (see _Electronic Design_, August 8,1985, pg. 149).

Mike

From -5053315032118186436
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58c6ddf53614afd3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 06:40:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!

FAC0392%UOFT01.BITNET@WISCVM.ARPA
From: FAC0392%UOFT01.BITNET@WISCVM.ARPA (Len Brady)
Newsgroups: net.ham-radio
Subject: Any luck with the phone?
Message-ID: <976@brl-tgr.ARPA>
Date: Mon, 26-Aug-85 09:40:22 EDT
Article-I.D.: brl-tgr.976
Posted: Mon Aug 26 09:40:22 1985
Date-Received: Wed, 28-Aug-85 02:37:55 EDT
Sender: news@brl-tgr.ARPA
Lines: 11

I spent a couple of frustrating days trying to get through to TAPR last
Monday to place my phone order for a TNC-2. It seems that the phone company
found out what was going on and decided to intervene by telling some great
proportion of the callers that "All circuits are busy. Please place your
call later." A friend of mine figured out how to test this and sure enuf!
the circuits were NOT busy. At any rate, after twelve hours of frustration,
I gave up. Does anybody know how to get one by mail????

73

Len KF8J

From -4298346834577526680
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fa372480950d8818,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 07:12:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!Dbennett%xmm-
plexus01.amc@amc-hq.arpa
From: Dbennett%xmm-plexus01.amc@amc-hq.arpa
Newsgroups: net.ham-radio
Subject: Listing of Packet Radio Bulletin Boards
Message-ID: <978@brl-tgr.ARPA>
Date: Mon, 26-Aug-85 10:12:09 EDT
Article-I.D.: brl-tgr.978
Posted: Mon Aug 26 10:12:09 1985
Date-Received: Wed, 28-Aug-85 02:40:00 EDT
Sender: news@brl-tgr.ARPA
Lines: 63

The following message was forwarded to me by W3IWI in Baltimore and I thought
it would be of interest to all. If anyone has additional information let me
know.

Msg# TR Size To   From   @ BBS Date   Title
6324 BN 1682 ALL   WB2RVX W3IWI 850817 Forwarded from WB2RVX at 0422Z

```
 867 BN  1617 ALL    WA2RKN W3IWI  850816 de WA2RKN-2 @ 1808 UTC
1632 BN  1556 ALL    KE1G   W3IWI  850816 Linked bbs network
At KE1G: 2188 From W0RLI Rcd 850815/1628 Sent 850816/0703z
At W0RLI: 5774 From W0RLI Rcvd 850815/1220. Sent 850815/1628
The following stations run bbs's of one nature or another.
All are linked by way of automatic forwarding.
  List as of 08/15/85

 W1AW-4         NEWINGTON, CT           (ARRL HQ STATION)
 K1BC           LEXINGTON, MA
 N1DL           SUDBURY, MA             (HF/VHF GATEWAY)
KE1G-1          GOFFSTOWN, NH
 N1DKF          CRANSTON, RI
WB1DSW          EAST KINGSTON, NH
WA1LRL-1        BEVERLY, MA             (145/441 GATEWAY)
WB2MNF          MEDFORD, NJ
AI2Q            FREEPORT, NY
WA2RKN-2        HYDE PARK, NY
WB2RVX          PENNSAUKEN, NJ
WA2SNA-1        WAYNE, NJ
KC2TN           ATCO, NJ                (HF/VHF GATEWAY)
WA2VKH          CARLSTADT, NJ
 N2WX-1         PALM BAY, FL
KC3BN           HARRISBURG, PA
WB3EYB          HARRISBURG, PA
 K3GYS          ATCO, NJ
 W3IWI          CLARKSVILLE, MD         (145.01/145.05 GATEWAY)
AK3P            HUMMELSTOWN, PA
KS3Q            BALTIMORE, MD
WA3QFN          MARGATE, FL
 K3RLI          WILKES BARRE, PA
 K3VPZ          GRANITE, MD             (HF/VHF GATEWAY)
KA4AHO          ORLANDO, FL             (HF/VHF GATEWAY)
 N4CI           ATLANTA, GA             (HF/VHF GATEWAY)
KF4JF           HAHIRA, GA              (HF/VHF GATEWAY)
NK4K            MIAMI, FL
 K4NTA          STUART, FL              (HF/VHF GATEWAY)
WA4SZK          FLORENCE, SC            (HF/VHF GATEWAY)
 K4TKU          MIAMI, FL
KI4XO           MARIETTA, GA            (HF/VHF GATEWAY)
WB4ZNW          MOULTRIE, GA
WB5VUL-1        PALO ALTO, CA
WA5MWD          GARLAND, TX
 W5XO           GAUSE, TX               (HF/VHF GATEWAY)
 W6CUS-1        RICHMOND, CA
KD6SQ           RANCO CUCAMONGA, CA     (HF/VHF GATEWAY)
WB7DCH          ENUMCLAW, WA            (HF/VHF GATEWAY)
 K7PYK          SCOTTSDALE, AZ          (HF/VHF GATEWAY)
WA0JFS-1        DES MOINES, IA
KC0OJ           BATTLE CREEK, IA
NA0P            AMES, IA
KI0Q            AMES, IA                (HF/VHF GATEWAY)
 W0RLI          WESTFORD, MA            (HF/VHF GATEWAY)
```

NA0S AMES, IA
AI0Z ROLAND, IA
VE3FXI OTTAWA, ON

From 1348026274345620973
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,74dd8650d2a8fb95,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 08:01:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!rachiele@NADC
From: rachiele@NADC
Newsgroups: net.ham-radio
Subject: puzzling question
Message-ID: <996@brl-tgr.ARPA>
Date: Mon, 26-Aug-85 11:01:39 EDT
Article-I.D.: brl-tgr.996
Posted: Mon Aug 26 11:01:39 1985
Date-Received: Wed, 28-Aug-85 02:52:08 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

While studing for my Tech test, I found a strange question in the question
pool. The question is, What is the 12 meter band? The answer was, 24.79
to 24.99. Is this a Ham band? What class? All the other question in that
section refered to Ham bands, but no chart of Ham frequencies ever listed
that band, including the chart in the same book I got the question from!
(ARRL general study guide 1985-86) Can anyone shed some light on this?
Jim Rachiele
KA3OKP

From -1874432131106099656
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc257787032a2de3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 09:57:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!aiz@JPL-VLSI.ARPA
From: aiz@JPL-VLSI.ARPA
Newsgroups: net.ham-radio
Subject: Blown Modem
Message-ID: <1001@brl-tgr.ARPA>
Date: Mon, 26-Aug-85 12:57:50 EDT
Article-I.D.: brl-tgr.1001
Posted: Mon Aug 26 12:57:50 1985
Date-Received: Wed, 28-Aug-85 20:09:20 EDT

Sender: news@brl-tgr.ARPA
Lines: 16

While tuning up on 40 meters last night, my electronic phone started making funny noises. When I tried to use the phone, it was dead. I "fixed" the phone by discharging all the capacitors (big tantalums) and plugging the phone back into the phone line. The phone worked fine. The phone is phone line powered and I think that the bridge on the input to extract the battery was rectifying RF and did strange things to bias circuits in an inoperable way. I seem to have solved the problem with a .005 uf cap across the tip and ring.

My US Robotics Password Modem, however, also appears to have died; apparently from the same cause.

Has anyone experienced similar problems from "RFI"?

Art Zygielbaum, WA6SAL

From 8877987161630779475
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,97f546aa2d58faea
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 13:23:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!KOHNEN.wbst@Xerox.ARPA
From: KOHNEN.wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: FCC announces 80-90 channels
Message-ID: <1009@brl-tgr.ARPA>
Date: Mon, 26-Aug-85 16:23:29 EDT
Article-I.D.: brl-tgr.1009
Posted: Mon Aug 26 16:23:29 1985
Date-Received: Wed, 28-Aug-85 11:17:32 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

David,
This FCC lottery business is very interesting but it leaves me with several questions. I hope you will be able to supply the answers or tell me where to look.

1. Is there any way of knowing the class of each assignment?

2. What units are the spacings expressed in?

3. Is there any way of knowing when the FCC will accept an application for a particular channel? In other words, can I apply now for an assignment from group #16 or do I have to wait until #15 is closed?

Regards,
Lou Kohnen, K2ANC

From -4654220695791028332
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,97f546aa2d58faea
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 13:44:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!KOHNEN.wbst@Xerox.ARPA
From: KOHNEN.wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: FCC announces 80-90 channels
Message-ID: <1010@brl-tgr.ARPA>
Date: Mon, 26-Aug-85 16:44:50 EDT
Article-I.D.: brl-tgr.1010
Posted: Mon Aug 26 16:44:50 1985
Date-Received: Wed, 28-Aug-85 11:18:02 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

David,
This FCC lottery business is very interesting but it leaves me with several questions. I hope you will be able to supply the answers or tell me where to look.

1. Is there any way of knowing the class of each assignment?

2. What units are the spacings expressed in?

3. Is there any way of knowing when the FCC will accept an application for a particular channel? In other words, can I apply now for an assignment from group #16 or do I have to wait until #15 is closed?

Regards,
Lou Kohnen, K2ANC

From -6604362647608557144
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ca6013b132ef4a56,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 14:31:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.ARPA
Newsgroups: net.ham-radio

Subject: tone burst for European repeaters
Message-ID: <1012@brl-tgr.ARPA>
Date: Mon, 26-Aug-85 17:31:49 EDT
Article-I.D.: brl-tgr.1012
Posted: Mon Aug 26 17:31:49 1985
Date-Received: Wed, 28-Aug-85 11:19:24 EDT
Sender: news@brl-tgr.ARPA
Lines: 8

If you have a reasonably accurate sense of pitch, you can whistle into your
radio at the start of each transmission and key the repeater that way.
This is inconvenient, but then again so is modifying your radio before a trip!

Have a good trip!

73,
John S., W3IKG

From 8748102420960179416
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2971d818f7a8b941,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 14:52:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.ARPA
Newsgroups: net.ham-radio
Subject: strategems for hidden encryption etc.
Message-ID: <1015@brl-tgr.ARPA>
Date: Mon, 26-Aug-85 17:52:59 EDT
Article-I.D.: brl-tgr.1015
Posted: Mon Aug 26 17:52:59 1985
Date-Received: Wed, 28-Aug-85 11:28:39 EDT
Sender: news@brl-tgr.ARPA
Lines: 20

One reason the Amateur Radio Service has always been treated so well
by the FCC is that we have a tradition of self-policing of adherence to the
rules and regulations. Tricks to "hide" encrypted material in plaintext would
run counter to this tradition and therefore would be very strongly frowned
upon by most hams.

Also, if such a trick SHOULD be noticed by the authorities, the culprits
might find themselves in a lot of hot water not just with the FCC but with
the FBI until the Feds satisfied themselves that it was in fact just some
computer hobbyists and not something more sinister.

As for cryptographic authentication schemes for computer login, I suspect
that the FCC could be brought around to approving this as in the public
interest as a better way of controlling access to radio-based systems.

The key fact here is that encryption is not used to obscure meaning but to control unauthorized access, and nothing in the rules seems to prohibit this.

73,
John S., W3IKG

From 6223720269298801604
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,153510a25c088f80,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 15:01:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site shark.UUCP
Path: utzoo!decvax!tektronix!orca!shark!philb
From: philb@shark.UUCP (Phil Biehl N7FWL)
Newsgroups: net.ham-radio
Subject: UHF Collinear-Coaxial Antenna Help
Message-ID: <1515@shark.UUCP>
Date: Mon, 26-Aug-85 18:01:53 EDT
Article-I.D.: shark.1515
Posted: Mon Aug 26 18:01:53 1985
Date-Received: Tue, 27-Aug-85 13:15:36 EDT
Distribution: na
Organization: Tektronix, Wilsonville OR
Lines: 23
Xref: tektronix net.ham-radio:03181

I am looking at this type of antenna to use as a base/repeater gain vertical and would like to communicate with some one who has experience and/or knowledge about building these babies.

My sole source is an old ARRL FM and Repeaters Manual and the diagram describing it is for a single halfwave array. I would like to add more sections to increase the gain but do not understand how this is accomplished. The diagrammed array from the bottom to the top consists of: a 1/4 wave stub (for reducing feedline radiation), a 1/4 wave section, a 1/2 section, another 1/4 wave, and finally a 1/4 whip at the top. What I want to do is to add more sections for a higher gain figure but do not know which sections to duplicate. Do I add just more 1/2 wave sections or do I need to add 1/4 wave sections along with the 1/2 wave sections?

Any and all help appreciated. TNX

73
Phil Biehl, N7FWL
503-685-2122
tektronix!shark!philb

From -2102321644481958967
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2b01f3134489fdae,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 18:42:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 74 (dir/vice dir elections)
Message-ID: <19938@mgweed.UUCP>
Date: Mon, 26-Aug-85 21:42:47 EDT
Article-I.D.: mgweed.19938
Posted: Mon Aug 26 21:42:47 1985
Date-Received: Wed, 28-Aug-85 20:16:48 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 72

qst de k9eui
hr arrl bulletin nr 74 from arrl headquarters
newington ct august 26, 1985
to all radio amateurs bt

the arrl executive committee met august 24, 1985, to examine
nominating petitions filed by members in seven divisions for arrl
director and vice director for two year terms of office beginning
january 1.

the following candidates are unopposed and so were declared elected
without balloting.

atlantic director hugh turnbull, w3abc
dakota director tod olson, k0to
delta director clyde hurlbert, w5ch
great lakes director george s. wilson, w4oyi
pacific director rodney j. stafford, kb6zv.

dakota vice director howard mark, w0ozc
southeastern vice director evelyn gauzens, w4wyr.

ballots were ordered mailed to full members in six divisions, as
follows.

atlantic division
   for vice director
      bardsley, kb3om
      mozley, w2bch

delta division
   for vice director

      oubre, k5dvg
      schmidt, w5ghp

great lakes division
   for vice director
      elliott, ka4jmz
      severson, ab8p

midwest division
   for director
      grauer, w0fir
      mccaffrey, k0cy

   for vice director
      eilers, w0yzv
      ridenour, kb0zl

pacific division
   for vice director
      delauney, w6pht
      hill, w6rff
      edwards, w6szn
      koropp, w6yfw

southeastern division
   for director
      butler, w4rh
      henson, wb4znh
in separate elections held in canada, thomas b. j.natkins, ve3cdm,
was reelected without opposition as president, crrl, and harry
maclean, ve3gro, was reelected without opposition as vice president,
crrl. they will serve, therefore, as director and vice director,
respectively, of the canadian division, arrl.

ballots must be received by noon november 20, and will be counted on
the following day.

election results will be announced by subsequent bulletin ar

From -6060599179152852598
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8205186b0b1b3510,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 18:43:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 73 (sec. mgr. elections)
Message-ID: <19939@mgweed.UUCP>
Date: Mon, 26-Aug-85 21:43:22 EDT

Article-I.D.: mgweed.19939
Posted: Mon Aug 26 21:43:22 1985
Date-Received: Wed, 28-Aug-85 20:17:06 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 13

qst de k9eui
hr arrl bulletin nr 73 from arrl headquarters
newington ct august 23, 1985
to all radio amateurs bt

ballots for the section manager elections for kentucky, los angeles and sacramento valley sections have been counted according to the prescribed rules. the following have been declared elected. kentucky - wa4jte, los angeles - aj6f, and sacramento valley - w6iew. their terms of office begin october 1, 1985 ar

From 4383440166005477377
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1e8fad4b9de62ce3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 18:44:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 34A
Message-ID: <19940@mgweed.UUCP>
Date: Mon, 26-Aug-85 21:44:00 EDT
Article-I.D.: mgweed.19940
Posted: Mon Aug 26 21:44:00 1985
Date-Received: Wed, 28-Aug-85 20:17:35 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 36

qst de k9eui
hr propagation forecast bulletin nr 34a from arrl headquarters
newington, ct august 26, 1985
to all radio amateurs bt

beginning august 11 the solar flux was at 69 or lower every day through the 21st, and no higher than 71 through the 25th. this is the most pronounced flux low since the beginning of cycle 21 more than 9 years ago. perhaps even more important, the august flux curve is no better than just even with the july curve at any time. from july 7 through 11 the flux was between 95 and 101. one solar rotation later it was 77 or 76 in the corresponding 5 days, and this was during the best days of

august. through all of the months to date, the flux has never more than just equaled the figure for the july rotation, and it has been as much as 25 points below it.

the propagation effects of the lower flux have been obvious. except for occasional sporadic e skip, there has been practically no dx on 28 mhz, and very little on 24 or 21 mhz. even reception of the usually reliable 10 mhz wwv has been poor or nonexistent in the early morning hours in connecticut.

no sunspots have been seen by the writer since august 10 despite good viewing conditions nearly every day. it is now more than a month since anything more than a single small spot has been seen, and that was back in july. the long calm may end in early september, if not before. geomagnetic activity is likely to be higher around august 27 but generally good propagation is expected at the months end and in the first few days of september.

american sunspot numbers for august 15 to 21 were between 0 and 5 with a mean of 1.7 ar

From 6294614845383102609
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,930784ef28b8f514,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-26 19:22:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA (Keith Petersen)
Newsgroups: net.ham-radio
Subject: packet.mail
Message-ID: <1020@brl-tgr.ARPA>
Date: Mon, 26-Aug-85 22:22:08 EDT
Article-I.D.: brl-tgr.1020
Posted: Mon Aug 26 22:22:08 1985
Date-Received: Thu, 29-Aug-85 08:24:14 EDT
Sender: news@brl-tgr.ARPA
Lines: 32

> Can you tell me how to get on the packet list? I know almost
> nothing about packet, but I do know computers, and now have a
> Tech licence.
>
> Jim Rachiele
> KA3OKP (interum KT)

Arpa/Milnet readers may subscribe to the packet radio mailing list by sending a note to PACKET-RADIO-REQUEST@MIT-EDDIE.ARPA.

A multi-part packet radio tutoral has recently begun and the first
four parts are now available via anonymous FTP (password GUEST) from
SIMTEL20 as:

```
Filename          Type  Bytes    CRC

Directory MICRO:<CPM.PACKET>
TEXNET.001.1           ASCII      6768  EF6CH
TEXNET.002.1           ASCII      7009  A772H
TEXNET.003.1           ASCII     10248  D82CH
TEXNET.004.1           ASCII      6455  C445H
```

Usenet readers can read these by using "readnews", "vnews", or "rn"
(whatever their favorite net news reader is) and telling it they want
to subscribe to net.ham-radio-packet

--Keith Petersen
Arpa: W8SDZ@SIMTEL20.ARPA
uucp: ...!seismo!SIMTEL20.ARPA!W8SDZ
uucp: ...!{decvax,unc,hao,cbosgd,seismo,aplvax,uci}!brl-bmd!w8sdz
uucp: ...!{ihnp4!cbosgd,cmcl2!esquire}!brl-bmd!w8sdz

```
From 1751991015298233541
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58c6ddf53614afd3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-27 00:12:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: Any luck with the phone?
Message-ID: <759@vortex.UUCP>
Date: Tue, 27-Aug-85 03:12:50 EDT
Article-I.D.: vortex.759
Posted: Tue Aug 27 03:12:50 1985
Date-Received: Wed, 28-Aug-85 21:13:33 EDT
References: <976@brl-tgr.ARPA>
Organization: Vortex Technology, Los Angeles
Lines: 9
```

The circuits most definitely *were* busy--telco didn't step in until
the fireworks were already all over. Note that circuit busy conditions
can exist at both the originating and terminating ends of the circuits,
which seemed to be the case in many instances on TAPR day. About
10K call attempts/hour were being logged to the TAPR number. Note,
however, that a couple of hundred people with daemon dialers can easily
achieve this call count.

--Lauren--

From -1144750511766531741
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5746dc54b8f79d0e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-27 03:06:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
mauseth%vax.runit.unit.uninett@NTA-VAX
From: mauseth%vax.runit.unit.uninett@NTA-VAX (Kai Mauseth)
Newsgroups: net.ham-radio
Subject: contest results
Message-ID: <1023@brl-tgr.ARPA>
Date: Tue, 27-Aug-85 06:06:25 EDT
Article-I.D.: brl-tgr.1023
Posted: Tue Aug 27 06:06:25 1985
Date-Received: Thu, 29-Aug-85 20:36:10 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

Has anyone received the results from CQ WORLD WIDE phone contest
in 1984 yet? I would be interested to know the result from my
operation in Malta as 9H3DN. I don't have the CQ magazine, so I
think the info will arrive late here.

- 73 de Kai / LA2TO

From 4523575939860932696
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,74dd8650d2a8fb95
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-27 07:12:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Bristol.henr@Xerox.ARPA
From: Bristol.henr@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: puzzling question
Message-ID: <1025@brl-tgr.ARPA>
Date: Tue, 27-Aug-85 10:12:20 EDT
Article-I.D.: brl-tgr.1025
Posted: Tue Aug 27 10:12:20 1985
Date-Received: Thu, 29-Aug-85 20:55:28 EDT
Sender: news@brl-tgr.ARPA
Lines: 13

Jim:

re: While studing for my Tech test, I found a strange question in the question
pool. The question is, What is the 12 meter band? The answer was, 24.79

to 24.99. Is this a Ham band?

Effective 0001 utc june 22, 1985 the following 12 meter freqs. and emissions:

24,890 to 24,930   a1 and f1
24,930 to 24,990   a1, a3, a4, a5, f3, f4, and f5

Bob
N2FQO

From 7130889698585013409
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,452a63526ca52e32
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-27 19:52:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!inuxi!wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Re: Traffic Format Req.
Message-ID: <244@inuxi.UUCP>
Date: Tue, 27-Aug-85 22:52:26 EDT
Article-I.D.: inuxi.244
Posted: Tue Aug 27 22:52:26 1985
Date-Received: Fri, 30-Aug-85 09:49:45 EDT
References: <19700007@hpfcmt.UUCP>
Organization: AT&T Consumer Products, Indianapolis
Lines: 10

At least two references to traffic handling come to mind. One is
any copy of the ARRL Handbook. The ARRL Operating Guide also gives
a good explanation (1 chapter) on traffic handling. If you write
the ARRL, or give them a call (1-203-666-1541) they will tell you
how to get a bunch of free (except for an sase) info on traffic
handling, i believe its the net directory package. It takes roughly
5 oz of postage plus a large sase (9x12 envelope). I have most of
the above info if you only need a few references.

steve

From 3222173080887118168
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,18100f3da5706ff3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-28 02:49:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!GRUPP@MIT-MC.ARPA
From: GRUPP@MIT-MC.ARPA (Paul R. Grupp)
Newsgroups: net.ham-radio

Subject: Loss of fredom in communications!
Message-ID: <1040@brl-tgr.ARPA>
Date: Wed, 28-Aug-85 05:49:25 EDT
Article-I.D.: brl-tgr.1040
Posted: Wed Aug 28 05:49:25 1985
Date-Received: Fri, 30-Aug-85 00:48:54 EDT
Sender: news@brl-tgr.ARPA
Lines: 28

I thought this would be of interest to all...
-----forwarded message starts here-----
Date: Thu, 22 Aug 85 20:52:54 EDT
From: Keith F. Lynch <KFL at MIT-MC.ARPA>
To: Security at RUTGERS.ARPA
Re: Watching TV

  I don't know if anyone noticed, but a few weeks ago the Supreme Court threw away a right that Americans have had since day one.
  It has always been the case that everyone had the right to receive any signal being transmitted on any frequency using any kind of receiver. You didn't always have the right to do whatever you wanted with these signals, such as tell anyone about them, but you could always listen to them (or watch them) alone in the privacy of your home.
  But now the court has ruled that people are breaking the law if they watch sattelite TV that is intended to be charged for, even if it not scrambled.
  Comments?
                                        ...Keith
-----end of forwarded message-----
I was struck with horror and disbelief after reading this message. The implications of this ruling set the way for making it a crime to monitor radio signals unless the sender gives express permission to do so. I suppose this could lead to making it a crime to even own certain receiving equipment! I've seen this in other countries but NEVER thought it would happin here in FREE AMERICA!

-Paul

From 2836772024383400458
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,452a63526ca52e32
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-28 08:59:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!price%marlin@nosc.ARPA
From: price%marlin@nosc.ARPA (James N. Price)
Newsgroups: net.ham-radio
Subject: Re: Traffic Format Req.
Message-ID: <1058@brl-tgr.ARPA>
Date: Wed, 28-Aug-85 11:59:36 EDT
Article-I.D.: brl-tgr.1058

Posted: Wed Aug 28 11:59:36 1985
Date-Received: Fri, 30-Aug-85 01:23:52 EDT
Sender: news@brl-tgr.ARPA
Lines: 38

Ron--

While I'm not exactly an "iron man" of traffic, I have done a fair amount of traffic handling in my days. Format-wise, the ARRL message blanks, available at most ham stores and from the ARRL, are almost self-explanatory. The message # is a serial number from your station, the precedence is routine or higher, handling instructions (HX something) are listed in the back of ARRL log books, the check is the number of words in the text, and so on.

The only thing funny about the word count is that numbers are spelled out unless they are a group like a frequency on 20 meters. Thus, a text line might be "have not heard from you in twenty one days Xray Meet me on 14.250 at usual time" or some such. The check of the words in quotes is 17. Xray and query are used instead of period and question mark.

Also there are the ARL numbered messages which again are listed at the back of the ARRL logbooks. Their purpose is to save time by using canned text for things like county fairs, happy birthday, etc.

If you'd like an on-the-air sample, meet me on 3928 kHz, the Mission Trail Net, at 8 p.m. Pacific Time--be glad to talk to you.

Also, I'm sure the ARRL puts out a small publication that explains all this more precisely, probably for the cost of an SASE.

Happy traffic handling--73

Jim Price, K6ZH, San Diego, CA (PRICE@NOSC.ARPA)

t

From -393529788890791459
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,18100f3da5706ff3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-28 09:28:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!wmartin@Almsa-2

From: wmartin@Almsa-2 (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: Re: Loss of fredom in communications!
Message-ID: <1061@brl-tgr.ARPA>
Date: Wed, 28-Aug-85 12:28:13 EDT
Article-I.D.: brl-tgr.1061
Posted: Wed Aug 28 12:28:13 1985
Date-Received: Fri, 30-Aug-85 01:24:52 EDT
Sender: news@brl-tgr.ARPA
Lines: 11

As a sidenote to this discussion, I recall running across a copy of a House bill in the government-documents-repository section of my university library (this was back in the early 60s) which was a resolution or proposed legislation that explicitly stated that "No regulation or law shall be interpreted to in any way restrict the right of any individual to receive any or all signals transmitted via the electromagnetic spectrum" (or words to that effect). However, sadly, I believe that this, one of the few worthwhile pieces of legislation I have ever read, was never passed. Too bad. If it had been, this nonsense would have never arisen.

Will

From -3839814036849861057
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,18100f3da5706ff3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-28 14:31:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@mitre-bedford.ARPA
From: jhs@mitre-bedford.ARPA
Newsgroups: net.ham-radio
Subject: Re: Loss of fredom in communications!
Message-ID: <1078@brl-tgr.ARPA>
Date: Wed, 28-Aug-85 17:31:17 EDT
Article-I.D.: brl-tgr.1078
Posted: Wed Aug 28 17:31:17 1985
Date-Received: Thu, 29-Aug-85 08:41:55 EDT
Sender: news@brl-tgr.ARPA
Lines: 21

Maybe it's time to start pressing for an amendment to the U.S. Constitution on this point. "No law, ordinance, regulation, or executive order shall be valid or binding if it abridges the right of a citizen to receive and gain information from radio signals from any source whatever."

The manufacturers of scrambling and encryption equipment should be more than glad to put their attorneys to work polishing up the amendment into a suitable form of legalese. Likewise the manufacturers of consumer satellite dish antennas and VCRs.

There are a lot of tricky issues within Government on this subject, but right now the mood is to get everybody to "button up" their communications. Therefore, stating this principle right in the Constitution would be a good way to relieve everybody of any other protection and force them to focus on encryption.

The key question is whether or not the public would care enough to vote for it in a referendum.

-John Sangster
jhs at MITRE-Bedford

From 1834528287321304859
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,972ac672bf615913,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-28 18:41:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!petrus!bellcore!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!AWalker@RED.RUTGERS.EDU
From: AWalker@RED.RUTGERS.EDU (*Hobbit*)
Newsgroups: net.ham-radio
Subject: what utter lossage
Message-ID: <1080@brl-tgr.ARPA>
Date: Wed, 28-Aug-85 21:41:22 EDT
Article-I.D.: brl-tgr.1080
Posted: Wed Aug 28 21:41:22 1985
Date-Received: Sat, 31-Aug-85 07:32:27 EDT
Sender: news@brl-tgr.ARPA
Lines: 7

It's really a shame that other country governments run so scared that they have to restrict posession of *receivers*. Christ. I am certain that there are those in *our* bureaucracy who would like to see the same kind of policy, too.

_H*

From 4009668165901644599
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27bbd9254b079977,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-28 22:54:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
FAC0392%UOFT01.BITNET@WISCVM.ARPA
From: FAC0392%UOFT01.BITNET@WISCVM.ARPA (Len Brady)
Newsgroups: net.ham-radio

Subject: Furor??
Message-ID: <1082@brl-tgr.ARPA>
Date: Thu, 29-Aug-85 01:54:50 EDT
Article-I.D.: brl-tgr.1082
Posted: Thu Aug 29 01:54:50 1985
Date-Received: Sun, 1-Sep-85 09:03:14 EDT
Sender: news@brl-tgr.ARPA
Lines: 11

Ref mine of 26 August and the several responses:

My friend simply dialed a phone number one higher than the TAPR
number. When it rang immediately, he concluded, as do I, that the
"All circuits are busy..." message was a sham to discourage us all
from calling and REALLY blocking up all the circuits.
It sure had an effect on me (and others). But I wish I had gotten
through.
                        73,
                        Len

From -2654501618015742913
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,41358a86551a3589,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-29 01:26:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!GRUPP@MIT-MC.ARPA
From: GRUPP@MIT-MC.ARPA (Paul R. Grupp)
Newsgroups: net.ham-radio
Subject: Loss of Fredom... CC:
Message-ID: <1084@brl-tgr.ARPA>
Date: Thu, 29-Aug-85 04:26:23 EDT
Article-I.D.: brl-tgr.1084
Posted: Thu Aug 29 04:26:23 1985
Date-Received: Sun, 1-Sep-85 09:03:39 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

    I've received a few complaints that there was a bad address in
the cc: line of the message I posted yesterday. The correct address
should have been TELECOM@MIT-XX rather than TELCOM... It turns out
that my local mailer had a synonym for this address and sent it
correctly, but DIDN'T change it in the header. Sorry for all thoes
rejection notices

-Paul

From -608744115940892619

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c2a8fd721f5034cc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-30 20:42:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site kitty.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!rocksvax!sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.ham-radio
Subject: Re: Re: leased lines
Message-ID: <182@kitty.UUCP>
Date: Tue, 30-Jul-85 23:42:11 EDT
Article-I.D.: kitty.182
Posted: Tue Jul 30 23:42:11 1985
Date-Received: Thu, 1-Aug-85 06:17:44 EDT
References: <103@biomed.UUCP> <207@steinmetz.UUCP>
Organization: Recognition Research Corp., Clarence, NY
Lines: 73

> >   ... (when she asked me if it would be used for voice, it made me
> > wonder if they sell different kinds of lines , like, voice-quality, and not
> > voice-quality?? What good is a non-voice quality line anyway????)
> > Bob Lagasse N 1 A L G
>
> They were probably wondering if you wanted voice quality or data quality.
> Data quality lines are less noisy than voice quality. It sounds like you
> want a data-quality leased line.

There are several basic categories of leased lines:

(1) SIGNAL GRADE lines provide metallic continuity and will generally provide a frequency response up to 30 Hz. There is absolutely no attempt at loading or other circuit design for voice frequencies. Nothing prevents voice frequency use if the loop is short and within the same central office.

(2) TELEGRAPH GRADE lines provide neutral or polar signalling for tty's, and are available up to 150 baud. Voice transmission is not possible because all you get are signalling leads from a telco interface.

(3) VOICE GRADE lines give you a bandwidth of 300 to 3,000 Hz with DC continuity if within the same central office. E&M signalling is available if more than one central office is involved, but you won't get actual DC continuity any more.

(4) OFF-PREMISES EXTENSION lines giving you voice frequency range with DC and ringing transmission *specifically* intended for use with PBX's.

(5) RINGDOWN TIE LINES like taxicabs, hotels, etc. use. You pick up a non-dial telephone at one end and a similar telephone rings at the other end.

(6) DATA GRADE lines still give you only 300 to 3,000 Hz frequency response with *no* DC signalling; however, the lines are carefully designed for flat frequency response (i.e., equalized), low noise, low envelope delay, low phase jitter, etc. There are various categories of the above parameters called 'conditioning', with typical grades of C1, C2, and C3 conditioning. The higher numbers give better quality for more $$$. Conditioning becomes critical when data circuits must run through carrier equipment.

(7) WIDEBAND DATA lines available in typical bandwidths of 48 kHz and 256 kHz. These lines are so expensive it's unreal.

(8) RADIO PROGRAM lines typically provide *one-way* service for radio stations, and are available equalized for 5 Khz and 15 kHz bandwidth.

(9) VIDEO CIRCUITS where available are gen-u-wine coaxial cable or telco microwave link with a 6 MHz bandwidth. These lines are *so* expensive you don't even want to ask...

(10) DIGITAL DATA SERVICE is pretty much an AT&T offering where you can get data circuits with data sets for speeds from 2,400 baud to 1.5 Mbits/sec.

There are all sorts of variations of the above, like multi-point lines, special burglar alarm lines (series circuits), telex/twx lines, etc.

And then if you want a *real* laugh, ask your telephone company for Picturephone (tm) service... :-) to AT&T

Larry Lippman
Recognition Research Corp.
Clarence, New York
UUCP {decvax,dual,rocksanne,rocksvax,watmath}!sunybcs!kitty!larry
{rice,shell}!baylor!kitty!larry
syr!buf!kitty!larry
VOICE 716/741-9185
TELEX {via WUI} 69-71461 answerback: ELGECOMCLR

"Have you hugged your cat today?"

From -1710680396042973732
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,53409e8f15df6ada,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-30 21:43:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Cottriel.ES@Xerox.ARPA
From: Cottriel.ES@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: TELECOM Digest V5 #11 - Leased Lines
Message-ID: <332@brl-tgr.ARPA>

Date: Wed, 31-Jul-85 00:43:36 EDT
Article-I.D.: brl-tgr.332
Posted: Wed Jul 31 00:43:36 1985
Date-Received: Thu, 1-Aug-85 06:13:38 EDT
Sender: news@brl-tgr.ARPA
Lines: 32

Bob, What is the exact application for your ~leased line~?

re: "...I believe consist of nothing more than a pair of wires
      from one site, to the phone company central office, then to
      the other site with no switching or electronic intervention
      in between...."

The key here is: "no switching or electronic intervention in between"

You can't usually get a metallic pair outside of the serving area of
the first Telco Central office. So, if you need DC continuity past
this boundary, you may as well forget it.

If on the other hand you will be sending tones in the range of ~300 to
3000hz, then you could order 3002 facilities, which are voice grade
lines suitable for data transmission. Cost is based upon tariff
mileage which may be longer or shorter than "as the crow flies"
mileage. There are also "local loop" and "termination" charges
involved, plus a one time installation fee.

There are also 1000 series facilities that are "...unconditioned
channels capable of transmitting direct current mark-space or binary
signals at rates up to 150 bauds. These channels are not suitable for
the transmission of alternating current tones; they are furnished for
half-duplex or duplex operation on a two-point or multi-point basis."
[FCC Tariff 260, ISM TTGD-2] These may or may not have DC continuity
outside of the first telco office.

There are many variables involved - Call me if you want to talk about
it.

John Cottriel 213-615-2095

From -942558514672674150
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b04b1e65995d8e39
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-31 09:02:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.ARPA
Newsgroups: net.ham-radio
Subject: Re: The new Butternut miniature beam

Message-ID: <349@brl-tgr.ARPA>
Date: Wed, 31-Jul-85 12:02:43 EDT
Article-I.D.: brl-tgr.349
Posted: Wed Jul 31 12:02:43 1985
Date-Received: Sun, 4-Aug-85 08:46:57 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

The Butternut miniature beam sounds similar to the one Austin sells.
Does it require a tuner with balun? Austin's mini-beam does, and would
have the same property of "using the entire antenna".

This is not a bad way to go, especially if you have a rig with "no tune-up"
output, i.e. your choice of 50 ohms. A tuner is advisable for such rigs
anyway if you want to cover the whole band with full power.

John S., W3IKG

From 8307583889361180550
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,f962d62bec01ca3c,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,f962d62bec01ca3c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-31 10:18:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!ihnp1!ihnp4!mhuxn!mhuxr!
ulysses!gamma!epsilon!zeta!sabre!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio,net.columbia
Subject: Latest STS-51F elements
Message-ID: <432@petrus.UUCP>
Date: Wed, 31-Jul-85 13:18:30 EDT
Article-I.D.: petrus.432
Posted: Wed Jul 31 13:18:30 1985
Date-Received: Fri, 2-Aug-85 01:36:41 EDT
Organization: Bell Communications Research, Inc
Lines: 19
Xref: watmath net.ham-radio:2976 net.columbia:1532

Satellite: sts-51f
Catalog number: 0
Epoch time: 85212.59409722
   Wed Jul 31 14:15:29.999 1985 UTC
Element set: 5a
Inclination: 49.4884 deg
RA of node: 146.3659 deg
Eccentricity: 0.0006493
Arg of perigee: 317.0027 deg
Mean anomaly: 185.4998 deg
Mean motion: 15.86377915 rev/day

```
Decay rate:        0.00025 rev/day^2
Epoch rev:              28
Semi major axis:  6691.464 km
Anom period:     90.772822 min
Apogee:            323.413 km
Perigee:           314.723 km
Ref perigee:      2768.62465252
   Wed Jul 31 14:59:29.977 1985 UTC


From -3611273117320544447
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,1f43feba5d65a292,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,1f43feba5d65a292,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-31 13:15:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site timeinc.UUCP
Path: utzoo!linus!philabs!prls!amdimage!amdcad!amd!pesnta!phri!timeinc!dwight
From: dwight@timeinc.UUCP (Dwight Ernest)
Newsgroups: net.ham-radio,net.columbia
Subject: Shuttle 51F Ham Radio Opportunities Schedule
Message-ID: <374@timeinc.UUCP>
Date: Wed, 31-Jul-85 16:15:25 EDT
Article-I.D.: timeinc.374
Posted: Wed Jul 31 16:15:25 1985
Date-Received: Sat, 3-Aug-85 09:14:15 EDT
Reply-To: dwight@timeinc.UUCP (Dwight Ernest)
Organization: Time, Inc. - New York
Lines: 99
Xref: linus net.ham-radio:2377 net.columbia:1089

[ Note from KA2CNN ...vax135!timeinc!dwight:
     No guarantees, but the METs (Mission Elapsed Times) shown
below may still be good. --Dwight 850731, 20:10 UTC ]

4331 BN  4216 ALL    WB2RVX WB2MNF 850729 Forwarded from WB2RVX at 0527z
 521 BN  4139 ALL    W3IWI  WB2MNF 850729 Forwarded from W3IWI PBBS at 0258z
5795 BN  4073 ALL    W3IWI  WB2MNF 850729 STS-51F info (from ASR)
The following is from Amateur Satellite Report #106

          Shuttle 51F Operating Opportunities Announced

NASA, AMSAT and ARRL have announced tentative operating
opportunities for the mission of Tony England, W0ORE, and
John-David Bartoe, W4NYZ.  As previously detailed, actual voice
operating time for the astronauts will be quite limited due to
the heavy "official" workload.  This is reflected in the schedule
below with the majority of transmissions being SSTV scan
converted images from the NASA on-board video.  This will be the
first occasion on which SSTV has originated on a shuttle.
```

The majority of voice transmissions will be with previously scheduled clubs and youth groups. This arrangement is in accord with the express wishes of Tony England so as to make the most efficient use of the limited operating time available.

The downlink frequency will be 145.55 MHz. If an open operating period is declared, you may attempt to QSO with the shuttle on 144.91, 144.97, 145.03 or 145.63 MHz. Listen to WA3NAN on the frequencies listed in ASR 105 for late breaking news on the operation.

The following data is courtesy of NASA spokesperson Chuck Biggs, KC5RG.

STS 51F Amateur Radio Opportunities
Launch: July 29, 19:23 UTC

	MET		UTC		
Orbit	Start d/hh:mm	Stop d/hh:mm	Start d/hh:mm	Stop d/hh:mm	Mode
47	2/22:10	2/22:40	01/17:33	01/18:03	TV & Voice
48	2/23:45	3/00:15	01/19:08	01/19:38	TV
49	3/01:20	3/01:40	01/20:43	01/21:03	TV & Voice
50	3/02:45	3/03:45	01/22:08	01/23:08	TV
51	3/04:20	3/05:20	01/23:43	02/00:43	TV
52	3/05:50	3/06:30	02/01:13	02/01:53	TV
53	3/07:25	3/08:05	02/02:48	02/03:28	TV
54	3/09:00	3/09:30	02/04:23	01/04:53	TV
58	3/15:30	3/15:40	02/10:53	02/11:03	TV
62	3/21:30	3/21:40	02/16:53	02/17:03	TV
63	3/22:50	3/23:25	02/18:13	02/18:48	TV
64	4/00:20	4/01:00	02/19:43	02/20:23	TV
65	4/01:45	4/02:15	02/21:08	02/21:38	TV
66	4/03:25	4/03:50	02/22:48	02/23:13	TV
67	4/05:10	4/05:30	03/00:33	03/00:53	TV
68	4/06:25	4/07:05	03/01:48	03/02:28	TV
69	4/08:05	4/08:35	03/03:28	03/03:58	TV
73	4/14:30	4/14:45	03/09:53	03/10:08	TV
78	4/21:50	4/22:25	03/17:13	03/17:48	TV
79	4/23:25	4/23:55	03/18:48	03/19:18	TV & Voice
80	5/01:00	5/01:20	03/20:23	03/20:43	TV
81	5/02:25	5/02:55	03/21:48	03/22:18	TV
82	5/04:10	5/04:30	03/23:33	03/23:53	TV
83	5/05:25	5/05:35	04/00:48	04/00:58	CW
83	5/05:45	5/06:05	04/01:08	04/01:28	TV
84	5/07:05	5/07:40	4/02:28	04/03:03	TV
85	5/08:40	5/09:05	04/04:03	04/04:28	TV
86	5/11:20	5/11:30	04/06:43	04/06:53	TV
89	5/15:05	5/15:20	04/10:28	04/10:43	TV
93	5/21:05	5/21:25	04/16:28	04/16:48	TV & Voice
94	5/22:25	5/22:55	04/17:48	04/18:18	TV

95   6/00:00   6/00:20   04/19:23   04/19:43   TV & Voice
96   6/01:25   6/01:55   04/20:48   04/21:18   TV
97   6/03:00   6/03:30   04/22:23   04/22:53   TV
98   6/04:45   6/05:05   05/00:08   05/00:28   TV
99   6/06:05   6/06:40   05/01:28   05/02:03   TV
100   6/07:40   6/08:05   05/03:03   05/03:28   TV
101   6/10:20   6/10:25   05/05:43   05/05:48   TV
104   6/14:10   6/14:20   05/09:33   05/09:43   TV
==

NOTES:
1. UTC day is day of the month of August.
2. This is revision B.
3. Offset from prior launch schedule (12 Jul 85, 20:30UTC) to
   current planned launch (29 Jul 85, 19:23 UTC): 16 days, 22
   hours, 53 minutes.
4. MET is Mission Elapsed Time
--

         --Dwight Ernest   KA2CNN   \ Usenet:...vax135!timeinc!dwight
           Time Inc. Edit./Prod. Tech. Grp., New York City
           Voice: (212) 554-5061 \ Compuserve: 70210,523
           Telemail: DERNEST/TIMECOMDIV/TIMEINC \ MCI: DERNEST

"The opinions expressed above are those of the writer and do not necessarily
 reflect the opinions of Time Incorporated."

From -3015510444439512185
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,52546b224ce69f3a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-31 21:25:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!vortex!
lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Software UARTS, CW, RTTY reception
Message-ID: <727@vortex.UUCP>
Date: Thu, 1-Aug-85 00:25:44 EDT
Article-I.D.: vortex.727
Posted: Thu Aug 1 00:25:44 1985
Date-Received: Sat, 3-Aug-85 21:16:39 EDT
Organization: Vortex Technology, Los Angeles
Lines: 25

Greetings. I'm looking for algorithms and/or code for software
UARTs for speeds up to, oh, 150 bps or so. What I'm REALLY
trying to find is code (8080/Z80 ASM would be best, though
I guess I can take it in any form, including BASIC) to handle
the decoding functions of CW and RTTY listening. While I *am*

interested in systems that depend on UARTs, and would like to
hear about these, I am also very interested in systems that handle
RTTY or CW decoding through watching a single bit (thusly my interest
in software UARTS). Ideally, such systems would require only being
told the word length (for RTTY) and could then determine the proper
speed on its own, and could also handle varying CW speeds.

Any and all information would be appreciated on these topics.
Please reply directly if possible--I'll summarize for this group
later. Thanks much.

--Lauren--
{ihnp4, decvax, seismo, clyde, bonnie, trwrb, ...}!vortex!lauren

P.S. I'm also looking for recommendations for equipment/circuits
for small, low power, flexible, rtty modems. Ideally they should
be able to handle shifts as small as 85 Hz and be able to filter
out the multiplexed rtty channels down to one channel at a time.

--LW--

From 6290260455032877542
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b04b1e65995d8e39
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-31 21:42:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!roode@uci-icsa
From: roode@uci-icsa (Dana Roode)
Newsgroups: net.ham-radio
Subject: Re: The new Butternut miniature beam
Message-ID: <354@brl-tgr.ARPA>
Date: Thu, 1-Aug-85 00:42:44 EDT
Article-I.D.: brl-tgr.354
Posted: Thu Aug 1 00:42:44 1985
Date-Received: Fri, 2-Aug-85 21:46:59 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

I dont know if the Butternut needs a tuner or not, I need to drop
them a line and get the details. Their verticals need no tuners.
How would I go about getting more info on this Austin mini-beam
you mentioned? I've never heard of it until now.

     Dana Roode, Wa6ngo

From -4757896780909569668
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a49ee037516f96b0
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-07-31 22:25:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio
Subject: Re: Re: Computer Controlled Scanners? (Comquest SPX-210)(JIL SX-400)
Message-ID: <246@anasazi.UUCP>
Date: Thu, 1-Aug-85 01:25:33 EDT
Article-I.D.: anasazi.246
Posted: Thu Aug 1 01:25:33 1985
Date-Received: Sat, 3-Aug-85 09:42:58 EDT
References: <237@anasazi.UUCP> <635@ihu1h.UUCP>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 15

The Conquest SPX-210 looks interesting and is an approach that might be kludged for other scanners.

I have read a description of the JIL SX-400 as "computer controllable", and indeed they sell an interface for an NEC PC. I called them up and asked for interface specs for the scanner itself so that I could control it with a different PC. The response was: "Do you work for the government? If not, we can't give you the specifications. We have no maintenance manual - the product is proprietary".

Sigh...

John NJ7E

From 6576244193200758505
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b04b1e65995d8e39
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-01 08:36:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: The new Butternut miniature beam
Message-ID: <368@brl-tgr.ARPA>
Date: Thu, 1-Aug-85 11:36:08 EDT
Article-I.D.: brl-tgr.368
Posted: Thu Aug 1 11:36:08 1985
Date-Received: Sat, 3-Aug-85 09:46:04 EDT
Sender: news@brl-tgr.ARPA
Lines: 51

The Austin mini-beam is a product of

Austin Custom Antennas
P.O. Box 357
Sandown, NH 03873.

The owner, Dick Austin, K1QIZ, can be reached via mail there or at (603) 887-2926.

Actually, he makes two beams, to my knowledge, one of which is VERY small, like maybe 10 by 15 feet (a guess) and 5 or 6 pounds. This is the one that has about 4.5 or 5 dB gain over a dipole. It covers 20 through 10 (including any new bands that happen to pop up in there) and is available in a "portable" version that can be knocked down into about 5-foot lengths and carried in a canvas bag. Could be real neat for field day! Either version can be mounted on standard TV masting and rotated with a standard TV rotator without strain. It probably has less weight and wind loading than a lot of big TV antennas!

The other one covers 40 through 10, with somewhat more gain except on 40, as I recall. This one is a lot bigger, like 30 by 35 feet or so (again a guess). It is also heavier, but for a 40-meter beam it is tiny and light by comparison to other ones available. It is probably lighter and smaller than some tribanders. This one I believe is WARC-band ready and covers all of them, both present and future, if they are between 7 and 30 MHz. The price you pay for this is that you supply the funny tuning reactance needed down there in your tuner instead of having him precompute it and install it for you up in the beam. And you should use open-wire line or TV twinlead (best foam type available to you) instead of coax except possibly for a short run from the tuner to the balun.

Incidentally, Austin also sells a variety of other antennas, including various collinear verticals for 146, 220, and 430 MHz bands, two of which cover ALL THREE BANDS in one whip, a scanner antenna designed to cover most scanner frequencies of interest and to give decent performance over the whole band, and a telescoping half-wave for your 2-meter HT. His latest thing is a nifty new antenna for 900 MHz cellular telephone service which reportedly runs rings around some of the antennas being sold for that purpose. His VHF and UHF antennas are with few exceptions independent of ground and none of them use radials. They are, however, well decoupled from the feed line so that the pattern is nearly ideal without radials and without adjustment.

Also, he really MEANS the "custom" in his company name -- he will make up specials for repeaters, mobile homes, or your hang-glider. He will talk antenna theory with you at length, even if it helps you to avoid buying one of his products by building your own!

73,
John S., W3IKG

From -3595997230801717899
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a39601cdd0314e20,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-01 08:59:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: request for info on scanner info sources
Message-ID: <369@brl-tgr.ARPA>
Date: Thu, 1-Aug-85 11:59:09 EDT
Article-I.D.: brl-tgr.369
Posted: Thu Aug 1 11:59:09 1985
Date-Received: Sat, 3-Aug-85 09:46:22 EDT
Sender: news@brl-tgr.ARPA
Lines: 17

A friend has asked me to try to obtain a list of the "10-codes" that
the police use in radio communications. I once had such a list but
can't find it at present.

Could someone on the net supply the complete list, or a source in which
I could find it?

Also, a few references to publications that give information on local users
of VHF/UHF radio frequencies, codes like the 10-codes, special jargon, etc.,
would be appreciated. All of this is for an elderly gentleman whose main
interest is his scanner but who lacks information with which to appreciate
all that he hears. A few key publications would probably get him off to a
good start.

Thanks for any assistance that is forthcoming.

-John Sangster, W3IKG

From 6408903312732666291
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d4d97556ce71b0c2,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12f221,d4d97556ce71b0c2,start
X-Google-Attributes: gid12f221,public
X-Google-Thread: 15f443,d4d97556ce71b0c2,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1985-08-01 12:36:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site cadre.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!cmu-cs-pt!cadre!km
From: km@cadre.ARPA (Ken Mitchum)
Newsgroups: net.wanted,net.ham-radio,net.misc
Subject: Tektronix documentation sought

Message-ID: <472@cadre.ARPA>
Date: Thu, 1-Aug-85 15:36:43 EDT
Article-I.D.: cadre.472
Posted: Thu Aug 1 15:36:43 1985
Date-Received: Sat, 3-Aug-85 08:31:37 EDT
Distribution: net
Organization: Decision Systems Lab., University of Pittsburgh
Lines: 14
Xref: linus net.wanted:6080 net.ham-radio:2375 net.misc:6859

Help! My aging Tektronix oscilloscope, type 315D, is in need of repairs,
and I cannot locate either a manual or schematic for it. I was told at one
time that only microfilm copies of these remain.

If you can help me locate these, please let me know. I will gladly pay more
any duplication costs, or costs of obtaining the microfilm records.

  -Ken Mitchum
  University of Pittsburgh
  Decision Systems Laboratories
  (km@cadre.arpa, km@cadre.uucp)

From 6620706425383264487
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7d7e9e0cb85642a1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-01 12:37:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!petrus!
root
From: root@petrus.UUCP (The Root of all Evil)
Newsgroups: net.ham-radio
Subject: TAPR TNC2 available
Message-ID: <433@petrus.UUCP>
Date: Thu, 1-Aug-85 15:37:53 EDT
Article-I.D.: petrus.433
Posted: Thu Aug 1 15:37:53 1985
Date-Received: Sat, 3-Aug-85 02:29:41 EDT
Organization: Bell Communications Research, Inc
Lines: 75

A N N O U N C E M E N T !

TAPR TNC 2 NOW AVAILABLE!

Tucson Amateur Packet Radio is pleased to announce the availability
of the new TAPR TNC 2.   In field testing since January, it is now
ready for you!

Effective Monday, August 19th, the TAPR Office will be accepting

orders and, for the first week, will have extended hours (9 AM until 9 PM Pacific Daylight Time - 12 NOON until 12 MIDNITE for you Easterners). (These extended hours are possible through the participation of volunteers, some of whom are travelling to Tucson from all over the country to assist you in obtaining a TNC 2.)

280 TNC 2 kits will be ready for shipment on or about August 19th. All parts are in hand (and boxed!) EXCEPT

a) the manual, which is at the printers and is expected back on the 16th, and

b) the cabinet end plates, which will ship to TAPR on or before the 10th of September. The first units will be shipped WITHOUT the cabinet end plates; the end plates will be sent to TNC 2 owners as soon as TAPR receives them.

The price for TNC 2 is $185 plus $10 S & H. A credit card order incurs a 3% surcharge (that's what the bank charges us) for a total of $200.85. Arizona residents must add tax, of course.

To order your TNC 2 kit, follow these simple rules:

1) Call the TAPR Office at (602) 746-1166

2) Have the following information available

   * Your Name

   * Your UPS shipping address (no PO Boxes, please)

   * A DAYTIME telephone number at which you can be reached

   * Your VISA or MasterCard number and expiration date

3) Two shipping labels (one for the TNC 2, one for the cabinet end end plates) will be filled out WHILE YOU ARE ON THE PHONE.

4) Your credit card slip will be made out and read back to you.

5) You will be assigned a sequential order number. Number 101 means you will be shipped the 101st TNC 2 kit.

Due to limited supply and expected large demand, only one kit per person and one kit per call may be ordered.

After Office hours, an automatic answering machine will be connected to the telephone line. IT WILL NOT RECORD MESSAGES! It will, however, advise of the day's order status and shipping status by order number. Thus, in less than a minute, you can find out if your order was shipped, if any orders are still being taken for the following day, and how many TNC 2s are still available.

We hope this procedure minimizes any inconvenience to you, and we will do our best to ensure that no orders are misplaced.

IF OUR SUPPLIERS DON'T SLIP IN THEIR SHIPMENTS TO US, an additional 300 kits will be available in mid-September. If you require multiple units, or miss out on the 280 set for August, you may order against the September shipments. Thus, after the initial 280 units, it will be "business as usual."

Thank you for your continued support of TAPR and

The Packet Radio Revolution!

From -7826890633787842634
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d2346f8ade459a7e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-01 14:31:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: request for ack
Message-ID: <374@brl-tgr.ARPA>
Date: Thu, 1-Aug-85 17:31:28 EDT
Article-I.D.: brl-tgr.374
Posted: Thu Aug 1 17:31:28 1985
Date-Received: Sat, 3-Aug-85 20:46:47 EDT
Sender: news@brl-tgr.ARPA
Lines: 18

Attention, Doug Hardie and Bob Menton:

I have attempted to send the "longwinded reply" to Bob's question about radials to both of you via the net. If you do not receive it, lets see if we can figure out a working mail address path.

Others wishing to see a copy of the reply may feel free to request it. It gives a lot of intuitive discussion of what radials are supposed to do for you (3 different functions), why a quarter wavelength is magic, a lot of other ideas for very effective wire antennas for HF DX work, etc. I thought it a bit long to just inundate the net with it gratis, but it might be useful to some subscribers.

-John S., W3IKG

P.S. - Keith -- is it feasible to put it into the archives without putting it on the net generally? Or maybe I should just do that and give the net some exercise?

From 3714443062265463965
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e1ddad0b02bc5821,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-01 16:31:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: FCC catches bootleggers on 6.933 MHz
Message-ID: <641@ihu1h.UUCP>
Date: Thu, 1-Aug-85 19:31:30 EDT
Article-I.D.: ihu1h.641
Posted: Thu Aug 1 19:31:30 1985
Date-Received: Sat, 3-Aug-85 04:03:06 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 54

x

Remember these postings from earlier this summer?

6.9330 call?_____unidentified: bootleggers in 3 way CB-type conversation, one was mobile, at least one employed as a truck driver , ids= "9", "10", and "13", used Q signals but no call letters, lsb, 5/15/85 @0100Z [location?] (B. Parnass)

call?_____unidentified: bootleggers in CB-type conversation, talked of mobile antennas and nearby RTTY QRM, ids= "13", "33 " (Dave), lsb, 5/19/85 @0024Z [location?] (B. Parnass)

These stations were on almost daily, and often used the word "Oscar" before their numeric identifiers.

Who are they? What happened to them? In the August 1985 issue of Monitoring Times, Bob Grove sheds some light on this group in the following article:

FCC Closes Illegal Net

"A nationwide network of illicit radio operators using lower sideband amateur equipment on 6933 kHz has been nipped in the bud by Federal Communications Commission personnel coordinated through the powder Springs, Georgia, monitoring station."

"Known as the 'Oscar' group, the net members used unauthorized identifiers like Oscar 1 (net control

station), Oscar 5 (North Winchester, Indiana), Oscar 10 (Ridgetop, Tennessee, near Nashville), Oscar 13 (Groveland, Indiana), and Oscar 33 (also near Groveland)."

"The operator identifying himself as Oscar 10 has been closed down and the FCC made an announcement over the air to other net members of that fact. Continued violations will result in continued prosecutions."

"Upon issuance of a Notice of Apparent Liability, the Ridgetop resident faces a fine of $700 for unlicensed operation and an additional $300 for operation in an aviation band. Depending upon the disposition of the case by Washington officials, a maximum fine of $10,000 can be levied for unauthorized use of the airwaves."

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 2349680939611689952
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,49c7a48cbea0f6d,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,49c7a48cbea0f6d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-01 16:31:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio,net.columbia
Subject: W0ORE/Challenger heard at KA9Q
Message-ID: <434@petrus.UUCP>
Date: Thu, 1-Aug-85 19:31:58 EDT
Article-I.D.: petrus.434
Posted: Thu Aug 1 19:31:58 1985
Date-Received: Sat, 3-Aug-85 02:38:12 EDT
Distribution: net
Organization: Bell Communications Research, Inc
Lines: 15
Xref: watmath net.ham-radio:2986 net.columbia:1534

SSTV signals were copied at KA9Q from W0ORE aboard the space shuttle Challenger on two consecutive passes this afternoon (approx 5:30 and 7:15 pm EDT). With a KLM-14C and GaAsFET preamp, signals were good, but not overly strong (i.e, full quieting, but not pegging the meter). The signal is FM at 145.55 mHz and consists of slow scan television interspersed with the

tone CW ID "W0ORE/CHALLENGER".

Based on antenna pointing and doppler, tracking is about 1.5 minutes behind predictions based on the last set (set 5a) so it ought to be usable at least until a possible orbit change takes place tomorrow.

As with the STS-9/W5LFL flight, PLEASE avoid any and all transmissions on 145.55 mHz!

Phil

From 6363856795441229073
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,901fd17ea10d829d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-01 21:11:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!hao!hull@Seismo.ARPA
From: hull@Seismo.ARPA
Newsgroups: net.ham-radio
Subject: Lightning Protection (long)
Message-ID: <377@brl-tgr.ARPA>
Date: Fri, 2-Aug-85 00:11:46 EDT
Article-I.D.: brl-tgr.377
Posted: Fri Aug 2 00:11:46 1985
Date-Received: Sat, 3-Aug-85 20:47:34 EDT
Sender: news@brl-tgr.ARPA
Lines: 229

Protecting one building or tower from lightning is fairly straightforward:

1. First order protection -

On the tallest object associated with your structure, mount an extended umbrella-like fixture a few meters in diameter, with numerous sharp points along the periphery and across the crown, spaced about 1 meter apart. (You can make the thing from re-bar and heavy duty chicken wire unless you have high winds like we have around here.) Use a large diameter conductor (1 to 2 cm.) to connect the umbrella points together at the center and thence down to a suitable ground stake located at a place where soil moisture is prevalent, but more importantly, try to make the conductor run in a straight line with *no* sharp corners; use a minimum radius of 1.5 meters on any bends in the ground wire. Keep this wire at least 2 meters from any power or communications conduit at all places along its route.

Theory:

The multitude of points will emit a trickle corona continuously, resulting in a space charge of ionized air within 20 meters of the umbrella. The space charge will terminate the cloud-to-ground

electric field across a broad hemisphere and will reduce the local field gradient to a value below that needed to form "leaders". The umbrella will likely not ever be hit by lightning; however, the conductor gauge is set to minimize the damage inherent in such a strike. (A strike, if it occurs, will likely be a secondary, (resulting from the shift in electrostatic field just after a strike) to another object within a fraction of a km.) This approach, you should note, puts additional stress on your neighbors (they will see a slight rise in their hit statistics) as it only postpones the discharge until the cloud has moved past your installation. The ground conductor is spaced from other conduits so that the Electromagnetic Pulse (EMP) associated with the 10000 Ampere surge will not be able to develop equivalent currents in parallel conductors adjacent to the ground wire. Using a large diameter and avoiding bends reduces the per length inductance discontinuities. This discourages the abandonment of your ground conductor in favor of nearby metal objects such as power conduits (resulting in hazardous elevation of the system ground potential to thousands of volts above the mains).

2. Second order protection -

Protect your primary power entry by use of a surge protector having four main elements

a.) Line fuses for each hot main NO FUSE FOR THE WHITE NEUTRAL. No circuit breakers (too slow).

b.) Self extinguishing gas discharge tubes or arc chutes routed to a primary ground stake *separated* by 3 or more meters from the umbrella ground mentioned above, *not* using the same stake, even, and using the same linear routing algorithm mentioned above.

c.) Heavy gauge inductors, 1 microhenry or thereabouts for typical 30 to 50 Ampere per phase service levels, to choke the surge out of the consumer side of the system. NONE IN THE WHITE NEUTRAL.

d.) Post choke line clamping to WHITE NEUTRAL. This is where the witchcraft comes in. One candidate is the Metal Oxide Varistor (MOV). They have two disadvantages: They age, gradually reducing their threshold over time until one day they evaporate in a ball of fire during a line surge. They have a rather remote threshold characteristic compared to, say, a Silicon TransZorb. They have several advantages: They are cheap. They come in packaging that is familiar to professional electricians. They are generally more robust than Selenium or Silicon protectors. They have a smaller geometry than a Selenium protector. Another candidate is a combination protector made up from a ground referenced 50 Ampere triac in series with either a lower rated voltage MOV or TransZorb element, with the triac gate wired back to (an artfully positioned) tap on the gas tube/arc chute ground. From here (this stuff belongs in a fire-rated NEMA box) the WHITE NEUTRAL and GREEN NEUTRAL are tied together at this one point only, and passed through a medium size conductor to the

primary ground stake by a route that is separated by 1.5 meters from the gas tube/arc chute ground.

Theory:

If your power line gets hit, the gas tube fires and conducts the surge current to ground. The 20 kilovolts experienced by your service entry (for about 10 microseconds) will go through the chokes and will cause the MOV or complex protector shunt to break down and draw a steadily rising current (to many tens of Amperes), but immediately choked to a reduced voltage. The fuses will, after a while, be blown away. Until then, the MOVs will clamp the WHITE NEUTRAL to the mains (perhaps resulting in noticeable rise of the common-mode voltage). It is this common-mode elevation which destroys your out-of-building communications interfaces. With everything in the building coming to 2000 volts above your neighbors (including your local telephone operating company), any common-mode paths will be severely stressed. However, especially withing the building, they will be less stressed than they would have been if the mains were allowed to diverge from the WHITE NEUTRAL.

3. Third level protection

The most effective common-mode protection is an Ultra-Isolator Transformer. It is also rather expensive compared to differential line protectors and secondary Silicon TransZorb protectors. Although many Ultra-Isolator Transformers were utilized during the 1970's by sensitive computer installations, it was realized eventually that the most damage to main-frame equipment was done by differential surges (main to main on three-phase systems). The common-mode threat was seen as too little to justify the cost and complexity of installation of an ultra-isolator, which, by the way, can also be done ineffectively, resulting in no net improvement in the level of protection. The companies that make ultra-isolators issue complete and effective instructions concerning their installation. The difficulty is in getting industrial electricians to follow the directions. Thus for the benefit of the main-frame and peripheral power supplies, for cost effective purposes, a good differential surge eliminator inside the enclosure of each system power supply is recommended. However, remember that the common mode is the most destructive to your distributed data communications peripherals; unfortunately, to protect them you must provide the entire computer room and distributed CRT terminal load with an ultra-isolator transformer, or see that each unit is designed to withstand momentary local and global differences of thousands of volts on the signal returns. Even then, on occasion, only one violator located in a critical location and tied to a non-isolated power system elsewhere in the building can blow the whole scheme.

Theory:

Not much theory here. The entire primary winding of the transformer may get lifted to 2000 volts, but the secondary remains referenced to

the computer room ground stake. The box shields around the the windings are tied to the stake, and short out the electric field that might otherwise couple to the secondary. Saturation of the transformer core protects the differential mode. The differential protectors installed in each power supply dissipate the surges locally and since each takes a small part of the surge energy, no concentration of damage will likely occur.

4. Fourth order protection

You may get surge protectors for all communication lines leaving the building. Each will need a reliable path to a stout ground. (DEC usually specifies that the computer frame GREEN WIRE ground be done with a heavy gauge wire, and all surge protector grounds be separately returned to the distribution transformer secondary neutral grounding point.) You may add Silicon TransZorbs to power supply rails in data communications equipment.

Theory:

If one of your comm lines gets hit, or gets involved in an induced surge, the elevation in voltage not dissipated by the protector is conducted through the internal diode clamps included in most IC line drivers and receivers to a ground or supply rail, and thence to a TransZorb (a back-to-back zener with a heavy silver anode and thermally conductive silver leads). If enough protectors are in place, the common-mode surge is clubbed to death by the collective capability of all peripheral surge protectors operating together.

And that about does it. Needless to say, if you do a good job of protecting your site, and one of your neighbors gets hit, you may be damaged anyhow by currents resulting from the elevation of your neighbor's electrical ground. This is especially true in Hawaii (and even more so on their mountain tops) where the ground is made of lava rock. If you get hit by lightning, your entire site goes to 25000 volts with respect to the surrounding neighborhood. This bleeds down to appx 2000 volts over the next 100 microseconds or so.

If you have several buildings to worry about, such as may be the case for a university campus, putting an umbrella protector on every building will only cause the cloud to ground potential to develop to the point that when you finally do get a strike, it will be a *real killer*. It has been pointed out elsewhere that most lightning strikes are from the ground up to the cloud.

Thus, More Theory (speculation):

I suspect that the mechanism is something like this: Collisions of air molecules with each other and the things that make up the surface tend to knock electrons off the air molecules. There are other charge pair generation mechanisms as well, such as natural radioactive decay of Radon 222 and its decay products. (This specific mechanism is not my theory - see JGR Vol 90 No D4 Pgs 5909-5916 June 30, 1985, Edward A

Martell, NCAR.) The electrons, because of their charge, are sticky.
They cling to the surfaces of various semi-insulators (rocks and dry
dirt) and near the surface of conductors until enough of them are
implanted to provide a counter electrical field gradient to repel
later arrivals. The positive air ions are separated by thermal
energy, and molecular screening prevents the immediate recombination.
The charge separation is effected by the rising of the warmed
positively ionized air.

Once the charge is separated, mutual repulsion drives the electrons
into the conductive ground layers. Later, as the air rises and water
condenses, positively charged droplets accumulate in descending air
columns at the front of the storm just ahead of the rising column. A
field gradient is thus established with respect to the ground, where
all the electrons are. As the ground is conductive, the electrons
follow the cloud until, with the aid of conductive moisture and the
turbulence of the rising and descending air column interface, leaders
are established and a strike path is ionized and carried into the
descending air. The electrons travel up the path in a flash (parts of
which will have oscillations at radio frequency) and then distribute
themselves (at a more leisurely pace, accompanied with local flashes
and secondary flashes) in accordance with upper level gradients until
there is nolonger sufficient gradient to ionize the cloud-to-cloud
paths.

Time scales:

Main strike and individual secondary strikes each about 10
microseconds.

Duration of ionized path, reversals and secondaries about 100
microseconds.

Duration of high altitude electrical coronae readjustment about 1
millisecond.

Localized differences in the final potential may result in some
reverse strikes from a few overcharged negative clouds to the ground,
or subsequently more numerously (after air motion), cloud to cloud
"readjustments".

Well, I've done it again. Darn. If this is too long, I suppose you
should flame me for it, or if I am guilty of mis-representing known
(un)truths, that would qualify as well. But I wanted to at least try
to clear up the nature of lightning and its hazards a little.

Howard Hull
{ucbvax!hplabs | allegra!nbires | harpo!seismo } !hao!hull

From -8835581596954996055
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b8a97603b82822bd,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-02 05:51:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Michael.Chepponis@CMU-CS-C.ARPA
From: Michael.Chepponis@CMU-CS-C.ARPA (Mike Chepponis)
Newsgroups: net.ham-radio
Subject: Shuttle reception
Message-ID: <379@brl-tgr.ARPA>
Date: Fri, 2-Aug-85 08:51:34 EDT
Article-I.D.: brl-tgr.379
Posted: Fri Aug 2 08:51:34 1985
Date-Received: Sat, 3-Aug-85 20:48:18 EDT
Sender: news@brl-tgr.ARPA
Lines: 73

Has anybody been able to copy acceptable SSTV from the shuttle? Here in Pittsburgh at W3VC, we've been able to hear faint signals on orbit #50, and much stronger signals on orbit #52, but nothing at all on any other orbit. Apparently, the SAREX experiment was not turned on as anticipated, and orbit #50 was the first orbit it was on. Both orbits were in "Mode 1" - auto SSTV downlink (no uplinks). The pictures we did get on orbit #52 were in the following sequence: four 8-sec B&W, one 12-sec color, one 36-sec color, then the cw id "W0ORE/CHALLENGER", sent at about 15 WPM. Then the sequence repeated. We were only able to hear it for slightly fewer than 3 sequences, and of the pictures we could see, the best were the B&W ones. But even though the signal peaked at s9+60 dB on the Yaesu FT-726R, the nulls were VERY deep, and this caused severe hits to the pictures. As far as we can guess, the pictures were of the shuttle bay doors and the IPS. We are using a GaAs FET preamp and either an Isopole or the 20-ele twist antenna of our OSCAR 10 setup. Tony is running only 2.5 w, but that should be quite enough. Also, on both passes, it was announced that SAREX would be on only MINUTES before the shuttle passed within our range.

I'm curious what sorts of experiences others are having. We have noticed that QRM on the downlink frequency is non-existent at this QTH (a far cry from the W5LFL mission!). Here is the germaine ARRL bulletin on the subject:

QST de W1AW
Hr ARRL Bulletin NR 65 From ARRL Headquarters
Newington Ct August 1, 1985
To all radio amateurs bt

The launch of space Challenger mission 51F took place at 2100.10 UTC on July 29.

Operation by W0ORE is now expected on the following schedule,

Date	Old Orbit Number	New Orbit Number	Start UTC	Stop UTC
Aug 1	47	48	1955	2025
	48	49	2130	2200

	49	50	2300	2320
Aug 2	50	51	0025	0125
	51	52	0155	0255
	52	53	0325	0405
	53	54	0500	0540
	54	55	0635	0705
	58	59	1300	1310
	62	63	1850	1900
	63	64	2010	2045
	64	65	2140	2220
	65	66	2305	2335

Keplerian elements for STS 51F are:

I.D.	Element Set 7
Epoch	85/212.59409722
Drag	2.5e-04
Inclination	49.4884
R.A.A.N.	146.3659
Eccentricity	.0006493
Arg. of Perigee	317.0027
Mean Anomaly	185.499
Mean Motion	15.86377915
Orbit Number	28
Semi Major Axis	6696.6766 Km
Anom Period	90.75
Apogee	319.5 Km
Perigee	312.3 Km
Beacon	145.55 MHz AR

73, -Mike, k3mc (with the CMU Amateur Radio Club, W3VC)

From -2973258865542743537
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,57a00f4097d3dd63,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-02 08:01:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site tekigm.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!qantel!hplabs!tektronix!tekigm!alanr
From: alanr@tekigm.UUCP (Alan Rovner)
Newsgroups: net.ham-radio
Subject: 2 meter xcvr - Comments on 7950
Message-ID: <542@tekigm.UUCP>
Date: Fri, 2-Aug-85 11:01:30 EDT
Article-I.D.: tekigm.542
Posted: Fri Aug 2 11:01:30 1985

Date-Received: Sun, 4-Aug-85 10:14:32 EDT
Distribution: net
Organization: Tektronix, Beaverton OR
Lines: 18

To the ham who was looking for comments on 2m mobile xcvrs:
I recently sold a 7950 after having it in the car for a couple years
and overall was very happy with it as far as the features, etc. But
one word of warning...on high power it dissipates about 90 watts of
heat in the heat sink. Translate this to read it gets REAL hot,
especially in the summer when in a hot car. This 90 watts is derived
by looking at the DC current draw on high power (~10 A) and multiplying
this times the input voltage (13.8 V). This gives approx. 138 watts
DC draw from the power supply. The RF output power is 50 watts so the
delta, or 88 watts or so is dissipated as heat. What all this boils
down to is that you have to keep your transmissions fairly short in order
to prevent overheating. All the griping aside, the 7950 is a fine radio.
I think it was one of the first to incorporate the PL and transmit offset
into each memory. If I did it all over again I would buy the 7930 instead
which gives you the same features but no heat problem..
73,
Al Rovner, WA2TMP
Tektronix, Vancouver, WA

From 445547700227709989
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7b53e5596a16a8ab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-02 08:12:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA (Richard Shapiro)
Newsgroups: net.ham-radio
Subject: basic SSTV questions
Message-ID: <382@brl-tgr.ARPA>
Date: Fri, 2-Aug-85 11:12:03 EDT
Article-I.D.: brl-tgr.382
Posted: Fri Aug 2 11:12:03 1985
Date-Received: Sat, 3-Aug-85 21:22:28 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

Can someone explain in simple terms how SSTV works? Also, what do
I need (other than a SW receiver and a TV) to receive it?

Thanks,
Richard Shapiro/BBN Labs/Cambridge Ma

From -2348982751209637714

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,509dfb417298c4fc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-02 08:37:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA (Richard Shapiro)
Newsgroups: net.ham-radio
Subject: Eavesdropper antenna
Message-ID: <384@brl-tgr.ARPA>
Date: Fri, 2-Aug-85 11:37:09 EDT
Article-I.D.: brl-tgr.384
Posted: Fri Aug 2 11:37:09 1985
Date-Received: Sat, 3-Aug-85 21:23:00 EDT
Sender: news@brl-tgr.ARPA
Lines: 11

I've heard good things about the Eavesdropper antenna and am
considering buying one. Does anyone have experience with one of
these? Also, my living situation is such that I CANNOT set it
up outside. In fact I can't stretch it out to its full length
at all. How effective will an antenna like this be sitting
doubled (or tripled) up on my porch? Will I do just as well
with a simple longwire?

Thanks,
Richard Shapiro/BBN Labs

From 8481831032693628923
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8af2ff3718f115ea,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,8af2ff3718f115ea,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1985-08-02 09:48:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!petrus!
karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio,net.columbia
Subject: Latest STS-51 keplerian elements
Message-ID: <438@petrus.UUCP>
Date: Fri, 2-Aug-85 12:48:20 EDT
Article-I.D.: petrus.438
Posted: Fri Aug 2 12:48:20 1985
Date-Received: Sat, 3-Aug-85 10:15:48 EDT
Organization: Bell Communications Research, Inc
Lines: 19
Xref: watmath net.ham-radio:2992 net.columbia:1544

```
Satellite: sts-51f
Catalog number: 0
Epoch time:      85213.62777778
   Thu Aug  1 15:04:00.0   1985 UTC
Element set:     8-1
Inclination:       49.6015 deg
RA of node:       140.5160 deg
Eccentricity:    0.0003231
Arg of perigee:   328.8386 deg
Mean anomaly:     317.7854 deg
Mean motion:   15.85320600 rev/day
Decay rate:        0.00025 rev/day^2
Epoch rev:              44
Semi major axis:  6694.419 km
Anom period:     90.833362 min
Apogee:            321.758 km
Perigee:           317.432 km
Ref perigee:      2769.63517457
   Thu Aug  1 15:14:39.82  1985 UTC


From 7946503430686851220
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e1bae0a67b4ed94
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-02 11:59:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: 2m mobile xcvrs (Kenwood TR79X0 vs. ICOM 27)
Message-ID: <642@ihu1h.UUCP>
Date: Fri, 2-Aug-85 14:59:12 EDT
Article-I.D.: ihu1h.642
Posted: Fri Aug  2 14:59:12 1985
Date-Received: Sat, 3-Aug-85 10:15:33 EDT
References: <295@brl-tgr.ARPA>
Organization: AT&T Bell Laboratories
Lines: 18

x
     Jim:

     My  response to your query about 2m  fm transceivers
      was
     rejected by the 'seismo' postmaster.

     Try the Kenwood TR7930 or   TR7950.    The  guts  are  an
     improved  version of the TR7800, which I used for years
     and enjoyed.  I've recommended the    TR7930 to W9MAF
      and
```

KC2KO, both of whom are satisfied with the radio.

The audio amplifier/speaker combination in the ICOM IC27 series doesn't seem to be loud enough for mobile use, and I know 2 ICOM owners who had their audio stages fail.

--

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -1234858790833117945
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c2a8fd721f5034cc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-02 14:08:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2g.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!hou2g!stekas
From: stekas@hou2g.UUCP (J.STEKAS)
Newsgroups: net.ham-radio
Subject: Re: leased lines
Message-ID: <575@hou2g.UUCP>
Date: Fri, 2-Aug-85 17:08:17 EDT
Article-I.D.: hou2g.575
Posted: Fri Aug 2 17:08:17 1985
Date-Received: Sat, 3-Aug-85 10:28:54 EDT
References: <1160@pitt.UUCP>, <1800@ecsvax.UUCP>
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 10

> We ... routinely run at 9600 bps ... Our longest run is probably 1-2 miles.
> If you can't run copper pairs that fast you may have loaded lines.

I recall reading that Telcos will, on occaision, resort to filters and other devices to prevent a line from grossly exceeding specifications. Apparently, people needing short voice grade private lines were ordering alarm/telemetry lines and using them for voice. Maybe they got tired of complaints about "voice quality".

Jim - NJ2F

From 3773750607546505766
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fb86c350786e4097,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-02 14:36:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio

Subject: difficulty with mailing...
Message-ID: <393@brl-tgr.ARPA>
Date: Fri, 2-Aug-85 17:36:41 EDT
Article-I.D.: brl-tgr.393
Posted: Fri Aug 2 17:36:41 1985
Date-Received: Sun, 4-Aug-85 07:20:23 EDT
Sender: news@brl-tgr.ARPA
Lines: 8

Anybody who requested and did not get the "longwinded reply about radials"
and who still wants it (given that it is VERY longwinded), please request it
again. I sent several copies of it out and got one or more cryptic messages
saying "Mail failed" but not telling me which copies didn't get sent.
Rather than send them all again I chose to issue this message. Apologies
to those who don't care about the message and didn't request it!!!

-John S., W3IKG

From 1805483059500266010
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,542abc8487fabc3a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-02 20:43:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d-2.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!drutx!mtuxo!mtunh!ky2d-2!
jak
From: jak@ky2d-2.UUCP (Jim kutsch)
Newsgroups: net.ham-radio
Subject: Re: Re: Roof Mounting a Beam Antenna
Message-ID: <31@ky2d-2.UUCP>
Date: Fri, 2-Aug-85 23:43:32 EDT
Article-I.D.: ky2d-2.31
Posted: Fri Aug 2 23:43:32 1985
Date-Received: Tue, 6-Aug-85 08:22:14 EDT
References: <324@brl-tgr.ARPA>
Organization: KY2D-2 Packet Radio Gateway, Little Silver, NJ
Lines: 20

> I've often considered mounting something on my roof. Did you have any
> trouble with rain leaking in? What did you do to seal up the holes
> where your threaded rod went through?
>
>   Dana Roode, WA6NGO

I have had no trouble in nearly 3 years now with rain leaking in. I
used a heavy application of roof patching cement (tar base stuff) under
the legs of the tripod. Then, after tightening down the threaded rod, I
put a heavy coat of the stuff all over the top of the tripod feet
covering the top of the threaded rod and the nuts. So far, not a drop
of water has come through.

I have, however, been wondering how to seal the holes if I take the tripod down. I guess I'll dump some more of this tar stuff over the holes.

Hope this is useful.

73, Jim ky2d ...!mtunh!jak

From -8281915277395193872
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,20683964576dd061,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-03 15:39:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: new ICOM IC-R7000 25-1300 MHz receiver!
Message-ID: <643@ihu1h.UUCP>
Date: Sat, 3-Aug-85 18:39:57 EDT
Article-I.D.: ihu1h.643
Posted: Sat Aug 3 18:39:57 1985
Date-Received: Sun, 4-Aug-85 09:46:06 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 42

x

ICOM IC-R7000 VHF/UHF RECEIVER

ICOM announced their new scanning vhf/uhf receiver at the recent ANARC convention in Milwaukee. From the spec sheet given me, this radio will give Yaesu a run for its money.

The new R7000 looks just like its hf cousin, the R71A, with a keyboard and infrared sensor on the front panel. It covers 25-1000 and 1240-1300 MHz continuously, with conventional tuning or 99 memories.

There are detectors for FM, AM, and SSB. Both frequency and mode information may be stored into the memory channels, which are backed up by a lithium battery. I don't know if critical model-dependent parameters are stored in the RAM, as in the R71A, which would force the owner to send the receiver back to ICOM for reprogramming when the lithium batter fails.

As with the R71A, there is a fluorescent display with dimmer switch, a noise blanker, and a dial lock. The S-meter can also be used as a center tuning meter.

There are several switches to control scanning and searching modes, but nobody knows yet how well or fast it scans. There is a priority scan mode, which is not explained in the literature.

A rotary switch on the front panel selects tuning steps of 0.1, 1, 5, 10, 12.5, or 25 kHz. Other controls include an attenuator switch and a way to select/deselect memory channels for scanning (hopefully like a lockout feature, sorely lacking on the Yaesu). Narrow/wide filter selection is also provided.

Options include a speech synthesizer and wireless infrared RC-12 remote control unit.

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6998321257373439800
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a39601cdd0314e20
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-03 15:54:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: request for info on scanner info sources (repost answer)
Message-ID: <644@ihu1h.UUCP>
Date: Sat, 3-Aug-85 18:54:42 EDT
Article-I.D.: ihu1h.644
Posted: Sat Aug 3 18:54:42 1985
Date-Received: Sun, 4-Aug-85 09:46:29 EDT
References: <369@brl-tgr.ARPA>
Organization: AT&T Bell Laboratories
Lines: 177

x
Here is a copy of a past posting on this subject. I recommend
your friend buy the book "Monitor America."

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HOW DO YOU FIND THESE FREQUENCIES?
Part I:

Books, Magazines, Government Records, and Clubs

Bob Parnass, AJ9S

I am often asked, "How do you find these frequencies?" Scanner enthusiasts can obtain frequency information from several sources, including books, government microfiche records, or other listeners.

Books

The most convenient source of fire and police frequencies is the Police Call Radio Guide, published each year in 9 regional volumes by Hollins Radio Data, and sold at Radio Shack and larger bookstores for about $7. Police Call is basically a computer printout of FCC license information in the fire, police, local government, and conservation services in two lists: by licensee name within state, and by frequency. Later editions have included a few pages of local airport and nonsensitive federal government frequencies.

I highly recommend Richard Prelinger's new book, Monitor America, published by SMB Publishing, and available from Grove Enterprises for about $15. This single edition contains 582 pages of police, fire, local government, news media, sports, national park, and commercial broadcast frequencies for all 50 states. The information was compiled mainly from members of the world's largest scanning club, the Radio Communications Monitoring Association (RCMA). Monitor America contains detailed communications system profiles and precinct maps for major metropolitan areas. Police and fire radio codes and unit identifiers unique to local agencies are listed for several cities. This differs from Police Call, which gives a more sterile, but uniform treatment of licensees, listing even the smallest of towns.

The most readily available source of sensitive US government frequencies is still Tom Kneitel's 168 page Top Secret Registry of US Government Radio Frequencies. Published by CRB Research, the 5th edition is available from Galaxy Electronics (Box 1202, 67 Eber Ave., Akron, Ohio) for about $15. Kneitel's book contains frequency listings for NASA, military, FBI, Secret Service, DEA, IRS, Border Patrol, arsenals, ammunition plants, missile sites, and others in the 25 to 470 MHz range. Since the US government no longer offers frequency information for its own stations, and has

never published sensitive frequencies, most of the information in Kneitel's book has been collected from listeners over the years. It is certainly not complete, nor 100% accurate, but is the best book in print for this difficult to obtain information.

Magazines

Although national in circulation, local frequency information is sometimes available in Grove's Monitoring Times and Kneitel's sensationalistic Popular Communications.

Government Records

Every year, the US Government sells FCC license information, in the form of microfiche, to the public through the US Department of Commerce National Technical Information Service (NTIS).

These lists contain license information for the industrial (e.g. Illinois Armored Car, Pinkerton's Security, Joe's Towing, etc.), highway maintenance, commercial broadcast, aviation, common carrier, and maritime services, as well as for police and fire. Microfiche is not for the casual hobbyist, but rather for the ardent listener, who can easily spend a few hundred dollars for the fiche, not including the price of a microfiche reader.

Copies of some of the FCC microfiche files are sold by Grove Enterprises. Buying from Grove is usually cheaper than buying directly from NTIS, although Grove doesn't offer all the files available from the government.

Since federal government radio stations are not licensed by the FCC, they are not listed in FCC microfiche. In 1981, a group of 60 radio hobbyists split a $1300 fee, and obtained 80 microfiche cards of 'sanitized' information about federal government radio stations under the Freedom of Information Act (FOIA)1. Only 12 of the 21 information fields for each station were furnished. Fields like "Remarks", which indicate the exact usage of a channel (e.g. "Sky Marshall's Net"), and "Bureau", indicating agency subdivision (e.g. TAC within the USAF), were withheld. These 80 pages of microfiche are available from Grove Enterprises for $25. In a step backward, the US Government insists it will no longer release this type of information - it is now 'classified'2.

For a reason unknown to this author, the government recently released a 1984 vintage set of frequencies allocated to the FAA. Perhaps this was a mistake, because the information is marked 'unclassified', but all fields are furnished, including some which indicate security related usage. Grove sells this set of 33 microfiche cards for about $13.

Radio Clubs

One of the best parts of the hobby is sharing it with other radio buffs. Trading information with other hobbyists about frequencies, communication systems, and receiving equipment is more valuable than a pile of magazines.

In 20 years of being an amateur radio operator, and belonging to amateur radio clubs, I never realized there were any scanner clubs! In 1983, I joined the world's largest scanner club, the Radio Communications Monitoring Association (RCMA).

Founded in 1975, the RCMA is the "first national and international organization of monitor radio listeners." There are several regional chapters which hold regular meetings. Club dues are $16.50 per year, which includes a monthly newsletter of about 95 pages. Although the focus is on VHF and UHF ranges, there is coverage of HF utility stations below 30 MHz.

Inquiries about RCMA membership should be sent to:

RCMA General Manager
P.O. Box 542
Silverado, CA 92676
USA

The Scanner Association of North American (SCAN) is a scanner organization headquartered in Chicago. Having no elected officers or meetings, SCAN is not a club in the traditional sense, rather it is run by an advertising agency contracted by the manufacturer of Bearcat scanners. The $12 per year membership fee includes SCAN Magazine, a thin, albeit glossy, bimonthly.

Membership information is available from:

Scanner Association of North America
240 Fencl Lane
Hillside, Illinois 60162

Do Your Own Sleuthing

The real challenge is deriving new spectrum usage information. Sometimes it requires several days of listening, taping, and compiling fragments of information. Other times, the frequency information is there for the taking - without hassle.

More about sleuthing will be discussed in Part II of this article.

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1. See "The Government Giveth, the Government Taketh Away", by Richard Prelinger, in Monitoring Times, July 1982.

2. See "AFIO and the FOIA", by Bob Grove, in Monitoring Times, September 1982.

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -4156598899994133274
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a5ccd8794779ce39
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-03 23:21:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio
Subject: Re: scanner.900mhz
Message-ID: <252@anasazi.UUCP>
Date: Sun, 4-Aug-85 02:21:36 EDT
Article-I.D.: anasazi.252
Posted: Sun Aug 4 02:21:36 1985
Date-Received: Wed, 7-Aug-85 00:46:27 EDT
References: <413@petfe.UUCP>
Reply-To: john@anasazi.UUCP (John Moore NJ7E)
Organization: Anasazi, Phoenix Az.
Lines: 23
Keywords: scanner Re: Is there any inexpensive scanner which covers the 900 Mhz

band.

Yes, the Regency MX7000 covers 25-550 MHz and 800-1200 Mhz. It lists for around $400-$500. I have played with the MX5000, which I guess is the same scanner without the 800-1200 Mhz (looks the same and they have a common maintenance manual). I noticed two annoyances: The scan rate is slow (~5 channels per second), and you have to access individual channels by keying in the number on the front panel - there is no single button channel select. It has 20 channels.

By the way, the best place to find scanner ads at discount prices seems to be "Popular Communications." However, I suggest you ignore the articles unless you are prepared to sacrifice your technical knowledge and common sense.

P.S.

>>> W H O O P I E !!! <<<

I worked the Space Shuttle Challenger W0ORE today and received acknowledgement. Rig was 160W FM to 14el beam accurately pointed. Range at contact was 830 miles.

John Moore NJ7E
(602) 952-8205

From 2681506648734897200
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e1bae0a67b4ed94
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-03 23:28:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio
Subject: Re: 2m mobile xcvrs
Message-ID: <253@anasazi.UUCP>
Date: Sun, 4-Aug-85 02:28:00 EDT
Article-I.D.: anasazi.253
Posted: Sun Aug 4 02:28:00 1985
Date-Received: Wed, 7-Aug-85 00:46:45 EDT
References: <314@brl-tgr.ARPA>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 21

In article <314@brl-tgr.ARPA> jhs%Mitre-Bedford@d3unix.UUCP writes:
>Re: ways to spend money: Send some of it out here and I'll take care of the
>problem for you.

I have a Kenwood TW4000, which not only gives you 25 watts on 2 meters, but also on 440-450. Works quite well... you might consider it.

>Incidentally, has anyone had experience with the effect of the Mirage
>amplifiers with RECEIVE PREAMPS on INTERMOD performance? I theorize that
>a good receive preamp with some selectivity in the front end could actually
>improve intermod immunity. If so, this would be the type of amplifier to
>buy for your HT.

It is unlikely that the pre-amp will improve selectivity unless it is very "stiff". There is no reason to believe that the selectivity in a preamp will be any better than that in the receiver it is connected to.

I have a Mirage amp with pre-amp that I bought for contacting Challenger (successfully!), and I haven't noticed any intermod here in Phoenix with it. On the other hand, none of my rigs hear intermod here except the Bearcat 20/20 scanner.

John Moore NJ7E

From 2491979886358424223
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a39601cdd0314e20
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-03 23:36:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio
Subject: Re: request for info on scanner info sources
Message-ID: <254@anasazi.UUCP>
Date: Sun, 4-Aug-85 02:36:43 EDT
Article-I.D.: anasazi.254
Posted: Sun Aug 4 02:36:43 1985
Date-Received: Wed, 7-Aug-85 00:47:01 EDT
References: <369@brl-tgr.ARPA>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 13

In article <369@brl-tgr.ARPA> jhs%Mitre-Bedford@d3unix.UUCP writes:
>A friend has asked me to try to obtain a list of the "10-codes" that
>the police use in radio communications. I once had such a list but

There is no standard list in use nationwide. I have heard widely varying meanings for the same "10 codes". I suggest that you call the police department of interest and ask them. The Phoenix Police Department here has a citizen ride-along program. When you go on it, they give you a complete list of 10-codes and the other codes they use. Maybe they have a similar service in your area. By the way, a common way to select other codes (211, 459, etc) is to use the criminal code number for the offense being described.

John Moore NJ7E (Phoenix, Arizona)

From -2332206113184272773
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b8a97603b82822bd
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-03 23:43:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio

Subject: Re: Shuttle reception
Message-ID: <255@anasazi.UUCP>
Date: Sun, 4-Aug-85 02:43:58 EDT
Article-I.D.: anasazi.255
Posted: Sun Aug 4 02:43:58 1985
Date-Received: Wed, 7-Aug-85 00:47:18 EDT
References: <379@brl-tgr.ARPA>
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 14

In article <379@brl-tgr.ARPA> Michael.Chepponis@CMU-CS-C.ARPA (Mike Chepponis)
writes:
>Has anybody been able to copy acceptable SSTV from the shuttle? Here in
>Pittsburgh at W3VC, we've been able to hear faint signals on orbit #50, and
>much stronger signals on orbit #52, but nothing at all on any other orbit.

In Phoenix, I have copied 5 orbits and worked him once. On all orbits he was
weaker than W5LFL was, with the strongest signal an S4 (??) on AZDEN 3000.
I have no SSTV equipment so have not looked at images, although they are
on tape and will be decoded at a friends QTH. Antenna system is KLM 14 el
vertically polarized beam with accurate AZ tracking and EL of 0 degrees.
The weak signals were heard on relatively close orbits that would have been
S9 on the W5LFL mission, so I wonder if his ERP is down for some reason.

     John NJ7E

From -1101526122658153913
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,479dd4fd89cf6d36,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-04 12:41:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!genrad!mit-eddie!think!harvard!seismo!brl-tgr!tgr!
DEVCTR@USC-ISID.ARPA
From: DEVCTR@USC-ISID.ARPA
Newsgroups: net.ham-radio
Subject: YEASU FT757
Message-ID: <419@brl-tgr.ARPA>
Date: Sun, 4-Aug-85 15:41:57 EDT
Article-I.D.: brl-tgr.419
Posted: Sun Aug 4 15:41:57 1985
Date-Received: Wed, 7-Aug-85 02:15:10 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

Does anyone know whether the most recent modifications counting
22 have made the Yeasu FT757 FULL BREAKIN (receive between dots)
up through 60 WPM? The first units out become semi-breakin after
20 wpm.

Fred N4FG

From -592988085284321205
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1f0ef96b7822f073,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-04 21:11:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site petfe.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!petsd!petfe!johnd
From: johnd@petfe.UUCP (John Decatur)
Newsgroups: net.ham-radio
Subject: shuttle freq 51.f
Message-ID: <423@petfe.UUCP>
Date: Mon, 5-Aug-85 00:11:09 EDT
Article-I.D.: petfe.423
Posted: Mon Aug 5 00:11:09 1985
Date-Received: Wed, 31-Jul-85 05:18:46 EDT
Organization: Perkin-Elmer DSG, Tinton Falls, N.J.
Lines: 36

There off....
Minus one engine but...

For those who like to listen to hams at work...
This shuttle flight has two, W0ORE, tony and W4NYZ john.
Also sstv this flight! Freq's mostly from QST may be more...
Always nice to hear first hand whats going on.

Planned shuttle frequencies for 51-f are:
(all freq. in mhz.)
Direct 2m down - 145.55 (slow scan tv in color also...)
Nasa/Goddard greenbelt md.
    3.860 ssb
    7.185 ssb
   14.295 ssb
   21.390 ssb
  147.450 fm wash dc area
Jet Prop. Lab/pasadena ca.
  224.040 fm
  145.460 fm
Marshall space flight cntr huntsville ,al
  145.430 fm
Nasa/Aims san francisco, ca
  145.580 fm
    7.270 ssb
New York City area
  147.000 fm (as avail.)

--

                                                73, de ...johnd (KA2QHD)
                                  {ucbvax|decvax}!vax135!petsd!petfe!johnd
 =-=-=-=

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f14da92f77113b18,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-05 11:33:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.8 $; site ctvax
Path: utzoo!linus!philabs!cmcl2!seismo!lll-crg!dual!qantel!ihnp4!inuxc!pur-ee!
uiucdcs!convex!ctvax!pedz
From: pedz@ctvax
Newsgroups: net.ham-radio
Subject: Stock Report
Message-ID: <36200001@ctvax>
Date: Mon, 5-Aug-85 14:33:00 EDT
Article-I.D.: ctvax.36200001
Posted: Mon Aug 5 14:33:00 1985
Date-Received: Mon, 12-Aug-85 01:58:33 EDT
Lines: 8
Nf-ID: #N:ctvax:36200001:000:217
Nf-From: ctvax!pedz   Aug 5 13:33:00 1985

Could anyone out there how to pickup the stock report from the airways.
I was once told that it was on a satelite but was hoping that it
was also on a terrestiral type system.

Perry
convex!ctvax!pedz
pedz@ct (csnet)

From 1237253988175766913
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1fd9cbd9b2ac8f5c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-05 11:54:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 Apollo 5/13/85; site apollo.uucp
Path: utzoo!linus!decvax!wanginst!apollo!rees
From: rees@apollo.uucp (Jim Rees)
Newsgroups: net.ham-radio
Subject: Where can I get a Picturephone?
Message-ID: <28267ea6.1de6@apollo.uucp>
Date: Mon, 5-Aug-85 14:54:24 EDT
Article-I.D.: apollo.28267ea6.1de6
Posted: Mon Aug 5 14:54:24 1985
Date-Received: Wed, 7-Aug-85 02:35:54 EDT
Organization: Apollo Computer, Chelmsford, Mass.
Lines: 9

Any idea where I can find a working or restoreable pair of Western Electric
Picturephones? I'm looking for the real thing, not a work-alike. They are
all phone company property, I know, but regular phones have leaked out, so
why not picturephones?

All suggestions, including pointers to a more suitable newsgroup (I posted
here because hams are so resourceful) are welcome.

n7ahz

From -6751293052084556628
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c44979a519838e0c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-05 12:05:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: roof mounted towers - comments
Message-ID: <19347@mgweed.UUCP>
Date: Mon, 5-Aug-85 15:05:42 EDT
Article-I.D.: mgweed.19347
Posted: Mon Aug 5 15:05:42 1985
Date-Received: Tue, 6-Aug-85 10:46:33 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 12

I agree with KY2D's comments on roof mounted towers.
I have a roof mounted section of ROHN tower that has angle-iron feet.
I installed 2-by-10's under the roof between the rafters and bolted the
tower thru these boards. Standing on the tower and trying to rock it
shows no give at all. I weatherproofed the bolt holes with roof cement.
I don't have a tribander on it but I have 4 VHF/UHF ham and TV antennas
on it. This same tower section did support a TA-33 at one time and
survived 70 plus mph winds.

Bob K9EUI

From -5642954975000166905
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8477bdf93ef67eb8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-05 15:39:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 31
Message-ID: <19351@mgweed.UUCP>
Date: Mon, 5-Aug-85 18:39:48 EDT
Article-I.D.: mgweed.19351

Posted: Mon Aug 5 18:39:48 1985
Date-Received: Tue, 6-Aug-85 12:45:48 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 34

qst de k9eui
hr propagation forecast bulletin nr 31 from arrl headquarters
newington ct august 4, 1985
to all radio amateurs bt

areas of the sun responsible for the solar flux peak of 101 on
july 7 are facing the earth again, but currently the flux is
resting at 77. it peaked at 81 july 29 and 30, and has been
drifting slowly downward since. despite lower flux levels, the
28 and 50 mhz bands were open to europe in the evening of
august 4, eastern time.   several contacts were made with an
ea4, crossband 50 to 28 mhz. many contacts were made 2 way on
50 mhz with the british isles earlier last week.

reflecting the changing position of the sun with respect to the
northen hemisphere, there has been north south f layer
propagation, on 28 mhz in the past few days. ten meter beacons
in several south american countries, and as far south as vp8,
are being heard again for the first time since early june.   no
appreciable rise in east west f layer muf is likely for another
3 weeks or so.

only one small sunspot group has been visible recently, and
even that is shrinking in size. lower flux levels are not
necessarily bad for propagation, as nearly quiet sun (makes)
for generally more stable conditions on frequencies below 14
mhz at this time of year. we were in a disturbed period at
bulletin time, but better conditions are expected august 6 to 8
and 10 to 13. the second half of august will tend to be better
than the first. the solar flux average for july was 79. it is
expected to be somewhat lower in august, with a long low spell
after about the middle of the month ar

From -1743204096274631024
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f14da92f77113b18
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-06 08:46:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.8 $; site trsvax
Path: utzoo!linus!philabs!cmcl2!seismo!lll-crg!dual!qantel!ihnp4!inuxc!pur-ee!
uiucdcs!convex!trsvax!mikey
From: mikey@trsvax
Newsgroups: net.ham-radio
Subject: Re: Stock Report
Message-ID: <52800063@trsvax>

Date: Tue, 6-Aug-85 11:46:00 EDT
Article-I.D.: trsvax.52800063
Posted: Tue Aug 6 11:46:00 1985
Date-Received: Mon, 12-Aug-85 04:56:09 EDT
References: <36200001@ctvax>
Lines: 17
Nf-ID: #R:ctvax:36200001:trsvax:52800063:000:749
Nf-From: trsvax!mikey   Aug 6 10:46:00 1985

Some local FM radio stations broadcast stuff like stocks and commodities
on subcarriers. Get a CHEAP fm radio, and feed the audio output to a
PLL for FM subcarrier, or to the antenna of long Wave receiver for AM.
Some of them, like paging services, may use non-standard baud rates
that are related to multiples of the pilot (19000khz) for simplicity.
Even some TV stations are starting to put info on the audio subcarriers.
Since the FCC allowed stereo TV, they opened up a lot of extra space for
the TV broadcasters. This is NOT the same as the VIR stuff they hide,
like channel 9 from Atlanta. BTW, anyone know how the lawsuit over
who owned the VIR time between the Atlanta station and the satelite
people came out?

mikey at trsvax
KA5MJQ

From 1402277918100118570
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b010cf451a9fef18,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-06 09:11:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Ether to Ether via T1 Microwave
Message-ID: <466@brl-tgr.ARPA>
Date: Tue, 6-Aug-85 12:11:00 EDT
Article-I.D.: brl-tgr.466
Posted: Tue Aug 6 12:11:00 1985
Date-Received: Thu, 8-Aug-85 00:15:58 EDT
Sender: news@brl-tgr.ARPA
Lines: 8

Have you checked with Bridge? I seem to recall some T1 products. If not,
they ought to be willing to whip one up for you as long as they retain the
rights to sell it elsewhere. The market ought to be quite large for this
kind of thing.

I be you'll find they already sell it, however.

-John S., W3IKG

From 2133761268480620880
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e1bae0a67b4ed94
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-06 09:35:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: 2m mobile xcvrs
Message-ID: <467@brl-tgr.ARPA>
Date: Tue, 6-Aug-85 12:35:26 EDT
Article-I.D.: brl-tgr.467
Posted: Tue Aug 6 12:35:26 1985
Date-Received: Thu, 8-Aug-85 00:16:17 EDT
Sender: news@brl-tgr.ARPA
Lines: 12

Yeah, it was probably wishful thinking (to expect a Mirage preamp to cure
an intermod problem). Still, they MIGHT tune it up for just the 2-meter band,
whereas some of these walkies cover 140-170 or so and keep us in the ham band
only by grace of the synthesizer.

Here in the Boston area, some hams have solved a particular intermod problem
Telco repeater around 151 MHz) with a simple filter made out of a coax stub
and an inductor. I haven't tried it but the word is that it works quite well.
A construction article is available but you will have to beg and plead and
send an SASE for it.

-John S., W3IKG

From 2727594046702403490
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8b79e852abdd1ff6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-06 09:51:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Hardie@MIT-MULTICS.ARPA
From: Hardie@MIT-MULTICS.ARPA (Maj. Douglas Hardie)
Newsgroups: net.ham-radio
Subject: Mobile rig mounting
Message-ID: <468@brl-tgr.ARPA>
Date: Tue, 6-Aug-85 12:51:41 EDT
Article-I.D.: brl-tgr.468
Posted: Tue Aug 6 12:51:41 1985
Date-Received: Thu, 8-Aug-85 00:17:59 EDT

Sender: news@brl-tgr.ARPA
Lines: 7

Has anyone tried to mount a rig in a Ford van? I want to install a 2
mtr rig in a new van, but the logical place (radio location) has been
eliminated by XYL. There is essentally no way to mount it under the
dash near the driver withoug interfearing with driving, and the other
side of the engine cover is too far away to see or use when driving.

-- Doug WA6VVV

From 2145471340295068990
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c8a5bc6e6159dc39,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-06 13:14:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2.fluke 9/24/84; site vax4.fluke.UUCP
Path: utzoo!decvax!tektronix!uw-beaver!fluke!cse
From: cse@fluke.UUCP (Bill Fetrow)
Newsgroups: net.ham-radio
Subject: Low Band Station for Sale
Message-ID: <2490@vax4.fluke.UUCP>
Date: Tue, 6-Aug-85 16:14:48 EDT
Article-I.D.: vax4.2490
Posted: Tue Aug 6 16:14:48 1985
Date-Received: Thu, 8-Aug-85 19:44:05 EDT
Distribution: na
Organization: John Fluke Mfg. Co., Inc., Everett, WA
Lines: 4
Xref: tektronix net.ham-radio:03078

For Sale: Excellant Condition!! Ten Tec Argonaut 509 with Crystal Calibrator, CW
Filter, MFJ 901 Antenna Tuner, and Power Supply. Would make a someone
real good novice station. For more information, please contact me at
          (206) 568-4917/evenings.
.

From -1564090743399266747
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c8a5bc6e6159dc39
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-06 13:21:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2.fluke 9/24/84; site vax4.fluke.UUCP
Path: utzoo!decvax!tektronix!uw-beaver!fluke!cse
From: cse@fluke.UUCP (Bill Fetrow)
Newsgroups: net.ham-radio
Subject: Re: Low Band Station for Sale
Message-ID: <2491@vax4.fluke.UUCP>

Date: Tue, 6-Aug-85 16:21:04 EDT
Article-I.D.: vax4.2491
Posted: Tue Aug 6 16:21:04 1985
Date-Received: Thu, 8-Aug-85 19:40:31 EDT
References: <2490@vax4.fluke.UUCP>
Distribution: na
Organization: John Fluke Mfg. Co., Inc., Everett, WA
Lines: 8
Xref: tektronix net.ham-radio:03079

>
> For Sale: Excellant Condition!! Ten Tec Argonaut 509 with Crystal Calibrator, CW Filter, MFJ 901 Antenna Tuner, and Power Supply. Would make a someone real good novice station. For more information, please contact me at
>   (206) 568-4917/evenings.
> .
>
>

*** The name under which the Station is listed is Jack Wilson, Wb7eok. Sorry for the goof.REPLACE THIS LINE WITH YOUR MESSAGE ***

From 615870698822396064
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,542abc8487fabc3a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-06 15:51:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Karz.Wbst@Xerox.ARPA
From: Karz.Wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Roof Mounting a Beam Antenna
Message-ID: <482@brl-tgr.ARPA>
Date: Tue, 6-Aug-85 18:51:08 EDT
Article-I.D.: brl-tgr.482
Posted: Tue Aug 6 18:51:08 1985
Date-Received: Sun, 11-Aug-85 00:15:17 EDT
Sender: news@brl-tgr.ARPA
Lines: 34

Bruce,

I have a roof mount for my Hygain Explorer 14 that I'm quite pleased with. My antenna mast is mounted on the back side of the roof a few feet from the peak. I built a "frame" for the mast mount out of 3 pressure treated 2X4s about 25" long that lie across the joyces and are bolted to the joyces with lag bolts. The 2X4s are parallel to each other and spaced about a foot apart. They are not quite parallel to the roof line and are caulked on their "uphill" sides so that they won't dam up rain water. The frame serves to distribute the load of the antenna across the joyces. I purchased 2 2' lengths of fireplace lentil at a

local brickyard. The lentil has an "L" shaped cross section. I drilled holes in the lentils and mounted them on the "frame" parallel to the fall line of the roof (that is, almost perpendicular to the 2X4s) and with the "feet" of the "L"s pointing outward. I spaced the lentils the mast diameter apart. I then drilled a hole through the mast about an inch above the bottom and corresponding holes in the lentils. The mast pivots on a 1/2" bolt through one lentil, the mast, and the second lentil. The antenna is held up by aircraft cable guys anchored to the roof with lag bolts. The mast is 12' high. I used roofing cement around all lag bolt holes and have had no problem with leaks. The antenna has been up 2 years this month, and I've had no problems whatever, but I do make a point of checking the installation twice a year since the failure of any one lag bolt will bring the system down. Except for the driven element, the system is a "plumbers delight" (just one big short), so I feel that the #4 copper ground wire from the mast gives pretty good lightning protection. Nevertheless, I keep the feedline disconnected from the rig and grounded when not in use as an added precaution.

I hope my experiences is of some help to you.

Bob Karz
K2OID

From 8186948050863147462
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5d6ff9477a190ff2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-07 05:17:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 4.3bsd-beta 6/6/85; site ucbvax.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!lll-crg!dual!ucbvax!woodson
From: woodson@ucbvax.ARPA (Chas Woodson)
Newsgroups: net.ham-radio
Subject: antennas
Message-ID: <9728@ucbvax.ARPA>
Date: Wed, 7-Aug-85 08:17:58 EDT
Article-I.D.: ucbvax.9728
Posted: Wed Aug 7 08:17:58 1985
Date-Received: Sat, 10-Aug-85 22:44:04 EDT
Organization: University of California at Berkeley
Lines: 10
Keywords: antennas

I am considering a set of phased verticles for my new QTH.
The basic idea is that they would stick out of the top of
trees which are about 20 meters high. I am interested in
40,30,20...10.

Any recommendations? How would you feed such antennas?
Half wave, center fed?

Anyone got any suggestions or report of experience?
.

From -2509594339053876424
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1fd9cbd9b2ac8f5c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-07 06:29:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site kitty.UUCP
Path: utzoo!watmath!sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.ham-radio
Subject: Re: Where can I get a Picturephone?
Message-ID: <258@kitty.UUCP>
Date: Wed, 7-Aug-85 09:29:38 EDT
Article-I.D.: kitty.258
Posted: Wed Aug 7 09:29:38 1985
Date-Received: Wed, 7-Aug-85 23:49:27 EDT
References: <28267ea6.1de6@apollo.uucp>
Organization: Recognition Research Corp., Clarence, NY
Lines: 31

> Any idea where I can find a working or restoreable pair of Western Electric
> Picturephones? I'm looking for the real thing, not a work-alike. They are
> all phone company property, I know, but regular phones have leaked out, so
> why not picturephones?

I too would love to tinker with some Picturephones (tm), but alas, I think they are AT&T's best kept secret - perhaps to hide what was a rather bad marketing blunder. I understand that there are *large* quantities of unused Picturephones along with anciliary apparatus like Picturephone line repeaters, special KTU equipment, etc. which are still squirreled away by AT&T Technologies and the [former] Bell System operating companies.

Since the Picturephone was introduced ~1965, the electronic technology used in the apparatus is quite outdated by today's standards; the Bell System never sold enough systems to justify any newer design. If my data is correct, the Picturephone apparatus used *all* discrete components! As far as I have been able to observe, the Picturephone "Tele-conferencing Service" which is still offered by some of the [former] Bell System operating companies uses no apparatus in common with the original Picturephone station concept.

I would be interested in obtaining some Picturephones to play with if someone knows of a legitimate source.

Larry Lippman
Recognition Research Corp.
Clarence, New York
UUCP {decvax,dual,rocksanne,rocksvax,watmath}!sunybcs!kitty!larry
{rice,shell}!baylor!/
syr!buf!/
VOICE 716/741-9185
TELEX {via WUI} 69-71461 answerback: ELGECOMCLR

"Have you hugged your cat today?"

From 5391480730403140204
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,901fd17ea10d829d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-07 07:06:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.8 $; site trsvax
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!pur-ee!uiucdcs!
convex!trsvax!mikey
From: mikey@trsvax
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <52800064@trsvax>
Date: Wed, 7-Aug-85 10:06:00 EDT
Article-I.D.: trsvax.52800064
Posted: Wed Aug 7 10:06:00 1985
Date-Received: Sat, 24-Aug-85 03:19:26 EDT
References: <377@brl-tgr.ARPA>
Lines: 10
Nf-ID: #R:brl-tgr.ARPA:-37700:trsvax:52800064:000:263
Nf-From: trsvax!mikey   Aug 7 09:06:00 1985

I notice you specify sharp points on the umbrella leads. Isn't there a
controversy on sharp points vs balls on lightning arresters? I remember
reading that the conflict goes all the way back to Ben Franklin and the
King of England.

mikey at trsvax
KA5MJQ

From -2604197662514089494
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,afcb09b818237c0f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 09:40:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA (Richard Shapiro)
Newsgroups: net.ham-radio
Subject: for sale
Message-ID: <507@brl-tgr.ARPA>
Date: Thu, 8-Aug-85 12:40:21 EDT
Article-I.D.: brl-tgr.507
Posted: Thu Aug 8 12:40:21 1985

Date-Received: Sun, 11-Aug-85 06:11:38 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

For sale:

Sony ICF-6500W portable SW receiver w/digital frequency display, two-speed
tuning, BFO, covering MW, SW 3.9 MHz -- 10.5 MHz and 11.5 MHz -- 26 MHz,
VHF/FM 88 -- 108 MHz.
$50

Richard Shapiro
RSHAPIRO@BBNA.ARPA

From -657791326419618995
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6251fc821e8debe4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-08-08 10:10:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
FAC1466%UOFT01.BITNET@WISCVM.ARPA
From: FAC1466%UOFT01.BITNET@WISCVM.ARPA
Newsgroups: net.ham-radio
Subject: Add to Hams List
Message-ID: <508@brl-tgr.ARPA>
Date: Thu, 8-Aug-85 13:10:46 EDT
Article-I.D.: brl-tgr.508
Posted: Thu Aug 8 13:10:46 1985
Date-Received: Sun, 11-Aug-85 04:27:20 EDT
Sender: news@brl-tgr.ARPA
Lines: 3

Please add me to your mailing list. Tks.

C. Smith KF8K

From -3527936791920475979
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1e47eecf1daa19,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-16 12:20:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: squelch comments
Message-ID: <18922@mgweed.UUCP>

Date: Tue, 16-Jul-85 15:20:09 EDT
Article-I.D.: mgweed.18922
Posted: Tue Jul 16 15:20:09 1985
Date-Received: Thu, 18-Jul-85 05:03:34 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 12

Most squelch circuits in FM receivers operate from detected noise, not AGC.
Most FM receivers do not even have AGC since limiting is necessary.
I do remember a few tube-type receivers that had some AGC applied to the
RF amplifier (like the Motorola "SENSICON").

Why try to eliminate the squelch tail anyway? It does serve as an audible
"over" signal. My only objection is to real long tails such as in a receiver
with a very loosely adjusted squelch.

Bob K9EUI

From -785465673962703065
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1befcdcc235d45a,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 122486,d1befcdcc235d45a,start
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1985-07-16 12:31:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!houxm!mtuxo!mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio,net.news.group
Subject: net.ham-radio.packet created
Message-ID: <479@mtunh.UUCP>
Date: Tue, 16-Jul-85 15:31:00 EDT
Article-I.D.: mtunh.479
Posted: Tue Jul 16 15:31:00 1985
Date-Received: Thu, 18-Jul-85 04:31:41 EDT
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 3
Xref: watmath net.ham-radio:2925 net.news.group:3275

Net.ham-radio.packet has been recreated.

73, Jim KY2D

From -8686630027857655194
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a6374612788f42,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-16 18:34:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagatin forecast bulletin nr 28
Message-ID: <18930@mgweed.UUCP>
Date: Tue, 16-Jul-85 21:34:13 EDT
Article-I.D.: mgweed.18930
Posted: Tue Jul 16 21:34:13 1985
Date-Received: Thu, 18-Jul-85 05:21:57 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 34

qst de k9eui
hr propagation forecast bulletin nr 28 from arrl headquarters
newington, ct july 14, 1985
to all radio amateurs bt

since early last fall, sunspot numbers and the solar flux have
been close to minimum levels most of the time. february and
march solar flux averages were in the low 70s, with some days
as low as 69. in february the high was only 76. flux highs in
the 90s in april and may, and a peak of 101 this month, are
more in line with expectations for a period more than 2 years
from the likely end of cycle 21. solar observers found the sun
more interesting in early july than at any time in at least a
year, but the show now seems over for at least 2 weeks.

coming in late spring and early summer, this higher solar
activity was of little help to dx enthusiasts of the northern
hemisphere. we can only hope that the sun will do as well this
fall. until then, dx will be mostly in the lower latitudes and
on transequatorial paths, and on 14 mhz and lower frequencies.
sporadic e skip will keep 21, 24, 28 and 50 mhz active through
july regardless of solar activity.   except for e skip
influence, the propagation charts in july qst should be quite
accurate when the solar flux is above the middle 70s.

geomagnetic disturbances held at relatively high levels longer
than predicted last week.   with only minor flux variations
expected, the next 10 days or so should bring more stable
propagation on all dx frequencies.

american sunspot numbers for july 3 to 10 were between 32 and
83 with a mean of 60.1 ar

From 163424501370137096
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1fbbb0632b51837a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-17 11:30:16 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site cbnap.UUCP
Path: utzoo!decvax!harpo!whuxlm!whuxl!houxm!ihnp4!cbosgd!cbdkc1!cbnap!gws
From: gws@cbnap.UUCP (Gary W. Sanders (N8EMR))
Newsgroups: net.ham-radio
Subject: ham bbs
Message-ID: <19@cbnap.UUCP>
Date: Wed, 17-Jul-85 14:30:16 EDT
Article-I.D.: cbnap.19
Posted: Wed Jul 17 14:30:16 1985
Date-Received: Tue, 23-Jul-85 08:54:10 EDT
Reply-To: gws@cbnap.UUCP (Gary W. Sanders (N8EMR)
Distribution: na
Organization: AT&T Bell Labs Columbus,Ohio
Lines: 11

Does anyone has a list of bbs that are geared to ham radio.
I have found a couple in QST, but one of them is after hours
and the other is 300 Baud only (yech).

73
Gary W. Sanders (N8EMR)
ihnp4!cbnap!gws

--
test of sig file

From 5698111378781968913
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,111f87daaa1d448d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-18 08:17:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site iddic.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
tektronix!orca!iddic!brucec
From: brucec@iddic.UUCP (Bruce W. Cheney)
Newsgroups: net.ham-radio
Subject: Kenwood 2500 - extended operation
Message-ID: <2087@iddic.UUCP>
Date: Thu, 18-Jul-85 11:17:28 EDT
Article-I.D.: iddic.2087
Posted: Thu Jul 18 11:17:28 1985
Date-Received: Sun, 21-Jul-85 02:29:10 EDT
Organization: Tektronix, Beaverton OR
Lines: 11

A fellow ham is looking for information on how to
extend both the transmit and receive frequency of
a Kenwood TR 2500 to at least 155 mHz. He is a

 member of the Mt.Hood Ski Patrol, which uses this
 frequency. If you know how, or know where to find
out, please post or e-mail.

TNX NI7M

brucec

From 3558635410802600272
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d72627d369588dc2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-18 11:49:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site sdcsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!oliveb!hplabs!sdcrdcf!sdcsvax!brian
From: brian@sdcsvax.UUCP (Brian Kantor)
Newsgroups: net.ham-radio
Subject: Re: "PL"... - how FM noise squelches work
Message-ID: <990@sdcsvax.UUCP>
Date: Thu, 18-Jul-85 14:49:47 EDT
Article-I.D.: sdcsvax.990
Posted: Thu Jul 18 14:49:47 1985
Date-Received: Mon, 22-Jul-85 07:46:12 EDT
References: <86@biomed.UUCP> <957@sdcsvax.UUCP> <11397@brl-tgr.ARPA>
<204@redwood.UUCP>
Reply-To: brian@sdcsvax.UUCP (Brian Kantor)
Organization: UCSD wombat breeding society
Lines: 61

In article <204@redwood.UUCP> rpw3@redwood.UUCP (Rob Warnock) writes:
>| > (Note to ham radio newcomers: the ``squelch tail'' is the burst of white
>
>Actually, with some fancy coupling between the squelch and AGC circuits,
>it should be possible to eliminate most or all of the "squelch tail".
>The squelch tail occurs because the AGC gain opens up faster than the
>squelch closes. By using a longer time-constant ...

It doesn't quite work that way....

In most FM receivers, there is little or no AGC (if any, its just used
to prevent overloading of early stages). Instead, the signal is
amplified to levels that clip out all amplitude variations in the
signal. Since the modulation on the signal being received is in
the form of frequency deviations, the amplitude is irrelevent.

It is precisely because most natural noise the intrudes
upon a transmitted signal is amplitude in nature that this clipping
process (called 'limiting') eliminates the noise background on FM
signals. Since the modulation can still be recovered even after the
limiting has disposed of most of the amplitude variations, you have a
very quiet communications channel with little natural interference. It

even gets rid of a lot of electron noise generated in the receiver circuits. The receiver hears a lot of this noise from random electrons when there is no signal being received.

The squelch circuit in most receivers works by measuring the amount of high-frequency audio content in the received signal (typically, for a 300-3000 Hz communications channel, the squelch will sample at above 16 KHz). When this noise energy drops (when the receiver is quieted by a received signal), the squelch opens. Some more sophisticated receivers and in the received signal strength to prevent the squelch from blowing if the receive loses gain for some reason (lower supply voltage, for example, will reduce the gain and thus the noise, but won't simulate a received signal).

All such noise squelches have a slight delay before opening to eliminate popping cause by noise impulses that might momentarily quiet the receiver.

Some delay in closing the squelch is a good idea, as when a signal fades quickly due to reinforcement and cancellation of multiple reflections from the moving mobile transmitter or receiver (called ``chopping'' or ``popcorn'' depending upon its severity), the squelch should not close as it cannot open quickly enough to avoid cutting off small parts of the received audio. But on a strong signal that is not choppy, there is no need for a closing delay.

One of the first radios on the market with dual-rate noise squelch was the Motorola MICOR, which had a moderate delay when the signal's average quieting level was below some specific threshold, and was much faster when the signal was strong. The effect was that weak signals had a squelch tail but did not chop off voices, and strong ones went away without a noise burst.

Hope this clears up some of the confusion.

Brian Kantor WB6CYT UC San Diego

decvax\ brian@ucsd.arpa
akgua >--- sdcsvax --- brian
ucbvax/ Kantor@Nosc

From -1314380571687015219
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a49ee037516f96b0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-19 13:10:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site anasazi.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!noao!terak!anasazi!john
From: john@anasazi.UUCP (John Moore)
Newsgroups: net.ham-radio
Subject: Computer Controlled Scanners?
Message-ID: <237@anasazi.UUCP>

Date: Fri, 19-Jul-85 16:10:35 EDT
Article-I.D.: anasazi.237
Posted: Fri Jul 19 16:10:35 1985
Date-Received: Sun, 21-Jul-85 02:09:30 EDT
Reply-To: john@anasazi.UUCP (John Moore)
Organization: Anasazi, Phoenix Az.
Lines: 29
Keywords: Scanners
Summary: Looking for info on scanners capable of computer control

There are many scanners in the world with all sorts of neat features.
Unfortunately, they never seem to do quite what you want. For example,
when searching a frequency range for new signals, there is no way to
skip specific frequencies which you don't want to hear.

I am looking for information on scanners which can be interfaced to
a computer so that the computer can exercise real-time control over
the parameters of the radio - especially frequency. I know of two
scanners with computer control (one made by Bearcat, and the other
a clone of the Regency MX-5000 made by AOR). Unfortunately, it is
pretty difficult to get information on either one. The last time I
talked to Bearcat (a while ago), they were unwilling to part with the
interface specs. Rather, they wanted one to buy a software package for
the computer of interest and just run it. I was unable to determine for
sure if the frequency skipping option is possible, but it looks like it
may not be. The computer may just be capable of loading the frequency
registers and reading usage counts, etc. If anyone knows more about this,
I would like to hear from them.

The AOR scanner is even more mysterious. It appears to be a Regency MX-5000
except with a Japanese name. There is an RS232 adapter for it for around
$130. However, finding out what you can do with that is an interesting
problem. My brother, who lives in Tokyo, is trying to find out but he
is not likely to succeed. Again, help!!

Does anyone know of any other computer controlled scanners? Regency? JIL?
etc...

     John Moore

From -7856269173775487849
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,60a31222286acf7d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-19 14:59:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site redwood.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!petsd!pesnta!hplabs!hpda!fortune!redwood!rpw3
From: rpw3@redwood.UUCP (Rob Warnock)
Newsgroups: net.ham-radio
Subject: Squelch Tails - A retraction (*blush*)

Message-ID: <208@redwood.UUCP>
Date: Fri, 19-Jul-85 17:59:22 EDT
Article-I.D.: redwood.208
Posted: Fri Jul 19 17:59:22 1985
Date-Received: Wed, 24-Jul-85 23:45:23 EDT
References: <11607@brl-tgr.ARPA> and others
Organization: [Consultant], Foster City, CA
Lines: 12

As several people have pointed out, I blew it talking about AGC and
FM radio squelch tails. I WAS thinking about AM or SSB. (*blush*)

How DOES an FM squelch work??? (I admit it, I have no idea...)

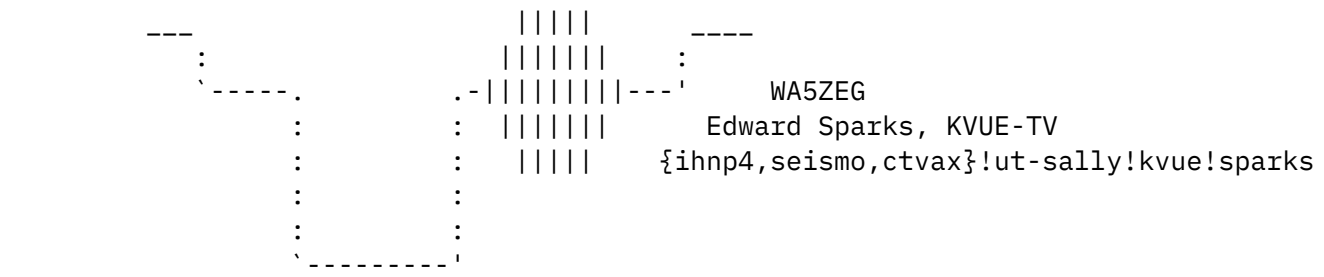
Rob Warnock
Systems Architecture Consultant

UUCP: {ihnp4,ucbvax!dual}!fortune!redwood!rpw3
DDD: (415)572-2607
USPS: 510 Trinidad Lane, Foster City, CA 94404

From 3751668824728567250
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b32dc0c92a0459de,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-19 15:17:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site kvue.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!ut-sally!oakhill!kvue!sparks
From: sparks@kvue.UUCP (Ed Sparks)
Newsgroups: net.ham-radio
Subject: ASR-33 for sale
Message-ID: <222@kvue.UUCP>
Date: Fri, 19-Jul-85 18:17:46 EDT
Article-I.D.: kvue.222
Posted: Fri Jul 19 18:17:46 1985
Date-Received: Sun, 21-Jul-85 04:12:52 EDT
Distribution: net
Organization: KVUE-TV, Austin, Tx.
Lines: 20

FOR SALE:
     Teletype model ASR-33 with paper tape punch and reader.
     Original documentation included; all equipment in very good
     condition.
     Also included: 110 baud originate only modem, connects directly
     to the ASR-33 via 25 pin D connector.

     Please reply by mail; make offer. Or call (512) 459-6521 x 2039



WA5ZEG
Edward Sparks, KVUE-TV
{ihnp4,seismo,ctvax}!ut-sally!kvue!sparks

From 2996918199116197556
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bfcb1509dbd7e6a0
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-20 22:31:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Scanner Info Needed (using TV antennas w/scanners)
Message-ID: <633@ihu1h.UUCP>
Date: Sun, 21-Jul-85 01:31:23 EDT
Article-I.D.: ihu1h.633
Posted: Sun Jul 21 01:31:23 1985
Date-Received: Mon, 22-Jul-85 07:24:08 EDT
References: <11586@brl-tgr.ARPA>
Organization: AT&T Bell Laboratories
Lines: 90

x
> ..... Recient messages about ICOM and
> Yaesu FRG-8800 battery backed-up RAM containing REQUIRED operating
> parameters have me worried.
> ..... Planned obsolescence (or required
> maintenance, if the company will be willing to do it
into the distant
> future) is not a desirable feature in a receiver. BTW, the Kenwood
> R-2000 does not have this problem.

I wouldn't let the RAM/backup design deter one from
buying a new ICOM R71A, as I think most people that buy
one new will be swapping it for a later model before
the
lithium battery runs down. The FRG8800 problem, on the
other hand, sounds like one that will affect owners of
new and used FRG8800 receivers alike.

> Is there any reason that a good quality, 25 element UHF/VHF/FM
> television antenna on a rotor wouldn't be as good or
better than a

> "scanner" antenna? The frequency coverage is about the same, it is
> directional, and the antenna feed is low loss 75 ohm coax. I am aware
> that impedance matching would be necessary if the scanner input is not
> 75 ohms.

TV Antennas as Scanner Antennas:
Textbook Answer

1. Because the lowest TV channel is around 56 MHz, a TV antenna doesn't excel in the 30 - 40 MHz range.

2. Because most stations one would monitor on a scanner use vertically polarized antennas, loss due to cross polarization would be experienced if using a horizontal antenna with a scanner.

TV Antennas as Scanner Antennas:
Experimenter's Answer

1. If you already have a TV antenna installed, try it on the scanner. Although I think you'll do better with a scanner antenna, my philosophy on receiving antennas is: if you can hear what you want to hear, USE it! I use coat hangers soldered into banana plugs on the back of 3 of my scanners.

2. The difference between using a 75 or 50 ohm antenna systems for a scanner receiving antenna is insignificant. The input impedance at the antenna terminals of a multi-band scanner is not a constant 50 ohms over the entire frequency range, and 75 ohms is close enough.

3. Remember that there are situations in which one doesn't want a "good" antenna. I monitor a local fire department frequency shared by dozens of towns, but I'm only interested in my own. For this purpose, I use the built-in telescoping antenna, collapsed down a few sections.

The majority of scanner purchasers aren't hobbyists, and are content with the telescoping antenna furnished with the radio.

Most hobbyists use the "ground plane" type of antenna with a coil in the vertical element for multiband reception. These antennas are made by Antenna Specialists and

Radio Shack, among others. The trap is designed to allow reception on 2 or 3 of the conventional bands. Avanti's 801 scanner antenna looks weird, but it too is designed for reception within discrete frequency ranges.

A new trend in monitoring is the availability of continuous coverage, wide band receivers. Now that reception of the 72-76, 200-400, and 800-1300 MHz bands is practical, one may consider using a set of antennas, each optimized for a particular band, or a single, broad band antenna. Hustler makes a broad band discone antenna for scanner use that sells for about $30.

This brings me to another subject. My Hustler discone wouldn't fit on the porch of my apartment, so I'm buying a multi-acre farmette. I won't keep cows in my barn (aka/inlaw suite), nor grow corn, but rather will plant an antenna crop.

Netnews submissions and listening activities will, of necessity, be limited during this busy time.

--

==========

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -3753950700129876584
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,995cf1e361c9c6a0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-22 10:13:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: "PL" & listen before xmit
Message-ID: <19046@mgweed.UUCP>
Date: Mon, 22-Jul-85 13:13:33 EDT
Article-I.D.: mgweed.19046
Posted: Mon Jul 22 13:13:33 1985
Date-Received: Thu, 25-Jul-85 03:07:17 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 72

715-4C

715-5C

715-5A

715-3B

715-6C

716-1C

716-1A

716-3A

716-2A

715-6A

As someone correctly pointed out, the mic hanger in a mobile unit had a switch in it so when the mic was hung up the rcvr would revert to tone squelch. When the mic was removed, the set went to carrier squelch, which fulfilled the requirement to listen before transmitting. I was

thinking more of base stations being the violators of this rule than mobiles. Some of the Motorola base stations had a dual paddle mic. One paddle was the PTT and the other was the carrier squelch switch which, I observed, was seldom used by the operator. We had 2 towns here 8 miles apart, whose police dept's were on the same freq. I don't think either dispatcher ever listened before transmitting. One finally went UHF and the other ended up adding a input to make their station into a repeater. This was after several years of a "power war" between them.

Bob K9EUI

From -4898497300894115983
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,165646ab524f2a7a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-22 12:18:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Electronics wearing out
Message-ID: <87@brl-tgr.ARPA>
Date: Mon, 22-Jul-85 15:18:09 EDT
Article-I.D.: brl-tgr.87
Posted: Mon Jul 22 15:18:09 1985
Date-Received: Wed, 24-Jul-85 06:55:18 EDT
Sender: news@brl-tgr.ARPA
Lines: 19

I for one think it is fairly reasonable for a lithium battery to have a 7-year life span.

Just so it doesn't take a whole transceiver or receiver with it when it dies.

I do NOT think it is reasonable to have a designed-in "service call" at 7 years (plus or minus 5 or so), especially when it is UNreasonable to expect anyone other than the manufacturer to be able to perform the necessary service successfully.

Under the circumstances, it's more like a renewal of your license to use the radio, at whatever price the manufacturer feels like charging you at the time.

In summary, I might well elect to lease or rent an ICOM radio with this kind of design, but I will never BUY one.

Especially a 7-year-old used one!!!

-John S., W3IKG

From 39422543383211638
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3beaa8bd44c133d9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-22 12:47:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: coarse language on the net
Message-ID: <89@brl-tgr.ARPA>
Date: Mon, 22-Jul-85 15:47:14 EDT
Article-I.D.: brl-tgr.89
Posted: Mon Jul 22 15:47:14 1985
Date-Received: Wed, 24-Jul-85 07:12:15 EDT
Sender: news@brl-tgr.ARPA
Lines: 16

One of the things I (used to) like about ham radio was that most hams
were pretty careful not to use coarse language on the air, in part because
the FCC was pretty adamant about this issue.

I have noticed a sudden rash of "off-color" words on the net in recent days.
I for one would like to see us all be a little more careful on this point.
What is perhaps acceptable in casual conversation comes off sounding pretty
coarse in print, even electron-excited phosphorescent print.

When coarse language is really intended, maybe something like #@$%&!!! will
convey the meaning.

I hope there is enough agreement on this subject that this comment will not
be considered out of place.

-John S., W3IKG

From 5039478405272443339
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,111f87daaa1d448d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-22 13:09:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!jhs@Mitre-Bedford
From: jhs@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: Kenwood 2500 - extended operation
Message-ID: <92@brl-tgr.ARPA>
Date: Mon, 22-Jul-85 16:09:44 EDT
Article-I.D.: brl-tgr.92
Posted: Mon Jul 22 16:09:44 1985
Date-Received: Wed, 24-Jul-85 07:14:21 EDT

Sender: news@brl-tgr.ARPA
Lines: 8

Is it legal to use ham gear which is not type-accepted for other uses
in ski patrol service? I am sure it would not be legal for commercial
applications.

Hams of course are free even to build their own equipment, so what's a little
modification if it is for ham use!?

-John S., W3IKG

From -2430191202200485118
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,484f4afcef29a696,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-22 16:23:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 56 (re-sked shuttle flight 51F)
Message-ID: <19053@mgweed.UUCP>
Date: Mon, 22-Jul-85 19:23:19 EDT
Article-I.D.: mgweed.19053
Posted: Mon Jul 22 19:23:19 1985
Date-Received: Thu, 25-Jul-85 05:12:38 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 56 from arrl headquarters
newington ct july 16, 1985
to all radio amateurs bt

the launch of space shuttle challenger mission 51f has been
tentatively rescheduled for 2030 utc july 29, or possibly
either of the two following days. there will be no change in
the sequence of scheduled amateur radio activities. watch arrl
bulletins for further details, as they become available ar

From -3959203232039940387
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e90bbbc87d5683a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-22 16:23:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr

From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 29
Message-ID: <19054@mgweed.UUCP>
Date: Mon, 22-Jul-85 19:23:45 EDT
Article-I.D.: mgweed.19054
Posted: Mon Jul 22 19:23:45 1985
Date-Received: Thu, 25-Jul-85 05:13:35 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 36

qst de k9eui
hr propagation forecast bulletin nr 29 from arrl headquarters
newington, ct july 21, 1985
to all radio amateurs bt

the solar flux curve is following a trend that began in may. early in the month there was a marked rise, followed by a sharper decline to very near quiet sun values. in the low period that began july 15, the flux curve is almost exactly superimposed on that for 4 weeks earlier. this trend is expected to hold, with flux values close to 70 until about july 27th, followed by a steep rise in early august.

about half of the sun has been active and the other half almost quiet for the past 3 months. the active periods bring very frequent geomagnetic disturbances and unstable propagation. the calm, like the period now at hand, gives more stable conditions, but with lower muf. this should be with us through the rest of july, with more variable propagation again in early august. sporadic e layer ionization is now declining, so 21, 24, 28 and 50 mhz will be less active through the rest of the summer. a more direct relationship between solar flux levels and dx conditions will be apparent as we move into august, and increasingly clear in early fall. usefulness of the qst propagation charts will improve, especially where high latitude paths are involved.

there is some possibility of better hf dx conditions in late 1985 than were experienced in the same months of 1984. that was a time of exceptionally low solar activity for less than 9 years into cycle 21.

american sunspot numbers for july 11 to 17 were between 3 and 50 with a mean of 18 ar

From -8802970884324773472
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bfcb1509dbd7e6a0
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-23 07:10:00 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.7 $; site trsvax
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!pur-ee!uiucdcs!
convex!trsvax!mikey
From: mikey@trsvax
Newsgroups: net.ham-radio
Subject: Re: Scanner Info Needed
Message-ID: <52800062@trsvax>
Date: Tue, 23-Jul-85 10:10:00 EDT
Article-I.D.: trsvax.52800062
Posted: Tue Jul 23 10:10:00 1985
Date-Received: Fri, 26-Jul-85 20:25:43 EDT
References: <11586@brl-tgr.ARPA>
Lines: 23
Nf-ID: #R:brl-tgr.ARPA:-1158600:trsvax:52800062:000:1148
Nf-From: trsvax!mikey   Jul 23 09:10:00 1985

75 to 50 ohm mismatch at the scanner is a 1.5:1 SWR, not much to worry about. And some of the 75 ohm aluminum shiellded cable is VERY LOW loss for the price. As for the TV antenna, it's probably designed to mount horizontally, with a mast up the center. Trying to mount it vertically may be a problem both mechanically and electrically, as a mast in line with the elements will probably affect it a lot. Don't get me wrong, I've used "other" antennas for lots of stuff like scanners and even transmitting. I'm now using an old Radio Shack VHF high band only base monitor antenna for a 2 meter transmitter. Believe it or not, I had to CUT the length down to make it tune. I get EXCELLENT results. (This is the old antenna that was discontinued in 1977 that has a base loaded coil. They sold a base version and a mobile version that were nearly identical. There was a taxi company near me that used the mobile version for their taxis, seems $16.95 was a lot cheaper than the Motorola antenna.)

On scanners, almost anything will work. Just get the antenna OUTSIDE and get it as HIGH in the air as you can.

mikey at trsvax
KA5MJQ

From 1588971069482204104
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1e47eecf1daa19
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-23 14:07:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: squelch comments

Message-ID: <112@brl-tgr.ARPA>
Date: Tue, 23-Jul-85 17:07:37 EDT
Article-I.D.: brl-tgr.112
Posted: Tue Jul 23 17:07:37 1985
Date-Received: Thu, 25-Jul-85 06:30:24 EDT
References: <18922@mgweed.UUCP>
Organization: Ballistic Research Lab
Lines: 10

> Why try to eliminate the squelch tail anyway? It does serve as an audible
> "over" signal. My only objection is to real long tails such as in a receiver
> with a very loosely adjusted squelch.
>
Because it can be quite harsh, especially with repeaters like the old
07/67 in Baltimore that had no input receivers at the transmitter site.
When carrier was dropped, you would hear both the input receiver, the
link receiver, and your own radio's squelch tail.

-Ron

From -627146358492585671
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,37372c32a351208d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-23 15:14:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Couse.osbunorth@Xerox.ARPA
From: Couse.osbunorth@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Equipment for Sale
Message-ID: <117@brl-tgr.ARPA>
Date: Tue, 23-Jul-85 18:14:13 EDT
Article-I.D.: brl-tgr.117
Posted: Tue Jul 23 18:14:13 1985
Date-Received: Thu, 25-Jul-85 06:32:02 EDT
Sender: news@brl-tgr.ARPA
Lines: 55

My husband is selling off much of his current ham gear in preparation
for buying some new equipment. Any interested parties can reach him
through me - Mary Couse - at my work number (415) 494-4668 (Palo Alto
CA).
He has the following items for sale:

               >>> DRAKE TR7A <<<

     * 0 to 30 Mhz receive
     * 160 to 10 meters plus WARC bands transmit
     * 250 watts input to fan cooled solid state finals

Complete with:
  * fan for final stage   * MS7 speaker
  * noise blanker   * MN2700 2KW matching network
  * 250 Hz filter   * Operators' manuals
  * 500 Hz filter   * Service manual for the TR7
  * 1500 Hz filter   * Service extender boards
  * PS7 power supply with fan   * Original boxes
  * RV75 synthesized PTO

Mint Condition.....asking $1200.00

>>> DRAKE C LINE <<<

R4C receiver with: Noise blanker   28.0 Mhz crystal
              500 Hz filter 29.0 Mhz crystal
              1500 Hz filter MS4 speaker
              10 Mhz crystal

T4XC xmtr with: AC4 supply
              28.0 Mhz crystal
              29.0 Mhz crystal

Complete with cables, manuals and original boxes.....asking $450

>>> DRAKE CC-1 VHF CONVERTER CONSOLE <<<

Complete with power supply, crystal calibration, Drake 2 meter and 6
meter converters. Matches C-line equipment style.....asking $125

>>> MFJ VERSA TUNER II (MFJ-949) <<<

300 watt tuner with built-in dummy load, balun, antenna selector switch
(2 coax, 1 balanced wire).....asking
$75

>>> HEATH MONITOR SCOPE HO-10 <<<

Built-in two-tone oscillator.....asking $55

From -5849820465922629686
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a49ee037516f96b0
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-23 18:22:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass

From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Computer Controlled Scanners? (Comquest SPX-210)
Message-ID: <635@ihu1h.UUCP>
Date: Tue, 23-Jul-85 21:22:40 EDT
Article-I.D.: ihu1h.635
Posted: Tue Jul 23 21:22:40 1985
Date-Received: Thu, 25-Jul-85 06:16:05 EDT
References: <237@anasazi.UUCP>
Organization: AT&T Bell Laboratories
Lines: 72

> .....
> Does anyone know of any other computer controlled scanners? Regency? JIL?
> etc...
>
> John Moore

Here's a reposting of a past article on a computer controlled scanner product. A friend has one, and I saw a demo by the inventor at our scanner club meeting. After seeing the demo, I suggested a few new features, such as a producing a histogram in the search mode, which are now incorporated into the latest version.

Comquest SXP-210 Scanner Expansion Package

There was a demonstration at the Wheaton Hamfest of a new $110 software package that allows a Commodore 64 personal computer to control a Bearcat 210XL scanner. The SXP-210 comes with software on a 5.25" floppy diskette and a special interface cable, which connects the 64 to a ribbon cable within the 210XL.

Uniden's hasty withdrawl of the Bearcat CompuScan 2100 leaves the SXP-210 as the only product that will allow a personal computer to control a VHF/UHF scanner.

Some of the more interesting features listed in the sales litera-
ture:

- Expands [stock] 18 channels to 50.

- Removes the software constraints [of the stock 210XL] that prevented operation on the 6m and 10m amateur bands.

- Color graphics that identify type of radio service being monitored. (Police, Fire, Amateur, etc.)

- With a printer you can generate a chronological log of selected channels as they become active along with the time of day that the transmissions were received.

- Includes 12 hour time of day clock w/AM and PM designations.

- Adds a "count" feature to the 210XL, similar to the one on more expensive scanners.

- Edit mode allows flexible control of all channel info.

- Includes an improved search mode with a "Hold" [?] trigger feature.

- Channel lockout/selective scan delay.

- Includes a special list function that displays freq info for all 50 channels simultaneously on one screen.

Installation appears simple. A pliers is used to crimp a supplied socket onto an existing ribbon cable within the 210XL. An umbilical cable plugs into this socket and into the computer.

One drawback of the this 64/BC210XL setup is the scan rate rate of only 8 channels/sec, about half the scan rate of a normal 210XL.

For more info, contact:

Comquest Company
5719 Gateway Drive
Indianapolis, IN 46254

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -9207871406151795763
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5e37b6ed03d4904f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-24 08:56:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!wmartin@Almsa-2
From: wmartin@Almsa-2 (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: Antennae for amateur operations on the shuttle
Message-ID: <136@brl-tgr.ARPA>
Date: Wed, 24-Jul-85 11:56:23 EDT
Article-I.D.: brl-tgr.136
Posted: Wed Jul 24 11:56:23 1985
Date-Received: Thu, 25-Jul-85 23:25:33 EDT
Sender: news@brl-tgr.ARPA
Lines: 21

Does someone out there know what the antenna setup is for the anateur radio operations on the space shuttle? Do the hams on board disconnect some mission radio equipment from external antennae and connect their ham gear during the scheduled times of operation? Or are there extra antennae installed, either mission spares or specially-set-up for the amateur radio operations, that are used? Or are no external antennae needed? (That is, is the shuttle made of enough composite and/or non-metallic components that it is not a "Faraday cage" that would restrict the RF radiation from passing through?)

I looked at at least one ham-radio magazine article on the subject, but found no technical details like this, which surprised me. Have there been QST or CQ articles covering ham radio on the shuttle with a lot of technical details? (Those are the only two ham mags that I can get to back issues of...)

Thanks for any info!

Regards,

ARPA/MILNET: wmartin@almsa-1.ARPA USENET: seismo!brl-bmd!wmartin

From -7204239644122560977
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,85071b0d12b60912,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-24 10:27:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!carpenter@nbs-vms
From: carpenter@nbs-vms (CARPENTER, BOB)
Newsgroups: net.ham-radio
Subject: Re: Ham antennas on shuttle.
Message-ID: <143@brl-tgr.ARPA>
Date: Wed, 24-Jul-85 13:27:48 EDT
Article-I.D.: brl-tgr.143
Posted: Wed Jul 24 13:27:48 1985
Date-Received: Fri, 26-Jul-85 00:34:42 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

I understand that the current ham antenna situation is the same as during Owen Garriot's flight. That is the ham-in-space puts an antenna up against a window when operation is to take place. It seems inconceivable to disconnect any "real" equipment during flight, and the cost of getting another hole in the shuttle whould be stupendous, as would be the delay.

Bob, W3OTC

From -8461077867524631071
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1119e53aec64eaa7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-24 12:18:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!carpenter@nbs-vms
From: carpenter@nbs-vms (CARPENTER, BOB)
Newsgroups: net.ham-radio
Subject: Re: Shuttle ham antennas
Message-ID: <148@brl-tgr.ARPA>
Date: Wed, 24-Jul-85 15:18:08 EDT
Article-I.D.: brl-tgr.148
Posted: Wed Jul 24 15:18:08 1985
Date-Received: Fri, 26-Jul-85 00:39:03 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

Sorry, but I forgot to say that there was a semi-technical article
about Garriot's gear a couple of years ago in QST.

From 6155535086836390436
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,111f87daaa1d448d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-24 20:10:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Kenwood 2500 (FCC type accepted for > 150 MHz)
Message-ID: <636@ihu1h.UUCP>
Date: Wed, 24-Jul-85 23:10:19 EDT
Article-I.D.: ihu1h.636
Posted: Wed Jul 24 23:10:19 1985
Date-Received: Fri, 26-Jul-85 08:21:45 EDT
References: <92@brl-tgr.ARPA>
Organization: AT&T Bell Laboratories
Lines: 32

x
     According to 1984 FCC records, the   Mt. Hood Ski Patrol,
     Inc. has these stations licensed for Special Emergency
     use in the   Public Safety radio service:

Mt. Hood Ski Patrol, Inc
[Government Camp, O]_ 155.2050____KON213
(govt recds)
" [Government Camp, O]_ 155.2050____KON215
(govt recds)
" [Parkdale, OR]_______ 155.2050____KON216
(govt recds)

Transmitting equipment used on these frequencies must be type accepted for this class of service. Thus, the Kenwood TR2500 could not legally be used for transmission on these frequencies.

The FCC may be more flexible in emergency situations, e.g., those in which life or property is in danger.

> Is it legal to use ham gear which is not type-accepted for other uses
> in ski patrol service? I am sure it would not be legal for commercial
> applications.
>
> Hams of course are free even to build their own equipment, so what's a little
> modification if it is for ham use!?
>
> -John S., W3IKG

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 269166952240556295
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,558f30af0d8f8ace,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-25 07:19:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Squelch Tails - A retraction (*blush*)
Message-ID: <165@brl-tgr.ARPA>
Date: Thu, 25-Jul-85 10:19:22 EDT
Article-I.D.: brl-tgr.165
Posted: Thu Jul 25 10:19:22 1985
Date-Received: Sat, 27-Jul-85 01:09:37 EDT
Sender: news@brl-tgr.ARPA
Lines: 50

Blushing is definitely not necessary on the net. You are EXPECTED to make innacurate statements from time to time to keep us on our toes. If it happens naturally (as it does with most of us) then that just makes it less

work to think them up.

Most FM squelch circuits work by exploiting the difference in spectral density of noise coming out of the discriminator (or equivalent demodulator) on quiet or modulated carriers versus noise resulting from Gaussian noise alone in the IF strip. The most common form in my (casual) experience is a high-pass or bandpass filter off the discriminator output, followed by some kind of amplitude detector such as a rectifier and lowpass filter, and of course a threshold device such as a Schmitt trigger. The filter has to reject the speech band, and should pick up just above it and then drop off again after a couple of octaves.

It is surprising how sensitive the things can be to even a slight carrier as opposed to pure noise. Apparently the high-frequency noise just above the speech band, say 5 to 20 KHz, quiets very quickly when a weak carrier pops up. This is probably due to the sudden disappearance of the "clicks" that occur in FM when the IF signal-space phasor wraps around the origin. It does this all the time when the noise is pure Gaussian with approximately equal power in any two quadrature phases. When you "bias" it toward a particular sinusoidal phase, it suddenly becomes much harder to get it to wrap around the origin. It has to overcome the rapidly-diminishing Gaussian probability distribution to get over to the origin.

To understand the "clicks", you have to understand that an idealized FM demodulator (discriminator) looks at an IF wave and "computes" as its output the time derivative of the instantaneous phase of the narrowband random process it sees at its input. The phase is the arctangent of the ratio of the instanteous in-phase and quadrature-phase signals at any given instant. What is going on is that really rapid phase changes (which give large spikey outputs with lots of high frequency components because, remember, the phase is differentiated) tend to occur most easily when the amplitude in BOTH in-phase and quadrature phase channels happens to be small at the same time, i.e. the point in the plane representing the input random process is very close to the origin. When a signal is injected, this ensures that this "phasor" stays away from the origin and does not get to generate the rapid phase changes that occur without a signal, and especially not the really nasty ones that encircle the origin.

The squelch detector should not be too sensitive to much higher frequencies than necessary, because these are slower to quiet than lower frequencies. The phase differentiation process leads to a nearly flat spectrum for low signal amplitudes and a triangular one, i.e. one that rises linearly with frequency, for large SNR. The best place to sense the noise is just above the speech band, i.e. at as low a frequency as possible consistent with not being fooled by the signal modulation.

-John S., W3IKG

From 1291122194351992488
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,85071b0d12b60912
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-07-25 08:08:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site frog.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!think!mit-eddie!cybvax0!frog!john
From: john@frog.UUCP (John Woods)
Newsgroups: net.ham-radio
Subject: Re: Ham antennas on shuttle.
Message-ID: <239@frog.UUCP>
Date: Thu, 25-Jul-85 11:08:55 EDT
Article-I.D.: frog.239
Posted: Thu Jul 25 11:08:55 1985
Date-Received: Sun, 28-Jul-85 08:37:04 EDT
References: <143@brl-tgr.ARPA>
Organization: Charles River Data Systems, Framingham MA
Lines: 17

> I understand that the current ham antenna situation is the same as
> during Owen Garriot's flight. That is the ham-in-space puts an antenna
> up against a window when operation is to take place. It seems
> inconceivable to disconnect any "real" equipment during flight, and
> the cost of getting another hole in the shuttle whould be stupendous,
> as would be the delay.
>
> Bob, W3OTC

Well, he could sit in the cargo bay with the door open... Putting a hole
in the suit might not be quite so expensive.

John, WB7EEL

--
John Woods, Charles River Data Systems, Framingham MA, (617) 626-1101
...!decvax!frog!john, ...!mit-eddie!jfw, jfw%mit-ccc@MIT-XX.ARPA

From -1536826148720122577
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,542abc8487fabc3a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-25 10:07:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site iddic.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
tektronix!orca!iddic!brucec
From: brucec@iddic.UUCP (Bruce W. Cheney)
Newsgroups: net.ham-radio
Subject: Roof Mounting a Beam Antenna
Message-ID: <2095@iddic.UUCP>
Date: Thu, 25-Jul-85 13:07:34 EDT
Article-I.D.: iddic.2095
Posted: Thu Jul 25 13:07:34 1985
Date-Received: Sun, 28-Jul-85 03:54:33 EDT
Organization: Tektronix, Beaverton OR

Lines: 9

I am considering mounting a tribander beam on
my roof (XYL says no to towers). I would be very
interested to hear of other people's experiences
trying to do something similar. Any good, practical,
reference material tips would also be appreciated.

NI7M
brucec

From 7995429872734551206
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c2a8fd721f5034cc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-25 15:21:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site biomed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!wjh12!biomed!lagasse
From: lagasse@biomed.UUCP (Robert C. Lagasse)
Newsgroups: net.ham-radio
Subject: leased lines
Message-ID: <103@biomed.UUCP>
Date: Thu, 25-Jul-85 18:21:01 EDT
Article-I.D.: biomed.103
Posted: Thu Jul 25 18:21:01 1985
Date-Received: Sun, 28-Jul-85 08:37:46 EDT
Organization: Mass. Gen. Hosp. - Dept. Biomed. Engineering
Lines: 40

Does anyone have any idea how much a telephone company "leased-line" costs? Is it so much per mile? (A leased line is a pair of wires from one point such as a business or residance to another site such as a repeater site or another building). These are usually used with buglar alarm systems and commercial broadcast radio "remotes" and I believe consist of nothing more than a pair of wires from one site, to the phone company central office , then to the other site with no switching or electronic intervention in between. (Does anybody have any ideas how many junctions the installer of such a line has to make? I figure a minimun of three. One at the pole at one end, one that he must call into a central ofiice to have someone make between two big fat trunk cables, and then another at the pole at the other end). I believe you can put a battery of, say, 10V at one site and measure the battery voltage at the other, minus the voltage drop due to connections and distance. By the way, does anyone know?: a) the maximum allowed voltage on a leased line b) how many volts/mile is usually lost, and c) maximum allowable current (do they fuse it somewhere?).

I called the phone company and got the royal run-around. I tried to explain what I wanted but was told of auto-ring circuits like the taxi phones use (how much do they charge for those/month). As soon as I mentioned that it would be for ham-radio remote control and also possibly

burglar alarm monitoring, I was referred to the "mobile-phone" group which deal with mobile phone companies (probably that cellular garbage) and they told me their lines cost $24.50/month and then an additional fee for each minute of "air-time". I then tried calling back the original office and re-explained that it would be like a burglar alarm line, was then asked if it was for voice, I was puzzled and said no, and was then told that burglar alarm lines run ONLY to the police station and could not go between residences.(when she asked me if it would be used for voice, it made me wonder if they sell different kinds of lines , like, voice-quality, and not voice-quality?? What good is a non-voice quality line anyway????)
I then tried to explain that all I wanted was a pair of wires from point A to point B but then she asked, " what kind of jack do you need, an RJ-11C?" As you can see, I could not get past the non-technical salespeople. What is the OFFICIAL name for this kind of line?
If there are any phone company gurus out there, H E L P!

Thank you for any and all answers.

Bob Lagasse N 1 A L G

From -8125313405752055960
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dc94d441cb329213,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-26 06:48:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site extel.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!tellab1!extel!larry
From: larry@extel.UUCP
Newsgroups: net.ham-radio
Subject: Re: Cc:
Message-ID: <43300006@extel.UUCP>
Date: Fri, 26-Jul-85 09:48:00 EDT
Article-I.D.: extel.43300006
Posted: Fri Jul 26 09:48:00 1985
Date-Received: Mon, 29-Jul-85 07:01:55 EDT
References: <11607@brl-tgr.UUCP>
Lines: 11
Nf-ID: #R:brl-tgr:-1160700:extel:43300006:000:513
Nf-From: extel!larry Jul 26 08:48:00 1985

Actually the story I know is that at least one police chief used to listen to the dispatch channel for the squelch tails. The radios used in the cars used a reverse burst so there was no squelch tail while the HT-220's had no reverse burst and a squelch tail. This way he could tell who was possibly taking a break at an eatery and who was in the car.

He was rather mad when he got his brand new Micor radio for his base station which did not have a discernable squelch tail on strong signals.

Larry, WA9QOO

From -593860812773537643
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a5ccd8794779ce39,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-26 07:22:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site petfe.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!petsd!petfe!johnd
From: johnd@petfe.UUCP (John Decatur)
Newsgroups: net.ham-radio
Subject: scanner.900mhz
Message-ID: <413@petfe.UUCP>
Date: Fri, 26-Jul-85 10:22:28 EDT
Article-I.D.: petfe.413
Posted: Fri Jul 26 10:22:28 1985
Date-Received: Mon, 29-Jul-85 04:55:49 EDT
Organization: Perkin-Elmer DSG, Tinton Falls, N.J.
Lines: 17

  Does anyone have any info on if there is an inexpensive receiver on
 the market yet for 900 mhz ? I have a bearcat 210xl and it stops abt
 512 mhz. Perhaps a converter? I have an mfj converter for my handie for
 154 ish to abt 164 and it works ok. It seems to be a growing trend here
 on the east coast toward 900 , several police dept's have gone,now my
 local town, cellular, and amateur, sure would like to listen to the
 activity there.
                                      tnx in advance...

--
 =-=
                                                 73, de ...johnd (KA2QHD)
                               {ucbvax|decvax}!vax135!petsd!petfe!johnd
 =-=

From 2502118900515686650
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,542abc8487fabc3a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-26 14:07:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!ky2d!jak
From: jak@ky2d.UUCP (Jim kutsch)
Newsgroups: net.ham-radio
Subject: Re: Roof Mounting a Beam Antenna
Message-ID: <31@ky2d.UUCP>

Date: Fri, 26-Jul-85 17:07:08 EDT
Article-I.D.: ky2d.31
Posted: Fri Jul 26 17:07:08 1985
Date-Received: Sun, 28-Jul-85 14:34:47 EDT
References: <2095@iddic.UUCP>
Organization: KY2D PC7300, ATTIS, Holmdel, NJ
Lines: 10

I had a TA33 Jr on my roof for a year then replaced it with the full TA33 about 2 years ago. It is on a 10 foot tripod and I am using alight duty TV type rotor. It is not guyed and has survived several NJ winters.

My only tip is to use threaded rod to bolt it to the roof, not wood screws. Use long rods and place a long 2x8 (or 2x10) under the rafters to spread the stress across several rafters.

Good luck. 73, Jim KY2D

From -5364278588885426346
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,542abc8487fabc3a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-26 14:52:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!price%marlin@Nosc
From: price%marlin@Nosc (James N. Price)
Newsgroups: net.ham-radio
Subject: Re: Roof Mounting a Beam Antenna
Message-ID: <211@brl-tgr.ARPA>
Date: Fri, 26-Jul-85 17:52:19 EDT
Article-I.D.: brl-tgr.211
Posted: Fri Jul 26 17:52:19 1985
Date-Received: Sun, 28-Jul-85 08:06:49 EDT
Sender: news@brl-tgr.ARPA
Lines: 30

Bruce--I have a pseudo-roof mounted beam, and I went thru the
same drill and quandries about what to do. What I elected to do,
somewhat due to simplicity, somewhat due to geometry, was to use
a 30' telescoping TV mast alongside the house. The mast is
drilled thru the eaves of the house, thus allowing it to be well
secured at that point as well as easy to pull up while standing on
the roof. It's easy to mount the antenna, too, because all work can
be done at eye level on the roof vice on ladders.

If you opt for an actual roof mount, I suggest a triangular tower
section with a tilt-over base, again for the sake of mounting the
antenna and raising it. You WILL need to bolt the tower section
THRU your roof, which can be a problem for some houses (like ours

which has open beam ceilings thruout!). And you will need to guy
it well since you don't want the antenna to take your roof off in
a good wind! And remember about using non-resonant lengths of guy
wires.

I have a TH-3JRS which is no big shakes as a beam, but it beats the
heck out of dipoles and verticals! I wouldn't advise roof-mounting
an antenna too much bigger than that--the wind load is really
incredible, even on the smaller beams.

Hope that helps. 73--

Jim Price, K6ZH, San Diego, CA
(619) 225-2665
PRICE@NOSC.ARPA

From -3373633946532769758
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c2a8fd721f5034cc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-26 15:16:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site steinmetz.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!mcnc!
ncsu!uvacs!edison!steinmetz!connolly
From: connolly@steinmetz.UUCP (C. Ian Connolly)
Newsgroups: net.ham-radio
Subject: Re: leased lines
Message-ID: <207@steinmetz.UUCP>
Date: Fri, 26-Jul-85 18:16:23 EDT
Article-I.D.: steinmet.207
Posted: Fri Jul 26 18:16:23 1985
Date-Received: Sun, 28-Jul-85 09:19:58 EDT
References: <103@biomed.UUCP>
Organization: GE CRD, Schenectady, NY
Lines: 12

>   ... (when she asked me if it would be used for voice, it made me
> wonder if they sell different kinds of lines , like, voice-quality, and not
> voice-quality?? What good is a non-voice quality line anyway????)
> Bob Lagasse N 1 A L G

They were probably wondering if you wanted voice quality or data quality.
Data quality lines are less noisy than voice quality. It sounds like you
want a data-quality leased line.
--
C. Ian Connolly, WA2IFI - USENET: ...edison!steinmetz!connolly
        ,   ,   ARPANET: connolly@ge-crd
An rud a bhionn, bionn.

From 6270019421518788125
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,542abc8487fabc3a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-26 15:42:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Roof Mounting a Beam Antenna
Message-ID: <213@brl-tgr.ARPA>
Date: Fri, 26-Jul-85 18:42:01 EDT
Article-I.D.: brl-tgr.213
Posted: Fri Jul 26 18:42:01 1985
Date-Received: Sun, 28-Jul-85 08:08:21 EDT
Sender: news@brl-tgr.ARPA
Lines: 67

Some comments:

1. Be very careful climbing around on your roof. And on ladders on the way up and down, too. Also, be extremely careful to avoid having ladders or antennas (or YOU) come in contact with power lines which may enter the house somewhere near where you are working, or which may pass by your house near roof level.

2. One DISADVANTAGE of a roof-mounted antenna is that it might possibly attract a lightning strike to your house. A lightning arrester on the house might be a good idea. (This might be a good line of argument to get the XYL to reconsider the tower issue!) (Or maybe to reconsider her choice of OM.) NOTE: A VERY effective lightning arrester can be made by taking a length of very finely stranded welding cable and stripping it back 6 inches or so and "fraying" the end of the wire into a bushy "head of hair" made up of the individual tiny strands of wire. This is mounted with the "hair" pointing upwards, up high on your tower, above the beam if possible, and grounded to the tower or else the heavy cable is itself run down the tower and to a good ground system -- preferably several independent ground rods tied together. Keep the grounding cable straight insofar as possible, as curves become inductive and encourage lightning bolts to jump off for something nearby that they like better.

According to Don Clark, a transient protection consultant used extensively by FEMA (the Federal Emergency Management Agency), installations protected with this "head of hair" approach simply NEVER have lightning strikes. The fine points of the wire cause such an intense electric field that the air around them breaks down and leaks off the charge in little sparks rather than one big one! According to Don, you should give the gadget a "haircut" about once a year, because little spherical beads of copper form at the ends of the fine strands, indicating that they are carrying heavy currents at times. Eventually this will decrease the E-field intensity at the ends and reduce the protection the device gives. Snipping off the little beads will restore its performance. Eventually you will of course have to use another piece of welding cable to replace the used-up end.

3. If you are still not cowering in fear, you might find W6SAI's book
The Antenna Handbook a useful source of ideas on roof mounting. The ARRL
Antenna Handbook also has some wisdom in it. Basically, there are
little bitty sections of tower that are designed to go on a rooftop.
It is also possible to use TV mast for small beams. Guy wires are a good
idea in either case.

4. Be careful what you attach to or guy to -- in a severe windstorm, it is
possible for a large, roof-mounted antenna to be stronger than the things
it is attached to and to pull off sections of roof or chimney or whatever.
(Another argument for your XYL!)

5. You might look into Dick Austin's itty-bitty little triband beam, which is
small and light enough to install very reasonably on a TV mast. I believe it
uses twin-lead to feed it and requires a tuner and a balun, but it is possible
to run a short length of coax and put the balun outside the house if you have
problems running twin lead in and out. This unit has about 4 to 5 dB of gain
over a dipole, and like all Austin antennas, this is what you would actually
measure on an antenna range. The better small tribanders run 7 or 8 dB if
you are lucky, i.e. about a half S-unit better. If you are lucky.
Austin is in Sandown, NH. His mailing address is PO Box 357, ZIP is 03873.
His phone is (603) 887-2926.

Dick will probably also be willing to give you good information on which
competitors' antennas are reasonably good if you choose to pick one which is
coax-fed. He tends to be very helpful and objective when it comes to
discussions of antennas, although he of course would be happy to sell you one.

That's AT LEAST all I know, maybe a lot more!

73,
John S., W3IKG

From 7067726413772856905
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36add1f78d151133,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-28 19:22:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!hoffmann@mit-marie.mit.edu
From: hoffmann@mit-marie.mit.edu (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Ham exams
Message-ID: <231@brl-tgr.ARPA>
Date: Sun, 28-Jul-85 22:22:53 EDT
Article-I.D.: brl-tgr.231
Posted: Sun Jul 28 22:22:53 1985
Date-Received: Wed, 31-Jul-85 05:52:30 EDT
Sender: news@brl-tgr.ARPA
Lines: 11

Next amateur exams at MIT are on Wednesday, August 21 at
7:00 pm. Contact Ron Hoffmann by one of the following
methods at least two days before.

          NET: hoffmann%marie@mit-mc.arpa
          TEL: 617-253-5820 (w)
               617-646-1641 (h)

73 and happy upgrading!

-Ron, WA2EYC/1

From -2402643014225256571
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c2a8fd721f5034cc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-29 07:30:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site pitt.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!cmu-cs-pt!cadre!pitt!hoffman
From: hoffman@pitt.UUCP (Bob Hoffman)
Newsgroups: net.ham-radio
Subject: Re: leased lines
Message-ID: <1160@pitt.UUCP>
Date: Mon, 29-Jul-85 10:30:56 EDT
Article-I.D.: pitt.1160
Posted: Mon Jul 29 10:30:56 1985
Date-Received: Wed, 31-Jul-85 23:31:09 EDT
References: <103@biomed.UUCP>
Reply-To: hoffman@pitt.UUCP (Bob Hoffman)
Organization: Univ. of Pittsburgh Computer Science
Lines: 20

The name you'll want to use when dealing with the telco is
"Local Area Data Channel", or "Local Area Data Service". We
usually just call them LADS lines. You will probably want to
get a publication from the telco called "Data Communications
using Local Area Data Channels". Its number is PUB 41028, dated
June 1979. This used to be called a "Bell System Technical Reference",
but is probably something else since the divestiture.   All of the
technical questions you raised are answered in this publication.
If you want end-to-end DC continuity, you must ask for it specifically.
As for cost, the ones we have that connect buildings on campus cost
$38 per month per pair ($76/month for a 4-wire DC line). Using
Bo-Sherrell M1 short-haul modems (actually differential DC line
drivers), we can get no more than 2400 baud on them.

I hope this helps.

     ---Bob.
--

Bob Hoffman, N3CVL {allegra, bellcore, cadre, idis, psuvax1}!pitt!hoffman
Pitt Computer Science hoffman%pitt@csnet-relay

From 1910807403751379336
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,a97552948a79738e,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,a97552948a79738e,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12f221,a97552948a79738e,start
X-Google-Attributes: gid12f221,public
X-Google-ArrivalTime: 1985-07-29 08:40:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.misc,net.analog,net.ham-radio
Subject: "Why?" for many "standards"
Message-ID: <255@brl-tgr.ARPA>
Date: Mon, 29-Jul-85 11:40:09 EDT
Article-I.D.: brl-tgr.255
Posted: Mon Jul 29 11:40:09 1985
Date-Received: Wed, 31-Jul-85 05:39:22 EDT
Distribution: net
Organization: USAMC ALMSA
Lines: 39
Xref: linus net.misc:6836 net.analog:393 net.ham-radio:2351

The following list of questions was printed in MONITORING TIMES, July '85, page 19. The first person to send correct answers to *all* these queries (to the mailing address given below) will get a free book from those published by Grove. However, I think this is the ideal sort of thing to be discussed on the net, so I thought it might be interesting to throw these out to inspire discussion, debate, and infuriated flamage...

Why were phonograph turntable speeds set at 33 1/3rd, 45, and 78 RPM?

Why were tape recorder speeds set at 3 3/4ths, 7 1/2, and 15 IPS?

Why was motion picture film width set at 8, 16, and 35 mm?

Why are the standard worldwide AC line-voltage frequencies 50 or 60 Hz?

Why is line voltage typically 120 or 240 Volts?

Why are standard US (NTSC) tv pictures composed of 525 lines?

Why was 500 kHz chosen as the worldwide marine distress frequency?

Why were 50, 72, and 300 ohms selected as standard antenna matching impedances?

Why is the commercial motion picture frame rate 24 per second?

*** End of question list ***

If you want to try to win the book, you can send your answers to:

Monitoring Times
Grove Enterprises
PO Box 98
Brasstown, NC 28902

Myself, I have *no idea* as to the answers to most of these "why?"s --
I think I recall reading the answers to some of them in the past, but
cannot recall just where...

Happy debate! Will

From 3075505230549511447
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eebb57a46ad81122,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-29 15:58:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2.fluke 9/24/84; site vax3.fluke.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!cornell!uw-beaver!fluke!limey
From: limey@fluke.UUCP (Paul Baldock)
Newsgroups: net.ham-radio
Subject: this is a test
Message-ID: <1437@vax3.fluke.UUCP>
Date: Mon, 29-Jul-85 18:58:02 EDT
Article-I.D.: vax3.1437
Posted: Mon Jul 29 18:58:02 1985
Date-Received: Wed, 31-Jul-85 08:13:22 EDT
Distribution: net
Organization: John Fluke Mfg. Co., Inc., Everett, WA
Lines: 2

This is a connection test

From -3236021082782478914
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,393efac28ea55af3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-29 21:55:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
tektronix!tekcrl!teklabs!rafaeld
From: rafaeld@teklabs.UUCP (Rafael De Arce)

Newsgroups: net.ham-radio
Subject: general dicussion nets on air?
Message-ID: <3145@teklabs.UUCP>
Date: Tue, 30-Jul-85 00:55:02 EDT
Article-I.D.: teklabs.3145
Posted: Tue Jul 30 00:55:02 1985
Date-Received: Thu, 1-Aug-85 20:26:57 EDT
Organization: Tektronix, Beaverton OR
Lines: 18

edom of speech is a wonderful freedom. i wish i saw more on
the air. or should i say 'hear' more on the air!

i'd like to know if their are any political discussion nets on the air.
i like to hear other peoples views on current events around the nation.
i'd like to hear the pros and cons on meaningful topics.

can someone provide a frequency and time if such a net exist?

it's not that i think i am smarter than everyone and want to
show it. i'd just like to exchange ideas and grow a little.

i'd like to know what the canadians think of us down here.

have you heard of such a net?

 de wd6cmx

From 3341131889476189406
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c2a8fd721f5034cc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-29 22:18:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site kitty.UUCP
Path: utzoo!watmath!sunybcs!kitty!larry
From: larry@kitty.UUCP (Larry Lippman)
Newsgroups: net.ham-radio
Subject: Re: leased lines
Message-ID: <176@kitty.UUCP>
Date: Tue, 30-Jul-85 01:18:36 EDT
Article-I.D.: kitty.176
Posted: Tue Jul 30 01:18:36 1985
Date-Received: Wed, 31-Jul-85 02:20:07 EDT
References: <103@biomed.UUCP>
Organization: Recognition Research Corp., Clarence, NY
Lines: 86

> Does anyone have any idea how much a telephone company "leased-line"
> costs? Is it so much per mile? ...

Having battled with Ma Bell (or what *used* to be Ma Bell) for a number of years on leased lines for process control and telemetering purposes, I'll try to give you a brief summary of what you can and cannot do.

First of all, there may be some variations of what I have to say, depending upon the tariffs of your local telephone company. What I am saying is correct for NY Telephone, however.

Charges are based upon where the two leased line termination points fall with respect to telco-defined central office boundaries. There boundaries generally bear little resemblence to city/town/village/county boundaries. If the two points fall within the same central office district, then the charges consist of central office loop charges - one for point A to the CO, and one for point B to the CO. In addition, there are local wiring and jack charges for each end. The average charge for a leased line having both points within the same central office in upstate New York is around $ 35.00/month, with an installation charge of around $ 300.00. Don't forget - this charge could well be different in your area.

If the two points are in different CO's, you will pay the airline mileage between the two CO's in addition to the central office loop and local wiring/jack charges If the two termination points are only 1,000 feet apart but in different CO districts, you will *still* pay the airline mileage! This is referred to interexchange mileage (IXC). In upstate New York this is around $ 24.00 per mile per month for an IXC of less than 12 miles. The rate decreases for over 12 miles.

Let's assume your leased line is in the same CO district. What do you get for your 35 bucks a month? You get a pair of wires have a DC loop resistance of no more than 1,000 ohms and an attenuation at 1 kHz of no more than 5.5 dB. If your total *loop* distance is greater than 2 miles you will most likely have a pair with loading on it, which will automatically limit your high frequency response to 3 kHz. You should not assume an upper frequency response of greater than 3 kHz anyhow. In general, you cannot apply tone signalling to the leased pair in excess of 0 dBm. You cannot exceed 135 volts from either conductor to ground, or 270 volts from conductor to conductor. You cannot exceed 150 milliamperes in loop current. Any circuit which you connect to the leased line must be longitudinally balanced. You can request a line impedance of 600 or 900 ohms; whether the circuit is actually engineered for the requested impedance is another matter.

If there is significant distance between the two terminal points, the telco may provide (as part of the expense) a repeater amplifier so that they will meet the 5.5 dB transmission requirement. This repeater will be of either a negative-impedance E-type, or of a hybrid V-type. If there is a repeater provided, you MUST maintain your requested 600 or 900 ohm impedance at BOTH ends or the circuit may `sing`; this is your responsibility, and not the telco's. Either of the above repeaters will pass DC signalling and will of course provide the same gain in both directions. Unbalanced DC currents may also saturate the transformers in the repeaters and cause them to sing.

In general, your equipment should work on a 1,000 ohm loop. While you can request a lower loop resistance, you might have to pay extra for it, or it simply may be unavailable for the particular circuit.

If your circuit runs between two central offices, you cannot get DC continuity from the telco, and you will have to use tone signalling, all of which will have to be inband (300 to 3,000 Hz). There is a type of DC signalling called E&M signalling which is availavle at extra cost. In simple terms, E&M signalling will give you a contact closure in each direction at

a rate not to exceed 20 Hz. The telco installs additional equipment to facilitate the E&M signalling function - which is *their* responsibility. You must be able to source a current-limited -48 volts DC in order to interface with the E&M signalling equipment.

If your IXC is greater than 12 miles, you are entitled to get a four-wire termination if you so choose at no extra cost. Four-wire circuits for less than 12 miles IXC cost twice as much as a two-wire circuit.

To order your circuit you should request a "Radio Tie Line" to make things simple for the usual idiots at the business office. They will no doubt refer you to a specialized salesperson who handles leased-lines, who will send you an engineering form to fill out where you describe your terminal equipment and your desired circuit specifications. You will also have to certify on this form that you will not exceed any pre-defined circuit limits (like voltage, current, etc). The limits really *DO* have to be adhered to so as not to cause interference to other services in the same cable, or cause harm to the network or telco craftspersons.

Chances are you will find the cost of *any* leased-line prohibitive for amateur radio use, but I thought I would at least take some mystery out of the world of leased-lines.

Larry Lippman
Recognition Research Corp.
Clarence, New York
UUCP {decvax,dual,rocksanne,rocksvax,watmath}!sunybcs!kitty!larry
{rice,shell}!baylor!kitty!larry
syr!buf!kitty!larry
VOICE 716/741-9185
TELEX {via WUI} 69-71461 answerback: ELGECOMCLR

"Have you hugged your cat today?"

From -7200795268320501269
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f38956aac92d3ae7,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,f38956aac92d3ae7,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1985-07-30 09:17:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio,net.columbia
Subject: First set of actual shuttle elements
Message-ID: <430@petrus.UUCP>
Date: Tue, 30-Jul-85 12:17:12 EDT
Article-I.D.: petrus.430
Posted: Tue Jul 30 12:17:12 1985
Date-Received: Wed, 31-Jul-85 08:24:35 EDT
Organization: Bell Communications Research, Inc
Lines: 19

Xref: watmath net.ham-radio:2968 net.columbia:1528

Satellite: sts-51f
Catalog number: 0
Epoch time: 85211.58763889
   Tue Jul 30 14:06:12.0   1985 UTC
Element set: real1
Inclination: 49.4924 deg
RA of node: 151.7455 deg
Eccentricity: 0.0007921
Arg of perigee: 245.1087 deg
Mean anomaly: 269.4665 deg
Mean motion: 15.83629098 rev/day
Decay rate: 0.0004 rev/day^2
Epoch rev: 12
Semi major axis: 6699.202 km
Anom period: 90.930383 min
Apogee: 336.536 km
Perigee: 325.923 km
Ref perigee: 2767.60351899
   Tue Jul 30 14:29:04.40 1985 UTC

From -7122674702593324988
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e1bae0a67b4ed94,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-30 09:53:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!CAD.THOMAS@MCC.ARPA
From: CAD.THOMAS@MCC.ARPA
Newsgroups: net.ham-radio
Subject: 2m mobile xcvrs
Message-ID: <295@brl-tgr.ARPA>
Date: Tue, 30-Jul-85 12:53:56 EDT
Article-I.D.: brl-tgr.295
Posted: Tue Jul 30 12:53:56 1985
Date-Received: Thu, 1-Aug-85 05:42:11 EDT
Sender: news@brl-tgr.ARPA
Lines: 12

I am looking for a new way to spend money and need some advice.
(The XYL is not available on technical matters.) I want to upgrade my
2m mobile capabilities from the present Kenwood TR2400 handheld to a
real mobile transceiver, and am shocked at the bewildering array of
choices. Any advice, comments, biases, prejudices, you have to offer
would be gladly accepted.

Regards,

Jim WA5OYF

From 7173977690728734154
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e1bae0a67b4ed94
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-30 13:16:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: 2m mobile xcvrs
Message-ID: <314@brl-tgr.ARPA>
Date: Tue, 30-Jul-85 16:16:06 EDT
Article-I.D.: brl-tgr.314
Posted: Tue Jul 30 16:16:06 1985
Date-Received: Thu, 1-Aug-85 05:09:22 EDT
Sender: news@brl-tgr.ARPA
Lines: 21

Re: ways to spend money: Send some of it out here and I'll take care of the problem for you.

Re: 2m transceivers: From what I have heard, the Kenwood 7950 is about as nice a rig as is currently available. I know a number of owners, and I have heard NOT ONE WORD of complaint, only praise for the unit.

Another possibility is to buy an amplifier for the HT. That's especially useful if you travel a lot and want a little more "oomph" than an HT gives when on a trip. I have been very happy with the DAIWA 30-watt amplifier. Mirage makes a couple of nice ones too.

Eh, live it up and buy one of each. After all, it's only money!

-John S., W3IKG

Incidentally, has anyone had experience with the effect of the Mirage amplifiers with RECEIVE PREAMPS on INTERMOD performance? I theorize that a good receive preamp with some selectivity in the front end could actually improve intermod immunity. If so, this would be the type of amplifier to buy for your HT.

From -6726237895993116921
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3bac6abdc278cc59,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-30 14:20:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Maron@LLL-MFE.ARPA

From: Maron@LLL-MFE.ARPA
Newsgroups: net.ham-radio
Subject: How to spend money.
Message-ID: <319@brl-tgr.ARPA>
Date: Tue, 30-Jul-85 17:20:32 EDT
Article-I.D.: brl-tgr.319
Posted: Tue Jul 30 17:20:32 1985
Date-Received: Thu, 1-Aug-85 05:12:10 EDT
Sender: news@brl-tgr.ARPA
Lines: 11

The "What is your favorite rig" question can produce flaming, wise cracks
and other net traffic but my reply comes from my good experience. For the
price I have been very impressed with my ICOM 25AH-2W/45W output. With
my 5/8 Larson and 45W I can hit all sorts of places. The 27AH which is what
is available now seems even better. It has built in PL, I had to add PL to
my externally so that I could make it switchable. I am not sure if the 27AH
has any trouble with the recently flamed about disappearing-memory-after-5-yrs
trouble. Anyways, I'll give you a vote for 45W in a small package for the
25AH/27AH.
--Neil KA6UTD

From 8311600427527009001
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6365cb9a25c16daa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-30 16:06:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 61 (shuttle info)
Message-ID: <19234@mgweed.UUCP>
Date: Tue, 30-Jul-85 19:06:25 EDT
Article-I.D.: mgweed.19234
Posted: Tue Jul 30 19:06:25 1985
Date-Received: Thu, 1-Aug-85 21:37:47 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 33

qst de k9eui
hr arrl bulletin nr 61 from arrl headquarters
newington ct july 30, 1985
to all radio amateurs bt

the launch of space challenger mission 51f took place at
2100r10 utc on july 29. the status of the planned experiments
is not known at this time. the uniden 900 number, 900 407
7223, or 900 40 space, will not be activated for this mission.

watch w1aw bulletins for further information. keplerian elements for sts 51f are,

launch july 29, 1985	2100r10 utc
i.d.	planning set 4
epoch	85/211.58763889
drag	2.004ebt04
inclination	49.4924
r.a.a.n.	151.7455
eccentricity	0.0007921
arg. of perigee	245.1087
mean anomaly	269.4665
mean motion	15.83629098
orbit number	12
semi major axis	6698.282 km
anom period	90.7833
apogee	319.3 km
perigee	312.6 km
ref. perigee	2767.60351899
nodal period	90.85511 min
long increment	23.120062 west/orbit
beacon	145.55 mhz

From 4841587243388623107
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5194536c35da7968,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-30 16:07:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 59 (arrl board mtg actions)
Message-ID: <19235@mgweed.UUCP>
Date: Tue, 30-Jul-85 19:07:08 EDT
Article-I.D.: mgweed.19235
Posted: Tue Jul 30 19:07:08 1985
Date-Received: Thu, 1-Aug-85 21:38:01 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 61

qst de k9eui
hr arrl bulletin nr 59 from arrl headquarters
newington ct july 27, 1985
to all radio amateurs bt

what follows is a summary of the major actions taken at the 1985 second meeting of the board of directors of the arrl, which was held in hartford, ct on july 25 and 26.

with regard to the repeater coordination proposal in fcc docket 85 22, the board directed counsel to file in support of preferred status for coordinated repeaters, that frequency coordination be urged but not mandated, that coordination be on a local or regional level, and that coordination include auxiliary operation. consistent with this action the board ordered that a study be made of the costs of maintaining a national repeater data base.

the board went on record in favor of fcc retaining responsibility for all amateur exam question pools with vecs responsible for creating actual tests therefrom. the league will petition fcc to require two or more general class operators to administer a novice test. the executive committee will study the need for a revision to fcc rules covering morse code testing.

counsel is to amend arrl petition on enhanced novice license, rm 5038, to maintain present power limits in novice bands below 28 mhz. persons designated by special service clubs will be able to certify awards for was, 5bwas, and vucc. the arrl qso party contest will be discontinued. the ecac was charged with reviewing the current limit of one hour for races test and drill periods. the board created an ad hoc committee on spread spectrum standards.

the board adopted a reduced arrl membership rate of 6 dollars and 25 cents per year for youths under 13 years of age, and a rate of 12 dollars and 50 cents per year for under 18 years of age. staff was encouraged to cooperate with and supply information about amateur radio to youth groups. there is also to be a program designed to integrate amateur radio into the curricula of the electronics and communications schools of the nations armed services.

the arrl executive vp is to submit to fcc a preliminary proposal to provide it assistance in assigning amateur callsigns. ways of strengthening the arrl field technical information service are to be studied. recommendations pertaining to strengthening of crrl were approved.

the 220 to 225 mhz band plan is changed to show repeater channel spacing of 20 khz rather than 40 khz. there is to be a study of the band plan for 420 to 450 mhz regarding repeater input output relationships, but 25 khz channel spacing is endorsed now. the 23 cm band plan regarding fm repeater offsets presently set at 12 mhz is to be reevaluated. the board also adopted a bandplan for the 24 mhz band as follows, 24.890 to 24.920 mhz cw only, 24.920 to 24.930 mhz cw and digital, and 24.930 to 24.990 mhz cw, phone and sstv ar

From -393741681245689248

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,375e0e7a20d9dd07,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-30 16:07:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 30
Message-ID: <19236@mgweed.UUCP>
Date: Tue, 30-Jul-85 19:07:45 EDT
Article-I.D.: mgweed.19236
Posted: Tue Jul 30 19:07:45 1985
Date-Received: Thu, 1-Aug-85 21:38:14 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 36

qst de k9eui
hr propagation forecast bulletin nr 30 from arrl headquarters
newington, ct july 28, 1985
to all radio amateurs bt

the solar flux rise predicted last week began 2 days earlier than expected. after 6 days at 69, ending july 24, the solar flux rose steadily, reaching 79 on the 28th. two minor sunspot groups came around the east limb of the sun last week. the second of these is low on the sun, giving rise to speculation that it may be a forerunner of cycle 22. an earlier low latitude spot was visible for only 4 days, beginning july 17. it did have little effect on the solar flux level for its short life.

the area of the sun responsible for the flux peak of 101 on july 9 will be in view again about august 1. it is too early to tell if it will be of major importance this time around. a broad peak somewhat below 100 is a fair guess, for about august 4 to 8. more on this next week.

sporadic e layer ionization seems late in reaching really interesting proportions this year. it is still showing up almost daily, and may have some surprises left. do not rule out transatlantic dx on 50 mhz. it has happened in august before, and the best e skip was late in starting this year. for those interested in much lower frequencies, the best propagation is likely after about the middle of august, when the solar flux is expected to be at its lowest for the month. atmospheric noise will remain troublesome on the low bands much of the time until early fall.

american sunspot numbers for july 18 to 24 were between 8 and 18 with a mean of 11.1 ar

From -1676699045978152227
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,542abc8487fabc3a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-30 18:48:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!roode@uci-icsa
From: roode@uci-icsa (Dana Roode)
Newsgroups: net.ham-radio
Subject: Re: Roof Mounting a Beam Antenna
Message-ID: <324@brl-tgr.ARPA>
Date: Tue, 30-Jul-85 21:48:33 EDT
Article-I.D.: brl-tgr.324
Posted: Tue Jul 30 21:48:33 1985
Date-Received: Thu, 1-Aug-85 20:47:10 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

I've often considered mounting something on my roof. Did you have any
trouble with rain leaking in? What did you do to seal up the holes
where your threaded rod went through?

     Dana Roode, WA6NGO
     roode@uci-icsa.arpa

From 4151870193897532950
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e1bae0a67b4ed94
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-30 18:49:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!roode@uci-icsa
From: roode@uci-icsa (Dana Roode)
Newsgroups: net.ham-radio
Subject: Re: 2m mobile xcvrs
Message-ID: <325@brl-tgr.ARPA>
Date: Tue, 30-Jul-85 21:49:26 EDT
Article-I.D.: brl-tgr.325
Posted: Tue Jul 30 21:49:26 1985
Date-Received: Thu, 1-Aug-85 20:47:26 EDT
Sender: news@brl-tgr.ARPA
Lines: 22

I purchased an ICOM IC27A late last year. For the features, it is
the best deal for the money (at least compared to the rigs available
to me at the time). I wanted memories I could scan by pressing the
up and down buttons on the microphone, which the IC27a has. It is
the only radio I know of that has builtin front panel dialable PL.

The Yaesu FT270RH looks quite nice, but it is more expensive
initially and you must pay for PL (which I believe then becomes
front panel dialable).

But - the IC27a isnt perfect. I am very dissappointed with the audio -
in my truck its difficult to hear it at times, even with the audio
all the way up. My old Kenwood TR7730 had excellent audio. My unit
also had an intermittent develop in the signal strength display.
For some strange reason the speaker I had on the TR7730 does not work
with the IC27a external speaker jack - there is a ripple present
whenever I try to use it. The same speaker still works great with
any other radio I try with it, and other speakers work with the IC27a.
Very strange.

     Dana Roode, WA6NGO
     roode@uci-icsa.arpa

From -8038365747350463400
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b04b1e65995d8e39,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-30 18:50:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!roode@uci-icsa
From: roode@uci-icsa (Dana Roode)
Newsgroups: net.ham-radio
Subject: The new Butternut miniature beam
Message-ID: <326@brl-tgr.ARPA>
Date: Tue, 30-Jul-85 21:50:20 EDT
Article-I.D.: brl-tgr.326
Posted: Tue Jul 30 21:50:20 1985
Date-Received: Thu, 1-Aug-85 20:47:40 EDT
Sender: news@brl-tgr.ARPA
Lines: 8

Does anyone know anything about the new Butternut miniature beam? It
sounds very interesting - a six foot boom, 11 foot wing spand, covers
20,15 and 10 - without traps. The usual claim of 'using the entire
antenna on every band' is made. I believe they mentioned something
about an option for the WARC bands also.

     Dana Roode, WA6NGO
     roode@uci-icsa.arpa

From -3487040196717455844
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5200289d1a88ec7b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-22 14:43:04 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: scanner vs. scanner continued
Message-ID: <612@ihu1h.UUCP>
Date: Sat, 22-Jun-85 17:43:04 EDT
Article-I.D.: ihu1h.612
Posted: Sat Jun 22 17:43:04 1985
Date-Received: Sun, 23-Jun-85 07:05:44 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 82

x

Regency

WHAMO-10: Regency's first synthesized scanner. Discontinued long ago. Appearance more like a crystal scanner, with a single LED per channel. User has to break off metal teeth on a 'comb' for each channel according to a code book. External frequency control unit DFS-5K optional. UHF VCO reference oscillator drifts on some units. Soldered sheet metal shields around some circuitry make access to some components difficult for servicing. Comb sockets prone to bad connections after moderate use.

TMR series: First generation crystal scanners. Come in all varieties of band coverage. Models with both
UHF and VHF bands must use separate antennas for each band (disadvantage in mobile installations, but can be overcome by connecting to front ends via a capacitor). Easy to crystal: Radio Shack crystals work well. TMRs usually $2 and up ad hamfests, often in poor condition. Don't pay more than $50, even if mint. Front ends must be tuned for selected portions within the bands for
best sensitivity. Wide IF selectivity troublesome in urban/suburban areas. Primitive digital scanning cir-
cuitry may become confused at times, but power off/on restores sanity. Not all that bad a deal if cheap. Replaced by Regency ACT units.

Radio Shack (made by GRE of Tokyo)

PRO2001: Early, discontinued single bank 16 channel programmable. Reasonable coverage of the 3 traditional bands, minus aircraft band. LED digital display as well as an LED per channel. Mechanical lockout switch

for each channel. Delay is either on or off for all channels at a time. High synthesizer noise level. Troublesome plated through holes on digital board in some units renders radio virtually unfixable. Could never get mine to work more than a few days in a row; always another bad connection. Some owners have no trouble.

PRO52: Discontinued 8 channel VHF-Lo/Hi base unit. No UHF band or provision for mobile operation. Good little scanner despite limited frequency coverage and Spartan lack of frills. Front mounted, vertical speaker always a win.

PRO24: Only 4 channels in this crystal controlled portable. Covers the three basic bands, but no aircraft. Easy to obtain batteries and crystals. Characteristic Radio Shack squelch problem, fixable by changing one resistor. All-plastic case larger than Bearcat Thin Scan and clones.

Craig (div. of Pioneer)

4530: Discontinued Japanese 10 channel crystal controlled 3 band unit. No aircraft band. Deluxe features like priority, trimmer capacitors for netting each channel, front panel speaker, and rugged metal cabinet make this unit a winner. Channel lockout slide switches have finite life. Replacing burned out incandescent channel lamps not fun. Grab a 4530 if you find one in good condition.

Tennelec

Manufactured the first synthesized scanners. Company out of business for last several years. Schematics and parts difficult to obtain. Radios reputed to be poor performers. I got my MS-2 and MCP-1 basket cases for free and sometimes regret taking them. Not worth fixing unless you have access to DTL/RTL chips and circuit diagrams.

--

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 8530798677615375587
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1985-06-23 09:56:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site luke.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!hao!
noao!amd!pesnta!hplabs!oliveb!bene!luke!steven
From: steven@luke.UUCP (Steven List)
Newsgroups: net.ham-radio,net.news.group
Subject: Re: new group net.ham-radio.packet -- history/apology/future
Message-ID: <244@luke.UUCP>
Date: Sun, 23-Jun-85 12:56:27 EDT
Article-I.D.: luke.244
Posted: Sun Jun 23 12:56:27 1985
Date-Received: Sat, 29-Jun-85 00:15:22 EDT
References: <459@mtunh.UUCP> <315@gatech.CSNET> <460@mtunh.UUCP>
<339@gatech.CSNET>
Reply-To: steven@luke.UUCP (Steven List)
Followup-To: net.news.group
Organization: Uncle Bene's Farm
Lines: 39
Xref: watmath net.ham-radio:2892 net.news.group:3191

In article <339@gatech.CSNET> spaf@gatech.UUCP (Gene Spafford) writes:
>In article <460@mtunh.UUCP> jak@mtunh.UUCP (Jim Kutsch) writes:
>>I do not understand why this is of such interest to all those who don't
>>read net.ham-radio in the first place!!!
>
>I'm not claiming that there isn't support for your particular group,
[...]
>As for others reading our correspondence -- perhaps some of these
>issues need to be read and considered by others on the net. Surely you
>and I alone are not the ones to decide the fate of this new group, are
>we?

I'm with Gene. I don't really care particularly about ham radios and
such. I do care about the net. Even though we're (I'm) relatively new
to the net, we've already run into concerns about the volume of traffic
propagated around the world. If criticisms appear about the size of
people's SIGNATUREs, why shouldn't we be concerned about passing narrow
special-interest traffic around the world?

Both a local site and the site to which we feed news have already posted
their subscription exclusions because of the amount of traffic. In a
related issue I recently corresponded with chuqui@nsc about starting a
Plexus User Group group. His response corresponded very closely with
Gene's attitude: use a mailing list if the interest group is not large
enough to warrant net traffic.

I firmly believe in your right to communicate on a subject of interest
via the network. The network is a fantastic privilege. With that
privilege is responsibility. Should the rest of us incur the cost of
communicating information of interest to only a few?

I don't have an answer, just a whole bunch of questions. I would like
to have more of a feel for how many wish to see your proposed subgroup
established before seeing that happen.
--
***
* Steven List @ Benetics Corporation, Mt. View, CA
* {cdp,greipa,idi,oliveb,sun,tolerant}!bene!luke!steven
***

From 9105540522824166210
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f2009055f83c29c0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-23 21:59:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: CE0AE - Silent Key
Message-ID: <233@inuxi.UUCP>
Date: Mon, 24-Jun-85 00:59:55 EDT
Article-I.D.: inuxi.233
Posted: Mon Jun 24 00:59:55 1985
Date-Received: Fri, 21-Jun-85 00:49:40 EDT
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 5

Just read today that Father Dave, CE0AE, passed away June 7. I am
sure that many of you who have worked Easter Island remember this call!!

Steve Wheatley, KU9C

From 4918830110978132720
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,524c2740d3d607ba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-24 06:54:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!decwrl!dec-rhea!dec-
kahlua!newell
From: newell@kahlua.DEC (Area 6 network support, 225-4667)

Newsgroups: net.ham-radio
Subject: re: DX Protocol
Message-ID: <2846@decwrl.UUCP>
Date: Mon, 24-Jun-85 09:54:58 EDT
Article-I.D.: decwrl.2846
Posted: Mon Jun 24 09:54:58 1985
Date-Received: Wed, 26-Jun-85 06:06:05 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 6

If a DX station is calling CQ DX, it means exactly what it means if a
W-station is calling CQ DX, ie, he wants calls from anywhere other than
his own country. Therefore, if OK1EP is calling CQ DX, he wants any
call other than another OK.

- Dick, ak1a

From -3878777083626805324
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,cba23fb033b4ec2b
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,cba23fb033b4ec2b
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,cba23fb033b4ec2b
X-Google-Attributes: gid15c702,public
X-Google-ArrivalTime: 1985-06-24 13:33:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site wjvax.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!decwrl!sun!qubix!wjvax!
ron
From: ron@wjvax.UUCP (Ron Christian)
Newsgroups: net.analog,net.audio,net.ham-radio
Subject: Re: Electronics wearing out
Message-ID: <506@wjvax.UUCP>
Date: Mon, 24-Jun-85 16:33:20 EDT
Article-I.D.: wjvax.506
Posted: Mon Jun 24 16:33:20 1985
Date-Received: Thu, 27-Jun-85 06:28:04 EDT
References: <2663@decwrl.UUCP> <508@edison.UUCP> <1005@pitt.UUCP>
<1746@amdcad.UUCP>
Reply-To: ron@wjvax.UUCP (Ron Christian)
Organization: Watkins Johnson, San Jose, Calif.
Lines: 25
Xref: watmath net.analog:346 net.audio:5185 net.ham-radio:2889

>This sounds very strange to me. Even if you are afraid of making a mistake
>and want to avoid using ROMs, EPROMs are dirt cheap ($2). The battery and
>CMOS RAM are probably more than this. So what reason could there be for
>using RAM?
>
> Phil Ngai (408) 749-5720

***

The only possible reason I can think of is, since the microprocessor
probably needs RAM for scratch pad and storing of transient parameters,
it may be cheaper to include one RAM for BOTH this and the microprocessor
program. I can imagine some 'clever' engineer realizing he could eliminate
one whole component and a bit of board space if he combines the RAM and
ROM functions into a single IC. Plus, he suddenly has the built-in feature
of nonvolitile user-settable parameters, since he has to battery back-up
the ram anyway. 'Nifty!' he says to himself. This kind of engineer should
be drowned at birth.

BTW, I bet if you're very careful, you could replace the battery yourself
without killing the ram. I for one wouldn't want to try it. Then again,
I probably would not buy such a product in the first place.
--
--
     Ron Christian (Watkins-Johnson Co. San Jose, Calif.)
     {pesnta,twg,ios,qubix,turtlevax,tymix,vecpyr,certes,isi}!wjvax!ron

From -4167840445396694649
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,66b04bdb7bafc4e2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-24 19:14:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 25
Message-ID: <18209@mgweed.UUCP>
Date: Mon, 24-Jun-85 22:14:12 EDT
Article-I.D.: mgweed.18209
Posted: Mon Jun 24 22:14:12 1985
Date-Received: Wed, 26-Jun-85 04:56:26 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 74

qst de k9eui
hr propagation forecast bulletin nr 25 from arrl headquarters
newington ct june 24, 1985
to all radio amateurs bt

there is much to be said for contests, especially the most
popular of all, the arrl field day. generating band occupancy
far beyond other contests, field day can be a two day lesson in
radio propagation.   if june 22 and 23 had been just another
early summer weekend, would thousands of stations all over
north america have been clamoring for attention on 21, 28 and
50 mhz?

of course not, and this ((w1aw carrier dropped on 20 mtrs - switched to 15 mtrs)).....

ten and six meters have had much less use than they merit, since solar flux and sunspot numbers dropped to near minimum levels months ago. the solar flux was 69 on field day saturday and 70 sunday, but e skip on these bands made this one of the most exciting field day weekends on record.

the sun has been spotless for several days, and it is likely to continue that way through this week. a rise is expected near the end of june, but whether the numbers rise or fall, e skip will continue to dominate the propagation picture for another five or six weeks, and it is not predictable in any precise way ar

From 8197313097422879964
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,528dc17d1d2868ac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-24 19:14:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 43 (VEC ham exam info)
Message-ID: <18210@mgweed.UUCP>
Date: Mon, 24-Jun-85 22:14:57 EDT
Article-I.D.: mgweed.18210
Posted: Mon Jun 24 22:14:57 1985
Date-Received: Wed, 26-Jun-85 04:56:44 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

qst de k9eui
hr arrl bulletin nr 43 from arrl headquarters
newington ct june 18, 1985
to all radio amateurs bt

the fcc has proposed to allow volunteer examiner coordinators to maintain the question pools used for amateur exams. this maintenance is presently done by the fcc. if this proposal is adopted, vecs would be required to maintain question pools containing at least ten times the number of questions actually used on each exam, and would be required to publish the pools as well as the formulas used to create exams. comments may be filed on this proposal until august 30, 1985. formal comment requires the filing of an original and five copies to the secretary, fcc, washington, dc 20554. copies of the nprm will

be available from arrl hq for an sase with 39 cents postage ar

From 3344547639665446829
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1d43076f2d368664,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-24 19:16:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 46 (12 meter band info)
Message-ID: <18211@mgweed.UUCP>
Date: Mon, 24-Jun-85 22:16:12 EDT
Article-I.D.: mgweed.18211
Posted: Mon Jun 24 22:16:12 1985
Date-Received: Wed, 26-Jun-85 04:56:59 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

qst de k9eui
hr arrl bulletin nr 46 from arrl headquarters
newington ct june 21, 1985
to all radio amateurs bt

remember that the 24 mhz band becomes available at 0001 utc
june 22.   general, advanced and extra class licensees may use
1500 watts pep output on the band. the cw and rtty subband
runs from 24.890 to 24.930 mhz, with cw, phone, fax, sstv and
narrow band fm permitted from 24.930 to 24.990. contacts made
on 24 mhz do not count for field day credit ar

From 3809781927376406 48
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7359c9d355bde086,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-24 19:18:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 47 (85-22 comment deadline extended)
Message-ID: <18212@mgweed.UUCP>
Date: Mon, 24-Jun-85 22:18:23 EDT
Article-I.D.: mgweed.18212
Posted: Mon Jun 24 22:18:23 1985
Date-Received: Wed, 26-Jun-85 04:57:15 EDT
Organization: AT&T Consumer Products - Montgomery Illinois

Lines: 16

qst de k9eui
hr arrl bulletin nr 47 from arrl headquarters
newington ct june 21, 1985
to all radio amateurs bt

in response to an arrl petition, the fcc has extended the deadline for comments in pr docket 85 22, the repeater coordination docket. the league requested a 45 day extension so that the arrl board of directors could consider input from members at its july 25 meeting. the comment deadline was originally set at july 1. by order released june 19, the comment deadline is extended to august 15. the reply comment deadline remains september 30. details on the docket can be found in the happenings column in april qst ar

From 7232673860664106292
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7879afc78550d6b2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-24 19:19:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 48 (1.2 GHz mode L authorized)
Message-ID: <18213@mgweed.UUCP>
Date: Mon, 24-Jun-85 22:19:40 EDT
Article-I.D.: mgweed.18213
Posted: Mon Jun 24 22:19:40 1985
Date-Received: Wed, 26-Jun-85 04:57:31 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 16

qst de k9eui
hr arrl bulletin nr 48 from arrl headquarters
newington ct june 23, 1985
to all radio amateurs bt

effective immediately, extra class amateurs are authorized to use the frequencies 1269.05 to 1269.85 mhz for satellite uplink purposes. this uplink operation, called mode l, is part of the allocations proposed in pr docket 85 23. arrl asked the fcc to allow mode l operation while docket 85 23 is being considered, and fcc has partially granted this request by allowing mode l operation by extra class licensees. league staff is working with the fcc to extend the authorization to technician, general and advanced licensees ar

From -3192658704770945489
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5b9fe98e905c8261,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-24 19:20:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 50 (1.2 GHz mode L bulletin 48 update)
Message-ID: <18214@mgweed.UUCP>
Date: Mon, 24-Jun-85 22:20:42 EDT
Article-I.D.: mgweed.18214
Posted: Mon Jun 24 22:20:42 1985
Date-Received: Wed, 26-Jun-85 04:57:47 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 50 from arrl headquarters
newington ct june 24, 1985
to all radio amateurs bt

fcc has issued an erratum to the order authorizing mode l operation in the amateur service. all licensees above novice class are now authorized to use the frequencies 1269.05 to 1269.85 mhz for satellite uplink purposes while docket 85 23 is being considered ar

From 8565099868716611935
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c8f81114d634c114,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-24 19:22:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 49 (Leap second - end of June!)
Message-ID: <18215@mgweed.UUCP>
Date: Mon, 24-Jun-85 22:22:00 EDT
Article-I.D.: mgweed.18215
Posted: Mon Jun 24 22:22:00 1985
Date-Received: Wed, 26-Jun-85 04:58:02 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 49 from arrl headquarters
newington ct june 24, 1985
to all radio amateurs bt

users of the wwv and chu time services are reminded that a positive leap second will be introduced at the end of june. the sequence of second markers will be june 30 23 hours 59 minutes 59 seconds, june 30 23 hours 59 minutes 60 seconds, july 1 zero hours zero minutes zero seconds ar

From -2436304296243548460
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,810c28c7fcfe83e8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-24 19:23:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 51 (K6KPS fined $2K by FCC)
Message-ID: <18216@mgweed.UUCP>
Date: Mon, 24-Jun-85 22:23:05 EDT
Article-I.D.: mgweed.18216
Posted: Mon Jun 24 22:23:05 1985
Date-Received: Wed, 26-Jun-85 04:58:18 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 21

qst de k9eui
hr arrl bulletin nr 51 from arrl headquarters
newington ct june 24, 1985
to all radio amateurs bt

fcc has fined james brantley, k6kps, 2000 dollars. the fcc had received complaints over a long period of time that brantley was disrupting amateur communications. on december 19, 1984, commission personnel observed brantley on several 20 meter amateur frequencies making lengthy cq calls and calling nonexistent stations. he did not make contact with any station, even though two stations made numerous attempts to respond to his cq calls. it became obvious that the purpose of these transmissions was to disrupt normal amateur communications. k6kps ignored the complaints of other stations on the frequencies. brantley was cited for violating section 97.113 which prohibits broadcasting by amateur stations. the fine was issued june 13, and brantley has 30 days to respond ar

From -6097351807976342042
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2238ce33b9d5fb0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-25 08:19:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: New cordless phone distance record set?
Message-ID: <616@ihu1h.UUCP>
Date: Tue, 25-Jun-85 11:19:00 EDT
Article-I.D.: ihu1h.616
Posted: Tue Jun 25 11:19:00 1985
Date-Received: Wed, 26-Jun-85 06:45:33 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 40

x

NEW CORDLESS PHONE DISTANCE RECORD?

by Bob Parnass

NAPERVILLE, Ill. - If you use a cordless telephone, you may be overheard by people 1000 miles away.

Jack Albert, a radio hobbyist in New Lenox, Illinois was watching TV channel 2 the evening of June 23 when he noticed another TV signal competing with the local Chicago station. Suspecting a "band opening", a natural phenomenon in which radio signals "skip" off the ionosphere, permitting reception of signals from extraordinary distances, Albert turned on his 6 meter ham radio receiver and found that conditions favored reception of signals from North Carolina.

Retuning his receiver to frequencies adjacent to the ham band, Albert's attention was drawn to two people conversing amidst the clamor of several other cordless phone conversations. When asked why he was sure that the parties were in North Carolina, Albert stated that both parties had "North Carolina accents" and that the slow fading pattern on the cordless phone signals matched that on the ham signals from the same state.

Albert regularly uses his 25 year old "Clegg Interceptor" receiver, connected to a 5 element beam antenna on a 45 foot tower, to monitor radio signals from his home station WA9FVP.

Radio hobbyists report that reception of cordless phone conversations from distances of one to two miles is common, but this may set the distance record in reception of these signals.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5221825844200245071
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f0adce1da9707dc2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-26 13:52:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxf.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!hoxna!houxm!houxf!signal
From: signal@houxf.UUCP (J.BODDIE)
Newsgroups: net.ham-radio
Subject: Anyone heard RS5 lately?
Message-ID: <929@houxf.UUCP>
Date: Wed, 26-Jun-85 16:52:48 EDT
Article-I.D.: houxf.929
Posted: Wed Jun 26 16:52:48 1985
Date-Received: Thu, 27-Jun-85 06:35:09 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 16

xx

I have tried twice in the past few days to hear the RS5 and RS7 satellites on 10m with no success. Both times were in the early morning (~3:30 a.m. E.D.T.). Do these satellites have an operating schedule that includes a period in which both the beacon and transponders are off?

I have heard the satellites in the past and believe my equipment adequate: ICOM R-70 and external dipole.

Any ideas?

Thanks,
Jim Boddie, NG2J
houxf!signal

From -991456042254936866

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c103415218b80ab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-27 10:02:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 21 (new crrl gen mgr)
Message-ID: <18266@mgweed.UUCP>
Date: Thu, 27-Jun-85 13:02:24 EDT
Article-I.D.: mgweed.18266
Posted: Thu Jun 27 13:02:24 1985
Date-Received: Sat, 29-Jun-85 04:22:12 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr crrl bulletin nr 21
from crrl headquarters london ontario
june 18 1985 to all radio amateurs bt

on behalf of the board of directors of the canadian radio relay
league president tom atkins ,ve3cdm, is pleased to announce the
apppointment of raymond c staines ,ve3zj, as general manager of
crrl, efffective immediately. he will be located at crrl
headquarters in london ontario. ar

From 122173360091530122
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fa36a11957631af3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-29 19:55:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Yaesu FRG9600 vhf/uhf rcvr: preliminary comments
Message-ID: <618@ihu1h.UUCP>
Date: Sat, 29-Jun-85 22:55:43 EDT
Article-I.D.: ihu1h.618
Posted: Sat Jun 29 22:55:43 1985
Date-Received: Sun, 30-Jun-85 03:38:41 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 34

x
       YAESU FRG9600 VHF/UHF SCANNING RECEIVER:

PRELIMINARY COMMENTS

A friend of a friend (of a friend) tried the new Yaesu 60 - 905 MHz scanning receiver, with these comments:

- Apparently good sensitivity on all ranges, but noticeable intermod in the 150 - 160 MHz range.

- Only 10 of the 100 channels can be scanned.

- There is no way to lock out a channel from the scan list.

- The tuning knob makes a "clicking" sound as it is rotated, and it takes several turns to tune even a small band segment.

- Relatively slow scan and search rates.

- Scanning algorithm pauses on an active channel for at most 7 seconds, then resumes scanning abruptly, causing interrupted transmissions.

- Scanning fails to stop sometimes, even on strong signals.

The reviewer assessed the FRG9600 "a failure as a scanner", although it is ok as an SWL receiver for higher frequencies.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 2433420464308846807
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1ec9971475defe8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-01 16:17:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 25
Message-ID: <18367@mgweed.UUCP>
Date: Mon, 1-Jul-85 19:17:52 EDT
Article-I.D.: mgweed.18367
Posted: Mon Jul 1 19:17:52 1985
Date-Received: Wed, 3-Jul-85 07:38:23 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 53

qst de k9eui
hr dx bulletin nr 25 from arrl headquarters
newington ct june 28, 1985
to all radio amateurs bt

uganda. confirmations for 5x5gk will be accepted for dxcc credit beginning with dxcc application submissions received on or after june 1, 1985. 5x5gk confirmations dated on or after 28 august 1984 will be accepted for dxcc credit. 5x5bd and 5x5wr are also creditable for dxcc beginning with the june 1, 1985 application submissions.

sao tome. luiz, s92lb, is active on 14200 khz at 2200z and 14220 khz at 0700z. he has also been heard on 21299 khz at 2130z. qsl to box 147, sao tome.

central kiribati. t31at, operated by t30at, will be active until july 30, working europe on 14253 khz and japan and the u.s. on 7070 khz from 0500 to 0700z. qsl via g4ged.

ghana. 9g1ht is active on 3799 khz at 0100z, also on 14236 khz at 2330z. qsl to box 351, akara.

french polynesia. fo0asj and fo0fb are active on 14188 and 14209 khz until july 8. qsl fo0fb to wb6ofj and fo0asj to n5dd.

tristan da cunha. zd9bv, andy, is back. he is active on saturdays on 21265 hz at 1700z.

chad. ka4jry/tt8 is active on 14220 and 14246 khz at 1930z. he will be active for three weeks, and will then be back and forth for a year. qsl to his home call.

south cook islands. zk1cy han heard on 7005 khz at 0920z. qsl via w6knh.

vanuatu. yj8fb has been found on 14203 khz at 0400z and on 14210 khz at 0730z.

marsall islands. kx6s active on 14218 khz at 0600z.

greece. sv0aa has been on ?0834 khz at 0230z.

russian dxpeditions to rare oblasts. uz9ywa/uawtz came on on june 23 for ten days. uz0uwa/ua8t appeared on june 19 for eight days.

special prefix/brazil. zv2adv on ssb, zv2acz on cw and zv2bw on rtty will be active on all bands, 80 through 10 meters, from june 30 to july 6 in honor of brazils annual fire prevention week. qsl to pt2adv or via the bureau ar

From 3756756682444200185
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b151b3526ce3a7e4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-01 16:18:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 26
Message-ID: <18368@mgweed.UUCP>
Date: Mon, 1-Jul-85 19:18:14 EDT
Article-I.D.: mgweed.18368
Posted: Mon Jul 1 19:18:14 1985
Date-Received: Wed, 3-Jul-85 07:38:41 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 41

qst de k9eui
hr propagation forecast bulletin nr 26 from arrl headquarters
newington ct june 30, 1985
to all radio amateurs bt

solar flux and sunspot number curves for june were quite similar to those for may, except that they were mostly a few points lower. this is to be expected, as cycle 21 will be 9 years old this week. the june flux average was 73.2. only march of this year was lower, with 72.5. the solar flux curve is presently above that for the same point in the previous solar rotation, but it is expected to peak more, probably early next week.

anyone using 21 or 28 mhz regularly of late has found these bands busy, thanks to the seasonal peak in sporadic e layer ionization. because this mode is sporadic, and largely unpredictable as to timing, its effects are not included in the propagation charts that appear monthly in qst. e skip is good mainly for distances under 1200 mile most of the time, so it is not normally thought of as a dx medium. multiple hop effects can extend its useful range markedly during early summer. the 10 meter band has been open to europe from the east coast recently, and even austrailia and new zealand have been worked now and then. the possibility of transatlantic e layer dx on 50 mhz should not be overlooked, though it is quite rare this high in frequency, especially over more than about 2500 miles.

propagation was erratic as this bulletin was being prepared. geomagnetic activity was rising, and rapid fading was troublesome. there should be some improvement later in the week but more disturbed conditions are likely again july 4 to

8. july 10 through 18 will bring more stability, and generally
good summer propagation when electrical storms are not making
noise a problem.

american sunspot numbers for june 20 through 26 were between 1
and 16 with a mean of 7.1 ar

From 2979959078883354605
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c72b0048e1229ed8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-02 06:30:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!decwrl!dec-rhea!dec-
oracle!biro
From: biro@oracle.DEC
Newsgroups: net.ham-radio
Subject: FRG9600 REVIEW
Message-ID: <2979@decwrl.UUCP>
Date: Tue, 2-Jul-85 09:30:25 EDT
Article-I.D.: decwrl.2979
Posted: Tue Jul 2 09:30:25 1985
Date-Received: Fri, 5-Jul-85 05:04:10 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 109

I just saw the first review of the FRG9600 and though
it was time I added my two cents also.

       YAESU FRG9600 VHF/UHF SWL RECEIVER:
                 AND THE MX5000 COMMENTS

I have had a Yaesu 9600 now for almost a month and these are
my observation and comments on this swl receiver. I also have
the RS232 interface and have been able to program it from my
computer. I have had the MX5000 for about 6 months that is the
only other receiver I can use for comparison.

Conclusion:

The FRG9600 is a great SWL receiver but is not really design
for a scanner. I have both the MX5000 and the FRG9600 and if
I could only have one I would pick the FRG9600 as most of my
receiving is listing to satellites and SWL like activities.
The unit is easy to use and to program from a computer.
The unit is in a shielded case and little intermod / birdies
have been found. I do a lot of monitoring of the 137 MHz
band and the MX5000 has problems with a local FM station but
the FRG9600 does not. This may be why the sensitivity of the

FRG9600 is not as good as the MX5000. I am glad to see that the scanner are going towards SWL receivers, but where is the cw filter, the agc selection, bandpass tuning etc.

- The sensitivity of the FRG9600 is not as good as the MX5000 but it is not as susceptible to microprocessor noise as the MX5000 is. I have not done any measurements but by simple step attenuators test I would assume that there is about 3 to 6 db of difference.

- The scanning routine is very bad, it stops on a channel and then continues. There is no option to stop on scan. It sure would have been nice to have the unit send out the freq. on the RS232 line. I still wonder if that is what they had in mind when they had it stop and blink one digit at a time and then continue scanning.

- The programming of the unit from the keypad is very easy and straight forward. All commands are done the same way not like the MX5000 which requires a different sequence depending on what scanning mode you are in and if the squelch is open or closed. I found the rotary dial to be easy to use an much like the two meter FM units, with the variable rate tuning steps one can easily tune threw bands. The only exception is in the ssb/cw mode where the step is fixed and not adjustable.

- The RS232 interface is simple a RS232 level converter to TTL levels (? 0 and 3 VDC and level inversion switching to invert mark and space if needed). The baud rate is 4800, and there is restriction on the time for all 5 character to be sent to the receiver. The odd part is the fact that there is a requirement of two stops bits. I am not sure why as the industry standard is 1 stop bit above 300 baud. This gave me some problem as my computer only did one stop bit, at first I could not program the unit because of this. After many hours of scopeing out the signals I determine if I put in a delay between sending characters to the FRG9600 I could fake out an extra stop bit. I use about 1 ms as that is what my delay loop first came out to be but any delay that is greater the 1.5 bit time should be enough. After this I found it very easy to program the mode and frequency of the FRG9600. These are the only command one can program. It would have been nice if you could program the selection of the memory channels but you can not and it would have been nice if you could use the step size and stepping and features but you can not. It also would have been nice if they had brought out the squelch to the RS232 interface but they did not. I did bring out the squelch line and tied it it data set ready of the RS232 line.

- From the computer interface one can set any frequency independent of the mode to 100 hz and it dose not snap to the nearest mode dependent step size. This is a very nice feature for odd frequency and in automating doppler shift correction for monitoring satellites.

- There is a clock and timer on the unit but it is not assessable to the RS232 interface. The clock is not battery backup like the MX5000 but all the memory channels are.

- Separate squelches are provide for AM/WBFM and NBFM. It seems to work well except for AM.

- The ssb detector is very good, I was lucky to receive the unit just before the VHF contest and copied may ssb/cw station in the 144/220/432 MHZ bands. They are easy to tune in.

- I have ordered the Video interface for it , but it is not available yet.

- External connections allows one to get the following signals, squelch, agc voltage, audio, if output and more . Those are the one I remember as I do not have my manual with me. The connector for the ant is a standard PL259 type connector, it should have been an N type connector.

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From -9133862497164783864
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eea4d7afff3f2539,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,eea4d7afff3f2539,start
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1985-07-02 20:01:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.aviation
Subject: Some VHF airline "company channel" freqs
Message-ID: <619@ihu1h.UUCP>
Date: Tue, 2-Jul-85 23:01:10 EDT
Article-I.D.: ihu1h.619
Posted: Tue Jul 2 23:01:10 1985
Date-Received: Wed, 3-Jul-85 09:20:47 EDT
Distribution: net

Organization: AT&T Bell Laboratories
Lines: 27
Xref: watmath net.ham-radio:2897 net.aviation:1716

x
     Some of these airline "company channel" frequencies may
     be   good nationwide. Transmissions are amplitude modu-
     lated.

Air France/aka Aeronautical Radio, company channel, transportation
                [Chicago]___________ 129.0250____KFI9   (others)
Air-Medic One, company channel, medical transportation
                [location?]_________ 131.1500____call?   (others)
British Airways/aka Aeronautical Radio, company channel
                [Chicago]___________ 131.1000____KFB8   (others)
Delta Airlines/aka Aeronautical Radio, company channel
                [Chicago]___________ 129.6000____WCD4   (others)
Eastern Airlines/aka Aeronautical Radio, company channel
                [Chicago]___________ 128.8500____KEB5   (others)
          "   [Chicago]___________ 130.7500____WGH2
       (others)
Jetstream/aka Aeronautical Radio, company channel, airline transportation
                [Chicago]___________ 128.8500____KEB5   (others)
United Airlines/aka Aeronautical Radio,   company channel
                [Chicago]___________ 131.3000____KJK5   (B. Parnass)
US Air/aka Aeronautical Radio, company channel, transportation
                [Chicago]___________ 130.5000____WFD6   (others)

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==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6478885209012606997
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2dd284f558c8ae15,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-03 07:08:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site biomed.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
wjh12!biomed!lagasse
From: lagasse@biomed.UUCP (Robert C. Lagasse)
Newsgroups: net.ham-radio
Subject: Commercial FM "tweedle"
Message-ID: <85@biomed.UUCP>
Date: Wed, 3-Jul-85 10:08:31 EDT
Article-I.D.: biomed.85
Posted: Wed Jul 3 10:08:31 1985
Date-Received: Fri, 5-Jul-85 06:19:46 EDT
Organization: Mass. Gen. Hosp. - Dept. Biomed. Engineering
Lines: 11

Living around Boston, I have heard several walkie-talkies that the transit police carry and also the EMS ambulance people. They all seem to be Motorolas. Anyway, it seems that when the base station releases its mike key, a couple of single tones are transmitted, very rapidly, one after another, each about 100mS long, with no space in between them, the first tone higher in freq than the other. One is about 1.5kHz and the other a bit lower, maybe around 1kHz. WHAT are these for?

All comments appreciated.
N 1 A L G Bobby L.

From 4107548915504839599
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d72627d369588dc2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-03 08:23:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site biomed.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!wjh12!biomed!lagasse
From: lagasse@biomed.UUCP (Robert C. Lagasse)
Newsgroups: net.ham-radio
Subject: "PL"
Message-ID: <86@biomed.UUCP>
Date: Wed, 3-Jul-85 11:23:18 EDT
Article-I.D.: biomed.86
Posted: Wed Jul 3 11:23:18 1985
Date-Received: Fri, 5-Jul-85 06:20:06 EDT
Organization: Mass. Gen. Hosp. - Dept. Biomed. Engineering
Lines: 43

Just tried out a shiny new ambulance with all of its electronic goodies (work part time as an EMT in my town) . Anyway, it has a new Motorola radio with the standard PL on/off slide switch on the microphone holder. Here comes the question: When the PL switch is off, the receiver audio is muted by the normal squelch circuit which allows you to hear receiver hiss for about half a second after the repeater shuts down, then all is quiet. When PL is on, receiver audio is heard, but right after they finish speaking, the reciever is muted and no squelch tail is heard. Are they or are they NOT shutting off the transmitted PL tone BEFORE thaey allow the repeater transmitter to shut down? This is what it sounds like.

Next question: Why does store bought 2m ham gear usually try to sell itself with a PL tone encoder ONLY? It seems that all of the commercial radios like in the previous question (even the walkie-talkies) have BOTH an encoder and a decoder. Is it because PL tones are really used in ham radio as an electronic "key" or access device to allow only those lucky few to access a closed repeater? I can see two reasons to use PL tones in commercial gear: 1) It allows several local services to use the same frequency without being

disturbed by one another's received audio.
2) On low-band systems (usually repeaterless) it eliminates received "skip" from everyone's radio listening.
  I suppose PL encoding and decoding could be used on 2m within a group of people so they would not have to listen to all of the repeater gossip if they were expecting a call from a certain ham operator.

While I am on the subject of private encoding/decoding:
   Is it legal to use this scheme on amateur radio? What if I have a tone decoder circuit in my mobile set that will only open up the receiver audio if it receives two or three DTMF pairs in the proper sequence? A typical scenario would go like this: Another ham tries to contact me by on or off off a repeater by saying my call, "this is", then his call, then using her or his DTMF pad transmits a sequence of tones. Do you think this would piss off people listening to the repeater, thinking that I am trying to access some repeater function (such as autopatch) when I don't EVEN BELONG to their repeater group or club?

Last question: on commercial FM gear, is the PL tone transmitted by a mobile set filtered out before the signal is retransmitted by the repeater???

..............I'm just full of questions today.

N 1 A L G   Bobby L @ MGH

From -5564266216101948010
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d72627d369588dc2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-04 12:42:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site sdcsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!petsd!pesnta!hplabs!sdcrdcf!sdcsvax!brian
From: brian@sdcsvax.UUCP (Brian Kantor)
Newsgroups: net.ham-radio
Subject: Re: "PL" and tweedles
Message-ID: <957@sdcsvax.UUCP>
Date: Thu, 4-Jul-85 15:42:24 EDT
Article-I.D.: sdcsvax.957
Posted: Thu Jul 4 15:42:24 1985
Date-Received: Sun, 7-Jul-85 05:57:59 EDT
References: <86@biomed.UUCP>
Reply-To: brian@sdcsvax.ARPA (Brian Kantor)
Organization: UCSD wombat breeding society
Lines: 74

In article <86@biomed.UUCP> lagasse@biomed.UUCP (Robert C. Lagasse) writes:
>the question: When the PL switch is off, the receiver audio is muted
>by the normal squelch circuit which allows you to hear receiver hiss for
>about half a second after the repeater shuts down, then all is quiet. When
>PL is on, receiver audio is heard, but right after they finish speaking, the

>reciever is muted and no squelch tail is heard. Are they or are they NOT
>shutting off the transmitted PL tone BEFORE thaey allow the repeater
>transmitter to shut down? This is what it sounds like.

True sub-audible PL as done by Motorola uses a technique called
``reverse burst'', in which the transmitter emits PL for 120 ms after
you release the microphone, but 180 degrees out of phase with that which
was sent during the main part of the transmission. Its frequently
louder too. The idea is to cancel the vibration in the mechanical
decoder reed at the receiving station, so that the tone squelch will
shut before the received carrier goes away, thus eliminating the squelch
tail.

(Note to ham radio newcomers: the ``squelch tail'' is the burst of white
noise heard as an FM receiver squelch delays closing for a short period
of time. It is NOT (as I have heard ignorant people say on local
repeaters) the delayed drop-off time of the repeater. It is perfectly
possible (and common) to have a squelch tail when there is no repeater
involved at all.

More recent Pl systems use a quick burst of digital code sent at the
beginning and end of each transmission. This DPL can address lots of
different stations both by group and individually, so its more flexible.
By combining it with dual-rate squelches (close fast on strong signals,
more slowly on weak signals that may be fluttering), even if the
trailing code burst is lost, the majority of squelch tails will be
eliminated.

>Next question: Why does store bought 2m ham gear usually try to sell itself
>with a PL tone encoder ONLY?

Most rice-rockets can have a decoder added to them, but since the great
majority of them have really shitty low-frequency audio response (small
speakers, little coupling caps, etc), most repeater operators choose not
to repeat PL tones through their repeaters. It is possible to do so, by
either of two methods - a tone coupler will repeat PL tones through
(under the squelch, so that reverse-burst will continue to work), or by
having an encoder on the repeater transmitter. So although its possible
to have a decoder, since most people won't have one, and the tones will
really distort audio in their receivers, repeaters generally don't emit
tone.

Tone bursts in the audible range, DPL, touch-tones, etc as selective
station calling devices have been used in ham radio off and on for
years, and I have not heard of their legality as such being questioned,
but they are unpopular for a number of reasons: They are annoying as
hell to listen to, and the general air of cliquishness they generate
usually pisses off enough people that they record and play back the
tones to annoy the members of the clique. (My, aren't repeaters FUN?)
Better to move to another band and put up a private system.

>Last question: on commercial FM gear, is the PL tone transmitted by a
>mobile set filtered out before the signal is retransmitted by the repeater???

See above.
>N 1 A L G   Bobby L @ MGH

PL=Private Line, QC=Quiet Channel, CG=Channel Guard, and they're all
trademarks of Motorola, RCA, GE. Touch-tone belongs to some part of
what is left of the Bell System.

     Brian Kantor WB6CYT, repeater baron extraordinaire (ret.)

     decvax\ brian@ucsd.arpa
     akgua >--- sdcsvax --- brian
     ucbvax/   Kantor@Nosc

"You know, I really like my RCA walkie - its the only radio I've ever
owned that withstands pounding nails with it and keeps on ticking...."

From 5803905321321918311
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2dd284f558c8ae15
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-04 17:30:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!cornell!uw-beaver!tektronix!hplabs!pesnta!greipa!decwrl!decvax!
genrad!panda!talcott!harvard!seismo!brl-tgr!ron

From: ron@brl-tgr.ARPA (Ron Natalie <ron>)

Newsgroups: net.ham-radio
Subject: Re: Commercial FM "tweedle"
Message-ID: <11380@brl-tgr.ARPA>
Date: Thu, 4-Jul-85 20:30:04 EDT
Article-I.D.: brl-tgr.11380
Posted: Thu Jul 4 20:30:04 1985
Date-Received: Thu, 11-Jul-85 05:41:29 EDT
References: <85@biomed.UUCP>
Organization: Ballistic Research Lab
Lines: 15

>
>   Living around Boston, I have heard several walkie-talkies that the
> transit police carry and also the EMS ambulance people. They all seem to be
> Motorolas. Anyway, it seems that when the base station releases its mike
> key, a couple of single tones are transmitted, very rapidly, one after
> another, each about 100mS long, with no space in between them, the first
> tone higher in freq than the other. One is about 1.5kHz and the other a bit
> lower, maybe around 1kHz. WHAT are these for?
>
Baltimore City has the{k bleedles. They are a data burst. They transmit
call information to the stations and engines. The officer in the engine
just pushes the buttons to indicate the situation on arrival at the scene.
I think the trade name is something like MODAC.

-Ron

From 7081034846153093911
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d72627d369588dc2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-04 17:36:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!cornell!uw-beaver!tektronix!hplabs!pesnta!greipa!decwrl!decvax!
genrad!panda!talcott!harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: "PL"
Message-ID: <11381@brl-tgr.ARPA>
Date: Thu, 4-Jul-85 20:36:21 EDT
Article-I.D.: brl-tgr.11381
Posted: Thu Jul 4 20:36:21 1985
Date-Received: Thu, 11-Jul-85 05:40:42 EDT
References: <86@biomed.UUCP>
Organization: Ballistic Research Lab
Lines: 18

> Next question: Why does store bought 2m ham gear usually try to sell itself
> with a PL tone encoder ONLY? It seems that all of the commercial radios
> like in the previous question (even the walkie-talkies) have BOTH an encoder
> and a decoder.

While their are some repeaters around here that have PL to keep out the
"riff-raff," the only repeater that I generally use installed PL to stop
interfering signals from unintentionally bringing up the repeater. This
can either be due to another repeater on the same frequency, or as in this
case, a cab company with a bunch of poorly maintained AEROTRON commecial
radios. We allowed the repeater to be brought up using any one of the
following three methods:

1. PL.
2. Any Touch Tone
3. Three kerchunks within one second followed by the carrier
   staying on.

-Ron

From -5998165776471209020
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d72627d369588dc2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-05 17:18:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site pitt.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!cornell!uw-beaver!tektronix!hplabs!qantel!dual!lll-crg!gymble!umcp-
cs!seismo!rochester!cmu-cs-pt!cadre!pitt!hoffman
From: hoffman@pitt.UUCP (Bob Hoffman)
Newsgroups: net.ham-radio
Subject: Re: "PL"
Message-ID: <1090@pitt.UUCP>
Date: Fri, 5-Jul-85 20:18:44 EDT
Article-I.D.: pitt.1090
Posted: Fri Jul 5 20:18:44 1985
Date-Received: Thu, 11-Jul-85 06:42:51 EDT
References: <86@biomed.UUCP>
Reply-To: hoffman@pitt.UUCP (Bob hoffman)
Organization: Univ. of Pittsburgh Computer Science
Lines: 44

In article <86@biomed.UUCP> lagasse@biomed.UUCP (Robert C. Lagasse) writes:
>
>... When
>PL is on, receiver audio is heard, but right after they finish speaking, the
>reciever is muted and no squelch tail is heard. Are they or are they NOT
>shutting off the transmitted PL tone BEFORE thaey allow the repeater
>transmitter to shut down? This is what it sounds like.

This is often done with what's called "tone reversal". When the Push-to-Talk
line on the transceiver is released, the tone encoder holds it on for about
another 100 ms. During this time, the PL tone is sent out, 180 degrees out of
phase. This serves to turn off a PL decoder as quickly as possible. In the
days of reed-based decoders, it damped the vibrations of the reed. The 100 ms
time was just long enough to shut down the decoder without it locking onto
the 180-degree signal.   RCA TACTEC (TAC100) radios do this, for example.

>
>While I am on the subject of private encoding/decoding:
>   Is it legal to use this scheme on amateur radio? What if I have a tone
>decoder circuit in my mobile set that will only open up the receiver audio
>if it receives two or three DTMF pairs in the proper sequence? A typical
>scenario would go like this: Another ham tries to contact me by on or off
>off a repeater by saying my call, "this is", then his call, then using her
>or his DTMF pad transmits a sequence of tones. Do you think this would p*ss
>off people listening to the repeater, thinking that I am trying to access
>some repeater function (such as autopatch) when I don't EVEN BELONG to their
>repeater group or club?
>

I always thought having a decoder on my rig would be a good idea. I don't
think it would be illegal -- you're not broadcasting, you're signaling a
specific individual. And no matter what you do, you're bound to make someone
mad at you! :-)

>
>Last question: on commercial FM gear, is the PL tone transmitted by a
>mobile set filtered out before the signal is retransmitted by the repeater???

>

Yes. In some rare cases, a *different* PL tone is used on the output than
on the input. That, of course, requires complete filtering on the receiver.
--
Bob Hoffman, N3CVL   {allegra, bellcore, cadre, idis, psuvax1}!pitt!hoffman
Pitt Computer Science   hoffman%pitt@csnet-relay

From 1238526363360218137
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2dd284f558c8ae15
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-05 23:18:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Commercial FM "tweedle"
Message-ID: <621@ihu1h.UUCP>
Date: Sat, 6-Jul-85 02:18:51 EDT
Article-I.D.: ihu1h.621
Posted: Sat Jul 6 02:18:51 1985
Date-Received: Sun, 7-Jul-85 05:46:08 EDT
References: <85@biomed.UUCP>
Organization: AT&T Bell Laboratories
Lines: 29

>   Living around   Boston, I have heard several walkie-talkies that the
> transit police carry and also the EMS   ambulance people. They
     all seem to be
> Motorolas. Anyway, it seems that when the base station releases its mike
> key, a couple   of single tones   are transmitted, very rapidly, one after
> another, each   about 100mS long, with no space in between them, the first
> tone higher in freq than the other. One is about 1.5kHz and the other a bit
> lower, maybe around 1kHz. WHAT are these for?
>
> All comments appreciated.
> N 1 A   L G   Bobby L.

     I think what you heard are the tone signals generated
     by   the remote control unit located   at the base operator
     position.   This control unit is probably connected
      via
     dedicated "phone" lines to the actual transmitter.

     Since these "phone" lines have no DC continuity, tone
     signals are used to remotely control the transmitter
     (e.g. transmit, receive,   change   channel,   etc).
     Although these tones are supposed to be muted to
     prevent their transmission over   the air, it's
      not

uncommon to hear them "slip out".

I hear these tones on the Bolingbrook (IL) Police base on 155.250 MHz, and the Illinois Department of Transportation on 151.100 MHz.

--

==========

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -3192477804075023701
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5336035888e6fcd2,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,5336035888e6fcd2,start
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1985-07-07 07:43:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.analog
Subject: Memory backup trouble in Yaesu FRG8800 (ala ICOM?)
Message-ID: <623@ihu1h.UUCP>
Date: Sun, 7-Jul-85 10:43:31 EDT
Article-I.D.: ihu1h.623
Posted: Sun Jul 7 10:43:31 1985
Date-Received: Mon, 8-Jul-85 00:58:29 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 44
Xref: watmath net.ham-radio:2903 net.analog:359

x
MEMORY BACKUP TROUBLE IN YAESU FRG8800 RECEIVER

A few months ago, I posted an article revealing that critical information is stored in the ICOM R71A's RAM, requiring factory reprogramming after the lithium backup battery runs down.1

Readers may be interested in the memory backup anomalies of other receivers. From Geoff Halligey's "Below 30 MHz" column in the July 1985 issue of the RCMA Newsletter:

"A friend in the U.K. exchanged his R2000 [Kenwood SWL receiver] for the new [Yaesu] FRG8800. He was delighted at first, but after 3 or 4 weeks the readout went blank and no signals. He found the backup bat-

teries fully discharged. Hastily returning the receiver to the dealer, a new replacement was sent out - three weeks later the same thing again."

"The dealers have now told him that they have had a number of similar complaints and they point out that the manual states that continual switching on and off the receiver will considerably shorten the life of the backup batteries."

"But three weeks in normal use is ridiculous."

It's not clear just what is stored in the FRG8800 RAM: user memory channels, critical operating parameters used by the microprocessor controller (as in the ICOM R71A), or both.

Does the FRG8800 use rechargeable NiCd batteries for backup? Are they charged only when the receiver is "on"?

---

1. Parnass, Bob, "ICOM Backup Batteries", QST, June 1985, p. 41.

--

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -1169143937848544682
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d72627d369588dc2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-07 17:10:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: "PL" and tweedles
Message-ID: <11397@brl-tgr.ARPA>
Date: Sun, 7-Jul-85 20:10:06 EDT
Article-I.D.: brl-tgr.11397
Posted: Sun Jul 7 20:10:06 1985
Date-Received: Thu, 11-Jul-85 00:38:12 EDT
References: <86@biomed.UUCP> <957@sdcsvax.UUCP>
Organization: Ballistic Research Lab
Lines: 15

> (Note to ham radio newcomers: the ``squelch tail'' is the burst of white

> noise heard as an FM receiver squelch delays closing for a short period
> of time. It is NOT (as I have heard ignorant people say on local
> repeaters) the delayed drop-off time of the repeater. It is perfectly
> possible (and common) to have a squelch tail when there is no repeater
> involved at all.
>
On a repeater however, you hear the squelch tail from the repeaters
receiver being retransmitted. If you have remote receive sites, the
problem is compounded. You can get around this by delaying the repeated
audio by enough time that when the COS from the reciever dies, the
squelch tail in the delay line is dumped. Of course, there isn't a
whole lot you can due about the squelch tail in the user's receiver.

-Ron

From -3688973704841583660
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d72627d369588dc2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-08 07:47:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.5 $; site trsvax
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!inuxc!pur-ee!uiucdcs!
convex!trsvax!mikey
From: mikey@trsvax
Newsgroups: net.ham-radio
Subject: Re: "PL"
Message-ID: <52800061@trsvax>
Date: Mon, 8-Jul-85 10:47:00 EDT
Article-I.D.: trsvax.52800061
Posted: Mon Jul 8 10:47:00 1985
Date-Received: Fri, 12-Jul-85 00:21:06 EDT
References: <86@biomed.UUCP>
Lines: 22
Nf-ID: #R:biomed.UUCP:-8600:trsvax:52800061:000:879
Nf-From: trsvax!mikey   Jul 8 09:47:00 1985

PL is used not just for security or access to a "private" repeater and/or
functions, but also to prevent interference. On 10M repeaters, each
area of the country has subtones that it is supposed to use for
repeater access. This prevents skip from one area of the country from
activating all the repeaters in another part of the country. It also
can be used to prevent interference where repeater coverage covers
more that one metro area, for example, New York to Boston. There are
probably some sites that if PL was not used, keying up would probably
bring up many machines in the area.

As to decoding the PL on a receiver, Kenwood did something similar
except they use ASCII transmission of your call sign in the TR2600

handi-talkie.

As to the legality of PL, there really isn't a problem. It's not
cryptic data and it conserves bandspace.

mikey at trsvax
KA5MJQ

From 4845266536683317376
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ebb0e07300452a5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-08 16:49:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 27
Message-ID: <18648@mgweed.UUCP>
Date: Mon, 8-Jul-85 19:49:42 EDT
Article-I.D.: mgweed.18648
Posted: Mon Jul 8 19:49:42 1985
Date-Received: Tue, 9-Jul-85 07:14:00 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 36

qst de k9eui
hr propagation forecast bulletin nr 27 from arrl headquarters
newington, ct july 7, 1985
to all radio amateurs bt

active areas of the sun responsible for solar flux peaks in
early may and june have been on the visible disc of the sun
again since july 1. the lead group is shrinking, but the
second is larger and more complex than during its june
appearance. the solar flux rose from 74 on july 1 to 95 on the
7th, its highest since july of last year. all visible activity
is now in the western half of the solar disc, so the flux and
sunspot numbers will be lower this week.

as predicted last week, geomagnetic activity associated with
the more active sun made for erratic dx conditions on our lower
frequencies. more stable propagation and lower muf are
expected after about july 9. transatlantic dx was worked on 50
mhz during the evening of july 2, and again around midday on
the 7th. there was also 50 mhz work to south and central
america on the latter date. we may have passed the early
summer peak for e layer dx on 28 and 50 mhz, but there will be
frequent openings during july. there is no close tie in with
solar flux peaks or valleys for the e layer mode, but the four

week solar rotation period is worth noting. on that basis we expect a fall off in the middle of july, and a final upsurge at the months end.

a gradual change to f layer propagation and longer skip distances will be noticeable on 21 mhz and lower frequencies in august. as e skip drops off, 28 mhz will seem quiet but there is a good possibility of long haul f layer work on that band in the fall months. more details on this prospect will be given in a few weeks. ar

From 8647444834471678454
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3693e53a7fcd6b6a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-09 08:23:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: girl scouts need radio equipment
Message-ID: <474@mtunh.UUCP>
Date: Tue, 9-Jul-85 11:23:11 EDT
Article-I.D.: mtunh.474
Posted: Tue Jul 9 11:23:11 1985
Date-Received: Thu, 11-Jul-85 06:48:29 EDT
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 14

The Girl Scouts of Monmouth county would like to help young women become more involved with careers in the electronics and communications industry. They are in the process of setting up a program for senior scouts and are seeking donations of amateur radio and CB equipment. They are specifically seeking all types of CB radio items such as antennas, mobile units and base stations. They would also like to set up an amateur radio station covering the HF and 2 meter bands. Equipment would include the radios, antennas, tower and support equipment such as a tuner and SWR meter. If you can help please contact Judy Mazza at (201) 938-5454 or Charles Burke (201) 566-1800 ext 353. Thank you very much for any help you can provide.

Charles Burke, WA2SLK

From 3985116299924441128
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,218fbd426639758b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-09 10:20:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA (Richard Shapiro)
Newsgroups: net.ham-radio
Subject: ICOM R70 mod?
Message-ID: <11429@brl-tgr.ARPA>
Date: Tue, 9-Jul-85 13:20:36 EDT
Article-I.D.: brl-tgr.11429
Posted: Tue Jul 9 13:20:36 1985
Date-Received: Sun, 14-Jul-85 09:10:00 EDT
Sender: news@brl-tgr.ARPA
Lines: 17

A few issues back in the Review of International Broadcasting
an article set out a simple and elegant modification to the
ICOM R71A which would convert the PBT (actually a variable width
filter scheme) into true passband tuning. Does anyone know of
a way to do this for the R70? Or does anyone remember seeing
any articles on this? Is there any reason to believe that designs
of the two radios are such that it should be equally easy to
do this?

Thanks

Richard Shapiro

p.s. Thanks to Bob Parnass for pointing out that the R70 does
not suffer from the battery-backed RAM problem which afflicts
the R71A.

From 6280593087121519869
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1f4b4ac7b1fcf22,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-09 10:21:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!brl-tgr!tgr!wjc@ll-vlsi
From: wjc@ll-vlsi (Bill Chiarchiaro)
Newsgroups: net.ham-radio
Subject: Re: \"PL\"
Message-ID: <11430@brl-tgr.ARPA>
Date: Tue, 9-Jul-85 13:21:50 EDT
Article-I.D.: brl-tgr.11430
Posted: Tue Jul 9 13:21:50 1985
Date-Received: Sun, 14-Jul-85 09:14:10 EDT
Sender: news@brl-tgr.ARPA
Lines: 48

Any of the tone schemes you mention would be legal for ham use.

A repeater supposedly filters out the mobile's PL tone (it's supposedly "subaudible" anyway). However, on my Motorola HT-220, I can hear the PL tone from another HT-220 after going through our Motorola MSY repeater (MIT 449.2). I can't hear it continuosly, but only as a quick, chiming tone at the beginning of the transmission. Maybe what I am hearing are higher-frequency transients as the electromechanical PL reed is starting to vibrate.

There could be a few reasons for the apparently shorter tail heard when using PL squelch. Some radios (repeaters in particular) transmit a so-called "reverse burst". When the radio is about to unkey its transmitter, it quickly reverses the phase of its PL tone. This causes the PL squelch circuit to turn off faster. This is useful with the electromechanical reed type of PL circuit; I don't think it would be necessary with an all-electronic PL squelch.

Hams tend to use PL only for keying up a closed repeater or preventing a repeater from being keyed by interference or grunge. However, it can be very nice to have an HT or mobile rig that can provide PL squelch as well as "PL transmit". If you are driving around an urban area where there is a lot of grunge, you will often find your rig unsquelching on all sorts of garbage. Enabling your PL squelch will keep your receiver quiet until the repeater you are listening for starts outputting the proper tone. In fact, this is how we run the 449.2 machine; we do not require a PL on the input to key the machine, but the machine does output PL for those who want to use it. Also, I often open up the noise squelch and enable the PL squelch on my HT when I am trying to work a weak simplex contact. I find that my PL squelch is more reliable on weak signals. Of course, the other guy's HT has to transmit the right tone.

One other ham use of PL is known as "anti-PL". About a year ago, our repeater started talking to a new machine in Philadelphia that was "upside-down" from us (444.2). The two machines talk to each other about once a week, often strongly enough to carry on a QSO with the people in PA. In order to prevent this from becoming annoying, the operator of the Philly machine installed a circuit that prevented his machine from keying if it heard our PL tone. Of course, when a local Philly user keys his HT, his (hopefully) much stronger signal will capture the Philly machine. This makes our tone "disappear" and their machine will key up.

Lastly, the only made-for-hams HTs that I can think of that support PL squelch are those made by Yaesu. The FT-208R and FT-708R and now the FT-209R and FT-709R allow for options that give both PL encode and decode.

Hope this helped...
Bill
N1CPK
MIT UHF Repeater Association

From 6827041883916916055
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,73f401cb299c6ac6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-09 13:38:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!houxf!signal
From: signal@houxf.UUCP (J.BODDIE)
Newsgroups: net.ham-radio
Subject: ICOM IC-R70 for sale
Message-ID: <939@houxf.UUCP>
Date: Tue, 9-Jul-85 16:38:17 EDT
Article-I.D.: houxf.939
Posted: Tue Jul 9 16:38:17 1985
Date-Received: Thu, 11-Jul-85 07:13:17 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 24

FOR SALE -> ICOM IC-R70 SHORTWAVE RECEIVER

Hear - Standard Time Signals - "tick...tick...tick...When the tone returns..."
Hear - International Broadcasts - "BBC World Service presents..."
Hear - Ham Radio Operators - "dah-di-dah-dit dah-dah-di-dah..."
Hear - CB Radio Operators - "Ten-four, Good Buddy..."
Hear - Mystery Numbers Stations - "uno nueve dos tres..."
Hear - Cordless Telephones - "The number you have reached..."
Hear - Strategic Military Comms - "Skyking, Skyking, do not answer..."
Hear - Radioteletype - "RYRYRYRYRYRYRYRYRY..."
Hear - Drug Smugglers, Pirates, Wierd Signals and much, much more!

IC-R70 Features:
>Frequency Coverage: 0.1 - 30.0 MHz in 10 Hz steps
>Modes: AM, CW, SSB, RTTY, FM (has optional FM unit)
>Selectivity: SSB - 2.3 KHz @ -6 dB; CW - 500 Hz @ -6 dB
>Sensitivity: 0.15 uV for 10 dB S+N/N
>Other: 2 VFOs, Passband Tuning, Notch, Noise Blanker,
              RIT, 117 V, 111 mm x 286 mm x 276 mm.
Asking - $400.00

                      Jim Boddie NG2J
                      houxf!signal
                      (201) 949-2678

From 3811913735314436151
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cf9cfcea01f68d3f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-10 10:00:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: PL, DTMF, etc comments
Message-ID: <18736@mgweed.UUCP>
Date: Wed, 10-Jul-85 13:00:33 EDT
Article-I.D.: mgweed.18736
Posted: Wed Jul 10 13:00:33 1985
Date-Received: Fri, 12-Jul-85 00:56:20 EDT
Organization: AT&T Information Systems - Montgomery Illinois
Lines: 17

Yes, it is legal to use "PL" tones or DTMF tones for signalling as long
as that particular mode is authorized on the band you are using.

Remember one thing that MOST commercial stations using tone activated
receivers forget: DISABLE THE TONE CIRCUITRY BEFORE TRANSMITTING.
That is, except on the 440 MHz ham band, it is illegal to transmit on
a frequency before monitoring it. You can't do this unless you revert
to carrier squelch!

All "decent" repeaters that use subaudible tones have a 300 Hz (or so)
hi-pass filter in the audio path so the tone is not repeated. I really
hate to hear systems where people have their "PL" cranked up so high
that it garbles the voice.

Bob K9EUI

From -4629356984659595684
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,455b0589aa0ef25d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-10 14:16:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!mit-eddie!think!
harvard!seismo!brl-tgr!tgr!wmartin@Almsa-2
From: wmartin@Almsa-2 (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: Low-cost SWL Radios
Message-ID: <11464@brl-tgr.ARPA>
Date: Wed, 10-Jul-85 17:16:15 EDT
Article-I.D.: brl-tgr.11464
Posted: Wed Jul 10 17:16:15 1985
Date-Received: Mon, 15-Jul-85 06:41:56 EDT
Sender: news@brl-tgr.ARPA
Lines: 16

Regarding the discussion some months back about $100-range shortwave
radios: Radio Shack is discontinuing their DX-400 radio (the same radio,
with slightly different cosmetics, as the Uniden CR-2021, which was
closed out last year for $90-$120 from various sources). I've seen it
at at least one R-S store on a "manager's special" for $149.95. As
stocks dwindle, I wouldn't be surprised to find demo models or the

last one in stock for even less -- it might be worth haggling over, even.

I wonder what will be coming out in the future to fill this void -- I would expect more Korean/other Asian makers to copy Sony models, the way Uniden copied the Sony 2001 for this one. Anybody out there in the trade have any word on new digital-readout SW portables? Or has the Asian SWL boom run its course (as it has in Japan), and Sony will have no competition in this area?

Regards, Will

From -8029503826369239679
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eedf1c5b1d47a99c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-11 10:01:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!NOLAND@USC-ISI.ARPA
From: NOLAND@USC-ISI.ARPA (Steve Noland)
Newsgroups: net.ham-radio
Subject: Equipment prices
Message-ID: <11502@brl-tgr.ARPA>
Date: Thu, 11-Jul-85 13:01:01 EDT
Article-I.D.: brl-tgr.11502
Posted: Thu Jul 11 13:01:01 1985
Date-Received: Mon, 15-Jul-85 07:10:35 EDT
Sender: news@brl-tgr.ARPA
Lines: 13

Does anyone out there know what the going rate on the used market is for the following equipment:

    Heath SB104 with external VFO and power supply

    Heath Apache (TX-1), Mohawk (RX-1), and SB-10 SSB adapter

    Model 19 TTY set, incl. typing reperf.

Thanks in advance,

Steve, WA6KLC

From 2497215272754237311
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cf9cfcea01f68d3f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-11 14:50:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!mit-eddie!think!
harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: PL, DTMF, etc comments
Message-ID: <11514@brl-tgr.ARPA>
Date: Thu, 11-Jul-85 17:50:22 EDT
Article-I.D.: brl-tgr.11514
Posted: Thu Jul 11 17:50:22 1985
Date-Received: Wed, 17-Jul-85 03:41:44 EDT
References: <18736@mgweed.UUCP>
Organization: Ballistic Research Lab
Lines: 10

> Remember one thing that MOST commercial stations using tone activated
> receivers forget: DISABLE THE TONE CIRCUITRY BEFORE TRANSMITTING.
> That is, except on the 440 MHz ham band, it is illegal to transmit on
> a frequency before monitoring it. You can't do this unless you revert
> to carrier squelch!
>
This is why the mike "hook" switch disables PL when you pick up the
mike.

-Ron

From 7430181252549693588
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d72627d369588dc2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-11 17:25:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site redwood.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!qantel!hplabs!hpda!
fortune!redwood!rpw3
From: rpw3@redwood.UUCP (Rob Warnock)
Newsgroups: net.ham-radio
Subject: Re: "PL" and tweedles
Message-ID: <204@redwood.UUCP>
Date: Thu, 11-Jul-85 20:25:54 EDT
Article-I.D.: redwood.204
Posted: Thu Jul 11 20:25:54 1985
Date-Received: Wed, 17-Jul-85 05:55:59 EDT
References: <86@biomed.UUCP> <957@sdcsvax.UUCP> <11397@brl-tgr.ARPA>
Organization: [Consultant], Foster City, CA
Lines: 44

+---------------
| > (Note to ham radio newcomers: the ``squelch tail'' is the burst of white
| > noise heard as an FM receiver squelch delays closing for a short period...
| ... Of course, there isn't a
| whole lot you can due about the squelch tail in the user's receiver.

+---------------

Actually, with some fancy coupling between the squelch and AGC circuits,
it should be possible to eliminate most or all of the "squelch tail".
The squelch tail occurs because the AGC gain opens up faster than the
squelch closes. By using a longer time-constant on AGC decay than on rise,
and by tying the time-constant to whether the squelch is open or closed
(you want a long decay if squelch is open), the "tail" will be heard as
QUIETER than the transmission, not louder. Of course, this means that the
squelch cannot be controlled simply by the AGC voltage (as is often the
case in simpler designs), or you'll get "motorboating" oscillations in
the squelch.

A possible algorithm is to use AGC voltage to OPEN the squelch (and switch
the AGC time-constant to "slow"), but then use some ratio of actual input
R.F. to "estimated" input (i.e. the AGC voltage) to trigger the CLOSING
of the squelch.

Careful design is needed in mobile rigs (or anywhere fast fading can occur)
to make this work, and of course impulse noise has to be treated carefully
as well. Note that the "slow" AGC decay (with squelch open) need not be
"slow" by human standards, only "slow" compared to the time-constant of
the squelch-closing detector.

Note that a squelch tail will still exist -- it just won't be so annoying.

p.s. Hmmm... maybe the problem is not the AGC, but the squelch open/close
detector. Mayebe all you need to do is make the squelch OPEN slow (compared
to impulse-noise rejection time) and CLOSE fast (compared to AGC recovery time).
That would get rid of the "tail" entirely.

Rob Warnock
Systems Architecture Consultant

UUCP: {ihnp4,ucbvax!dual}!fortune!redwood!rpw3
DDD: (415)572-2607
USPS: 510 Trinidad Lane, Foster City, CA 94404
require

From 647705351449654972
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eedf1c5b1d47a99c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-11 23:11:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site lanl.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!panda!talcott!
harvard!seismo!cmcl2!lanl!jp
From: jp@lanl.ARPA
Newsgroups: net.ham-radio
Subject: Re: Equipment prices

Message-ID: <28205@lanl.ARPA>
Date: Fri, 12-Jul-85 02:11:43 EDT
Article-I.D.: lanl.28205
Posted: Fri Jul 12 02:11:43 1985
Date-Received: Wed, 17-Jul-85 03:47:40 EDT
References: <11502@brl-tgr.ARPA>
Organization: Los Alamos National Laboratory
Lines: 14

> Does anyone out there know what the going rate on the used market is for
> the following equipment:
>
>   Model 19 TTY set, incl. typing reperf.

I don't know about the other equipment but you'll probably have to pay
someone $50-$100 to take the Model 19. Too bad, it was a pretty neat piece
of gear in its day, but, its day ended 3 to 5 years ago. I, sadly, took
mine to the dump early this year to make room for some goodies that won't
be obsolete until next year.

73

Jim Potter K9GXC jp@lanl.arpa

From 4111658381360913079
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,33e4de1019ac278a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-12 08:28:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: Gateway V. 1 No. 23
Message-ID: <478@mtunh.UUCP>
Date: Fri, 12-Jul-85 11:28:16 EDT
Article-I.D.: mtunh.478
Posted: Fri Jul 12 11:28:16 1985
Date-Received: Sat, 13-Jul-85 11:53:45 EDT
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 389

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Editor:
Jeffrey W. Ward, K8KA

PACKET RADIO USED IN FIGHTING BRUSH FIRES

[The following is a report filed by Wally Linstruth, WA6JPR from an ongoing emergency operation. It is meant to convey the initial experiences of using a new, potentially formidable technology under emergency conditions.]

Packet radio is playing an important role in aiding firefighters involved with the Wheeler Gorge forest fire that is still raging in the forests and brushlands east of Santa Barbara, CA. Bill Talanian, W1UUQ, President of the Santa Barbara Amateur Radio Club, reports that over 200 messages have been cleared from the fire area in the last few days. The traffic consists of approximately 50 percent health and welfare and 50 percent official fire department disaster-coordination messages for relay to the northern part of the state.

The WESTNET digipeater system and the W6IXU mailbox are being used for much of the traffic. Traffic is also being cleared to NTS through Los Angeles area hams and WESTNET.

The versatility and simplicity of the simplex digipeater was proven when the KA6SOX-1 Painted Cave digipeater was easily moved to La Cumbre peak for a better path into Pendola Camp, the main fire control point. A duplex repeater was also rapidly converted to a digipeater to enhance WESTNET coverage of the fire area.

All is not roses, however, and we will have much more to report after the conclusion of the current activity. The problems uncovered during this emergency will provide serious food for thought for the packet-radio community. Two problems that have already been identified are:

o Line-by-line entry is tedious and error prone. This is compounded by the fact that (at least here) the people involved in packet technology are not uniformly well trained in emergency traffic-handling procedures. Also, the well-trained ARES operators are not familiar with the details of TNC operation. This problem was handled by W1UUQ who received most outbound traffic at his home where the messages were reformatted using his word processor and retransmitted to their ultimate WESTNET destinations.

o The California State emergency agencies have been convinced that packet is superior to means of sending messages. Because of this, state-purchased packet gear was being used in preference to ordinary traffic-handling methods, even though it was obvious to

the control operators that traditional methods were operating at higher efficiency. This situation got worse when the W6IXU mailbox became congested because there is not yet a "data highway" from packet into NTS.

We can draw one moral from these experiences, even before the final report has been filed: Make sure that you have a working packet-radio traffic-handling system before you "sell" packet to government authorities.

Expect a more detailed report soon.

From WA6JPR.

PACKET AT THE JACKSON-HOLE HAMFEST

The 1985 Wyoming-Idaho-Montana-Utah (WIMU) Hamfest, which will also be the ARRL Rocky Mountain Division Convention, has scheduled several packet-radio events. The hamfest will be held in Jackson Hole, Wyoming, August 2-4. Here is a tentative schedule of packet-radio happenings:

Fri. 3 P.M. The Packet Radio hospitality room swings into action.

Fri. 7 P.M. All packeteers go to the Bar-J Ranch for a chuck-wagon dinner and Western variety show.

Sat. 8 A.M. Packet talks begin, continuing until 10 am. The primary speaker will be Pete Eaton, WB9FLW.

Jackson Hole, at the doorstep of Yellowstone National Park, is a great place to take the family if you want a combination vacation and hamfest. Plan your vacation so that you get both the best scenery and the most up to date packet radio information.

From N7BHC.

EMERGENCY LOCATION WITH PACKET RADIO

Dave Pederson, N7BHC, suggests a potential public-service use for high-altitude digipeaters. He suggest that we develop an emergency locator transmitter (ELT) direction finding (DF) receiver be interconnected with a packet station. Information from the DF receiver could be relayed via packet to search and rescue authorities. The high-altitude sites occupied by many digipeaters would be quite good for receiving ELT beacons.

A computer-controlled ELT DF system attached to a TNC could send out an emergency beacon whenever it heard an ELT (outside of standard testing times). The system could then update DF information periodically or on command. Dave provides further

details of this idea in an article in the July issue of UPRA Connect.

Via N7BHC.

JAS-1 UPDATE

JAS-1, the amateur radio satellite built by the Japanese Amateur Satellite Corp. (JAMSAT), is complete, and should be launched in August of 1986. Along with a linear transponder operating with a 2-meter uplink and a 70-cm downlink (mode J), JAS-1 will carry a "mode-JD" digital store-and-forward transponder. This transponder will operate like an orbiting packet bulletin-board system (PBBS), and ground stations will use AX.25 TNCs and special modems to access the satellite.

With two flight-ready satellites complete (a primary spacecraft and a backup), specifications of the mode-JD transponder are becoming available. The following details come from the "Satellite Update" column in Amateur Radio Action, an Australian ham magazine.

The transponder has four uplinks in the two-meter band and one downlink in the 70-cm band. The single downlink will be able to keep up with multiple uplinks because there will be frequent uplink collisions between ground stations that can not hear each other. The uplinks, on 145.85, 145.87, 145.89 and 147.91 MHz will use 1200-bit/s, Manchester coded FM. The 435.91-MHz downlink, will use 1200-bit/s, non-return to zero inverted (NRZI), phase shift keying (PSK).

While JAS-1 will probably be available to any appropriately-equipped ground station, it is likely that most stations will access the satellite through teleport stations. The use of central teleports has several advantages: users without satellite antennas will be able to take advantage of the satellite, time and money invested in building special modems will be reduced and contention for the satellite's uplink channels will be minimized.

With JAS-1 mode JD, the RUDAK experiment on Phase 3-C and PACSAT all scheduled to be launched in the next year or so, the horizons of packet radio will soon be greatly expanded.

Via Amateur Radio Action.

ARRL COMMENTS ON AUTOMATIC CONTROL

The ARRL has filed comments on the FCC's proposal to extend automatic control to all amateur operations above 29.5 MHz (RM-4879). Excerpts from the ARRL comments follow:

"The League reaffirms its proposal that automatic control of digital communications be permitted on all amateur frequencies above 30 MHz as outlined in its Petition. In the Notice [RM-4879], the Commission has built upon the League's request, proposing that 'any amateur station may be under automatic control, except where transmitting on frequencies below 29.5 MHz.' In order to carry out its broader proposal, the Commission proposes to modify its Rules dealing with third-party traffic.

"It is unfortunate that the Commission has introduced the issue of third-party traffic into this proceeding. It detracts from the primary purpose expressed in the Notice of keeping the amateur service abreast of technological developments such as computer-based message systems (CBMS) and other digital technologies. The proposed third-party Rules also impose unnecessary and onerous restrictions on the development and operation of digital communications networks. In fact, the proposal as presented in the Notice will not allow normal operation of CBMSs, which is contrary to one of the Commission's goals as stated in the Notice. What is supposedly allowed radio amateurs by permitting automatic control is at the same time taken away by a proposed blanket prohibition from transmitting third-party traffic by automatically controlled stations as explained below."

The comments recall that the issue of third party traffic first came to importance in the late 1970s, with the growing use and abuse of repeater autopatches. The casual use of autopatches lead the FCC to issue a news release in 1978 reading, in part, "Section 97.79(d) states that 'the licensee of an Amateur station may permit any third party to participate in Amateur radio communication from his station, provided that a control operator is present and continuously monitors and supervises the radio communications to insure compliance with the rules.'" The Commission in the same notice also stated that section 97.79(d) clearly "prohibited autopatching and reverse autopatching through automatically controlled repeater stations and required a control operator to be on duty at all times during these operations."

From the ARRL comments:

"What the Commission was seeking to guard against then was the origination and introduction of communications into the amateur radio medium by unlicensed individuals.

"The commission misapplies this point in the [automatic control of digital communications] proposal, however, by seeking to prohibit 'third party traffic from any amateur radio station under automatic control.' A similar potential for abuse by unlicensed individuals in a digital amateur radio system exists only at the point where the third-party traffic is originated and introduced into the amateur radio medium. It is necessary to

require a control operator at this stage only. This control operator will guard against the potential abuse of amateur frequencies in a digital system just as effectively as the control operator on duty at a voice repeater station when an autopatch is accessed. To impose the additional burden of a control operator at every point along the digital system, be it at a CBMS site or at every packet 'digipeater' along the path to the message's destination is unnecessary. Such a requirement, in fact, would severely curtail the use of the developing digital technologies because the burden on control operators would be nearly impossible to shoulder. For example, messages on a packet radio repeater are received at a rate of 1200 words per minute, and retransmitted immediately at the same rate. This would require a control operator to examine each packet at a rate of 600 words per minute to keep up with the throughput capability of such a repeater. Furthermore, speeds higher than 1200 words per minute are authorized, and technology is advancing toward higher and higher speeds."

After this, the comments address the common practice of using automatically controlled voice repeaters to pass third party traffic. In conclusion, the ARRL says:

"We urge the Commission to modify its proposal so as not to impose a blanket prohibition of third-party traffic on stations operating under automatic control. We believe that the best way to achieve the goal of promoting the developing technologies in digital communications is to leave section 97.79 intact with the possible exception of clarifying section 97.79(d) by [adding the following text]:

> 'Participation means the origination, introduction or reintroduction of a communication into the amateur radio medium by a third party.'

"The proposed addition of this language to section 97.79(d) has the added benefit of clarifying that a control operator is required during operation of simplex autopatches.

"It is further urged that the proposed Rule sections 97.80(c) and 97.114(d) not be adopted, and that the Commission instead adopt the wording of 97.80, as originally proposed by the League, as follows:

"97.80 Automatic Control of Digital Communications.

> 'Amateur Radio Stations may be operated under automatic control on frequencies above 30 MHz when utilizing digital communications pursuant to section 97.69, provided that the control functions include (i) adequate provision for detection of transmitter

> malfunction and discontinuance of transmitter operation in the event such malfunction is detected; (ii) devices installed and procedures implemented to ensure compliance with the rules when a duty control operator is not present at a control point of the station. Upon notification by the Commission of improper operation of a station under automatic control, operation under automatic control shall be immediately discontinued until all deficiencies have been corrected.

"THEREFORE, the foregoing considered, the League recommends that the Commission extend automatic control to amateur digital communications above 30 MHz. The League also requests that the proposed blanket prohibition of third-party traffic transmitted on automatically-controlled stations not be adopted, and it urges that section 97 be amended by the adoption of section 97.80 as originally proposed by the League."

Ed.

NORTHWEST NEWS

The following update on the Northwest Amateur Packet Radio Association (NAPRA) comes from John Hayes, KD7UW, NAPRA's Technical Vice President.

"There is currently a network operating in Seattle on 145.010 MHz. In order to reduce the frequency of collisions and bring some organization to the frequency, use of the WN7ANK-5 digipeater is mandatory. Stations that can connect without the digipeater are encouraged to move to 145.050 MHz.

"Northern Idaho and eastern Washington are now also served by a 145.010-MHz digipeater, N7BI-4 on Mica Peak. Again, the suggested simplex channel is 145.050 MHz. The packeteers responsible for the N7BI digipeater are affiliated with NAPRA and work with us on network coordination. To facilitate this, we hold an HF net on 3885 Khz, Thursday at 8 P.M. Pacific Time.

"Doug Lux, WB6VAC, has been advocating the use of a 'channel-busy' signal to reduce the number of collisions at digipeater receivers. The packet repeater with a busy signal will, like a duplex repeater, use two frequencies. Whenever it is receiving a packet, it will transmit a busy signal on its transmit frequency. This signal will be recognized by stations using the repeater, and they will not transmit when they hear the busy signal. Once a packet has been completely received by the repeater, it will be regenerated (as in a digipeater) and retransmitted. The repeater with busy signal is addressed just like a digipeater. This addressing and the regeneration of packets before they are

repeated may make the proposed system superior to a standard duplex repeater. WB6VAC will be experimenting to find out if the system works well.

"We are working on expanding our network into Oregon, which is where we will meet WESTNET. A site in Longview, Washington, has been located, and we are working to put in a digipeater there. Longview 'sees' Portland, Oregon. The Utah Packet Radio Association (UPRA) and the Boise, Idaho, group are working to connect with us through the Pullman, Washington/Moscow, Idaho area. South-central Washington should be on the air later this summer. We also hope to work with VADCG to get a true Gateway into their 145.65-MHz network, which uses the V-2 protocol."

Via HAMNET.

PACKET FOR THE COMMODORE 64

The manufacturer of the PKT-1, Advanced Electronics Applications (AEA) will be announcing a packet-radio adapter for the C 64 sometime this fall. The adapter will plug into the C 64 like any other program cartridge, and it will provide AX.25 protocol software, a terminal emulator program and a modem. Transmission and reception of HDLC frames will be handled by hardware. To provide enhanced HF operation, AEA may use something other than the common EXAR IC modem. How much will it cost? Around $200, but the price has not been set yet. When will it be available? This fall, probably sometime in September.

Via WB9FLW, AEA.

TAPR PROJECT STATUS

The TAPR TNC 2 is in the "final stages" of beta testing, with the hardware completely debugged and the final version of the software distributed to the dozen beta testers. The manual, one of the most demanding aspects of the project, is almost complete. It looks like initial estimates of "late summer or early fall" for availability of the first 300 TNCs were fairly accurate. The process of announcing the availability of the TNC 2 and then taking orders for it will be tightly controlled. When TAPR is ready to take orders, electronic messages will be posted on DRNET and Compuserve HAMNET. Orders will be taken over the telephone, and only one order per person and one order per phone call will be accepted. No COD or purchase orders will be accepted. Once the first 300 TNCs have sold out, there will be NO WAITING LIST. These rules will not be bent.

The TAPR PC board for the K9NG 9600-bit/s modem is also just about through beta testing. Several of the boards in operation at beta sites.

Ed.

REPRODUCTION OF GATEWAY MATERIAL

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provided that the original contributor is credited and Gateway is
identified as the source.

From -485228081148628835
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13372f,b1a09ca941ec0899,start
X-Google-Attributes: gid13372f,public
X-Google-Thread: 151e61,b1a09ca941ec0899,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-12 15:58:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site petfe.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!houxm!mtuxo!mtunh!mtung!
mtunf!ariel!vax135!petsd!petfe!johnd
From: johnd@petfe.UUCP (John Decatur)
Newsgroups: net.ham-radio,net.space
Subject: Shuttle Frequencies
Message-ID: <381@petfe.UUCP>
Date: Fri, 12-Jul-85 18:58:42 EDT
Article-I.D.: petfe.381
Posted: Fri Jul 12 18:58:42 1985
Date-Received: Sat, 13-Jul-85 14:37:04 EDT
Organization: Perkin-Elmer DSG, Tinton Falls, N.J.
Lines: 43
Xref: watmath net.ham-radio:2914 net.space:4261

for those who like to listen to hams at work...
this shuttle flight has two, W0ORE, tony and W4NYZ john.
also sstv this flight!

planned shuttle frequencies for 51-f are:
(all freq. in mhz.)

direct 2m down - 145.55 (slow scan tv in color also...)

nasa/goddard greenbelt md.
    3.860 ssb
    7.185 ssb
   14.295 ssb
   21.390 ssb
  147.450 fm wash dc area

jet prop. lab/pasadena ca.

224.040 fm
145.460 fm

marshall space flight cntr huntsville ,al

145.430 fm

nasa/aims san francisco, ca

145.580 fm
7.270 ssb

new york city area

147.000 fm (as avail)

good listening....
es 73,
de KA2QHD

--
73, de ...johnd (KA2QHD)
{ucbvax|decvax}!vax135!petsd!pedsgd!pedsga!johnd
=-=-=-

a reasonable price ($459 mail order). Recient messages about ICOM and Yaesu FRG-8800 battery backed-up RAM containing REQUIRED operating parameters have me worried. Does anyone have first-hand knowledge if this is the case with the FRG-9600? Planned obsolescence (or required maintenance, if the company will be willing to do it into the distant future) is not a desirable feature in a receiver. BTW, the Kenwood R-2000 does not have this problem.

Is there any reason that a good quality, 25 element UHF/VHF/FM television antenna on a rotor wouldn't be as good or better than a "scanner" antenna? The frequency coverage is about the same, it is directional, and the antenna feed is low loss 75 ohm coax. I am aware that impedance matching would be necessary if the scanner input is not 75 ohms.

Finally, thanks to Bob Parnass for his recient review of scanner features, specifications, and their operation. It was most helpful to those of us trying to figure out what's out there, and what features are important.

Ray DuFlon
DuFlon.wbst@Xerox.ARPA

From 3010082690105761868
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d72627d369588dc2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-15 11:16:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!petrus!karn
From: karn@petrus.UUCP (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: Re: "PL" and tweedles
Message-ID: <401@petrus.UUCP>
Date: Mon, 15-Jul-85 14:16:14 EDT
Article-I.D.: petrus.401
Posted: Mon Jul 15 14:16:14 1985
Date-Received: Thu, 18-Jul-85 03:33:30 EDT
References: <86@biomed.UUCP> <957@sdcsvax.UUCP> <11397@brl-tgr.ARPA> <204@redwood.UUCP>
Organization: Bell Communications Research, Inc
Lines: 21

> Actually, with some fancy coupling between the squelch and AGC circuits,
> it should be possible to eliminate most or all of the "squelch tail".
> The squelch tail occurs because the AGC gain opens up faster than the
> squelch closes.

You're forgetting that FM is a nonlinear modulation method. An ideal

discriminator reads signal PHASE and is completely insensitive to RF level. Moreover, there is limiting ahead of the discriminator, so the "gain" in an FM receiver up to this point depends instantaneously on the signal level. When the input signal to an "ideal" FM receiver goes away, the pre-discriminator gain instantaneously goes to infinity. (In a real receiver, it goes just high enough for front-end thermal noise to saturate the limiters). Thus, you have squelch noise that starts immediately upon loss of signal.

The AGC is there just as an engineering convenience to keep the front-end intermod products down when receiving a very strong signal. It plays no part in keeping the audio output level constant, as it does in linear modulation reception such as SSB.

Phil

From -1129865555326595630
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,627a13b83447a2c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-15 13:48:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!genrad!mit-eddie!think!harvard!seismo!brl-tgr!tgr!jhs@Mitre-Bedford
From: jhs@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: hamfest alert! hamfest alert! hamfest alert!
Message-ID: <11601@brl-tgr.ARPA>
Date: Mon, 15-Jul-85 16:48:34 EDT
Article-I.D.: brl-tgr.11601
Posted: Mon Jul 15 16:48:34 1985
Date-Received: Thu, 18-Jul-85 07:36:08 EDT
Sender: news@brl-tgr.ARPA
Lines: 66

Don't miss the BIG EVENT of the summer for Ham Radio in New England!!!

The H E A V Y H I T T E R S H A M F E S T and F L E A M A R K E T will H A P P E N (as in a Happening!) on Saturday, 20 July and Sunday, 21 July, 1985, at the famed TOPSFIELD FAIR GROUNDS, near the U.S. Route 1 exit from Route 95 in Topsfield, MA.

That is THIS COMING WEEKEND !!!! Pack your bags, fill your wallet with nice crisp green money, and rent yourself a BIG TRUCK to haul all the good stuff you are gonna be able to buy at TOPSFIELD!

In addition to a massive FLEA MARKET, there will be COMMERCIAL EXHIBITORS who will be showing the latest and greatest in the big name lines of Ham equipment. Exhibits will be open from 9 to 4 both days. The Flea Market will be outdoors and will doubtless be open much earlier than 9:00, so get there early! (NOTE: Flea Market sellers will be admitted at 6 AM Saturday. ALL

VENDORS, both commercial and Flea Market, will be assessed a $5 fee be the town of Topsfield.)

There will be a real, live FCC LICENSE EXAMINATION, conducted by those cute Volunteer Examiners you've been hearing about. (Well, maybe you haven't heard...) NOTE: Walk-ins will be accomodated insofar as possible, but to be safe you should TRY to bring your own FCC Form 610. If you can't get one, we understand that one of Boston's most successful FORGERS will be there to make up custom copies at special Flea Market rates. Inquire about rates on other useful documents and certificates as well, available by special appointment only.

NOTE: The FCC Exams will be held not at the Fairgrounds, but nearby at the MASCONOMET REGIONAL HIGH SCHOOL near the Endicott Road exit off Route 95.

As if that weren't enough, the masterminds of the HEAVY HITTERS HAMFEST are planning also a series of AMATEUR RADIO FORUMS on Saturday afternoon, with sessions on Packet Radio, Amateur TV, AMSAT, the Amateur Satellite Corporation, and on ARRL Activities. Representatives of the League will be present to talk with you personally.

There will also be several exciting CONTESTS including a QSL contest, hidden transmitter and HIDDEN RECEIVER (!No Kidding!) hunts, a CW copying contest that will include real live QRM, and much more.

A Saturday night musical Coffee House is planned, as are a number of other events of interest to non-hams.

There are probably even a few crazies out there who will arrive Friday night and avail themselves of the excellent CAMPING FACILITIES at Topsfield. The flea market opens early, I mean EARLY!!!, so camping on the doorstep is not an extreme measure if you want a chance at the BARGAINS before they are all gone!

Admission is $4.00 at the door, and spouses (spice?) and kids are free; in fact I think the rules read that any non-ham guests are admitted free. Proceeds from the Hamfest will support the Waltham (open) Repeater and several very worthwhile charities, details available at the Hamfest. Talk-in will be provided on the Waltham repeater, 146.04/64 MHz, and on the Topsfield machine on 147.885/285. So you don't even need a road map, if you can find your way to Boston!

Come one, come all! This is THE BIG ONE, the one you DON'T WANT TO MISS !!! See you THIS SATURDAY at TOPSFIELD FAIR GROUNDS. Shucks, I might even be operating the Talk-in Station myself on Saturday! I would be pleased to meet all my ARPANET/USENET friends out there in Baud Land (like Radio Land only different) ! I hope to see you there!

73,
John Sangster, W3IKG

From 1421911880496051487

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eedf1c5b1d47a99c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-15 14:37:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site mako.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!cornell!uw-beaver!tektronix!orca!mako!jans
From: jans@mako.UUCP (Jan Steinman)
Newsgroups: net.ham-radio
Subject: Re: Equipment prices
Message-ID: <853@mako.UUCP>
Date: Mon, 15-Jul-85 17:37:51 EDT
Article-I.D.: mako.853
Posted: Mon Jul 15 17:37:51 1985
Date-Received: Thu, 18-Jul-85 04:43:04 EDT
References: <11502@brl-tgr.ARPA>
Reply-To: jans@mako.UUCP (Jan Steinman)
Organization: Tektronix, Wilsonville OR
Lines: 18
Summary:

In article <11502@brl-tgr.ARPA> NOLAND@USC-ISI.ARPA (Steve Noland) writes:
>Does anyone out there know what the going rate on the used market is for
>the following equipment:
>
>   Heath Apache (TX-1), Mohawk (RX-1), and SB-10 SSB adapter

Heath Apache w/o SSB adapter: $10. (Post at your local marina.)

Apache with SSB adapter: $150 - $225. (Prices seen at recent hamfest.)

SSB adapter w/o Apache: $150 - $225. (Find some Apache owner without SSB.)

Suggestion: try to get what you can for the SSB adapter, then donate the
Apache to a school or ham club. I owned an Apache for years and know that
there are more Apache's than SSB adapters out there!
--
:::::: Jan Steinman   Box 1000, MS 61-161   (w)503/685-2843 ::::::
:::::: tektronix!tekecs!jans   Wilsonville, OR 97070 (h)503/657-7703 ::::::

From -4048609237076616220
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,60a31222286acf7d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-07-15 15:16:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
genrad!mit-eddie!think!harvard!seismo!brl-tgr!tgr!jhs@Mitre-Bedford
From: jhs@Mitre-Bedford
Newsgroups: net.ham-radio

Subject: Cc:
Message-ID: <11607@brl-tgr.ARPA>
Date: Mon, 15-Jul-85 18:16:51 EDT
Article-I.D.: brl-tgr.11607
Posted: Mon Jul 15 18:16:51 1985
Date-Received: Thu, 18-Jul-85 08:37:15 EDT
Sender: news@brl-tgr.ARPA
Lines: 38

Subject: Re: "PL" and tweedles
In-reply-to: Your message of Thursday, 11 Jul 1985 20:25-EDT.
<204@redwood.UUCP>

Mr. Warnock's solution to the squelch tail problem would probably work if the modulation method were AM rather than FM.

However, a well-designed FM receiver pays little attention to the amplitude of the signal being processed, insofar as the audio output level is concerned. Specifically, the discriminator output is ideally the time derivative of the instantaneous phase of the IF signal output, and changing the gain of the IF chain has no theoretical effect on this parameter.

As a matter of fact, it IS possible to make squelch circuits which turn off considerably faster than the typical ones you hear. It is also possible to insert a time delay network, e.g. using "bucket brigade" chips, in the audio path, so that the squelch circuit can in effect turn off before the signal does! Quite a few "ham" repeaters do precisely this to avoid the "double squelch tail" effect of a repeater. (They haven't figured out how to get rid of the one generated by YOUR receiver, though!)

Back when I was in the Applied Research Labs at Motorola in ought sixty five or so, they had worked out a squelch that gave only the barest little "tick" when the signal went off, and they thought it was the greatest thing since sliced bread, or whatever. Then the marketing guys went out and found out that the customers, mostly police departments and trucking fleets and such, didn't WANT the squelch tail removed. Maybe they thought it was sort of "macho-radio" to hear that deafening burst of noise at the end of each transmission, or maybe they just thought it was a nice, handy, functional feature to have a distinctive end-of-transmission indicator, but in any case, they wanted their old squelch tail back. So the idea died right then and there. The guy who invented it threw in the towel and went into patent law instead of trying to invent things anymore. He also applied what he had learned about signal detection theory, so he told me, to his dealings in the commodities market, and got rich with his little squelch detector turned into a "buy! buy! buy!" detector! S'truth, s'help me!

-John S., W3IKG

From 6578094835631070817
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1d0d333a6bbdb3a9,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-07-15 19:25:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!hoffmann%marie%mit-mc@mit-eddie.MIT.EDU
From: hoffmann%marie%mit-mc@mit-eddie.MIT.EDU (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Amateur Exams
Message-ID: <11612@brl-tgr.ARPA>
Date: Mon, 15-Jul-85 22:25:59 EDT
Article-I.D.: brl-tgr.11612
Posted: Mon Jul 15 22:25:59 1985
Date-Received: Sat, 20-Jul-85 07:58:06 EDT
Sender: news@brl-tgr.ARPA
Lines: 12

The MIT Radio Society and UHF Repeater Association will conduct
a volunteer exam session for all classes of amateur license.
The session will take place on Wednesday, July 24 at 7:00 pm.
Address: 77 Massachusetts Avenue, Cambridge, MA, MIT Room 1-134.
Please bring with you: a completed FCC form 610 (available from
the FCC), the $4.00 exam fee in cash, and a copy of any amateur
license you currently hold. Also required will be two forms of
identification. Please contact Ron Hoffmann, WA2EYC at either
(617) 253-5820 or (617) 646-1641 no later than Monday, July 22
if you are planning to attend. A limited number of walk-in
candidates will be accepted, space permitting. This is a W5YI-
VEC session. via WA2EYC

From -7956757047626664945
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,74f0ccdb7643e7ac
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-12 09:11:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!grkermi!genrad!decvax!harpo!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Cellular phones and confidentiality
Message-ID: <17783@mgweed.UUCP>
Date: Wed, 12-Jun-85 12:11:32 EDT
Article-I.D.: mgweed.17783
Posted: Wed Jun 12 12:11:32 1985
Date-Received: Sun, 16-Jun-85 08:37:35 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 7

One correction to that article on cellular is that you can hear both sides
of the conversation on one frequency. There is sidetone in the system and

if you monitor the cell xmit frequency, you will hear both sides.

Bob K9EUI

From 294781832003549717
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,427f8c118969965f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-12 10:51:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site biomed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!biomed!lagasse
From: lagasse@biomed.UUCP (Robert C. Lagasse)
Newsgroups: net.ham-radio
Subject: Scanner Meter
Message-ID: <76@biomed.UUCP>
Date: Wed, 12-Jun-85 13:51:30 EDT
Article-I.D.: biomed.76
Posted: Wed Jun 12 13:51:30 1985
Date-Received: Thu, 13-Jun-85 03:10:15 EDT
Organization: Mass. Gen. Hosp. - Dept. Biomed. Engineering
Lines: 13

Here at the hospital we have a lot of VHF and UHF "walkman" sized EKG transmitters that patients walk around with. As a quick performance check for these units, I would like to add a circuit to a decent scanner such as the Regency MX5000 to use it as a tunable relative field strength meter. Such a tunable device would also come in handy tracking down sources of problem RF as we sometimes have. Any suggestions as to where in the scanner to tap a signal and what kind of simple circuit I can use would be appreciated. I was thinking of using an analog meter movement as a visual indicator. All I am interested in is relative carrier signal strength. Any help is greatly appreciated.

Bobby L. N1ALG @ MGH

From -5316671870449927114
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,72866ef548254119,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,72866ef548254119,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-12 13:21:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxv.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!houxv!ads
From: ads@houxv.UUCP (A.SCHAPIRA)
Newsgroups: net.ham-radio,net.audio
Subject: Does a communications receiver like this exist?
Message-ID: <394@houxv.UUCP>

Date: Wed, 12-Jun-85 16:21:00 EDT
Article-I.D.: houxv.394
Posted: Wed Jun 12 16:21:00 1985
Date-Received: Thu, 13-Jun-85 02:56:48 EDT
Organization: AT&T Information Systems, Murray Hill, NJ
Lines: 16
Xref: watmath net.ham-radio:2820 net.audio:5136

I am looking for a communications receiver with the following
characteristics:

AM & FM broadcast bands, plus some VHF band (30-50 MHz, or 144-180 MHz)
OR UHF band (450-512 MHz), plus the aircraft band (~116 MHz),
with analog tuning (a knob, not a keypad) and digital freq display.

Memories, scanning, clock, etc are not essential.
AM short wave (10kHz-30MHz) is NOT needed.

The Sony 2002 lacks analog tuning, VHF and AIR.
The Sony 2010 lacks VHF/UHF.

Thanks for any leads.

- Al Schapira (AT&T Information Systems, houxv!ads MH 7C-306 201-582-3669)

From 3706114534393517929
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,cba23fb033b4ec2b,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,cba23fb033b4ec2b,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,cba23fb033b4ec2b,start
X-Google-Attributes: gid15c702,public
X-Google-ArrivalTime: 1985-06-13 07:36:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!decwrl!dec-rhea!dec-
jon!moroney
From: moroney@jon.DEC (Mike Moroney)
Newsgroups: net.analog,net.audio,net.ham-radio
Subject: Re: Electronics wearing out
Message-ID: <2663@decwrl.UUCP>
Date: Thu, 13-Jun-85 10:36:00 EDT
Article-I.D.: decwrl.2663
Posted: Thu Jun 13 10:36:00 1985
Date-Received: Sat, 15-Jun-85 06:39:24 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 5
Xref: watmath net.analog:328 net.audio:5145 net.ham-radio:2828

I have to agree with you. I will never knowingly buy an electronic device

which depends on a battery keeping a RAM alive, especially when ROM's of the same size are cheaper.

-Mike

From 8074625293734120314
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,74f0ccdb7643e7ac
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-13 10:33:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site iham1.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!iham1!jgpo
From: jgpo@iham1.UUCP (John, KA9MNK)
Newsgroups: net.ham-radio
Subject: Re: Cellular phones and confidentiality
Message-ID: <372@iham1.UUCP>
Date: Thu, 13-Jun-85 13:33:22 EDT
Article-I.D.: iham1.372
Posted: Thu Jun 13 13:33:22 1985
Date-Received: Fri, 14-Jun-85 04:45:37 EDT
References: <17783@mgweed.UUCP>
Organization: AT&T Bell Laboratories
Lines: 19

>
> One correction to that article on cellular is that you can hear both sides
> of the conversation on one frequency. There is sidetone in the system and
> if you monitor the cell xmit frequency, you will hear both sides.
>
> Bob K9EUI

Actually, the sidetone is generated in the mobile unit. You might be able to hear the mobile-originated side of the conversation by listening in on the cell site, but that would be due to crosstalk in the switch and would probably be at least 10 dB down.

John Opalko
Autoplex (TM) 1000 Development Group
(the cellular people)
AT&T Bell Labs
Naperville, IL
...!ihnp4!iham1!jgpo

From -2046505323363776209
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fcb16271d902f204,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-13 15:10:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Uniden to introduce 800XLT scanner w/800 MHz band
Message-ID: <602@ihu1h.UUCP>
Date: Thu, 13-Jun-85 18:10:37 EDT
Article-I.D.: ihu1h.602
Posted: Thu Jun 13 18:10:37 1985
Date-Received: Sat, 15-Jun-85 05:39:55 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 52

x

New Uniden Bearcat 800XLT Scanner To Include 800 MHz Band

Uniden will soon introduce the 800XLT, a new 40 channel 12 band scanner that includes the 806 - 912 MHz range. What follows is a description extracted from the information provided me by a Uniden employee.

A keyboard will be used to program 40 channels in 2 banks for the following frequency coverage:

Freq Limits (MHz)	
Lower	Upper
29.7	54
118	136
136	174
406	512
806	912

An instant weather feature, activated by depressing the 'WX' key will cause the scanner to search all the NOAA weather radio frequencies for a weather station in the area.

A priority channel feature will be provided that samples channel one every 3 seconds, whereas previous Bearcat models sampled every 2 seconds.

A 3 second scan delay will be selectable on a per-channel basis, as compared with 2 second delay on older models. Channel lockout will apparently be of the conventional variety, as will be the direct channel access

capability (not available on most new Regency scanners).

Scan rate will be specified at a respectable 15 channels/second. The 800XLT will incorporate a full vacuum fluorescent decimal frequency display and can be powered from 117 VAC or 12 VDC. Two telescoping antennas will be supplied, one being for 800 MHz.

From looking at the picture I have, the scanner will be dark gray, with silver trim around the sloping front panel and look like a cross between the BC300 and the BC210XL.

--

==========

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 3722782635329877107
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7d51ef0a11761c9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-13 20:35:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: The Woodpecker Project
Message-ID: <603@ihu1h.UUCP>
Date: Thu, 13-Jun-85 23:35:10 EDT
Article-I.D.: ihu1h.603
Posted: Thu Jun 13 23:35:10 1985
Date-Received: Sat, 15-Jun-85 06:15:43 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 287

x

Bob Horvitz, a shortwave listener 'par excellence', and chairman of ANARC's Over-the-Horizon Radar Committee, asked me to post the following information. [I in no way endorse or warrant any offer contained herein, but post it for information only. Don't respond to me, respond to the address in Washington, DC.]

THE WOODPECKER PROJECT

Coordinated by the
Association of North American Radio Clubs'
Over-the-Horizon Radar Committee

1634 - 15th St. NW
Washington, DC 20009
USA

Purpose: To gather current data on the worldwide interference caused to shortwave broadcasters and their audiences by the high-power pulse emission sources known colloquially as the "Woodpeckers". This data will be analyzed and presented to telecommunications ministries of countries participating in the 1987 World Administrative Radio Conference for High-Frequency Broadcasting, in an effort to convince them to support a protocol statement condemning this interference.

Data needed:

1. In order to map the "Woodpeckers'" general band use, we need large numbers of volunteers to monitor parts of the spectrum between 5 and 23 MHz for 3-hour periods during October 1985. If each monitor covers 3 MHz, and at least 3 geographically-separated monitors are scheduled for each time and band segment, then at least 144 monitors are needed for 24-hour coverage. We would like to gather 5 days worth of data. That requires at least 720 volunteers. Attached to this sheet is a sign-up form. Please fill it out, indicating what times you can commit to monitoring. Return it without delay - in any event, before 15 August 1985. We especially need people able to monitor at unusual times (just before dawn, for example). Our monitoring report form is a simple graphic system requiring minimal effort to complete.

2. We also seek reports of specific instances of "Woodpecker" interference to stations operating in the shortwave broadcast bands. Reports should include the name of the affected station, its frequency, the date and time, duration and relative strength of the interference, the type of receiver, and your location. Mail us your reports before 1 November 1985.

Recognizing "Woodpecker" signals: They're called "Woodpeckers" because that's what they sound like on a shortwave radio. Technically, the signal is a 3 millisecond square-wave pulse with a stable pulse rate of 10/second. (Rates of 17 and 7.4/second have also been heard, but rarely.) The signal is wide band, with most of the energy concentrated in about 15 kHz, and a weaker "pulse-scape" filling the adjacent spectrum. The energy concentrations can be clustered together to cover 100 kHz or more. The "Woodpeckers" change frequency abruptly and often. Their "dwell time" varies

from a few seconds to a few minutes.

Money: This project is organized and staffed entirely by unpaid volunteers. We need your help to pay for printing, postage, etc. To raise money we are selling T-shirts with our symbol [a woodpecker in a circle with a red slash over it - BP], for $10 each postpaid in North America. Arrangements for foreign distribution are still being explored. When ordering, please specify size (S/M/L), and make checks payable to "The Woodpecker Project" in US currency.

Additional copies of this announcement are available for 1 uncanceled 1st class US postage stamp + a US stamped self addressed envelope; or 3 IRCs. We also encourage you to photocopy and distribute these sheets yourself.

X=======================CUT HERE============================X

Sign-Up for the Woodpecker Monitoring Team

Name:_____ Years of SW listening experience:_____

Address:_____ Receiver model:_____

_____ Receiver's band coverage:_____

_____ _____

In the table that follows, put a "1" in the box that corresponds to the date/time which is your first choice for duty, "2" for your second choice, etc.

If you are willing to monitor for more than 3 hours, how many time periods can you handle?_____

We will try to schedule you according to your preferences, but we can accommodate only 48 monitors per time slot, and ther factors - like geographical distribution - must be considered, too. In general, our policy is "first come, first served", so don't delay! Send this completed form - along with a self addressed US-stamped envelope, or 3 IRCSs to:

The Woodpecker Project
1634 - 15th St. NW
Washington, DC 20009 USA

We must hear from you by 15 August 1985. Time and band assignments will be mailed out 1 September 1985.

Feel free to photocopy and distribute these forms to other SW listeners.

Woodpecker Monitoring Team Signup Form					
October:	1	4	7	10	13
0000-0300					
0300-0600					
0600-0900					
0900-1200					
1200-1500					
1500-1800					
1800-2100					
2100-2400					

X=======================CUT HERE============================X

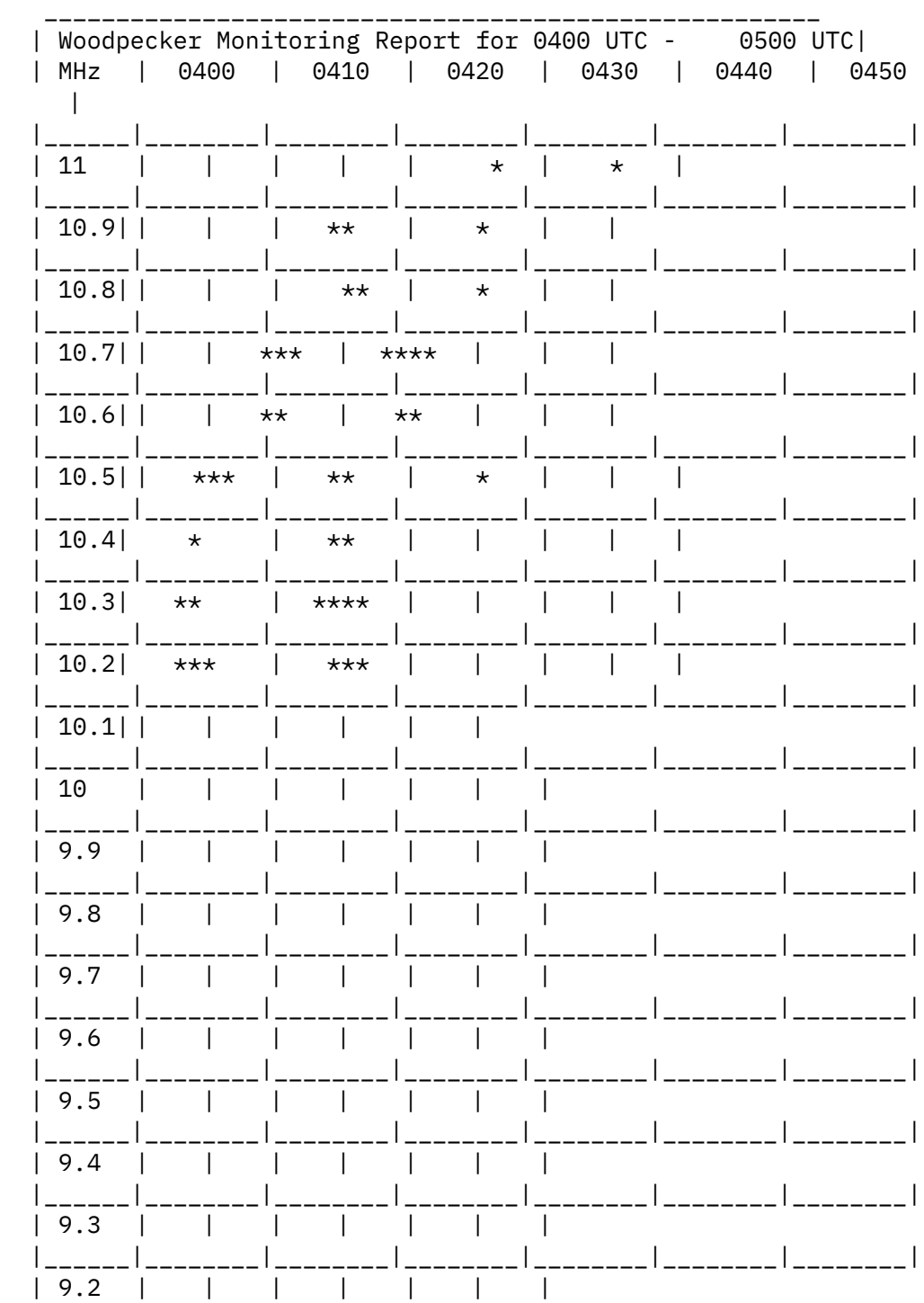
Monitoring Report - The Woodpecker Project

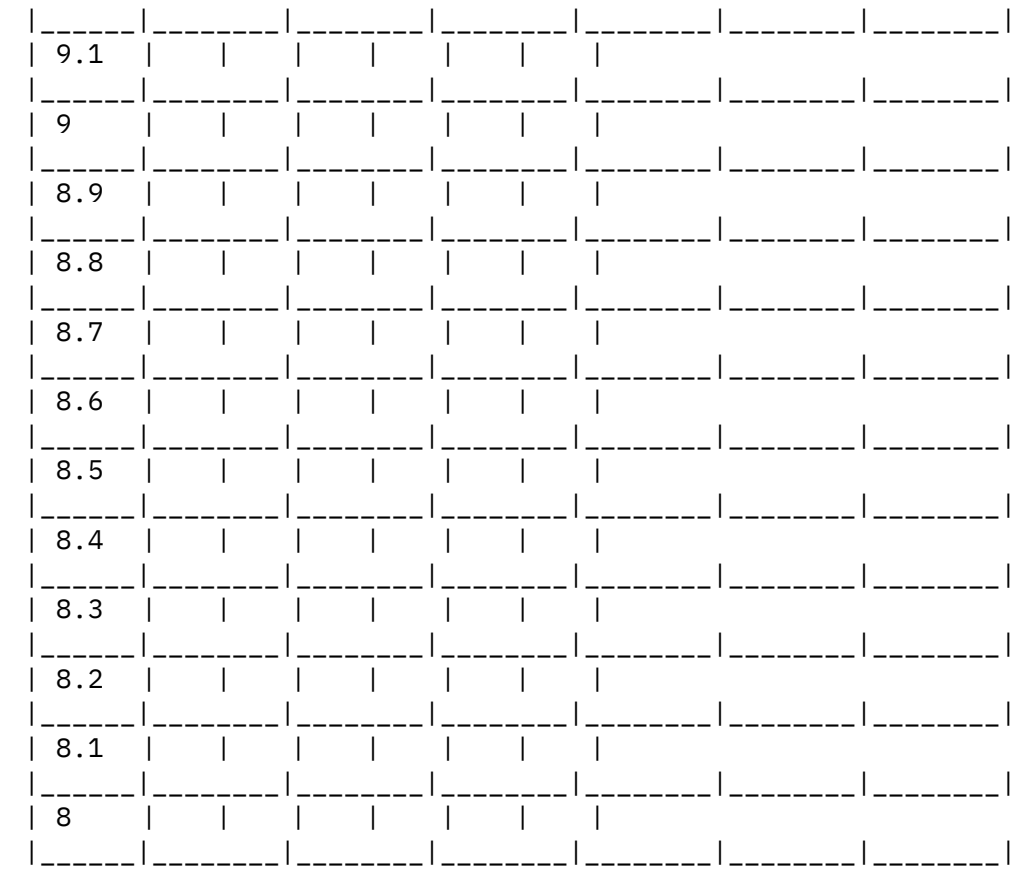
Instructions: You are to monitor a 3 MHz portion of the shortwave spectrum for 3 hours (the table below shows only 1 hour for brevity, your chart should be 3 times wider). Sweep your assigned band however you like, so long as you TUNE EVERY FREQUENCY AT LEAST ONCE EVERY 10 MINUTES. Whenever you hear a "Woodpecker", put a small distinct ink-dot on the grid to mark the frequency and time. If your monitoring is interrupted, note this by drawing vertical lines on the grid to show the time missed. Label the area between the lines "UNMONITORED". (For obvious reasons, please try to avoid interruptions.) Thanks for contributing your time and effort to this project. Even if you don't hear the "Woodpecker" during your sweeps, remember that

that, too, is valuable information. Please return this form
by 1 November 1985 to:

The Woodpecker Project
1634 15th St. NW
Washington, DC 20009, USA

Sample Monitoring Report
(only 1 hour shown for brevity)





Please use the back of this form to record additional obser-
vations and comments.

Date:_____ Monitor Name:_____

City, Country:_____

Receiver:_____

X=======================CUT HERE============================X

Report on "Woodpecker" Interference
in a Shortwave Broadcast Band

Affected station:_____ Affected frequency:_____

Strength of interference (1 = mile, 5 = overwhelming):
1 2 3 4 5

circle one

Date (UTC):_____ Time (UTC):_____

Approximate duration of interference:_____

Report's name:_____ Receiver model:_____

Reporter's location (city, country):_____

Complete and return by 1 November 1985 to:

The Woodpecker Project
1634 - 15th St. NW
Washington, DC 20009, USA

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 8291844124487002326
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 122486,a4ce1f92accb5cc7,start
X-Google-Attributes: gid122486,public
X-Google-Thread: 151e61,a4ce1f92accb5cc7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-14 08:24:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio,net.news.group
Subject: new group net.ham-radio.packet -- history/apology/future
Message-ID: <459@mtunh.UUCP>
Date: Fri, 14-Jun-85 11:24:02 EDT
Article-I.D.: mtunh.459
Posted: Fri Jun 14 11:24:02 1985
Date-Received: Sat, 15-Jun-85 07:49:32 EDT
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 43
Xref: watmath net.ham-radio:2829 net.news.group:3148

History-- About a month ago Clifford@mit-eddie posted an article in net.ham-radio which among other things told of the Arpa mailing list "packet-radio". Several packeteers in my local area were interested in reading the list. A brief discussion in newsgroup "net.ham-radio" discussed the possibility of gatewaying the "packet-radio" list into "net.ham-radio". However, the Arpa list "info-hams" is already exchanged with "net.ham-radio".

There are good reasons to keep the two separate. About three weeks ago, I posted an article asking for comments on the proposal to create "net.ham-radio.packet" as a subgroup and connect it with the "packet-

radio" list. In that article I indicated I would create the group after a suitable waiting period if no one objected. Unfortunately, at the time mtunh was having some news distribution problems. Among other things, the proposal did not make it to "net.news.group". In fact, it might not have made it very far off mtunh at all, even in "net.ham-radio".

Last week, based on no negative replies and several positive ones, I created the "net.ham-radio.packet" group. I have received several flames since then.

Explanation/Apology-- I was not trying to make a decision and force it on the entire net! I am not a newcomer to Usenet (In fact, I created "net.ham-radio" in the first place over 4 years ago!), and know the net procedures. I am sorry that we had news distribution problems here.

Solution-- So, let's try again ... Other than the flames on procedural issues, does anyone have any real problems with the creation of net.ham-radio.packet? I am already on the mailing list and am getting the info, but several others around here would like to read it too. I did get several positive replies (from those who saw my first posting). It seems (to me) that there is sufficient interest for a newsgroup and it should be a subgroup under net.ham-radio. I guess at this point the new group exists on some sites, but I know from the flames that others have removed it. Let's get the useless exchange on proper etiquitte etc. over with and get to the technical content of packet radio.

What say? Let's shoot for a JUly 15 decision of "net.ham-radio.packet" -- to be or not to be???

Jim Kutsch ihnp4!mtunh!jak or ihnp4!mtunh!ky2d!jak
ATTIS Holmdel, NJ (201) 834-2092

From -8295981119747274886
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,942e11b0f42bd70d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-14 11:31:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihlpg.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihlpg!berman
From: berman@ihlpg.UUCP (Andy Berman)
Newsgroups: net.ham-radio
Subject: Burnt-out ham returning -- has questions
Message-ID: <634@ihlpg.UUCP>
Date: Fri, 14-Jun-85 14:31:36 EDT
Article-I.D.: ihlpg.634
Posted: Fri Jun 14 14:31:36 1985
Date-Received: Sat, 15-Jun-85 07:33:56 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 17

As a burnt out ham coming back to the fold, I need some info:

I want to upgrade my Tech license to a General.

Where do I get a code test in the Chicago area? I'm told
the FCC no longer does it. I've been gone several years now
after my 2 meter rig was stolen.

Also is it true the code test is "comprehension" only?
What does that mean concretely?

    Thanks,

          ihnp4!ihlpg!berman

          WD9EMZ

From -1392984832394333948
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11da26,9efa04ccabcef26a,start
X-Google-Attributes: gid11da26,public
X-Google-Thread: 151e61,9efa04ccabcef26a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-14 13:22:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site iddic.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!vax135!cornell!uw-beaver!
tektronix!orca!iddic!brucec
From: brucec@iddic.UUCP (Bruce W. Cheney)
Newsgroups: net.chess,net.ham-radio
Subject: Radio Chess
Message-ID: <2035@iddic.UUCP>
Date: Fri, 14-Jun-85 16:22:04 EDT
Article-I.D.: iddic.2035
Posted: Fri Jun 14 16:22:04 1985
Date-Received: Sun, 16-Jun-85 00:42:27 EDT
Organization: Tektronix, Beaverton OR
Lines: 14
Xref: watmath net.chess:875 net.ham-radio:2834

Anyone interested in playing chess via amateur
radio ? Propagation isn't so hot these days, but
80 meters seems pretty reliable in the evenings, at
least for the West Coast.

I'm located in Sherwood, OR (20 miles south of Portland)
operating at 100 watts with a multiband vertical. The
vertical has a rather narrow freq. response, especially on
80 (3850 is the current minimum SWR).

It seems like a good way to combine two hobbies.

NI7M Bruce Cheney

From 7473426791075796703
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1985-06-14 18:41:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site umd5.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!think!harvard!seismo!
umcp-cs!cvl!umd5!louie
From: louie@umd5.UUCP
Newsgroups: net.ham-radio,net.news.group
Subject: Re: new group net.ham-radio.packet -- history/apology/future
Message-ID: <585@umd5.UUCP>
Date: Fri, 14-Jun-85 21:41:25 EDT
Article-I.D.: umd5.585
Posted: Fri Jun 14 21:41:25 1985
Date-Received: Sun, 16-Jun-85 01:28:42 EDT
References: <459@mtunh.UUCP>
Reply-To: louie@umd5.UUCP (Louis Mamakos)
Organization: U of Md, CSC, College Park, Md
Lines: 8
Xref: watmath net.ham-radio:2835 net.news.group:3157
Summary: YES: create net.ham-radio.packet

Here's one vote YES; create net.ham-radio.packet for the discussion of
amateur packet radio and gateway to the packet-radio@mit-eddie mailing
list. Let's get this done and over with.

--
Louis A. Mamakos WA3YMH   University of Maryland, Computer Science Center
 Internet: louie@umd5.arpa
 UUCP: {seismo!umcp-cs, ihnp4!rlgvax}!cvl!umd5!louie

From -3436794331623198689
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1985-06-14 21:18:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site akgua.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!glc
From: glc@akgua.UUCP (G.L. Cleveland [Lindsay])

Newsgroups: net.ham-radio,net.news.group
Subject: Re: new group net.ham-radio.packet -- history/apology/future
Message-ID: <1496@akgua.UUCP>
Date: Sat, 15-Jun-85 00:18:12 EDT
Article-I.D.: akgua.1496
Posted: Sat Jun 15 00:18:12 1985
Date-Received: Sat, 15-Jun-85 09:26:05 EDT
References: <459@mtunh.UUCP>
Organization: AT&T Technologies/Bell Labs, Atlanta
Lines: 32
Xref: watmath net.ham-radio:2833 net.news.group:3151

Poor Jim! He tries to do it "by the rules" and what happens...
Murphy Strikes!! I hope this time the "word" gets sent to all
sites in the prescribed manner.

Anyway...

>Solution-- So, let's try again ... Other than the flames on procedural
>issues, does anyone have any real problems with the creation of
>net.ham-radio.packet? I am already on the mailing list and am getting
>the info, but several others around here would like to read it too. I
>did get several positive replies (from those who saw my first posting).
>It seems (to me) that there is sufficient interest for a newsgroup and
>it should be a subgroup under net.ham-radio. I guess at this point the
>new group exists on some sites, but I know from the flames that others
>have removed it.

>Jim Kutsch ihnp4!mtunh!jak or ihnp4!mtunh!ky2d!jak
>ATTIS Holmdel, NJ (201) 834-2092

My site (akgua) did not remove the new newsgroup. I am all for it!

The fact that it needs to be a separate newsgroup for ARPA and/or
mailing list gatewaying gives it even more reason for existance.
And from what I have seen and heard to date, it is a growing topic.
However, the non-packeteers who avidly read net.ham-radio would
appreciate not being deluged by packet-related articles.

Cheers,
  Lindsay

Lindsay Cleveland (akgua!glc) (404) 447-3909   Cornet 583-3909
AT&T Technologies/Bell Laboratories ... Atlanta, Ga

From -5044342163323561998
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1b353814ca08cdc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-16 08:24:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: BACKSCATTER - OTH Radar ('woodpecker') newsletter
Message-ID: <605@ihu1h.UUCP>
Date: Sun, 16-Jun-85 11:24:40 EDT
Article-I.D.: ihu1h.605
Posted: Sun Jun 16 11:24:40 1985
Date-Received: Mon, 17-Jun-85 04:17:06 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 52

x

BACKSCATTER Newsletter

Just received an issue of BACKSCATTER, a sporadic newsletter "designed to inform the shortwave community about developments in the field of Over-the-Horizon (OTH) Radar." Bob Horvitz, chairman of ANARC's Over-the-Horizon Radar Committee, edits BACKSCATTER, which is about 4 pages long.

According to the issue I have, one may receive the next issue of BACKSCATTER when published by sending a long, self-addressed US-stamped envelope and 50 cents (for a single issue.) The 50 cents may be in the form of mint US postage stamps. Requests for delivery to points outside the US should not include SASEs or foreign stamps, but 4 IRCs for airmail delivery instead.

Address inquiries to:

Association of North American Radio Clubs'
Over-the-Horizon Radar Committee
1634 15th St. NW
Washington, DC 20009 USA

The June 1985 issue contains these articles, as quoted from the 'News in Brief' overview:

- "Woodpecker Project" gathering data on Woodpecker band use and interference to shortwave broadcasts; hundreds of volunteers needed for world-wide monitoring effort in October.

- First 60 degree sector of US system in Maine to begin test transmissions this summer or fall.

- England and Japan may get OTH radars.

- Debate over OTH procurement within Pentagon shar-
  pens as DARPA chief says, "we cannot afford to use
  contemporary technology to build a US
 air
  defense... space systems are the only way..."

- More detail on Australia's "Project Jindalee":
  contrary to earlier reports, it's not a pulser.

- OTH and the "Star Wars" connection.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 2352125632229259005
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1985-06-16 11:22:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site gatech.CSNET
Path: utzoo!watmath!clyde!bonnie!akgua!gatech!spaf
From: spaf@gatech.CSNET (Gene Spafford)
Newsgroups: net.ham-radio,net.news.group
Subject: Re: new group net.ham-radio.packet -- history/apology/future
Message-ID: <315@gatech.CSNET>
Date: Sun, 16-Jun-85 14:22:08 EDT
Article-I.D.: gatech.315
Posted: Sun Jun 16 14:22:08 1985
Date-Received: Mon, 17-Jun-85 04:45:45 EDT
References: <459@mtunh.UUCP>
Reply-To: spaf@gatech.UUCP (Gene Spafford)
Organization: The Clouds Project, School of ICS, Georgia Tech
Lines: 13
Xref: watmath net.ham-radio:2837 net.news.group:3158
Summary:

If you want to create a newsgroup to act as a "gateway" to and from
an Arpa newslist, the newsgroup should be created as a "mod" group, not
as a "net" group. The "mod" option will help get replies to the
right place (as well as postings) and make the gateway simpler
to maintain.

We DON'T want another "net" group which connects to an Arpa group.
We've had problems with such links in the past.
--
Gene "3 months and holding" Spafford
The Clouds Project, School of ICS, Georgia Tech, Atlanta GA 30332

CSNet: Spaf @ GATech ARPA: Spaf%GATech.CSNet @ CSNet-Relay.ARPA
uucp: ...!{akgua,allegra,hplabs,ihnp4,linus,seismo,ulysses}!gatech!spaf

From -3156622594436061283
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-16 11:41:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.4 $; site trsvax
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!inuxi!inuxc!
pur-ee!uiucdcs!convex!trsvax!ron
From: ron@trsvax
Newsgroups: net.ham-radio
Subject: Re: new group net.ham-radio.packet -- h
Message-ID: <52800057@trsvax>
Date: Sun, 16-Jun-85 14:41:00 EDT
Article-I.D.: trsvax.52800057
Posted: Sun Jun 16 14:41:00 1985
Date-Received: Fri, 21-Jun-85 00:50:41 EDT
References: <459@mtunh.UUCP>
Lines: 13
Nf-ID: #R:mtunh.UUCP:-45900:trsvax:52800057:000:536
Nf-From: trsvax!ron Jun 16 11:41:00 1985

The only suggestion I have to offer is that you name it
    net.radio.packet
or
    net.hr.packet
instead. The reason is that, for people that run notes, a directory
is created with the name of the group used as the the name of the directory.
On non-4.2 BSD systems, the limit the length that a directory name can
be is 14 characters. net.ham-radio.packet exceeds that limit at the
second period. Thus, the proposed group will get truncated to
"net.ham-radio." Could you please use a name that is <= 14?

    ...{microsoft,ctvax}!trsvax!ron

From -6744697271659774661
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9bcb5ffe51f7e755,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-16 18:25:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Maine ('Woodpecker') radar to start soon
Message-ID: <606@ihu1h.UUCP>

Date: Sun, 16-Jun-85 21:25:58 EDT
Article-I.D.: ihu1h.606
Posted: Sun Jun 16 21:25:58 1985
Date-Received: Mon, 17-Jun-85 08:32:07 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 40

x

From June 1985 BACKSCATTER, newsletter of the Association of North American Radio Clubs' (ANARC) Over-the-Horizon Radar Committee:

MAINE RADAR TO START UP SOON

"Test transmissions from the first sector of the US Air Force's OTH radar in Maine are expected to start this summer or fall. Listen for loud buzz-chirps with bandwidths of 5, 10, 20 or 40 kHz. When the bandwidth is 5 or 10 kHz, the waveform repetition rate should be 10 to 20/second; when it's 20 or 40 kHz, 20 to 60/second."

"The experimental OTH radar was authorized to transmit in these bands, according to QST (April 80):"

Bands Authorized (kHz) for 1985 USAF OTH Radar Experiment		
6765-7000	10100-11175	17360-17900
7300-7508.4	11400-12330	18030-19993
7530-8195	13360-14000	20010-21000
9040-9995	14350-14993	21450-21850
15100-16460		

"Bands used by the operational radar may be different. It will also be capable of transmitting in the 5000-6740 and 22250-30600 bands, but will probably be restricted to only portions of the added spectrum. In general, look for it in the Fixed bands."

--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 7773761101059682912
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 15c702,cba23fb033b4ec2b
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,cba23fb033b4ec2b
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,cba23fb033b4ec2b
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1985-06-17 06:25:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site edison.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!mcnc!ncsu!uvacs!edison!
dca
From: dca@edison.UUCP (David C. Albrecht)
Newsgroups: net.analog,net.audio,net.ham-radio
Subject: Re: Re: Electronics wearing out
Message-ID: <508@edison.UUCP>
Date: Mon, 17-Jun-85 09:25:38 EDT
Article-I.D.: edison.508
Posted: Mon Jun 17 09:25:38 1985
Date-Received: Thu, 20-Jun-85 07:43:39 EDT
References: <2663@decwrl.UUCP>
Organization: General Electric Company, Charlottesville, VA
Lines: 14
Xref: watmath net.analog:335 net.audio:5157 net.ham-radio:2845

> I have to agree with you. I will never knowingly buy an electronic device
-> which depends on a battery keeping a RAM alive, especially when ROM's of the
> same size are cheaper.
>
> -Mike

Do WHAT? I don't remember the original posting but I would imagine the
RAM is used to store transient information such as station presets and
perhaps volume settings. A ROM? be serious, you can have any color you
like so long as it's blue, and volume you want so long as it's 5 any
station you want if you can get them to move to 101.2 :-)

David Albrecht
General Electric

From 8667713034773989676
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1985-06-17 06:27:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!drutx!mtuxo!mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio,net.news.group
Subject: Re: new group net.ham-radio.packet -- history/apology/future

Message-ID: <460@mtunh.UUCP>
Date: Mon, 17-Jun-85 09:27:27 EDT
Article-I.D.: mtunh.460
Posted: Mon Jun 17 09:27:27 1985
Date-Received: Tue, 18-Jun-85 07:45:09 EDT
References: <459@mtunh.UUCP>, <315@gatech.CSNET>
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 21
Xref: watmath net.ham-radio:2839 net.news.group:3161

We (those involved) do not want a "mod." group. We have had net.ham-radio for years and have been successful in exchanging news with the ARpa info-hams list. All we want to do is create a subdivision.

I do not understand why this is of such interest to all those who don't read net.ham-radio in the first place!!! We have subdivisions under net.religion, net.nlang and several others. If you really want me to do it I can post numerous private mail messages in support of the net.ham-radio.packet group. Is this really necessary? The idea here is just a subdivision of an existing group to better serve those who are involved in the group.

Also, Mr. Spafford, I answered your (somewhat presumptuous) private mail to me when you did the rmgroup. However, I have not seen a reply. I guess you would rather have all net folks read our correspondence? Rhetorical question: why does *EVERYTHING* on Usenet have to generate 50Kb of net traffic before anything can be done? The overhead of discussing procedural issues seems to almost exceed the real traffic in some cases!

Cheers, Jim

From -1783347736186695281
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3393c33dc196618b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-17 09:12:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.4 $; site trsvax
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!inuxi!inuxc!pur-ee!uiucdcs!convex!trsvax!mikey
From: mikey@trsvax
Newsgroups: net.ham-radio
Subject: Re: Electronics wearing out
Message-ID: <52800059@trsvax>
Date: Mon, 17-Jun-85 12:12:00 EDT
Article-I.D.: trsvax.52800059
Posted: Mon Jun 17 12:12:00 1985
Date-Received: Fri, 21-Jun-85 00:52:36 EDT
References: <458@ihu1m.UUCP>
Lines: 17
Nf-ID: #R:ihu1m.UUCP:-45800:trsvax:52800059:000:687

Nf-From: trsvax!mikey   Jun 17 09:12:00 1985

There seems to be a slight misunderstanding here. There are two types
of battery backup. The first is just a battery backup of RAM for
storage of your "memory" channels or your frequently used operating
parameters. Big deal if that goes dead. You replace the battery and
just reprogram your memory. The problem is some new equipment is
designed so that a number of units use the same board and the unit is
programmed "on the fly" on the production line and an on board battery
keeps it alive. The problem is that if you loose the battery, you loose
everything, including the ability to reprogram. This means a return to
the factory, and a bill.

mikey at trsvax
KA5MJQ

From 6778095104436277967
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8907333424e151ae,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-17 09:51:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site mhuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!mhuxl!wrc
From: wrc@mhuxl.UUCP (CLEGG)
Newsgroups: net.ham-radio
Subject: Re: Vertical antenna's
Message-ID: <254@mhuxl.UUCP>
Date: Mon, 17-Jun-85 12:51:56 EDT
Article-I.D.: mhuxl.254
Posted: Mon Jun 17 12:51:56 1985
Date-Received: Tue, 18-Jun-85 07:55:10 EDT
References: <2686@decwrl.UUCP>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 22

>
>
>   I recently picked up a cushcraft vertical antenna from someone
> and i am now unsure as to what type of ground plane to use.
>   Screen is out because i would have to dig up the lawn since it is
> mounted about 2 feet off the ground. but how many radials should i put in
> ?? how few can i get away with?? I have read some different books and have
> come up with different answers . is there anyone out there who can fill me
> in?
>
>
>   73's Paul KA1MWQ

Check the June 1985 issue of QST for an article on vertical antennas. The article describes the effect of the number of radials, soil conductivity, length of radials, angle of radiation etc. Maybe it will give you some ideas. Let me know how you like it as I am interested in possibly getting one myself.

73
Bill N2AZX

From 151380829669670439
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3393c33dc196618b
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,3393c33dc196618b
X-Google-Attributes: gid126c94,public
X-Google-Thread: 15c702,3393c33dc196618b
X-Google-Attributes: gid15c702,public
X-Google-ArrivalTime: 1985-06-17 11:52:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!henry
From: henry@utzoo.UUCP (Henry Spencer)
Newsgroups: net.analog,net.audio,net.ham-radio
Subject: Re: Electronics wearing out
Message-ID: <5689@utzoo.UUCP>
Date: Mon, 17-Jun-85 14:52:02 EDT
Article-I.D.: utzoo.5689
Posted: Mon Jun 17 14:52:02 1985
Date-Received: Mon, 17-Jun-85 14:52:02 EDT
References: <11251@brl-tgr.ARPA>
Organization: U of Toronto Zoology
Lines: 93

Unfortunately, there really are wear-out mechanisms even in semiconductors. They are less obvious than the ones in tubes, but no less real.

Plastic IC packages (used for most ICs in commercial equipment) are not hermetically sealed, and may eventually develop leaks that let air and moisture at the chip; the resulting corrosion kills it. Why do you think the military uses ceramic (truly hermetic) packages almost exclusively?

Diffusion does occur even in solids. Various forms of material migration can occur in the presence of electric currents. These things are significant concerns to semiconductor manufacturers. Remember that commercial ICs are optimized for low cost rather than ultimate maximum lifetime.

Power spikes, static, and similar forms of overstressing may possibly account for a significant fraction of semiconductor failures in the field. It is very difficult to shield completely against such things, although "99%" protection is much easier and increasingly common. Note that power

behavior during powerup and powerdown is rather ill-specified and hard
to control completely.

EPROMs and EEPROMs inherently have limited lifetimes if they are being
reprogrammed regularly, because the erase/program techniques involve
pushing electrons through materials that are normally insulators. The
technique used to do this is basically brute force. This unavoidably
involves some degradation of the insulator. Do it too many times, and
it won't insulate any more.

EPROMs and EEPROMs will *eventually* lose their contents anyway, because
they rely on holding charge on very-well-insulated electrodes. Although
the insulation around those electrodes is of truly superb quality, it's
not perfect, and the charge will leak off eventually. In the absence of
unusual stress, this takes a very long time. Nobody is quite sure how
long, because we haven't had the devices that long! Extrapolations from
stress tests may not be 100% valid, although they do give hints.

Circuit designs which use batteries for volatile memories simply need
their batteries replaced occasionally. They don't "become useless"
any more than a flashlight becomes useless, although in some cases the
battery replacement may be a lot of hassle. (When expected battery
lifetime exceeds expected equipment lifetime, it's tempting to just
solder the battery in.)

Things like semiconductor lasers in CD players are being operated "hard
and hot"; this aggravates failure mechanisms like material migration
and solid diffusion. Often there is a deliberate tradeoff between power
output and lifetime, as with incandescent bulbs. For example, stadium
lighting is often run at higher-than-normal voltages; the bulbs burn out
quickly but yield a lot more light meanwhile, and this is a reasonable
tradeoff in that application. Similarly, commercial semiconductor lasers
have very limited power outputs because of difficult technical problems.
Getting the necessary power with available components may *require* some
deliberate loss of lifetime. Even when higher-power components really are
available, it may be a good deal cheaper to opt for shorter life. (Just
how much extra are most consumers willing to pay for long-life components?
Regular incandescent bulbs heavily outsell long-life bulbs, remember.)

> This troubles me. I had thought that we had a reasonable progression of
> development of electronics during these days of solid-state gear
> replacing tube equipment that meant longer life for any device. ...

Longer, yes. But not infinite. Not even the phone company's highly
conservative, heavily over-engineered equipment is expected to last more
than 40-50 years (and this is *not* a zero-maintenance lifetime, either).

> But now I see that designers either deliberately build in inevitable
> failures (the use of volatile ROMs and batteries instead of PROMs or
> other permanent devices) or the solid-state stuff I was led to believe
> had indefinitely-long lives really is as short-lived as vacuum tubes
> (the laser diodes mentioned above).

You pays your money and you takes your choice. If you are willing to
pay double or triple current prices, you could probably get some very
long-lived equipment. (The high cost of military electronics is not
all corruption and overcharging.) (95%, maybe.)

> I may be insane, but I really expect electronic equipment to operate
> forever. I don't want to buy any that has built-in and inevitable
> failure. ...
> I realize that consumer products have built-in planned obsolescence.
> I'm not talking about small appliances, which I expect to die and be
> replaced. I'm talking about multi-hundred-dollar equipment. Am I
> totally unjustified in expecting such things to be designed to
> continue to work indefinitely without maintenance, except for
> mechanical stuff like motors, belts, pots, etc?

Basically, yes. There ain't no way to make it work indefinitely. And
making it work "a long time" is quite expensive. Semiconductors have
made it relatively easy to build gear with far longer lifetimes than
tube equipment, but this is a (large) quantitative improvement rather
than a fundamental repeal of the Second Law of Thermodynamics.
--
Henry Spencer @ U of Toronto Zoology
{allegra,ihnp4,linus,decvax}!utzoo!henry

From 2948172484613915896
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eca55b8fa4675308,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-17 13:47:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: verticals
Message-ID: <17972@mgweed.UUCP>
Date: Mon, 17-Jun-85 16:47:02 EDT
Article-I.D.: mgweed.17972
Posted: Mon Jun 17 16:47:02 1985
Date-Received: Sun, 23-Jun-85 10:52:30 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

THe last Field Day that I participated in where I was responsible
for setting up the 75/160 meter station, I decided to use a vertical.
I used a center loaded pipe about 35 to 40 feet high. The antenna
was tuned slightly too low in frequency for 75 so I compensated for
that with a series cap at the base. On 160, I added additional coil
to lower the frequency. The ground system consisted of eight quarter-
wave radials on 75 meters. The system worked really great on both

bands, in fact better than expected. On 160, we worked all stations
we could hear on that band in 30 minutes (there were only about 25
stations on). By the way, the base impedance, as expected, was less
than 50 ohms so a toroidal autotransformer was used to match it to the
coax. No tuner was used on the 820 transciever. The radials were
insulated stranded wire, about 18 Ga.

Bob K9EUI

From 3365187221240391103
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1ea40f8e8e14a46a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-17 14:40:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site biomed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!biomed!lagasse
From: lagasse@biomed.UUCP (Robert C. Lagasse)
Newsgroups: net.ham-radio
Subject: thanks
Message-ID: <79@biomed.UUCP>
Date: Mon, 17-Jun-85 17:40:09 EDT
Article-I.D.: biomed.79
Posted: Mon Jun 17 17:40:09 1985
Date-Received: Wed, 19-Jun-85 02:30:40 EDT
Organization: Mass. Gen. Hosp. - Dept. Biomed. Engineering
Lines: 6

thank you Bob Parnass for all of the interesting frequency listings. Keep
'em coming. By the way where do you FIND all of these frequencies???
Postings of any other listings anyone else has are also appreciated.

Bobby L. N1ALG @ MGH

From -7060856057745913575
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13372f,fcb1a07f4b2cfb7a,start
X-Google-Attributes: gid13372f,public
X-Google-Thread: 116b5e,fcb1a07f4b2cfb7a,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,fcb1a07f4b2cfb7a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-17 15:07:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!inuxi!inuxc!
pur-ee!wd9get
From: wd9get@pur-ee.UUCP (Brandt)
Newsgroups: net.columbia,net.space,net.ham-radio
Subject: Space Shuttle Audio & Video

Message-ID: <2959@pur-ee.UUCP>
Date: Mon, 17-Jun-85 18:07:45 EDT
Article-I.D.: pur-ee.2959
Posted: Mon Jun 17 18:07:45 1985
Date-Received: Fri, 21-Jun-85 00:49:57 EDT
Reply-To: wd9get@pur-ee.UUCP (Brandt)
Organization: Electrical Engineering Department , Purdue University
Lines: 25
Xref: watmath net.columbia:1448 net.space:4167 net.ham-radio:2856

I watched the launch of Discovery on a TVRO system this morning, and
I must say it was a refreshing change from trying to sort out the junk
the network newscasters clog up the airways with.

If you have been looking for the sat info, I caught the NASA link on
Satcom F1R (F1 in most sat mags) on transponder 18. F1 is in geosync
over 139 W longitude. A different magazine showed the NASA link to be
on Galaxy G1 (the next sat west of F1) on transponder 13. I didn't try
to confirm this as G1 comes in very poorly on a 7 ft dish from central
Indiana, and I was also trying to video tape the launch.

For those of you with HF ham radio low band gear or a shortwave
receiver, the Goddard Amateur Radio Club in Greenbelt, MD is again
retransmitting the shuttle audio on 3.860, 7.185, and 14.290 MHz.

--
--Keith E. Brandt
  wd9get@pur-ee.UUCP

 "Goodbye, cruel world that was my home-
    there's cleaner space out here to roam.
  Put my feet up on the moons of Mars-
    sit back, relax, and count the stars."
                  --Ian Anderson

From 2029338806659426135
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a6e819737b9c0057,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-17 17:02:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 42 (shuttle relay freqs)
Message-ID: <17978@mgweed.UUCP>
Date: Mon, 17-Jun-85 20:02:08 EDT
Article-I.D.: mgweed.17978
Posted: Mon Jun 17 20:02:08 1985

Date-Received: Sun, 23-Jun-85 10:53:21 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

qst de k9eui
hr arrl bulletin nr 42 from arrl headquarters
newington ct june 17, 1985
to all radio amateurs bt

the goddard amateur radio club, wa3nan, at the nasa goddard space flight center in greenbelt, maryland, retransmits live space shuttle audio. coverage begins within the hour before liftoff, and continues through the flight and until about an hour after landing. wa3nan will not be on the air during astronaut sleep periods. frequencies used are 3860, 7185, and 14295 khz ssb and 147.45 mhz fm. wa3nan operates under a blanket waiver of section 97.113 issued by the fcc for the duration of all space shuttle flights. see happenings november 1983 qst, for details of the waiver ar

From 14148552868335401 51
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4708811062c0e2f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-17 17:02:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!grkermi!genrad!
decvax!bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!
rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 41 (ARRL proposes novice changes)
Message-ID: <17979@mgweed.UUCP>
Date: Mon, 17-Jun-85 20:02:48 EDT
Article-I.D.: mgweed.17979
Posted: Mon Jun 17 20:02:48 1985
Date-Received: Sun, 23-Jun-85 08:08:24 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr arrl bulletin nr 41 from arrl headquarters
newington, ct june 14, 1985
to all radio amateurs bt

on june 6, arrl filed a petition with the fcc requesting enhanced privileges for novice class amateur radio operators. arrl requested that the fcc authorize rtty, data modes and ssb

phone on a portion of the 10 meter band, and all modes on the 220 mhz band and a portion of the 1.2 ghz band. details can be found in the arrl letter and qst. no rm number has been assigned to the petition at this date ar

From 3344481984743227199
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5b98b8a69938efec,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-17 17:03:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!grkermi!genrad!
decvax!bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!
rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 40 (Wash. election)
Message-ID: <17980@mgweed.UUCP>
Date: Mon, 17-Jun-85 20:03:20 EDT
Article-I.D.: mgweed.17980
Posted: Mon Jun 17 20:03:20 1985
Date-Received: Sun, 23-Jun-85 08:08:57 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 10

qst de k9eui
hr arrl bulletin nr 40 from arrl headquarters
newington ct june 13, 1985
to all radio amateurs bt

kd7g was elected, without balloting, section manager of the washington section. his term of office will begin october 1, 1985 ar

From 5609128713720320951
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e765cfdca43b16e9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-17 17:03:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!grkermi!genrad!
decvax!bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!mhuxn!ihnp4!mgnetp!mgweed!
rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 24
Message-ID: <17981@mgweed.UUCP>
Date: Mon, 17-Jun-85 20:03:42 EDT

Article-I.D.: mgweed.17981
Posted: Mon Jun 17 20:03:42 1985
Date-Received: Sun, 23-Jun-85 08:09:18 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 35

qst de k9eui
hr propagation forecast bulletin nr 24 from arrl headquarters
newington ct june 16, 1985
to all radio amateurs bt

as discussed in last weeks bulletin, the solar flux curve is beginning another downward trend. numbers have been close to those of 27 to 28 days ago except that since june 11th the decline has been more rapid. the flux number for june 16 was 78, ten points below that for may 19, when the sun was in a similar position with respect to the earth. flux values near the quiet sun level are expected in the last few days of june.

the effects of lower solar activity are minor in the summer months. skip tends to be longer on the lower amateur bands as solar activity declines. on 21, 28 and 50 mhz the early summer sporadic e ionization produces almost daily short skip, over 400 to 1300 miles, depending on the band and on the ionization density. the latter reaches its peak in late june and early july. watch 144 mhz for e skip opportunities this season.

the lower solar activity currently makes for less disturbance of the earths magnetic field, and this is good for nearly all amateur communications over other than local distances. undoubtedly, summer is the season for increased thunderstorm activity, and higher noise levels are observed on all frequencies much of the time. storm noise can be propagated over long distances on the lower frequencies. storm static is essentially a local phenomenon on frequencies above the muf at the time.

american sunspot numbers for june 6 through june 12 were between 31 and 59 with a mean of 40.3 ar

From 6121690378585297258
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,675197569759f2c2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-17 19:57:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Recent SWL loggings: NASA, USAF, maritime, etc.

Message-ID: <607@ihu1h.UUCP>
Date: Mon, 17-Jun-85 22:57:04 EDT
Article-I.D.: ihu1h.607
Posted: Mon Jun 17 22:57:04 1985
Date-Received: Wed, 19-Jun-85 01:36:30 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 57

11.2520 AFE71_____US: NASA, "Cape Radio" wkg E3W, N2M, P7G, and others dur
ing shuttle mission, then ordered "QSY to frequency padl
ock honeydew heyday yardstick tablespoon backbone metalw
ork raincoat", usb, 6/18/85 @0031Z
[Cape Canavrl, FL] (B. Parnass)

13.0950 KLC_______Radio KLC Inc, maritime/coastal, cw, 6/4/85 @1634Z
[Arcadia, TX] (B. Parnass)

13.3060 KEA5______Aeronautical Radio Inc, id="New York", wkg aircraft EAF3
11, usb, 6/4/85 @1639
[New York, NY] (B. Parnass)

17.0936 WMH_______MD: Maryland, State of, marker, cw, 6/7/85 @1706Z
[Cambridge, MD] (B. Parnass)

17.1751 VAI_______Canada: Canadian Coast Guard, marker, cw, 6/7/85 @1713Z
[Vancouver, BC Canada] (B. Parnass)

17.1895 D3E51_____Luanda Radio, marker, cw, 6/7/85 @1715Z
[Luanda, Angola] (B. Parnass)

17.1955 LPD46_____unidentified: marker, "QSX 8 12 16", cw, 6/7/85 @1719Z
[location?] (B. Parnass)

WLO_______Mobile Marine Radio, Inc, marker, cw, 6/7/85 @1720Z
[Mobile, AL] (B. Parnass)

17.2045 WLO_______Mobile Marine Radio, Inc, marker, cw, 6/7/85 @1720Z
[Mobile, AL] (B. Parnass)

17.2075 WCC_______RCA Global Communications, maritime/coastal, raspy cw, 6
/7/85 @1721
[S Chatham, MA] (B. Parnass)

17.2095 WLO_______Mobile Marine Radio, Inc, marker, cw, 6/7/85 @1722Z
[Mobile, AL] (B. Parnass)

17.2160 WLO_______Mobile Marine Radio, Inc, marker, cw, 6/7/85 @1722Z
[Mobile, AL] (B. Parnass)

17.2360 KMI_______AT&T ship-to-shore radiotelephone, id="High Seas", usb,
6/7/85 @1730Z

[Dixon, CA] (B. Parnass)

17.9750 call?_____US: Air Force, SAC, freq Tango, "skyking" broadcast, usb
, 6/7/85 @1739Z
[location?] (B. Parnass)

19.8505 WFK39_____ITT World Communications, Associated Press, fax, cw id,
6/8/85 @0157Z
[New York, NY] (B. Parnass)

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6995500125605104233
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-17 21:08:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!genrad!panda!talcott!
harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio,net.news.group
Subject: Re: new group net.ham-radio.packet -- history/apology/future
Message-ID: <11294@brl-tgr.ARPA>
Date: Tue, 18-Jun-85 00:08:33 EDT
Article-I.D.: brl-tgr.11294
Posted: Tue Jun 18 00:08:33 1985
Date-Received: Thu, 20-Jun-85 20:08:35 EDT
References: <459@mtunh.UUCP> <315@gatech.CSNET>
Organization: Ballistic Research Lab
Lines: 18
Xref: watmath net.ham-radio:2846 net.news.group:3164

> If you want to create a newsgroup to act as a "gateway" to and from
> an Arpa newslist, the newsgroup should be created as a "mod" group, not
> as a "net" group. The "mod" option will help get replies to the
> right place (as well as postings) and make the gateway simpler
> to maintain.
>
> We DON'T want another "net" group which connects to an Arpa group.
> We've had problems with such links in the past.
> --
> Gene "3 months and holding" Spafford

Gene, get off it. Perhaps you would volunteer to moderate this list?
Perhaps you'd like to moderate all the net groups so that problems
won't occur? The gateway is very simple to maintain. All we do is

some table entries and it occurs. What basis in fact do you have for
your statement?

-Ron

From 8245578487723144223
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d6baed789cae248,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-18 07:22:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2g.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!hou2g!stekas
From: stekas@hou2g.UUCP (J.STEKAS)
Newsgroups: net.ham-radio
Subject: DX Protocal
Message-ID: <512@hou2g.UUCP>
Date: Tue, 18-Jun-85 10:22:46 EDT
Article-I.D.: hou2g.512
Posted: Tue Jun 18 10:22:46 1985
Date-Received: Wed, 19-Jun-85 04:18:11 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 8

A quick question from a rusty "re-licensee":

   When a DX station calls CQ DX, is he willing to accept stateside
   replys? When W2XXX calls CQ DX I know he doesn't want to hear from
   me. But when OK1XX calls CQ DX does that mean he doesn't want to be
   called by other Czechs or not be bothered by the stateside throngs.

                                    Tnx - Jim (NJ2F)

From -8760281525895135736
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ec4a9402f221dd9b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-18 09:56:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 23
Message-ID: <17998@mgweed.UUCP>
Date: Tue, 18-Jun-85 12:56:34 EDT
Article-I.D.: mgweed.17998
Posted: Tue Jun 18 12:56:34 1985
Date-Received: Thu, 20-Jun-85 21:19:56 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 36

qst de k9eui
dx bulletin nr 23 from arrl headquarters newington ct
june 14 1985 to all radio amateurs bt

china. dk7pe has been active from by1qh on 14025 khz at 12z, on 40 meters at 13z, and occasionally on 14227 khz at 14z. he should be active through this week.

iraq. yi1bgd has been active on 14210 khz at 19z.

faroes. oz5dl/oy and oz5ul/oy have been active on 14200 khz at 2150z, 7002 khz at 0245z, and 14033 khz at 2230z. qsl via home callsigns.

taiwan. bv2b has been on 14205 khz at 1330z.

djibouti. j28ei has been active on 14022 khz and on 7002 khz at about 0230z. qsl direct.

sudan. dl5kl/st2 has been active on 14334 khz at 16z.

sao tome. s92lb has been heard on 14186 khz at 2030z, working into europe.

togo. 5v7hl has been on 14220 khz at 2110z.

pakistan. ap2nq and ap2au have been active on 14185 khz between 0100 and 0230z.

mauritius. 3b8cs has been active on 40 meters. he is hoping to operate from 3b6 or 3b7, possibly in early july if he can get the paperwork problems solved.

rwanda. 9x5wp has been active on 14105 khz at 0430z. qsls go via wb6ckd. ar

From -6643530025366256972
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ca6a285dad1a3d8a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-18 09:57:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 37 (central div. vice dir. change)
Message-ID: <17999@mgweed.UUCP>
Date: Tue, 18-Jun-85 12:57:40 EDT

Article-I.D.: mgweed.17999
Posted: Tue Jun 18 12:57:40 1985
Date-Received: Sun, 23-Jun-85 12:38:06 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 11

qst de k9eui
arrl bulletin nr 37 from arrl headquarters newington ct
may 29 1985 to all radio amateurs bt

claire richard dyas ,w0jcr, has resigned as vice director of the midwest division because of illness in his family. arrl president larry price ,w4ra, has appointed richard ridenor kb0zl, to serve the remainder of the term as vice director.
ar

From 3630797676705725147
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,da1c712b20cf6580,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-18 17:30:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site inuxi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!inuxi!
wheatley
From: wheatley@inuxi.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: FCC Exam Questions Wanted
Message-ID: <234@inuxi.UUCP>
Date: Tue, 18-Jun-85 20:30:38 EDT
Article-I.D.: inuxi.234
Posted: Tue Jun 18 20:30:38 1985
Date-Received: Fri, 21-Jun-85 00:51:20 EDT
Distribution: net
Organization: AT&T Consumer Products, Indianapolis
Lines: 9

Does anyone have on the computer a file of the FCC questions for volunteer examinations. I have a copy of the novice questions that someone posted a few months ago, so am looking for the other written examination questions. Thanks in Advance

steve wheatley
ku9c
....!inuxc!inuxi!wheatley

From -3908225132149426685
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,623f4e1273a3c3c8

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-18 18:38:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ritcv.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
genrad!panda!talcott!harvard!seismo!rochester!ritcv!abh6509
From: abh6509@ritcv.UUCP (A. Hudson KA2KHD)
Newsgroups: net.ham-radio
Subject: Re: CD laser diode life
Message-ID: <8790@ritcv.UUCP>
Date: Tue, 18-Jun-85 21:38:15 EDT
Article-I.D.: ritcv.8790
Posted: Tue Jun 18 21:38:15 1985
Date-Received: Fri, 21-Jun-85 00:01:49 EDT
References: <687@vortex.UUCP>
Organization: Rochester Institute of Technology, Rochester, NY
Lines: 14

> The laser diodes used in CD players (780 nm) are typically rated
> at "over 5000 hours" use. Those little devils generate a considerable
> amount of energy from a tiny chip area. As they age, they require
> more and more current to generate the required amount of light, and
> circuitry in the player automatically keeps the current high enough
> to provide this level. Eventually, the diode simply won't emit
> enough light without so much current that it burns out.
>
> This isn't part of some devious plot--it's just the physics of
> the little beasties.
>
> --Lauren--

can you be more precise about the ion migration, ie half life??

From 1481029170608640815
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5b8e7185ff2b805d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-18 18:57:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!inuxi!inuxc!
pur-ee!wd9get
From: wd9get@pur-ee.UUCP (Brandt)
Newsgroups: net.ham-radio
Subject: Shuttle Oribtal Elements
Message-ID: <2968@pur-ee.UUCP>
Date: Tue, 18-Jun-85 21:57:50 EDT
Article-I.D.: pur-ee.2968
Posted: Tue Jun 18 21:57:50 1985
Date-Received: Fri, 21-Jun-85 00:51:58 EDT
Reply-To: wd9get@pur-ee.UUCP (Brandt)
Organization: Electrical Engineering Department , Purdue University

Lines: 29

Here's the orbital elements for the current STS 51-G mission.

Satellite: sts51-g
Catalog number: 15823
Epoch time: 85169.64097164
                 Tue Jun 18 15:22:59.950 1985 GMT
Element set: 31
Inclination: 28.4685 deg
RA of node: 262.4166 deg
Eccentricity: 0.0018622
Arg of perigee: 248.0753 deg
Mean anomaly: 268.9343 deg
Mean motion: 15.66995142 rev/day
Decay rate: 0.00028744 rev/day/day
Epoch rev: 13
Semi major axis: 6749.952 km
Anom period: 91.895626 min
Apogee: 388.558 km
Perigee: 363.418 km
--
--Keith E. Brandt
  wd9get@pur-ee

 "Goodbye, cruel world that was my home-
    there's cleaner space out here to roam.
  Put my feet up on the moons of Mars-
    sit back, relax, and count the stars."
                  --Ian Anderson

From 1743982614864510474
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-19 06:44:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site wnuxb.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!hw3b!wnuxb!
netnews
From: netnews@wnuxb.UUCP (Heiby)
Newsgroups: net.ham-radio,net.news.group
Subject: Re: net.ham-radio.packet - how Usenet works
Message-ID: <601@wnuxb.UUCP>
Date: Wed, 19-Jun-85 09:44:35 EDT
Article-I.D.: wnuxb.601
Posted: Wed Jun 19 09:44:35 1985
Date-Received: Thu, 20-Jun-85 09:58:57 EDT
References: <459@mtunh.UUCP> <315@gatech.CSNET> <460@mtunh.UUCP>

Reply-To: netnews@wnuxb.UUCP (Heiby)
Organization: AT&T - Warrenville Data Center, IL
Lines: 29
Xref: watmath net.ham-radio:2849 net.news.group:3167

In article <460@mtunh.UUCP> jak@mtunh.UUCP (Jim Kutsch) writes:
>I do not understand why this is of such interest to all those who don't
>read net.ham-radio in the first place!!!
>
>Rhetorical question: why does *EVERYTHING* on Usenet have to generate
>50Kb of net traffic before anything can be done?

I understand the meaning of "rhetorical", but these points deserve to be
explained for those on the net who are in Jim's position of not understanding
how Usenet works. The reason why many of us who do not read net.ham-radio
are interested in new newsgroups is that many of us have to administer
netnews on our machines, and in some cases hold the net together with spit
and bailing wire. If people went off and created newsgroups on a whim,
utter confusion would result (even more than already exists). There is
a procedure established for creation of new newsgroups (yes, even just
sub-divisions, remember that net.ham-radio is "just a sub-division" of net.)
which is documented in articles posted to net.announce.newusers. If
someone doesn't like the procedure, then s/he should work to change it,
but it should still be followed in the mean time. If you read the procedure,
you will see that if the procedure had been followed by all concerned, that
the traffic generated would have been at most A) a solicitation of interest,
B) some direct mail traffic, C) an announcement of results, and D) a newgroup
message. That really isn't much. Ok, now let's all re-read (for the first
time?) the messages in net.announce.newusers and not post anything else until
we have. If someone doesn't get that newsgroup, contact your netnews admin.
If you are the netnews admin and don't know how to fix it, let me know. Thanks.
--
Ronald W. Heiby / netnews@wnuxb.UUCP | unix-request@cbosgd.UUCP
AT&T Information Systems, Inc., Lisle, IL (CU-D21)

From 1875852075057424117
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6fc0f9457c79a4a6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-19 07:54:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site hplabs.UUCP
Path: utzoo!utcs!lsuc!pesnta!amd!hplabs!paull
From: paull@hplabs.UUCP (Rob KA6SFV)
Newsgroups: net.ham-radio
Subject: Silicon Valley police codes
Message-ID: <1985@hplabs.UUCP>
Date: Wed, 19-Jun-85 10:54:04 EDT
Article-I.D.: hplabs.1985
Posted: Wed Jun 19 10:54:04 1985
Date-Received: Thu, 20-Jun-85 03:50:44 EDT
Distribution: net

Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 23

Hi,

I've been monitoring the public service airwaves (police, fire, etc) here in Silicon Valley for quite a while. I am wondering if anyone knows what the verbal codes being used mean. Not just the ten-codes but the letter suffixes and the other codes.

e.g.; 10-98G, 10-8N, 10-98X etc.

It seems like the letters are some type of case disposition code, but what does it mean?
I would appreciate any info anyone might have on this subject. This may not be appropriate to post to the 'world' but who knows, there are a lot of listeners out there.

TNX Rob WE6B SK

From -7876921225222252903
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,cba23fb033b4ec2b
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,cba23fb033b4ec2b
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,cba23fb033b4ec2b
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1985-06-19 08:20:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site pitt.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!genrad!panda!talcott!harvard!seismo!rochester!cmu-cs-pt!cadre!pitt!hoffman
From: hoffman@pitt.UUCP (Bob Hoffman)
Newsgroups: net.analog,net.audio,net.ham-radio
Subject: Re: Electronics wearing out
Message-ID: <1005@pitt.UUCP>
Date: Wed, 19-Jun-85 11:20:11 EDT
Article-I.D.: pitt.1005
Posted: Wed Jun 19 11:20:11 1985
Date-Received: Sun, 23-Jun-85 04:16:02 EDT
References: <2663@decwrl.UUCP> <508@edison.UUCP>
Reply-To: hoffman@pitt.UUCP (Bob Hoffman)
Organization: Univ. of Pittsburgh Computer Science

Lines: 50
Xref: watmath net.analog:340 net.audio:5167 net.ham-radio:2868

Judging from the direction this discussion has been taking, I think
the point of the original note was lost. I don't think any of us
object to batteries being used in radios and the like to store
transient information. What's being objected to here is the use
of a battery-powered CMOS RAM _i_n_ _p_l_a_c_e_ _o_f a ROM for storing
the "permanent" part of the controller's memory.

In particular, Icom markets a series of radios with this sort of device.
The IC-R71A receiver, the IC-751 HF transceiver, the IC-271 144 MHz
transceiver, and the IC-471 440 MHz transceiver all use a
microprocessor based controller. Each radio, of course, has different
operating parameters, such as frequency range, modes, etc. Therefore,
the operating system must be different for each microprocessor. Now,
rather than using a ROM to store the operating system, they chose to
use a CMOS RAM backed up by a lithium battery.

If the battery should become disconnected, or if it should go dead
(claimed life: 6-7 years), the RAM loses its contents, and the radio
becomes completely useless. Unlike older receivers that used a
tuning capacitor to adjust the local oscillator frequency, it is now
done digitally with a voltage-controlled-oscillator and a digital
counter in a feedback loop. Without the microprocessor running, the
digital counter no longer works and the radio ceases to function.
Completely. As one person mentioned earlier, it becomes a ~$700
doorstop. The only repair is to send the radio (maybe just the RAM
module, I'm not sure) back to Icom to have the battery replaced and
the RAM reloaded.

What will happen when Icom decides to discontinue support for this line
of radios? I tend to keep my radios a long time. I dread the thought
of being helpless to prevent these units from failing.

If I were more adventurous, I would build a circuit to dump the contents
of the RAM into my computer and save the result on disk. Then, I could
either reprogram the RAM myself, or burn some ROMs to replace the whole
module.

What could have been Icom's motivation for doing this? Are they really
out to screw the public by making the radios obsolete before their time?
Could it be cheaper to manufacture this RAM module than a similar ROM?
Do I sound bitter? You bet. I own an R71A and a 271H and I think they're
excellent radios. Really first class. Except for their built-in
obsolescense. I had planned on getting a 471 next year, but am now
reconsidering.

Tnx for reading & 73,

--
Bob Hoffman, N3CVL   {allegra, bellcore, cadre, idis, psuvax1}!pitt!hoffman
Pitt Computer Science   hoffman%pitt@csnet-relay

From -5214909833017285442
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,18879793beac5f9d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-19 12:19:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihlpg.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxn!ihnp4!ihlpg!berman
From: berman@ihlpg.UUCP (Andy Berman)
Newsgroups: net.ham-radio
Subject: vhf transcievers: a buyers guide???
Message-ID: <676@ihlpg.UUCP>
Date: Wed, 19-Jun-85 15:19:46 EDT
Article-I.D.: ihlpg.676
Posted: Wed Jun 19 15:19:46 1985
Date-Received: Thu, 20-Jun-85 10:13:18 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 12

Where would one find a basic "buyers guide" to VHF ham gear? What I want
is a summary of the features and performance of the standard
VHF transceivers on the market today. Something akin to a
Consumers Reports listing. Does something like this exist?

If not, any advice on how to decide on VHF transceivers?

     many thanks, andy berman WD9EMZ
                   ihnp4!ihlpg!berman

         ....and thanks to everyone who told me about code tests

From -4257732975952010977
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab71a32f27d6571e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-19 14:14:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site petfe.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!petsd!petfe!evan
From: evan@petfe.UUCP (Evan Marcus)
Newsgroups: net.ham-radio
Subject: Shuttle audio link
Message-ID: <357@petfe.UUCP>
Date: Wed, 19-Jun-85 17:14:59 EDT
Article-I.D.: petfe.357
Posted: Wed Jun 19 17:14:59 1985
Date-Received: Thu, 20-Jun-85 10:22:48 EDT

Organization: Perkin-Elmer DSG, Tinton Falls, N.J.
Lines: 25

Just posting this for a friend...send any mail regarding it to ...petfe!johnd

==========
just a reminder ...
shuttle audio link can be heard on:

3860 lower side band (80m)
7185 lower side band (40m)
14295 upper side band (20m)

147.45 fm (2m) (wash.dc area)
147.00 fm (2m) (new york,nj,so.conn. area)
==========
                                    73,
                                       John KA2QHD
==========

--
{ucbvax|decvax}!vax135!petsd!petfe!evan
                         ...!pedsgd!pedsga!evan

"So, if she weighs the same as a duck, she is made of wood..."
"And therefore..."
"A witch!"

From 3051161183437386347
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,39d2e65762ca6a74,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12745e,39d2e65762ca6a74,start
X-Google-Attributes: gid12745e,public
X-Google-Thread: 13375c,39d2e65762ca6a74,start
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1985-06-19 21:58:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.railroad,net.aviation
Subject: scanner vs. scanner - brief notes
Message-ID: <609@ihu1h.UUCP>
Date: Thu, 20-Jun-85 00:58:13 EDT
Article-I.D.: ihu1h.609
Posted: Thu Jun 20 00:58:13 1985
Date-Received: Thu, 20-Jun-85 10:46:52 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 164

Xref: watmath net.ham-radio:2853 net.railroad:469 net.aviation:1647

x

At last count, there were about 30 scanners here of various brands, but not all on at the same time! Having serviced Regency, Bearcat, Plectron, Sonar, Radio Shack, Craig, SBE, Motorola, and Heathkit monitor receivers to name a few, I still have 2 Tennelecs waiting for attention which they will probably never receive.

Scanner features often differ not only by model but by manufacturer. For instance, Radio Shack and most Bearcat programmables allow enable/disable of the delay function on a per-channel basis. Regency only permits the delay to be enabled/disabled globally, that is, for all the channels at one time.

Both Bearcat and Regency, as well as Radio Shack offer some good models. I avoid the Bearcat 100, and scanners made by JIL, Fox, Tennelec, and Robyn. Radio Shack scanners contain a reasonable number of features, but scan a bit slowly and have a higher level of synthesizer noise. Most have too much hysteresis in the operation of the squelch control, but this can be fixed completely by replacing one resistor. Good, detailed shop manuals are available for Radio Shack units for $5 - $8.

In the name of cost cutting, some newer models have done away with the concept of a "channel bank", i.e. the ability to select/deselect a group of channels at a time. The bank concept was a good one. It may be inconvenient to operate a 30 channel scanner without banks (e.g. Regency MX3000, HX1000) if you operate the way many scanner hobbyists do.

Bearcat was just purchased by Uniden, maker of radios and cordless telephones.

Heath's new scanner is really a Bearcat 20/20 in semi-kit form, and should appeal to those who want to monitor the commercial aircraft band.

My favorite base/mobile scanners include the Bearcat 300, the Regency M400 (just discontinued), and the Regency K500 (predates the M400), all of which include a "service search" feature.

For portable use, I prefer the Regency HX1000 over the

6 Radio Shack PRO30s I've been through, although it's the Kenwood TR2600A scanning 140-160 MHz walkie-talkie that goes wherever I do.

Bearcat

BC300: 50 channel top of the line scanner. Service Search feature contains 11 ROM banks of preprogammed channels. Good sensitivity. Built in clock. I leave it on 24 hours a day. This is a favorite.

BC20/20: 40 channels. Service Search only for Marine and Aircraft. Good scanner, but tinny audio.

BC250: 50 channel discontinued model. Lacks aircraft band and 144-146 MHz. Search and Store feature extremely useful for finding federal frequencies. High frequency of repair. Digital circuitry very sensitive to glitches caused by static and AC line spikes. Avoid 1978 or earlier vintage units.

BC260: Super heavy metal cabinetry and lighted controls, aimed at mobile use for firemen, police, etc. Few frills, only 16 channels, no aircraft, but generous coverage of federal bands omitted in older Bearcat scanners. Multiplexor circuitry for vacuum fluorescent display produces audible whine.

BC100: First programmable portable. Be prepared for at least repair in the 1st year. Early units, with threaded antenna connector, have high frequency of repair. No priority channel or aircraft band. Some people swear by the BC100, others swear at them.

Regency

K500: Nice wood-like cabinet. Discontinued 40 channel model with every feature Regency could dream of in one scanner, except aircraft band. Idle tone bypass feature for mobile phone stations works about 50% of the time. Weather alert feature. Service Search in several banks. Search and Store facility not implemen-

ted as well as BC250, but better than none. Built in clock when radio off or in manual mode. Sensitivity could be better but can be programmed out of band.

M400: 30 channel replacement for K500, but now discontinued. Service Search, but no aircraft. Easily programmable out of band. Built in clock when radio off or in manual mode. Backlighted keyboard good for night viewing and mobile use but generates RFI into nearby SW receivers. A favorite.

MX3000: Current, 30 channel replacement for M400, but basic features only. Nice lighted keyboard. Easily programmable out of band, but no aircraft. All 30 channels are in a single bank, and lack of direct channel access make this model more difficult to operate. Good first scanner, and the most scanner for the money ($180 typical discount price).

M100: Discontinued 10 channel unit. Same as MX3000 except different color and fewer channels. Nice lighted keyboard.

HX1000: Good, fairly rugged, 30 channel handheld synthesized unit. Generous out of band coverage but no AM aircraft coverage. Built by Azden. Very sensitive on UHF, but annoying audio hiss leaks through speaker when squelched. Belt clip chintzy, but can be directly replaced with better clip from Kenwood TR2600A. Like the MX3000, all 30 channels are in a single bank, and lack of direct channel access make this model more difficult to operate. Low discount price makes this best choice for programmable portable.

HX650/H604: 6 channel crystal portable. Likely made by Sanyo. Same as Fannon and Bearcat Thin Scan units, (except that Bearcat has 10.8 MHz IF frequency, and is harder to get crystals for), but scans faster. Small size and common crystals (available at Radio Shack), make this 1st choice for bare bones portable scanner.

PRO2003: Radio Shack's top of line. 50 channels + 10 FM commercial broadcast band channels. Includes air-
craft. Good frequency coverage but very difficult to read keyboard makes scanner hard to operate. All keys close together and same color. Good audio, but slow scan rate and high price.

PRO30: 16 channel programmable portable with aircraft band. Good frequency coverage. Low audio output. All-plastic case vs. metal frame in HX1000. Good belt clip. High price, no discounts or sales yet.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -8986960889370657222
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-20 06:24:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site gatech.CSNET
Path: utzoo!watmath!clyde!burl!ulysses!gatech!spaf
From: spaf@gatech.CSNET (Gene Spafford)
Newsgroups: net.ham-radio,net.news.group
Subject: Re: new group net.ham-radio.packet -- history/apology/future
Message-ID: <338@gatech.CSNET>
Date: Thu, 20-Jun-85 09:24:10 EDT
Article-I.D.: gatech.338
Posted: Thu Jun 20 09:24:10 1985
Date-Received: Fri, 21-Jun-85 00:53:40 EDT
References: <459@mtunh.UUCP> <315@gatech.CSNET> <11294@brl-tgr.ARPA>
Reply-To: spaf@gatech.UUCP (Gene Spafford)
Organization: The Clouds Project, School of ICS, Georgia Tech
Lines: 48
Xref: watmath net.ham-radio:2861 net.news.group:3171
Summary:

In article <11294@brl-tgr.ARPA> ron@brl-tgr.ARPA (Ron Natalie <ron>) writes:
>Gene, get off it. Perhaps you would volunteer to moderate this list?
>Perhaps you'd like to moderate all the net groups so that problems
>won't occur?

No, I certainly don't want to moderate any groups. I do however
continue to advocate using "mod" groups for Arpa-gatewayed groups.
Let me explain the mechanism to make it a bit clearer.

Jill Usenetter wants to submit an article to the news for publication
in some newsgroup gatewayed to/from the Arpanet. She "posts" it
to the "mod" group using the standard news software (soon to be 2.10.3).
The article doesn't start propagating through the net from her node.
Instead, it gets mailed to the "moderator" of the group -- in this case,
the "moderator" is actually the news distribution software at the
gateway. The news software then "approves" the article (possibly with
the intervention of the moderator, in the case of a digestified
news list on the Arpanet), and gets sent out both to the Arpa side *and*
the Usenet side from the same site.a It is entirely possible
that no person acts as "moderator" in this setup -- we simply use
the built-in "mod" mechanism to support the list. It also provides
the means for an Arpa digest maintainer to get things from the Usenet
side in a consistent manner.

Other advantages:
     -- Since there is no possibility of followups beating
     their base article to the gateway, Arpanetters never have
     to contend with the common Usenet problem of reading
     responses to articles they haven't read yet. (This
     is also solved for Usenetters, BTW.)

     -- with the addition of a human in the mechanism, the
     newsgroup could be immediately available for Stargate,
     whenever that goes "live".

     -- there is almost no possibility of a "feedback-loop"
     whereby the same article gets posted to one network
     hundreds of times (this happens about every 6 months
     with one of the Arpa-gatewayed groups).

There, Ron, Have I "gotten off it"? Or did you have something
else in mind?

--
Gene "3 months and holding" Spafford
The Clouds Project, School of ICS, Georgia Tech, Atlanta GA 30332
CSNet: Spaf @ GATech   ARPA: Spaf%GATech.CSNet @ CSNet-Relay.ARPA
uucp: ...!{akgua,allegra,hplabs,ihnp4,linus,seismo,ulysses}!gatech!spaf

From -4826751621686234449
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1985-06-20 06:53:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site gatech.CSNET
Path: utzoo!watmath!clyde!burl!ulysses!gatech!spaf
From: spaf@gatech.CSNET (Gene Spafford)

Newsgroups: net.ham-radio,net.news.group
Subject: Re: new group net.ham-radio.packet -- history/apology/future
Message-ID: <339@gatech.CSNET>
Date: Thu, 20-Jun-85 09:53:17 EDT
Article-I.D.: gatech.339
Posted: Thu Jun 20 09:53:17 1985
Date-Received: Fri, 21-Jun-85 00:55:00 EDT
References: <459@mtunh.UUCP> <315@gatech.CSNET> <460@mtunh.UUCP>
Reply-To: spaf@gatech.UUCP (Gene Spafford)
Organization: The Clouds Project, School of ICS, Georgia Tech
Lines: 67
Xref: watmath net.ham-radio:2862 net.news.group:3172
Summary: Ham radio and mayo packet on rye, to go

In article <460@mtunh.UUCP> jak@mtunh.UUCP (Jim Kutsch) writes:
>We (those involved) do not want a "mod." group. We have had net.ham-
>radio for years and have been successful in exchanging news with the
>ARpa info-hams list. All we want to do is create a subdivision.

See my previous posting about why I believe a "mod" group is preferrable.
As to your second point, "We've used oil lamps for years and they work
fine -- we don't want any of that newfangled electricity, by crackey!" :-)

>I do not understand why this is of such interest to all those who don't
>read net.ham-radio in the first place!!! We have subdivisions under
>net.religion, net.nlang and several others. If you really want me to do
>it I can post numerous private mail messages in support of the net.ham-
>radio.packet group. Is this really necessary? The idea here is just a
>subdivision of an existing group to better serve those who are involved
>in the group.

Each subgroup is another subdivision of the "net" group. I still have
some faint interest in seeing Usenet continue, although it is fading
fast these days, and I'd like to think that responsible individuals are
concerned about the effects on the net *as a whole* when they consider
new groups. That includes the effects of setting precedents. Also, the
interface to other networks is something we need think about.

I'm not claiming that there isn't support for your particular group,
and I'm sure you can cite lots of others who share your interests. But
someone could make the same claim for net.hamsters.and.duct.tape. We
need to discuss each group some before it's created to see what the
collective "wisdom" produces. There are some questions that need
answering such as: How many people will read this new group on the
Usenet? 50? Less? More? Would it be better served by making it a
mailing list? Would the net as a whole be better served by making the
new group a mailing list? Has anybody bothered to poll the current
Arpa list members to see if they *want* the Usenet gating?

>Also, Mr. Spafford, I answered your (somewhat presumptuous) private mail
>to me when you did the rmgroup. However, I have not seen a reply. I

>guess you would rather have all net folks read our correspondence?

I get, on the average, over 40 pieces of mail per day from people on 4 different networks. I tend to answer letters that indicate they need a response, and not much else. Besides helping to administrate 6 machines, I'm supposed to be finishing my thesis -- replying to every letter I get implies a luxury of time I don't have.

Your letter to me (as I remember) didn't really need a reply. You said you were posting to this group about the hows and whys of the group and the accidental creation thereof. That's how it normally works -- why did I need to write you back about that?

My mail may have been presumptuous in that I presumed that the group had been created by accident or mistake. I was not going to attribute the flaunting of net "rules" to stupidity or malice -- would you rather I had done that?

As for others reading our correspondence -- perhaps some of these issues need to be read and considered by others on the net. Surely you and I alone are not the ones to decide the fate of this new group, are we?

--
Gene "3 months and holding" Spafford
The Clouds Project, School of ICS, Georgia Tech, Atlanta GA 30332
CSNet: Spaf @ GATech ARPA: Spaf%GATech.CSNet @ CSNet-Relay.ARPA
uucp: ...!{akgua,allegra,hplabs,ihnp4,linus,seismo,ulysses}!gatech!spaf

From 7608577538788877219
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1985-06-20 09:15:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 alpha 4/15/85; site plus5.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!plus5!hokey
From: hokey@plus5.UUCP (Hokey)
Newsgroups: net.ham-radio,net.news.group
Subject: Re: new group net.ham-radio.packet -- history/apology/future
Message-ID: <776@plus5.UUCP>
Date: Thu, 20-Jun-85 12:15:56 EDT
Article-I.D.: plus5.776
Posted: Thu Jun 20 12:15:56 1985
Date-Received: Fri, 21-Jun-85 01:06:53 EDT
References: <459@mtunh.UUCP> <315@gatech.CSNET> <11294@brl-tgr.ARPA>
Reply-To: hokey@plus5.UUCP (Hokey)
Organization: Plus Five Computer Services, St. Louis, MO
Lines: 15
Xref: watmath net.ham-radio:2863 net.news.group:3173

Ron, when creating a gateway group from Arpa to Usenet via a "net" group,
is bi-directional capability automatically provided?

If not, the "mod" approach is better than the "fa" approach because this
facility can be provided easily.

I would prefer to see all "fa" groups converted to "mod" groups, just to
simplify the news software, and provide for bidirectional transmissions.
As far as I am concerned, there need not be a "real" moderator for these
groups. Whenever articles arrive, they are automatically posted to Usenet,
and the ArpaNet (if necessary).

--
Hokey   ..ihnp4!plus5!hokey
           314-725-9492

From 2389072837170381638
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de1c2066d008eec,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-20 14:11:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!ihnp4!mhuxn!mhuxr!
ulysses!gamma!epsilon!zeta!sabre!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: STS-51F Preliminary Elements
Message-ID: <379@petrus.UUCP>
Date: Thu, 20-Jun-85 17:11:32 EDT
Article-I.D.: petrus.379
Posted: Thu Jun 20 17:11:32 1985
Date-Received: Sun, 23-Jun-85 01:23:26 EDT
Organization: Bell Communications Research, Inc
Lines: 22

While we're on the topic of Shuttle elements, here's a preliminary
set for the next mission, the one with yet another "ham in space":

Satellite: sts-51f
Catalog number: 0
Epoch time: 85195.81669658
   Sun Jul 14 19:36:02.584 1985 UTC
Element set: rev3
Inclination: 49.5000 deg
RA of node: 120.7914 deg
Eccentricity: 0.0000000
Arg of perigee: 330.0000 deg
Mean anomaly: 30.0000 deg
Mean motion: 15.61455314 rev/day
Decay rate: 0.00025 rev/day^2

Epoch rev: 32
Semi major axis: 6762.458 km
Anom period: 92.221659 min
Apogee: 387.404 km
Perigee: 387.404 km
Ref perigee: 2751.81135968
   Sun Jul 14 19:28:21.476 1985 UTC

From -8549302339490205396
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,157f3b2fd2d90bc7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-21 10:09:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!cornell!uw-beaver!tektronix!tekcrl!teklabs!rafaeld
From: rafaeld@teklabs.UUCP (Rafael De Arce)
Newsgroups: net.ham-radio
Subject: packet radio
Message-ID: <3120@teklabs.UUCP>
Date: Fri, 21-Jun-85 13:09:14 EDT
Article-I.D.: teklabs.3120
Posted: Fri Jun 21 13:09:14 1985
Date-Received: Sun, 23-Jun-85 04:28:59 EDT
Organization: Tektronix, Beaverton OR
Lines: 11

I, for one, am real tired of seeing so many articles on packet radio on the
net. It's refreshing to see anything other than this tripe. Sure, it might be
the wave of the future but, I really doubt it. I own a computer that is link-
ed (excuse me... Interfaced) to my rig but, I'd rather have a one-on-one QSO
WID TH OM (or OW) AT TH OTHER END ._._._

                                        73 ES GUD DX
                                             SK

                                          DE WD6CMX

From -9131326743879635676
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1985-06-21 11:14:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ulysses!allegra!mit-eddie!genrad!panda!talcott!
harvard!seismo!brl-tgr!ron

From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio,net.news.group
Subject: Re: new group net.ham-radio.packet -- history/apology/future
Message-ID: <11325@brl-tgr.ARPA>
Date: Fri, 21-Jun-85 14:14:27 EDT
Article-I.D.: brl-tgr.11325
Posted: Fri Jun 21 14:14:27 1985
Date-Received: Mon, 24-Jun-85 03:54:23 EDT
References: <459@mtunh.UUCP> <315@gatech.CSNET> <11294@brl-tgr.ARPA>
<338@gatech.CSNET>
Organization: Ballistic Research Lab
Lines: 39
Xref: watmath net.ham-radio:2870 net.news.group:3181

> Instead, it gets mailed to the "moderator" of the group -- in this case,
> the "moderator" is actually the news distribution software at the
> gateway. The news software then "approves" the article (possibly with
> the intervention of the moderator, in the case of a digestified
> news list on the Arpanet), and gets sent out both to the Arpa side *and*
> the Usenet side from the same site.a It is entirely possible
> that no person acts as "moderator" in this setup -- we simply use
> the built-in "mod" mechanism to support the list. It also provides
> the means for an Arpa digest maintainer to get things from the Usenet
> side in a consistent manner.
>
> Other advantages:
>   -- Since there is no possibility of followups beating
>   their base article to the gateway, Arpanetters never have
>   to contend with the common Usenet problem of reading
>   responses to articles they haven't read yet. (This
>   is also solved for Usenetters, BTW.)

[Agreed]

>
>   -- with the addition of a human in the mechanism, the
>   newsgroup could be immediately available for Stargate,
>   whenever that goes "live".

But this requires a HUMAN! This WAS my complaint.

>
>   -- there is almost no possibility of a "feedback-loop"
>   whereby the same article gets posted to one network
>   hundreds of times (this happens about every 6 months
>   with one of the Arpa-gatewayed groups).
>

You overstate the every six months problem. I only ever recall seeing
one case that your AUTOMATED moderation would have helped. In other
cases, the problem lied elsewhere.

-Ron

From -567510887628662588
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a4ce1f92accb5cc7
X-Google-Attributes: gid151e61,public
X-Google-Thread: 122486,a4ce1f92accb5cc7
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1985-06-21 11:19:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ulysses!allegra!mit-eddie!genrad!panda!talcott!
harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio,net.news.group
Subject: Re: new group net.ham-radio.packet -- history/apology/future
Message-ID: <11326@brl-tgr.ARPA>
Date: Fri, 21-Jun-85 14:19:10 EDT
Article-I.D.: brl-tgr.11326
Posted: Fri Jun 21 14:19:10 1985
Date-Received: Mon, 24-Jun-85 03:55:06 EDT
References: <459@mtunh.UUCP> <315@gatech.CSNET> <11294@brl-tgr.ARPA>
<776@plus5.UUCP>
Organization: Ballistic Research Lab
Lines: 25
Xref: watmath net.ham-radio:2871 net.news.group:3182

> Ron, when creating a gateway group from Arpa to Usenet via a "net" group,
> is bi-directional capability automatically provided?

YES.

>
> If not, the "mod" approach is better than the "fa" approach because this
> facility can be provided easily.

FA is not what I'm referring two. FA works by adding a dummy user to
our mail list that really is postnews. USENETTERS shouldn't even be
allowed to post to FA groups since they are supposed to be READ ONLY.

>
> I would prefer to see all "fa" groups converted to "mod" groups, just to
> simplify the news software, and provide for bidirectional transmissions.
> As far as I am concerned, there need not be a "real" moderator for these
> groups. Whenever articles arrive, they are automatically posted to Usenet,
> and the ArpaNet (if necessary).
>
Find someone else to gateway then, BRL is not willing to support a lot
of UUCP mail. The NEWS is obtained by a different route than blasting
out our phone lines.

+Ron

From -4336180101628282126
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,cba23fb033b4ec2b
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,cba23fb033b4ec2b
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,cba23fb033b4ec2b
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1985-06-21 22:20:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.3 alpha 4/15/85; site amdcad.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!ihnp4!amdcad!phil
From: phil@amdcad.UUCP (Phil Ngai)
Newsgroups: net.analog,net.audio,net.ham-radio
Subject: Re: Electronics wearing out
Message-ID: <1746@amdcad.UUCP>
Date: Sat, 22-Jun-85 01:20:10 EDT
Article-I.D.: amdcad.1746
Posted: Sat Jun 22 01:20:10 1985
Date-Received: Sun, 23-Jun-85 04:24:48 EDT
References: <2663@decwrl.UUCP> <508@edison.UUCP> <1005@pitt.UUCP>
Reply-To: phil@amdcad.UUCP (Phil Ngai)
Organization: AMD, Sunnyvale, California
Lines: 18
Xref: watmath net.analog:339 net.audio:5166 net.ham-radio:2866

In article <1005@pitt.UUCP> hoffman@pitt.UUCP (Bob Hoffman) writes:
> What's being objected to here is the use
>of a battery-powered CMOS RAM _i_n_ _p_l_a_c_e_ _o_f a ROM for storing
>the "permanent" part of the controller's memory.

This sounds very strange to me. Even if you are afraid of making a mistake
and want to avoid using ROMs, EPROMs are dirt cheap ($2). The battery and
CMOS RAM are probably more than this. So what reason could there be for
using RAM?

By the way, please don't be so clever with your ^H_s.
--
 Offensive pickup line follows:
"Hi there, want to be my boy toy?"

 Phil Ngai (408) 749-5720
 UUCP: {ucbvax,decwrl,ihnp4,allegra}!amdcad!phil
 ARPA: amdcad!phil@decwrl.ARPA

From 8875597281053937398
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4dd4a79b9ca44ad9
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,4dd4a79b9ca44ad9
X-Google-Attributes: gid134694,public

X-Google-ArrivalTime: 1985-05-28 16:24:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site sol1.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sol1!s247
From: s247@sol1.UUCP (s247)
Newsgroups: net.ham-radio,net.video
Subject: Re: Listen to Cellular Phones On Your TV Set
Message-ID: <302@sol1.UUCP>
Date: Tue, 28-May-85 19:24:26 EDT
Article-I.D.: sol1.302
Posted: Tue May 28 19:24:26 1985
Date-Received: Sun, 2-Jun-85 00:27:18 EDT
References: <562@ihu1h.UUCP>
Distribution: net
Organization: THE SOLUTION, Lincoln, NE
Lines: 37
Xref: watmath net.ham-radio:2787 net.video:1229

> x
> Listening to Cellular Telephones
> Using a Television Set
>
> Several weeks ago, I posted an article in which I told
> of being able to hear 800 MHz land mobile communica-
> tions on my 800 MHz television set.
>
> Here are some excerpts from a letter to the editor
> appearing in the May 1985 issue of Personal Communica-
> tions magazine:
>
> "In reference to your March 1985 article on cellu-
> lar privacy, I have developed a technique for
> eavesdropping on cellular users that requires no
> fancy scanner, no computer, no sophisticated
> antennas or any other gimcracks....."
>
> "....By using the manual tuning on the varactor
> tuner in my VCR I have little difficulty listening
> to the neighborhood cell sites on my 1973 model
> Zenith TV.... Since sidetone is transmitted I
> hear both ends of the conversation....."
>
> "Handoff is an irritation, but frequently I am
> able to manually sweep across the band and pick up
> where they left me. What really irks me is the
> low audio level from the TV due to the deviation
> mismatch."
>
> "The real significance of all this is that anyone
> with a TV and VCR connected to a TV antenna can
> get the same results with a little practice...."
>

> --
> ==
> Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -985452949474427879
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ca7cff170094b63,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-28 16:30:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!
mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 21
Message-ID: <17483@mgweed.UUCP>
Date: Tue, 28-May-85 19:30:36 EDT
Article-I.D.: mgweed.17483
Posted: Tue May 28 19:30:36 1985
Date-Received: Fri, 31-May-85 00:47:41 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 38

qst de k9eui
hr propagation forecast bulletin nr 21 from arrl headquarters
newington ct may 26, 1985
to all radio amateurs bt

may brought a marked reversal of the downward trend in solar activity that began last fall. in fifteen days ending may 22 the solar flux was 80 or higher daily. the major disturbed periods of april did not recur in may, so hf propagation was generally better than had been expected. if similar sun conditions prevail in the fall, the dx picture could improve markedly, especially on frequencies above 14 mhz.

at bulletin time the sunspot groups responsible for the higher solar flux had gone around the west limb, or had shrunk in size. the solar flux dropped from 93 on the 16th to 74 on the 26th. an area that was active april 28 to may 1 is in view again, but showing no important activity thus far, so no major hf propagation change is expected this week.

sporadic e skip was much in evidence on 28 and 50 mhz, and this upward trend will continue. since may 14, kf4ms, a 10 meter beacon in st. petersburg, fl, has been heard in the writers connecticut location daily since may 14, usually for several hours at a time. the bermuda beacon, vp9ba, has been logged nearly as often. the 50 mhz band has been waking up, and multihop contacts out to 2000 miles or more have been reported.

the number and duration of e openings will increase through june. high density sporadic e can affect lower frequencies adversely, but it is great for 28, 50 and possibly 144 mhz, in the summer months. transatlantic qsos may be possible on 50 mhz now that several european countries permit operation on that band after about 2200 utc.

american sunspot numbers for may 16 through 22 were between 43 and 21 with a mean of 30.3 ar

From 4709887998491745058
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2751e4f48910d4a1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-28 16:31:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!
mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 36 (W6AM obit)
Message-ID: <17484@mgweed.UUCP>
Date: Tue, 28-May-85 19:31:11 EDT
Article-I.D.: mgweed.17484
Posted: Tue May 28 19:31:11 1985
Date-Received: Fri, 31-May-85 00:48:05 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 16

qst de k9eui
hr arrl bulletin nr 36 from arrl headquarters
newington ct may 25, 1985
to all radio amateurs bt

one of the worlds best known and most admired amateur radio pioneers, don c. wallace, w6am, passed away today at the age of 86. don was an enthusiastic dxer from the very earliest days of radio right up to the present day, and set the pace for several generations of radio amateurs. his rhombic antenna farm on the palos verdes peninsula in southern california was one of the most famous amateur radio stations ever assembled. don wallace, w6am, will be missed by his countless friends throughout the world ar

From -5959031605438765990
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1359b71f65f0c7c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-28 16:31:48 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!
mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 35 (SPREAD SPECTRUM authorized)
Message-ID: <17485@mgweed.UUCP>
Date: Tue, 28-May-85 19:31:48 EDT
Article-I.D.: mgweed.17485
Posted: Tue May 28 19:31:48 1985
Date-Received: Fri, 31-May-85 00:48:31 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

qst de k9eui
hr arrl bulletin nr 35 from arrl headquarters
newington ct may 24, 1985
to all radio amateurs bt

fcc has authorized spread spectrum techniques in the amateur service, above 420 mhz. the report and order in docket 81 414, released on may 24, becomes effective in 12 months. this delay is intended to encourage the amateur community to develop voluntary standards for the use of spread spectrum. in the interim, special temporary authorizations will be available to interested amateurs. the commission also approved docket 81 413, a limited authorization for spread spectrum use in the public safety service, and the industrial, scientific and medical service. more information can be found in the arrl letter ar

From 9002924436250745736
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,caff4519c5233945,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-28 16:32:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!
mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 34 (Nevada arrl election)
Message-ID: <17486@mgweed.UUCP>
Date: Tue, 28-May-85 19:32:36 EDT
Article-I.D.: mgweed.17486
Posted: Tue May 28 19:32:36 1985
Date-Received: Fri, 31-May-85 00:48:51 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr arrl bulletin nr 34 from arrl headquarters
newington ct may 23, 1985
to all radio amateurs bt

ballots for the section manager elections for nevada and northern new jersey have been counted according to the prescribed rules. the following have been declared elected, nevada w8ixd and northern new jersey k2bjg. in the utah section, k3fr withdrew after ballots had been mailed, so na7g was declared elected. their terms of office begin july 1, 1985
ar

From -8668390379696733223
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a28af0ebb80c50e2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-28 19:22:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: FCC proposes hams & business share 421-450 Mhz!
Message-ID: <17489@mgweed.UUCP>
Date: Tue, 28-May-85 22:22:23 EDT
Article-I.D.: mgweed.17489
Posted: Tue May 28 22:22:23 1985
Date-Received: Fri, 31-May-85 01:11:12 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 70

qst de k9eui
business and ham band sharing proposed!
---

will the amateur radio service and the land mobile service make good bed partners? it appears we are going to find out. it also appears that they had better be or it is the hams that will be kicked off the band!

like it or not and with little advance fanfare, the fcc has issued a nprn proposing to allocate portions of the 421-430 mhz ham band to land mobile interests in the cities of detroit, cleveland and buffalo. this action is proposed to alleviate business band congestion caused by the proximity of the canadian border restricting use of both the 470-512 mhz and the 800 mhz business bands.

the commission wants to open 204 new business band channels each in detroit and cleveland and 114 channels in buffalo. manufacturers noted that this represents a potential market of more than 48,000 radio units. ge produces a land mobile product line retailing between $1,000 and $4,000 for export to canada and the middle east, which operates in the 421-430 mhz band proposed for the three u.s. border cities. motorola also makes land mobile gear for this spectrum.

a treaty arrangement was entered into with canada to obtain land mobile spectrum relief by an exchange of diplomatic notes on april 7, 1982, allowing both nations to operate their primary radio services in the band 406.1 to 430 mhz along border areas. "this arrangement, coupled with the cooperation of the executive branch," the fcc said, " will permit land mobile use in portions of the 421-430 amateur band in detroit, cleveland and buffalo." the executive branch cooperation had to do with releasing spectrum reserved for us military radar.

the legalities of this arrangement are cloudy to us since the us arrangements clearly hold the 420-450 mhz band in the united states to be allocated to "amateur" - secondary only to government radiolocation. the region 2 itu allocation, however, is to the fixed, mobile and radiolocation services.

the nprm proposing land mobile and amateur sharing reads:

"we do not propose to change the amateur allocation. amateurs would have to avoid causing any interference to land mobile because we propose to make land mobile a primary service. if land mobile systems with 30 mile operating ranges and located within 25 miles of the center of these cities are to be practical, they must be protected from interference by a buffer of at least 45 miles."

"if the secondary allocation is not sufficient, we would consider prohibiting amateur operation in the 421-430 mhz band within approximately 100 miles of the center of these cities. we specifically seek comments on this alternative."

the fcc said that they could prohibit amateur operation should the need arise by adding language to footnote ng-135 stating that the amateur service is prohibited in certain counties in ohio, west virginia, pennsylvania and new york, and in the areas enclosed between these counties and line "a".

this proposal was a real shocker and "came out of the blue" with no advance warning!

via the w5yi electronic edition, from compuserve (relayed by wa9trg)

From -5847013203371546619
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4e61fe9d2e3e192,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-29 10:11:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!CLEMENTS@BBNG
From: CLEMENTS@BBNG
Newsgroups: net.ham-radio
Subject: W0RLI Packet Radio Mailbox/BBS/GateWay system Version 9.3
Message-ID: <11129@brl-tgr.ARPA>
Date: Wed, 29-May-85 13:11:22 EDT
Article-I.D.: brl-tgr.11129
Posted: Wed May 29 13:11:22 1985
Date-Received: Fri, 31-May-85 03:42:23 EDT
Sender: news@brl-tgr.ARPA
Lines: 182

Now available from SIMTEL20:

Filename	Type	Bytes	CRC
Directory MICRO:<CPM.PACKET>			
PACKET93.LBR.1	BINARY	219648	0C0BH

PACKET93.LBR contains the files that make up version 9.3 of the W0RLI Packet Radio MailBox/BBS/GateWay system.

This system runs on the following hardware:

Computer:
     Xerox 820-1 computer (the ones that were available for $50,
                    and are still around for not much more),
     one or more 8" single density, single or double sided disk drives,
     parallel keyboard, CRT monitor.

Packet Radio gear:
     One or Two TAPR (or AEA) TNCs with version 3.1 or later software.
          (Two TNCs if you are going to run a crossband Gateway.)

Radio gear:
     One or two transceivers.

The W0RLI software supports sending, receiving and forwarding mail, uploading and downloading files, capturing typescripts, logging channel activity and mailbox activity, and gateway operation between two TNCs on two bands.

Read the file NOTES.TNC to start working your way through the documentation.

Hank would appreciate knowing of users who are running this software.
A QSL to Hank or a net message to me would be appreciated.

Here is Hank's update from the February 1985 NEPRA PacketEar:

   The MailBox/GateWay has now been sent to 25 states and 5 countries. As far as I know for sure, it is on the air at least 20 places now. In the Boston area, 4000 messages have passed through it. The local forwarding network now includes 9 nodes: W0RLI, WB2OSZ, WB1DSW, K1BC, WA2RRKN-2, K7PYK, WA4SZK, KA1T, W1AW-4. The last two run their own software, but allow for forwarding from the W0RLI systems.

   A message put into any one of these systems will find its way to the system nearest the intended recipient.

   There are several other areas of the country now using the software: Georgia, Arizona, Iowa, Washington DC, Seattle, ENY/NYC/NNJ, Dallas, Illinois, Southern New Jersey, Los Angeles have all been heard from. All have the software in daily use.

   Expect to see it on Oscar-10 at KL7GNG soon.

   Look for it from Australia, New Zealand, Japan, Hungary.

   Sacramento county RACES will be using it.

   GateWays are running at W0RLI, K7PYK, WA4SZK and WB7DCH.

                        de Hank Oredson, W0RLI

The following is an extract from the file NOTES.TNC for version 9.3 of the W0RLI MailBox and GateWay software. This extract contains the list of changes since the last distribution to the SIMTEL20 repository, which was version 8.6.

W0RLI, Hank, does not have access to either ARPANET or USENET.
I will be glad to try to answer questions or to relay them to Hank.
I can be reached at:

   ARPANET: CLEMENTS@BBN
   USENET: {ihnp4, decvax, linus, ...}!bbncca!clements

73,
Bob Clements
K1BC

--- excerpt from NOTES.TNC follows ---

     W0RLI MailBox and GateWay   Version 9.3 - 5/16/85

Created and distibuted to the packet community by:

  Hank Oredson, W0RLI
  19 North Hill Road
  Westford, MA 01886

These notes are rough, more release notes and tech notes than anything else. A SYSOPS Manual (Very nice, 25 pages or so) is available for 8-1/2 x 11 SASE ($1.24 postage) from:

  Jon Pearce, WB2MNF
  109 Pine Cone Trail
  Medford, NJ 08055

A very nice log file analyzer was written by:

  Tom Hogan, WB7DCH
  26911 S E 456 St.
  Enumclaw, WA 98022

I have included this on the release disk as LFA.COM.

Release notes, Version 9.3 :

In version 9.0, there was a change to the structure of the mail file. When TNC is first run, it will update the mail file to the new structure. This is done by doing an untangle. Don't panic when this happens the first time you run version 9.3!

     Changes and additions since version 9.2 are:

Added privelege A and B, excluded on A or B ports.
Removed LA and LN, was bad idea.
Support for S W0RLI @ K1BC installed...
Added H local command: short / long menu (=Help).
Added $X, $Y, $Z : Date, time, current msg # at last login.
Verify for files specified in config.tnc that the drive is on line and write enabled.
L now lists new, LN same, LA lists all.
Faster forward - send "S XXX" and title then eat 2 lines.

     Changes and additions since version 9.1 are:

Much faster untangle.
D, DP, DU for remote sysop.
CP ON/OFF and CR ON/OFF for remote sysop.

     Changes and additions since version 9.0 are:

"Remote sysop" feature added.
Better handling of user record currency.
Excluded user disconnected with no "bye" message.
Fixed bug - long packets not get monitored properly.
Added ki4xo changes for 5" to boot, sbios, cbios.
Added GM, GU, OA, OB, C <call>.

Changes and additions since version 8.9 are:

Some changes to CBIOS thanks to ke1g give faster disk I/O
Added user privilege check. If E, then user is excluded from
use of the MailBox. N is used for normal user, and is default.
Fixed connect bug - now conok on is last sent, conok off is first.
Most searches go most recent first.
Added LL (List Last n), and LN (List New).
User file version 1, and DU - Display Users, EU - Edit Users.
Mail file structure version 2, back chaining of msg headers.
N menu item, rename file.

Changes and additions since version 8.8 are:

Fixed (again) the disconnect process.
Added DP - page mode.
G menu item replaces UNTANGLE, GR to renumber the messages.
L and private msg, show only to owner/sender/addressee.

Changes and additions since version 8.7 are:

Name of CONFIG.TNC file can be specified at execution time:
TNC OLDCFG.TNC or TNC NEWCFG.TNC for example. Defaults to CONFIG.TNC
if not specified.

The names for files CALLS.TNC, FWD.TNC, LOG.TNC specified in CONFIG.TNC
Installed ke1g improved cbios. Thank you Bill.
Y replaced by YC, YF, YL, switch calls, forward, or log files.
Fixed (I hope) the "Can't DISCONNECT, Link state is..." bug.
Added Z (delete file) to local menu.
X menu item forces forward regardless of hours given in FWD.TNC.
Was not passing "*** LINKED to" thru from next GateWay.
Not allow GateWay connect line with "tran" at end.

Changes and additions since version 8.6 are:

Fixed (again!) the lack of timeout when bombarded with con req.
Added UA (append) option to local menu.
Fixed dayclock month rollover.
Split EDMSG, FWD, MBFILE as separate routines.

--- End of extract ---

From -7477315279952392841
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,f31cfef22b6838a9,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,f31cfef22b6838a9,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,f31cfef22b6838a9,start
X-Google-Attributes: gid134694,public

X-Google-ArrivalTime: 1985-05-29 15:38:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.video,net.audio
Subject: Subcarrier xmsns noted in NY/NJ area
Message-ID: <583@ihu1h.UUCP>
Date: Wed, 29-May-85 18:38:24 EDT
Article-I.D.: ihu1h.583
Posted: Wed May 29 18:38:24 1985
Date-Received: Thu, 30-May-85 20:20:22 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 28
Xref: watmath net.ham-radio:2781 net.video:1222 net.audio:4974

x
Subcarrier Transmissions Noted in the NY/NJ Area

On a recent trip to the northern New Jersey area, I did some subcarrier listening by connecting the antenna jack of a Yaesu FRG7700 receiver to the audio stage of a cheap television set:

- By tuning the Yaesu to 88.0 kHz FM, and the TV to channel 4, WNBC-TV New York was heard rebroadcasting WYNY-FM audio. WYNY is an NBC affiliate station.

- By tuning the Yaesu to 31.5 kHZ USB, and the TV to
channel 68, the audio of WWHT-TV Newark, a scrambled TV station, was monitored.

Other signals were heard, including a series of 6 or 7 telemetering tones sent every 30 seconds on an FM subcarrier of a TV station.

Several FM broadcast stations in the New York area were also using subcarrier technology. One station was transmitting 3 different subcarrier channels of information concurrently.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 3232429420039414276
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3119d0babae17ab
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-29 20:42:21 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ecsvax.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!mcnc!ecsvax!cjl
From: cjl@ecsvax.UUCP (Charles Lord)
Newsgroups: net.ham-radio
Subject: Re: Quality of NASA space-to-ground links
Message-ID: <1358@ecsvax.UUCP>
Date: Wed, 29-May-85 23:42:21 EDT
Article-I.D.: ecsvax.1358
Posted: Wed May 29 23:42:21 1985
Date-Received: Sat, 1-Jun-85 00:22:15 EDT
References: <10912@brl-tgr.ARPA>, <356@petrus.UUCP>
Organization: NC Educational Computing Service
Lines: 6

my only question is-

  "who did the TVDXpedition to the moon to find out?"

Charles Lord   WD4CHW   cjl@ecsvax.UUCP

From 45501320683648365
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a28af0ebb80c50e2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-30 06:40:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ptb@Mitre-Bedford
From: ptb@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: FCC proposes hams & business share 421-450 Mhz!
Message-ID: <11146@brl-tgr.ARPA>
Date: Thu, 30-May-85 09:40:52 EDT
Article-I.D.: brl-tgr.11146
Posted: Thu May 30 09:40:52 1985
Date-Received: Sat, 1-Jun-85 10:45:06 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

Is there comments allowed on this one? Anyone know what the comment
deadline is??

                  Peter Baldwin, WA1SNH

From -1153626679201481909
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a0ad7c4d75beb69,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-30 08:13:23 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ERWINVL.DLOS@Xerox.ARPA
From: ERWINVL.DLOS@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Need 6Kv capacitors
Message-ID: <11153@brl-tgr.ARPA>
Date: Thu, 30-May-85 11:13:23 EDT
Article-I.D.: brl-tgr.11153
Posted: Thu May 30 11:13:23 1985
Date-Received: Sat, 1-Jun-85 10:51:22 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

JIM,

FOR HV CAPACITORS, I HAVE ALWAYS RAIDED OLD TV SETS AND GOT THE DOOR KNOB CAPS OUT OF THEM. YOU CAN ALSO FIND THEM AT HAMFESTS. THERE IS ALSO A MAIL ORDER VENDOR THAT HAS A PRETTY GOOD STOCK OF THAT STUFF CALLED - RADIO KITS AND THEY ADVERTISE IN ALL THE HAM MAGS- QST, CQ, ETC. GUD LUCK.

VAL ERWIN/W5PUT

From -5498367602363324978
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e34c099a8a5dfd0a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-30 11:51:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: 421-450 Mhz deadline passed
Message-ID: <17521@mgweed.UUCP>
Date: Thu, 30-May-85 14:51:25 EDT
Article-I.D.: mgweed.17521
Posted: Thu May 30 14:51:25 1985
Date-Received: Sat, 1-Jun-85 13:28:30 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 3

The comment deadline on the NPRM about sharing 412-430 Mhz was May 28.

From -7109295043265507947
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a28af0ebb80c50e2
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-05-30 13:25:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: FCC proposes hams & business share 421-450 Mhz!
Message-ID: <11163@brl-tgr.ARPA>
Date: Thu, 30-May-85 16:25:29 EDT
Article-I.D.: brl-tgr.11163
Posted: Thu May 30 16:25:29 1985
Date-Received: Sat, 1-Jun-85 12:24:23 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

I think I saw 28 May listed as the deadline for comments. However, if
they are like everybody else, if it gets in on Monday, they might read it.

This one is serious and we should do all we can.

-John S., W3IKG

From -2386366963022529530
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3eb527838fbdbe62,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-31 06:24:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site sdcsvax.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!sdcrdcf!sdcsvax!brian
From: brian@sdcsvax.UUCP (Brian Kantor)
Newsgroups: net.ham-radio
Subject: Packet Radio Digest - Week 2
Message-ID: <901@sdcsvax.UUCP>
Date: Fri, 31-May-85 09:24:30 EDT
Article-I.D.: sdcsvax.901
Posted: Fri May 31 09:24:30 1985
Date-Received: Mon, 3-Jun-85 00:18:19 EDT
References: <899@sdcsvax.UUCP>
Reply-To: packet-radio@mit-eddie.arpa
Organization: UCSD wombat breeding society
Lines: 778

From ihnp4!cbnap!gws@mit-eddie.ARPA Sun May 19 12:26:58 1985
Subject: lsi -11 programs

Does anyone have any sort of programs for packet radio or
amateur radio in general that will run on a pdp 11/03 11/23
or 11/23+ under RT-11 ??

many thanks and 73

Gary W. Sanders (N8EMR)
AT&T Bell Labs (Columbus)
ihnp4!cbnap!gws

From bcn@mit-eddie.ARPA Sun May 19 19:22:08 1985
Subject: Routing and Addressing

I am interested in routing and addressing issues associated with amateur packet radio, and am wondering what people have done so far. I read Phil Karn's paper in the proceedings of the 4th Networking Conference. The emphasis of that paper was mainly on the way things are done on the ARPA Internet.

I agree with his recommendations, and would like to get started on solving (or attempting to solve) the problem. Here are my present ideas on the subject.

Naturally, a full address should specify a host. The first three fields of the internet address (one of which is fixed) should specify a physical subnet. What I mean by a physical subnet is a collection of machines which can talk to one another directly (i.e. not using a digipeater). With this limitation, 8 bits may seem like a lot to allocate for hosts within a subnet. It isn't though, since repeaters may be used to extend the coverage of a subnet.

One (or more) machine(s) on each subnet should be on another subnet and should act as a gateway between the two. As with the ARPA internet, subnets can be tied together by a subnet one level up in the hierarchy which has at least one host per lower level subnet, each of these hosts acting as a gateway.

I think that the current emphasis should be on getting local subnets set up. As I mentioned, regular repeaters (as opposed to digipeaters) should be used to extend the range of the local subnets. Use of regular repeaters should cut some of the latency since the repeater would transmit as it is receiving the packet instead of storing it, and only retransmitting it after receiving the whole packet. We are about to set up a repeater at MIT for packet work.

Clifford Neuman
N1DMM

From rgt@LANL.ARPA Mon May 20 06:24:06 1985
Subject: Packet Radio field sizes

I read the article to this mailing list by Clifford Neuman <bcn@mit-eddie.ARPA> about routing ideas. I am interested in packet radio, but have done nothing about it for lack of money. I have not read the papers to which he refers, but do have one suggestion.

Here at Los Alamos, we have an Integrated Computer Network of

many computers. A friend of mine was working at a site, and they chose an 8-bit field. He suggested 16 bits. They said that 8 was enough, and would never be exceeded. Fortunately, he persuaded them to go with 16 bits. Now, about 5 years later, they have about 250 machines and adding more.

Please use 16 bits, at least! I know, you will never have more than 256 machines in one subnet. But if it does happen and packet radio catches on (as it is already doing), there might be such a concentration in one area in the near future. Better to have a large, unused field in the protocol than have to redo the protocol at a later date because the sizes were exceeded. Build in plenty of room for expansion!

Richard Thomsen
rgt@lanl

From michel@bbncct Mon May 20 07:49:53 1985
Subject: Routing and addressing

Clifford Neuman raises the issue of routing. Let me carry over some lessons from the Internet. Again, these are personal lessons with which other Internetters might not agree.

The original Arpanet was designed to be a small network. Quite early on the address field was expanded from 8 bits to 24 bits. But the mentality remained, that all network users would know or be easily able to figure out the physical address of a correspondent. One result of this seems to be that now that the INternet is grown to very large, world-wide proportions, addressing and routing are quite out of hand. The problem is that given a 32 bit Internet address, you can't figure out from the address what to do. The reason is that the network numbers (the first three fields of an address) don't have any topological significance. Network 194.1.1 might be in Japan while 194.1.2 could be in England. What this seems to mean is that each switching node must keep a table listing all networks, and the best strategy to get to each possible destination. Even now this is pretty unwieldy, and is a principle limit on the number of network numbers which can actually be assigned (or at least supported).

The Internet is evolving various clever, ad hoc schemes to cope, but none is really ideal for the ham radio packet environment.

A different approach has been taken by the CCITT in their design of an internetwork. Recommendation X.121 divides the world into 10 major regions, and further subdivides these into smaller regions, mostly according to political boundaries. Given nothing but the address, you can get fairly close to your destination. Any remaining ambiguity is presumed to be small enough to be handled by a local nameserver or table lookup in the switch, or something simple.

THere are some troubles with X.121, mostly due to its Telephone company orientation. It presumes there will be few networks in any one country, ideally only 1. But it allows for variable length addressing,

so that "area codes" with few networks can assign short numbers within
the area.

At this early stage of ham packet, the choice could still be made either
way. I'd recommend the CCITT way. It might be that the X.121 choices
are suitable as they stand. Perhaps the amateur fraternity should re-allocate
the numbers. Perhaps the world-wide telephone numbering system could
be used. Perhaps some derivative of the world-wide radio call sign
prefix allocation would work. Any of these is superior to no system
at all.

I personally favor the telco approach. Addresses are allocated to geographic
areas, and coded by expected frequency of use. Actually the European
telcos did it better than AT&T by adopting variable length numbers.
Addresses in the big city begin...1-some number of digits. Address in
a rarely addressed location in the provinces might have a long prefix.
Once inside an area, there is a similar coding. Popular addresses are
given short codes. SInce this might seem to "discriminate" against
the residents of the provinces, an escape is available for dialing
local numbers. If you want a local number, you do not attach the "long
distance" prefix. More or less like our telephone system.

How long is the maximum address? In the telephone system 10 or 15 digits
is a LONG nnumber, outside the USA. Coded as BCD, that is very
manageable. In the protocol research community some advocate much
different schemes. One scheme calls for addresses to be ASCII (actually
"international alphabet #5") strings of up to 255 characters. Such
an address could be read directly on a datascope, presumably, as it
went whizzing by.

Who allocates the area codes? Hmmm.... This is the hardest problem, by
far. Sounds like diplomacy.

Who maintains the "directory?" The white pages? (Sorted by name)
The yellow pages? (sorted by some other consideration)

Once the address assignment mechanism is chosen we can grapple with
routing. SHould the user be allowed to specify a route (explicit
routing)? If the address assignment is not systematic/topological, you
need this capability. Telephone systems once had this, and phased
it out in most places because it's unwieldy. WHen the net diameter
gets big, you need a lot of overhead in the message just to carry the
route info.

I think it's worth considerable effort at the beginning to get this right.
Designs tend to get entrenched, and that which we do today as a hack
may last a long time.

AXM

From bcn@mit-eddie.ARPA Mon May 20 18:53:12 1985

Subject: Status report from Dave Mills

Here is a copy of a status report sent by Dave Mills (mills@dcn6) on the ninth of this month:

> You can report that initial tests using IP/TCP were carried out using an LSI-11 and experimental software used on the ARPANET and DARPA Internet systems. A Heath TAPR board was operated in transparent mode via the WB4JFI-5 and W3VD-5 digipeaters on 145.01 MHz. The tests were carried out using virtual-terminal, file-transfer and mail protocols with traffic looped via a digipeater back to W3HCF. Additional tests using special performance-measurement protocols revealed disturbingly high packet-loss statistics of one in ten via the WB4JFI-5 digipeater and one in four via the W3VD-5 digipeater, but confirmed the viability of the IP/TCP protocols and implementation over typically raunchy Amateur circuits.
>
> Further tests using an IBM Personal Computer and an IP/TCP software package from MIT over the same channel were inconclusive due to inadequate timeouts in the MIT software. The authors of the software have been advised of this and, hopefully, can be persuaded to fix the problem. The MIT software, which is publicly available, provides virtual-terminal, file-transfer and several utility functions using standard DoD protocols, including IP/TCP.
>
> Dave

From bellcore!karn@Berkeley Mon May 20 23:23:51 1985
Subject: Routing issues

I agree with Tony Michel that the current Arpa Internet addressing and routing schemes are not well suited to the amateur radio environment. However, I think the real issue is hierarchical vs (relatively) flat addressing, and we can solve the problem without tossing out IP.

The fundamental problem with the current Internet model is the implicit assumption that all hosts within a "network" (whether class A, B or C) can communicate directly, without IP's help. In other words, as far as IP is concerned, the Internet is a hierarchy with two and only two levels, "network" and "host".

About the only way under the current conventions that a collection of hosts who are NOT fully interconnected can be made into an Internet is to assign fully interconnected subsets to small Class-C nets, or to exchange routing information at the host-specific instead of network level. Both of these techniques tend to result in routing table explosion.

Clearly this restriction has already become a problem with current Internet, even ignoring the extra problems of packet radio; hence the big flurry of RFCs on subnet addressing schemes. The proposals had in common the addition of at least one new level in the addressing hierarchy, but in my opinion they are all too ad-hoc for amateur packet radio, and will probably become obsolete eventually for general Internet use as it grows even more.

I believe that the most general scheme would be the best. It would allow an arbitrary number of levels within the constraints of a 32-bit IP address, with the bit field boundaries being completely variable. Routing table entries would consist of variable-length bit strings representing prefixes on IP addresses; an entry is used if the leading bits of the target address match the corresponding bits in the routing table. The special cases of 0 and 32 bit long table entries would correspond to the current notions of default and host-specific entries, respectively.

As I mentioned, a gateway need not concern itself with the actual "meaning" of the bits in an address; it would simply try to "collapse" all routing table entries with a common prefix and routing decision (i.e., the same next hop) into a single table entry as a means of saving table space. There is no need for a gateway to retain any more information than that necessary to make a routing decision.

For this reason, I am not really concerned with the actual boundaries and procedures that are established to assign IP addresses, so long as they are done in a hierarchical manner. Only the meaning of a few leading bits need be established on a worldwide basis to denote major regions (countries or continents, etc). National entities would then establish the boundaries for the next lower level in the hierarchy and "take" enough bits to encode them. The task of assigning the remaining bits is likewise delegated recursively until they're all gone (and hopefully you've reached the end host!) All along the way, the boundary assignments should be made with an eye towards the topology of the network in the specific area, so that as many routing table entries as possible can be "collapsed" together. If the regions at any level of the hierarchy differ in population then a Huffman-like variable width subfield encoding scheme should be used to conserve bits.

There is no requirement that the number of levels be the same for all hosts, nor that the number of bits needed to designate any one entity within a hierarchical level be the same. This makes the scheme as flexible as possible and highly adaptable to local needs.

ARPA has already assigned Class A network number 44 to amateur radio, so that leaves us 24 bits to play these games with. This means we can address 16 million hams, so I think the job ought to be doable.

I presented this scheme in more detail in my ARRL Computer Networking Conference paper "Addressing and Routing Issues in Amateur Packet Radio". I'm very interested in comments and suggestions on this scheme. I certainly doubt that this idea is completely original with me (I seem to recall a mention of Danny Cohen at ISI proposing something similar) so if others have tried this scheme and failed, I'd like to know why. About the only problem I can see is the speed of the routing table lookup. However, I suspect that caching would help greatly here since a gateway is probably handling packets to only a few destinations over any short interval.

73,

Phil Karn, KA9Q

From bellcore!karn@Berkeley Mon May 20 23:41:12 1985
Subject: Re: IP over X.25 - the CSNET experience

Paul, thanks for your comments on CSNET. I am somewhat familiar with CSNET, as another one of the developers is here in my group at work. So I am not totally naive as to the many problems caused by X.25. In fact, I have often used his experiences, which were essentially identical to yours, as potent ammunition against those who blindly tout X.25 as the ultimate networking solution. We have a Telenet connection, and as soon as we get the CSNET software I'll be able to experience these joys first hand.

Perhaps the main difference between X.25 as seen by CSNET and AX.25 as seen a ham user is that AX.25 consists ONLY of the link layer (LAPB) from X.25; there is no packet layer as such. What this means is that there is no concept of a "message" spaning more than one physical frame. If we wanted to do "implicit" IP fragmentation, we would have to add an extra mechanism to denote the beginning and end of the datagram. This could be done, for example, by encapsulating the datagram with SLIP and sending it as serial data (ignoring link frame boundaries altogether), or by defining a few more AX.25 "level 3 protocol IDs" to indicate "head", "middle" or "tail" of a datagram. Both approaches are kludgey, to say the least. Don't forget that even the "reliable" (i.e., connected) mode of AX.25 can lose packets so whatever encapsulating method you use still has to be able to resynchronize after lost physical frames. [If you want the gory details on the flaws in AX.25, (and LAPB, too, to be fair) let me know and I'll make it the subject of a separate message.]

If on the other hand there is a one-to-one correspondence between IP datagrams and AX.25 frames, then other things become much easier, e.g., mixing sequenced (I) frames with datagram-like unnumbered (UI) frames depending on the setting of the IP "reliability" bit. The cost is, of course, the extra overhead of the duplicated IP headers.

The problem with just getting rid of the connection-oriented link (AX.25) layer and relying totally on TCP is that our links are currently so bad that hop-by-hop acknowledgements are often essential just to get reasonable performance over a long connection. I've worked out the formulas for the expected number of transmissions across all nodes for three acknowledgment strategies (end-to-end only, explicit hop-by-hop, and implicit (echo) acknowledgments without duplicate filtering). If anyone is interested I can post the gory details here.

If anyone can suggest a link-level acknowledgement scheme other than the two I just mentioned, I'd certainly be interested, particularly if it's easier to implement and more efficient when sending datagram traffic than the go-back-N scheme in the connected mode of AX.25 (LAPB).

Phil Karn

From karn@umd5 Wed May 22 14:27:48 1985

Subject: Conference papers available on line

I have put up the two papers I wrote for the Fourth ARRL Computer Networking Conference on machine "umd5". They can be retrieved with the "anonymous" ftp convention as:

packet-radio/routing - Addressing and Routing Issues in Amateur Packet Radio
packet-radio/tcp_ip - TCP/IP: A Proposal for Amateur Packet Radio Levels 3 and 4

Thanks to Louie Mamakos (louie@umd5) for making the necessary arrangements.

Phil Karn

From bellcore!karn@umd5 Wed May 22 15:30:29 1985
Subject: Packet Radio paper in IEEE JSAC

I am proud to announce the publication of the paper "Packet Radio in the Amateur Service" by Harold Price, NK6K, Bob Diersing, N5AHD and yours truly, KA9Q, in the May issue of IEEE Journal on Selected Areas in Communications, pp. 431-439.

I guess this means that amateur packet radio has "arrived"!

Phil

From CHEPPONIS@CMU-CS-C.ARPA Thu May 23 11:25:32 1985
Subject: link quality query; book recommendation

A few days ago, Dave Mills posted a message giving present amateur packet link quality data for IP/ICMP using loopback through two digipeaters. The packet loss rates varied from 1 out of 10 lost to 1 of 4 lost.

I'm wondering: would using Hamming coding on the link level reduce these rates? And what sorts of interference, etc., caused the packet lossage in the first place? (QRM, hardware failure, whatever).

Also, a truly delightful book by Michael A. Padlipsky titled "The Elements of Networking Style" (Prenice-Hall 1985) gives insight into networking from an "Old Network Boy's" point of view. Find out why he thinks the ARM (ARPANET Reference Model, including TCP/UDP/IP) is the way to go, and why ISORM (The ISO Reference Model, pronounced "Eye Sore mmmm") is a loser. And lots of other networking stuff. Highly recommended! (Aside to Phil: Have you sent a copy to Terry yet?)

-Mike, K3MC

From CHEPPONIS@CMU-CS-C.ARPA Thu May 23 13:38:31 1985
Subject: Another advantage of datagrams

It just occurred to me how datagrams may be a very big win over Virtual Circuits: high bandwidth point-to-point links with low bandwidth links in between. Think of it as a sort of "frequency" division multiplexing.

If we assume the source produces datagrams at a high rate, these datagrams can be carried by multiple (possibly slow) links and eventually be reassembled at the (high bandwidth) destination.

Virtual Circuits, however, suffer from the "weakest link" principle: The greatest bandwith through a VC is limited by the bandwidth of the slowest link.

BTW, are there any VC proponents on this list? -Mike, k3mc

From bellcore!karn@umd5 Thu May 23 15:45:18 1985
Subject: Re: link quality

My personal intuition, from operating on 2m packet radio for about 2 years, is that the poor quality of present amateur links is due to two main reasons:

1) The modems themselves are rather inefficient. Bell 202 modem tones on an FM main carrier make very poor use of bandwidth and S/N ratio. The slow transmission speed means that the channel is easily congested, leading to frequent collisions, and of course the poor S/N efficiency leads to higher bit error rates. The 9600 bps direct FSK modem designed by Steve Goode, K9NG, has achieved bit error rates 3 db better than the TAPR 202 modem at 1200 bps, despite the 8:1 speed improvement, given equal RF power levels and bandwidths.

2) The networks are highly prone to "hidden terminal" problems. Although each station waits for a clear channel before transmitting, the following happens very frequently. Consider three stations, A, B and C. A can hear B; B can hear C, but A cannot hear C. C is sending a packet to B. A wants to send a packet. Hearing nothing on the channel, it barges in on C's transmission and clobbers B's reception. This problem is aggravated by the lack of proper backoff algorithms in the present packet radio controllers. The channels fall easily into congestion collapse, and only when the controllers begin to abort connections does the traffic fall back to a productive level.

Phil

From @DCN6.ARPA:mills@dcn6 Fri May 24 13:32:27 1985
Subject: Phill Karn papers

Folks,

Copies of Phill Karn's papers from UMD5 are now on DCN1. The one called packet-radio/routing is in PROUTE.TXT and the other called packet-radio/tcp_ip is in PTCPIP.TXT, both in the RFC login with RFC password. DCN1 is three gateways closer to ARPANET than UMD5, but is a fuzzball (not Unix) system.

Dave

From bellcore!karn@mit-eddie.ARPA Fri May 24 14:12:10 1985
Subject: Re: Another advantage of datagrams

Mike, this is called "load sharing". This is a special case of adaptive routing, which can be one of the major advantages of a datagram subnet.

The VC advocates counter that this is too "difficult" a thing to do, and therefore conclude that it isn't a real advantage. However, if you look through the later revisions of X.25 and X.75, you'll see them working like mad adding something called "multi-link procedures". This allows them to gang together more than one physical link between two points, although this is far more difficult and less powerful than true adaptive routing in a datagram network because packets have to be resequenced at each link point.

This seems to be a favorite ploy of the VC types. While they loudly proclaim that a certain innate advantage of datagram protocols isn't worth anything, behind the scenes they're scurrying about like mad trying to kludge it into their own protocols.

Phil

From bellcore!karn@umd5 Sat May 25 09:07:52 1985
Subject: Bugs in AX.25

The bug I alluded to in my earlier message has to do with the possible loss of I-frames that can result from just ONE frame being lost on the transmission link.

Consider the following scenario. (Knowledge of AX.25 state transitions is assumed.)

TNC A, attached to a terminal, wants to initiate a connection to TNC B, attached to a bulletin board system. A sends an SABM to B and goes into the Connect Pending state. TNC B receives the SABM, responds with a UA, and goes directly from the Disconnected state to the Connected state.

HOWEVER, the UA is lost in transmission. TNC B, since it is in the connected state, is free to transmit I-frames and since its local client is a bulletin board, does so with the BB's login banner.

TNC A is still in the connect pending state, since it never received the expected UA response to its SABM. It therefore has to ignore B's I-frames and, eventually, retransmits its SABM. However, this is interpreted at B as a link reset: clear all state variables and flags, and go to the connected state. The frames B transmitted earlier (the I-frames containing the BB's signon messages) are lost.

A number of people have reported this phenomenon with bulletin board systems, so it is not just a theoretical possibility. I suppose I could coin Karn's corollary to Murphy's Law for communications protocols: if a failure mode is POSSIBLE in the protocol, no matter how "unlikely" it seems, then it is ABSOLUTELY GUARANTEED to occur (eventually).

This problem seems to be fundamental to LAPB and cannot be solved without the use of a three-way handshake. Such a handshake is provided as standard equipment in TCP, but not everybody is convinced...

Phil Karn

From @DCN6.ARPA:mills@dcn6.arpa Sat May 25 21:42:46 1985
Subject: TAPR considered unfriendly

Folks,

I tried valiantly today to twinkle unsequenced (datagram) packets using the TAPR board, but got ambushed at every turn. I used raw Internet Protocol (IP) packet formats sent by a fuzzball and looped in full-duplex mode back to itself, a trick which works in transparent mode with sequenced (virtual circuit) packets. Unfortunately, the TAPR board not work in transparent mode with unsequenced packets; therefore, today's ambushes were in converse mode.

My first battle was simply to prefix all control characters (there are about eleven in the TAPR converse mode) with the literal-next (PASS) code to insure character transparency, but the Tuscon boys have laid their traps well. Converse mode is intended for chit-chat between consenting, vanilla ASCII terminals; therefore (?), only seven bits are significant, even if the UART parameters are set for eight bits and no parity. The Principle of Least Astonishment would suggest all eight bits as significant, even if control-character interpretations were masked to seven bits. This makes it easy to win transparency battles, and also allows parity to be checked on an end-end basis.

I counterattacked with the time-honored trick of encoding three octets as four septets encapsulated as vanilla, upper-case ASCII characters preceeded and succeeded by a couple of non-TAPR control characters, so that the miscellaneous TAPR gratuitous commentary could be suppressed. That hideosity worked and the unsequenced IP datagrams did fly; however, the TAPR commandos decided unsequenced packets longer that 128 octets were not polite, in spite of the fact that sequenced (tranparent) packets up to 256 octets work fine.

For my next raid, I carefully broke packets longer than 128 octets into fragments no longer than 128 octets, with each one terminated by the send-packet TAPR control character. But this meant that the character following a fragment terminated by the send-packet character could wander into the TAPR board hard on the heels of the send-packet character itself, unless some kind of timeout intervened. In spite of a generous amount of buffer storage and in spite of this situation working fine with sequenced packets, the TAPR folk simply amputated anything longer than 128 octets. One would assume they feared a congestion-gas counterattack.

I conclude the braindamage has gone far enough and trying to trick the TAPR board into unsequenced transparency is interpreted as indecent exposure. I should have kept my clothes on, having warred this way with more operating systems than I care to admit. Until I do something dramatic, like write an AX.25 driver for the fuzzball, I will TAPR IP only in sequinned nudity.

Dave

From Elias.PDO1@MIT-MULTICS.ARPA Mon May 27 18:05:03 1985
Subject: A network primer on networking?

My congratulations to Cliff for starting this net, and to everybody else who has contributed interesting and sometimes hilarious entries on this important subject; they made me realize that there is more to networking than sending $164.95 plus postage and handling to GLB Electronics. They also made me realize that my claims to electronic knowledge and computer wizardry shrink to subparticle proportions when confronted with the world of networking, a subject about which some people even write their Senior Thesis.

So. I would like to propose that you wizards out there get together and prepare a set of files explaining "Networking for Laypersons". In particular, It would be nice to see something like a set of (three?) files, each discussing the area in successive levels of detail (layers?); the first one could be a tutorial version of pages 19-21 to 19-31 of the 1985 Amateur Radio Handbook; in particular, I think you guys could do better than the Handbook in two ways:

1- You seems to know the stuff better, at least by comparing the alphabet soup you use with the glossary on page 19-30.

2- You could pattern it to the "learning packeteer", instead of attempting the double education-reference scope of the Handbook (admirable, but confusing).

The next files could dwell on the relative merits of Virtual Circuits versus unsequenced datagram packets, etc., not in the flaming mode reserved for the actual mailing list transactions, but in a paused, academic way (.... .. ..).

Now; if only these files could be created, placed, accessed, and edited in a location where a large number of mailing list readers could access them, I can see the following process happening:

1- Info-Hams aficionados, like myself, will be informed of the existence of such files and how to read them.

2- After reading them, one would get a much better appreaciation of what's going on on packet-radio (and the real world, for that matter).

3- The real wizards, meanwhile, keep these tutorial files updated while flaming on packet-radio.

Who knows, we may get the first net-wide book... on the subject of networking, which seems to be appropriate...

- Antonio/KA1LLM

From KPETERSEN@SIMTEL20.ARPA Wed May 29 09:31:15 1985
Sender: CLEMENTS@BBNG
Subject: W0RLI Packet Radio Mailbox/BBS/GateWay system Version 9.3

Now available from SIMTEL20:

Filename	Type	Bytes	CRC
Directory MICRO:<CPM.PACKET>			
PACKET93.LBR.1	BINARY	219648	0C0BH

PACKET93.LBR contains the files that make up version 9.3 of the W0RLI Packet Radio MailBox/BBS/GateWay system.

This system runs on the following hardware:

Computer:
     Xerox 820-1 computer (the ones that were available for $50,
                    and are still around for not much more),
     one or more 8" single density, single or double sided disk drives,
     parallel keyboard, CRT monitor.

Packet Radio gear:
     One or Two TAPR (or AEA) TNCs with version 3.1 or later software.
          (Two TNCs if you are going to run a crossband Gateway.)

Radio gear:
     One or two transceivers.

The W0RLI software supports sending, receiving and forwarding mail, uploading and downloading files, capturing typescripts, logging channel activity and mailbox activity, and gateway operation between two TNCs on two bands.

Read the file NOTES.TNC to start working your way through the documentation.

Hank would appreciate knowing of users who are running this software. A QSL to Hank or a net message to me would be appreciated.

Here is Hank's update from the February 1985 NEPRA PacketEar:

   The MailBox/GateWay has now been sent to 25 states and 5 countries. As far as I know for sure, it is on the air at least 20 places now. In the Boston area, 4000 messages have passed through it. The local forwarding network now includes 9 nodes: W0RLI, WB2OSZ, WB1DSW, K1BC, WA2RRKN-2, K7PYK, WA4SZK, KA1T, W1AW-4. The last two run their own software, but allow for forwarding from the W0RLI systems.

   A message put into any one of these systems will find its way to the system nearest the intended recipient.

   There are several other areas of the country now using the

software: Georgia, Arizona, Iowa, Washington DC, Seattle, ENY/NYC/NNJ, Dallas, Illinois, Southern New Jersey, Los Angeles have all been heard from. All have the software in daily use.

   Expect to see it on Oscar-10 at KL7GNG soon.

   Look for it from Australia, New Zealand, Japan, Hungary.

   Sacramento county RACES will be using it.

   GateWays are running at W0RLI, K7PYK, WA4SZK and WB7DCH.

                        de Hank Oredson, W0RLI

The following is an extract from the file NOTES.TNC for version 9.3 of the W0RLI MailBox and GateWay software. This extract contains the list of changes since the last distribution to the SIMTEL20 repository, which was version 8.6.

W0RLI, Hank, does not have access to either ARPANET or USENET. I will be glad to try to answer questions or to relay them to Hank. I can be reached at:

   ARPANET: CLEMENTS@BBN
   USENET: {ihnp4, decvax, linus, ...}!bbncca!clements

73,
Bob Clements
K1BC

--- excerpt from NOTES.TNC follows ---

     W0RLI MailBox and GateWay   Version 9.3 - 5/16/85

Created and distibuted to the packet community by:

  Hank Oredson, W0RLI
  19 North Hill Road
  Westford, MA 01886

These notes are rough, more release notes and tech notes than anything else. A SYSOPS Manual (Very nice, 25 pages or so) is available for 8-1/2 x 11 SASE ($1.24 postage) from:

  Jon Pearce, WB2MNF
  109 Pine Cone Trail
  Medford, NJ 08055

A very nice log file analyzer was written by:

  Tom Hogan, WB7DCH
  26911 S E 456 St.

Enumclaw, WA 98022

I have included this on the release disk as LFA.COM.

Release notes, Version 9.3 :

In version 9.0, there was a change to the structure of the mail
file. When TNC is first run, it will update the mail file to
the new structure. This is done by doing an untangle. Don't panic
when this happens the first time you run version 9.3!

Changes and additions since version 9.2 are:

Added privelege A and B, excluded on A or B ports.
Removed LA and LN, was bad idea.
Support for S W0RLI @ K1BC installed...
Added H local command: short / long menu (=Help).
Added $X, $Y, $Z : Date, time, current msg # at last login.
Verify for files specified in config.tnc that the drive
is on line and write enabled.
L now lists new, LN same, LA lists all.
Faster forward - send "S XXX" and title then eat 2 lines.

Changes and additions since version 9.1 are:

Much faster untangle.
D, DP, DU for remote sysop.
CP ON/OFF and CR ON/OFF for remote sysop.

Changes and additions since version 9.0 are:

"Remote sysop" feature added.
Better handling of user record currency.
Excluded user disconnected with no "bye" message.
Fixed bug - long packets not get monitored properly.
Added ki4xo changes for 5" to boot, sbios, cbios.
Added GM, GU, OA, OB, C <call>.

Changes and additions since version 8.9 are:

Some changes to CBIOS thanks to ke1g give faster disk I/O
Added user privilege check. If E, then user is excluded from
use of the MailBox. N is used for normal user, and is default.
Fixed connect bug - now conok on is last sent, conok off is first.
Most searches go most recent first.
Added LL (List Last n), and LN (List New).
User file version 1, and DU - Display Users, EU - Edit Users.
Mail file structure version 2, back chaining of msg headers.
N menu item, rename file.

Changes and additions since version 8.8 are:

Fixed (again) the disconnect process.

Added DP - page mode.
G menu item replaces UNTANGLE, GR to renumber the messages.
L and private msg, show only to owner/sender/addressee.

     Changes and additions since version 8.7 are:

Name of CONFIG.TNC file can be specified at execution time:
TNC OLDCFG.TNC or TNC NEWCFG.TNC for example. Defaults to CONFIG.TNC
if not specified.

The names for files CALLS.TNC, FWD.TNC, LOG.TNC specified in CONFIG.TNC
Installed ke1g improved cbios. Thank you Bill.
Y replaced by YC, YF, YL, switch calls, forward, or log files.
Fixed (I hope) the "Can't DISCONNECT, Link state is..." bug.
Added Z (delete file) to local menu.
X menu item forces forward regardless of hours given in FWD.TNC.
Was not passing "*** LINKED to" thru from next GateWay.
Not allow GateWay connect line with "tran" at end.

     Changes and additions since version 8.6 are:

Fixed (again!) the lack of timeout when bombarded with con req.
Added UA (append) option to local menu.
Fixed dayclock month rollover.
Split EDMSG, FWD, MBFILE as separate routines.

--- End of extract ---

From 5376057869602320730
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,40b3adfda628feab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-31 09:01:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site rduxb.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!rduxb!ianuzi
From: ianuzi@rduxb.UUCP (IANNUZZI)
Newsgroups: net.ham-radio
Subject: RTTY Station Info Request
Message-ID: <482@rduxb.UUCP>
Date: Fri, 31-May-85 12:01:55 EDT
Article-I.D.: rduxb.482
Posted: Fri May 31 12:01:55 1985
Date-Received: Sat, 1-Jun-85 02:21:53 EDT
Organization: AT&T Bell Laboratories, Reading, PA
Lines: 3

I have recently logged a RTTY station of unknown origin on 9.2264 Mhz
(850/50R). The apparent call is: RPFNA. Any info would be appreciated.
rduxb!ianuzi

From 5675577189896977539
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7a21199be3aeb1df,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-31 13:43:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!price%marlin@Nosc
From: price%marlin@Nosc (James N. Price)
Newsgroups: net.ham-radio
Subject: Sporadic E Receptions
Message-ID: <11192@brl-tgr.ARPA>
Date: Fri, 31-May-85 16:43:02 EDT
Article-I.D.: brl-tgr.11192
Posted: Fri May 31 16:43:02 1985
Date-Received: Sat, 1-Jun-85 14:20:02 EDT
Sender: news@brl-tgr.ARPA
Lines: 44

Dear group,

This is my first transmission to the info-hams bunch, hope it gets thru OK.

I took the most recent ARRL prop. bulletin to heart last night, noting it indicated a strong Sporadic E skip condition. Sure enough when I got home after work, channels 2 thru 5 on TV were jumping with a hodgepodge of stations. This was a bit of deja vu for me since I used to be a very active TV DXer during the BIG sunspot peak in the late 50s and early 60s. We lived at that time in an area (San Joaquin Valley of California) where there were no VHF signals at all. I logged 60 stations in 18 states plus 3 Canadian provinces and Mexico, including Mexico City!

Anyway, last night between 6 and 8 p.m. PDT, I logged KATC channel 3 from Lafayette, Louisiana; KFDX channel 3 from Wichita Falls, Texas; and KIII channel 3 from Corpus Christi, Texas. I wasn't able to pull out anything over channels 2, 4, and 5 from LA, altho I caught a snippet of something from Nebraska on channel 2.

I surmised that 10 meters might have a good sporadic E opening, and sure enough, there were some BIG, close-in signals. Between 9 and 10 p.m. local time, I worked Wyoming, Colorado, and Texas, with my 2 watt QRP rig on phone. I worked the same guy in Texas this morning, too, at 6 a.m. local. His signals were 20 over s9 both times!

What I'm leading up to is--are there any other TV DX crazies out there in info-hams land? I'd like to compare notes since it appears we may have some good openings this summer. Any other similar Sporadic E experiences the past few days?

Hope this didn't sound too self-congratulatory, but I was really,

as we used to say, "stoked!" 73--

Jim Price, K6ZH, San Diego, CA
JPRICE@USC-ISI.ARPA or PRICE@NOSC.ARPA

From -7893685308475133827
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,28433f74ae4730f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-01 01:59:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Packet radio digest on net.ham-radio -- A BAD IDEA
Message-ID: <675@vortex.UUCP>
Date: Sat, 1-Jun-85 04:59:56 EDT
Article-I.D.: vortex.675
Posted: Sat Jun 1 04:59:56 1985
Date-Received: Wed, 5-Jun-85 00:52:59 EDT
Organization: Vortex Technology, Los Angeles
Lines: 31

Without any discussion, I now see that somebody is posting the entire
transactions of the packet radio mailing list onto net.ham-radio
(the first such "digest" was over 30K bytes). This is getting silly.
The reason a mailing list was set up instead of a newsgroup was to
avoid having the lengthy and fairly esoteric discussions about AX.25,
TCP/IP, and similar topics being forced down the throats of net.ham-radio
readers who might not wish to receieve such materials at this time.

Anybody on the nets can subscribe directly to the list if they
are interested in the topic. Posting all of the transactions to
net.ham-radio simply doubles the traffic to the members of the list,
most of whom are already receiving net.ham-radio. This is costing
people REAL MONEY. If there is a massive outcry for all the nitty-
gritty packet radio technical discussions and arguing to be widely
posted, then a separate newsgroup should be used. In that case the
mailing list could be dissolved. But having the mailing list and
then reposting to net.ham-radio is just wasting disk space and money.

Personally, I think that this is a classic case where mailing lists
are superior to newsgroups. But it should be EITHER the mailing
list OR a SEPARATE newsgroup apart from the top-level net.ham-radio.
I would prefer to see the former. But it is extremely wasteful

to do both.

--Lauren--

P.S. Due to other gatewaying that I know is going on, there are
now some groups of people who will receive THREE copies of all
packet radio messages thanks to the most recent "digest" postings.

--LW--

From -3384508241902091124
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,19f62ffc165c0fbe,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-02 13:09:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mtunh!ky2d!jak
From: jak@ky2d.UUCP (Jim Kutsch KY2D)
Newsgroups: net.ham-radio
Subject: net.ham-radio.packet exists!
Message-ID: <25@ky2d.UUCP>
Date: Sun, 2-Jun-85 16:09:02 EDT
Article-I.D.: ky2d.25
Posted: Sun Jun 2 16:09:02 1985
Date-Received: Thu, 6-Jun-85 22:10:25 EDT
Distribution: net
Organization: KY2D Packet Radio Gateway, Little Silver, NJ
Lines: 6

Based on interest expressed to me and Clifford@mit-eddie,
net.ham-radio.packet has been created.
Mit-eddie will serve as gateway between the Arpa mailing list on packet radio
and the Usenet net.ham-radio.packet newsgroup.

73, Jim KY2D

From -3504798271024793480
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd4a154b6e63dd4e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-03 16:27:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!
whuxlm!whuxl!houxm!mhuxt!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 18/19
Message-ID: <17706@mgweed.UUCP>
Date: Mon, 3-Jun-85 19:27:45 EDT

Article-I.D.: mgweed.17706
Posted: Mon Jun 3 19:27:45 1985
Date-Received: Sun, 9-Jun-85 20:55:04 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 16

qst de k9eui
hr crrl bulletin nr 18/19 from crrl headquarters
london, ont may 30, 1985
to all radio amateurs bt

a new reciprocal operating agreement between canada and 9y,
trinidad and tobago, went into effect on april 1.

doc has announced its 1986 examination schedule. amateur radio
exams will be held across canada on february 12, april 16, june
18 and october 15. closing dates for applications are january
15, march 19, may 21 and september 17. remaining 1985 dates
are june 19 and october 16. applications for the october 16
exams are due by september 18 ar

From -6031784478746810733
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c7fc96096f570a87,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-03 16:29:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!
whuxlm!whuxl!houxm!mhuxt!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 38 (F2A proposed 29.5 - 29.7)
Message-ID: <17707@mgweed.UUCP>
Date: Mon, 3-Jun-85 19:29:47 EDT
Article-I.D.: mgweed.17707
Posted: Mon Jun 3 19:29:47 1985
Date-Received: Sun, 9-Jun-85 20:55:26 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 16

qst de k9eui
hr arrl bulletin nr 38 from arrl headquarters
newington ct june 3, 1985
to all radio amateurs bt

fcc has proposed to allow f2a telegraphy on amateur frequencies
between 29.5 and 29.7 mhz.   the fcc released the notice of
proposed rulemaking in docket 85 168 on may 31, 1985.   the
commissions action comes as a result of an arrl petition

requesting fm telegraphy in the 10 meter repeater subband so that fm repeaters could identify in that mode. the commission invites comments concerning adverse effects of the proposal. comments must be filed by august 14. details will appear in the arrl letter and qst ar

From -3234735985812537804
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d2a6e02a089ae3a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-03 16:30:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!whuxlm!whuxl!houxm!mhuxt!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 22
Message-ID: <17708@mgweed.UUCP>
Date: Mon, 3-Jun-85 19:30:46 EDT
Article-I.D.: mgweed.17708
Posted: Mon Jun 3 19:30:46 1985
Date-Received: Sun, 9-Jun-85 20:55:47 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 38

qst de k9eui
hr propagation forecast bulletin nr 22 from arrl headquarters newington ct june 3, 1985
to all radio amateurs bt

may was interesting for propagation watchers. the solar flux peaked at 93, one point below the high for the year to date. the low was 68, on may 31 and june 1. the most recent 68 before these came in july, 1976, the first month of cycle 21. with this wide range of flux values, one would expect high levels of geomagnetic activity, but the may average for the a index was only 10.6. this is one of the lowest in the entire cycle to date.

sporadic e skip is increasing markedly on 28 and 50 mhz. this is not yet the high density variety that will make for very short skip later this month, but it brought the 10 and 6 meter bands back to life, as word got around. no 144 mhz skip has been reported yet, but conditions more favorable for this will be showing up later in june, and in july.

the summer e skip is not directly related to high solar flux or sunspot numbers, and the timing cannot be predicted accurately. transatlantic contacts were made fairly often in the low years of cycle 20, mainly in june and july. the most likely time

appeared to be mid morning, eastern time, but evening openings were observed. these would be most favorable for 50 mhz transatlantic work as the european amateurs having 50 mhz permits are mostly restricted to after 2000 hours universal time. 100 british permits have been issued, and at least 25 norwegians now have similar authorization. other countries are likely to be represented as tv is gradually moving to higher frequencies.

american sunspot numbers for may 23 through 29 were between 0 and 27 with a mean of 11.7 ar

From 7619912203675454877
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,80b721e91eb39fba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-04 08:06:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!drutx!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: SWL HF loggings: ARINC, maritime, etc.
Message-ID: <586@ihu1h.UUCP>
Date: Tue, 4-Jun-85 11:06:39 EDT
Article-I.D.: ihu1h.586
Posted: Tue Jun 4 11:06:39 1985
Date-Received: Thu, 6-Jun-85 03:29:59 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 32

x

8.8460	KEA5_____Aeronautical Radio Inc, id="New York", wkg American Airlines flight 658, usb, 6/1/85 @2120Z [New York, NY] (B. Parnass)
9.0433	call?_____unidentified: beacon, sending 'k' in cw repeatedly, 6/2/85 @1340Z [location?] (B. Parnass)
10.9450	CFH_____Canada: Canadian Forces Maritime Radio, "NAWS (Notice to All Allied Warships) de CFH", cw, 6/2/85 @1405Z [Halifax, NS] (B. Parnass)
11.1300	ZLX_____New Zealand: Royal New Zealand Navy, wx report, cw, 6/2/85 @1412Z [Wellington, New Zealand] (B. Parnass)
11.3960	KEA5_____Aeronautical Radio Inc, id="New York", wkg in-flight aircraft, usb, 6/1/85 @2125Z [New York, NY] (B. Parnass)
	WWA3_____Aeronautical Radio Inc, id="San Juan", wkg Air Canada flight 967, usb, 6/1/85 @2130Z [San Juan, PR] (B. Parnass)
12.0225	KKN50_____US: State, likely at the National Communications System installation at Warrenton Training Center, embas

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                              sy-related?, "QSX 43/69/45/49 K", cw, 6/2/85 @20
                              36Z [Remington, VA] (B. Parnass)
  12.2710    B0P_______unidentified: USN uses this type of tactical callsign, h
                              ours of encrypted msgs consisting of 5 character
                               groups, sounds like manually sent cw, words lik
                              e 'whiskey' in preamble, dash/dot ratio less tha
                              n 3:1 with operator making several errors 6/2/85
                               @2135Z [location?] (B. Parnass)
  12.3290    OVG_______Denmark: Danish Navy, cw marker, "ZKR 5611 MC/S", 6/2/85
                               @2345Z [Frederikshavn, Denmark] (B. Parnass)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From 4805149550248693079
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b58e95729730d61a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-04 20:20:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: 3 new UNIDEN/Bearcat scanners announced
Message-ID: <587@ihu1h.UUCP>
Date: Tue, 4-Jun-85 23:20:59 EDT
Article-I.D.: ihu1h.587
Posted: Tue Jun  4 23:20:59 1985
Date-Received: Thu, 6-Jun-85 04:11:49 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 28

x
           New UNIDEN/Bearcat Scanners Announced

     Three new Bearcat scanners  were introduced    at the
     sum-
     mer Consumer Electronics Show in Chicago:

     - BC140   ($139)

     - BC175XL ($229), a keyboard programmable unit with
       full    display,  similar in appearance  to Regency's
       'Z' models.

     - BC50XL ($189), a cost reduced, hand-held  keyboard
       programmable,     featuring 10 channels and a 2 digit
       display.  In a break with the  Bearcat  tradition of
       selectable scan delay on a per-channel basis, this
       model   appears   to have   a 3 second global scan delay
```

which cannot be defeated.

None of these models provides 800 MHz band coverage.

These new models lend credence to the prediction that UNIDEN intends to concentrate on 'back to basics', low cost designs and de-emphasize full featured scanners aimed at more sophisticated radio enthusiasts.

--

==========

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 58163429856039110
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,28433f74ae4730f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-05 05:17:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site burl.UUCP
Path: utzoo!watmath!clyde!burl!ars
From: ars@burl.UUCP (ars)
Newsgroups: net.ham-radio
Subject: Re: Packet radio digest on net.ham-radio -- A BAD IDEA
Message-ID: <727@burl.UUCP>
Date: Wed, 5-Jun-85 08:17:31 EDT
Article-I.D.: burl.727
Posted: Wed Jun 5 08:17:31 1985
Date-Received: Thu, 6-Jun-85 08:12:30 EDT
References: <675@vortex.UUCP>
Organization: AT&T Technologies, Burlington NC
Lines: 40

> Without any discussion, I now see that somebody is posting the entire
> transactions of the packet radio mailing list onto net.ham-radio
> (the first such "digest" was over 30K bytes). This is getting silly.
> The reason a mailing list was set up instead of a newsgroup was to
> avoid having the lengthy and fairly esoteric discussions about AX.25,
> TCP/IP, and similar topics being forced down the throats of net.ham-radio
> readers who might not wish to receieve such materials at this time.
>
> Anybody on the nets can subscribe directly to the list if they
> are interested in the topic. Posting all of the transactions to
> net.ham-radio simply doubles the traffic to the members of the list,
> most of whom are already receiving net.ham-radio. This is costing
> people REAL MONEY. If there is a massive outcry for all the nitty-
> gritty packet radio technical discussions and arguing to be widely
> posted, then a separate newsgroup should be used. In that case the
> mailing list could be dissolved. But having the mailing list and
> then reposting to net.ham-radio is just wasting disk space and money.
>
> Personally, I think that this is a classic case where mailing lists
> are superior to newsgroups. But it should be EITHER the mailing

> list OR a SEPARATE newsgroup apart from the top-level net.ham-radio.
> I would prefer to see the former. But it is extremely wasteful
> to do both.
>
> --Lauren--
>
> P.S. Due to other gatewaying that I know is going on, there are
> now some groups of people who will receive THREE copies of all
> packet radio messages thanks to the most recent "digest" postings.
>
> --LW--

For what it counts I appreciate the chance to view the digest material. If I knew of another way to obtain the material in the digest, I might agree with Lauren; however, as far as I know I can not be on the Packet Radio Mailing List since our site is not on ARPA. If I am wrong please correct me.

Allen Shuff AI4G
AT&T Technologies, Burlington, N.C.

From 1379099089699515313
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,28433f74ae4730f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-05 12:27:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: Re: Packet radio digest on net.ham-radio -- A BAD IDEA
Message-ID: <454@mtunh.UUCP>
Date: Wed, 5-Jun-85 15:27:51 EDT
Article-I.D.: mtunh.454
Posted: Wed Jun 5 15:27:51 1985
Date-Received: Thu, 6-Jun-85 22:11:17 EDT
References: <675@vortex.UUCP>
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 11

I agree that posting the packet "digest" is the wrong thing to do. Clifford@mit-eddie and I have been discussing the creation of a new newsgroup for packet discussions. We have both solicited opinions and as a result of the query, I created net.ham-radio.packet last weekend. Clif is willing to gateway articles between the Arpa mailing list and Usenet.

Unfortunately, due to a netnews snafu here, the new newsgroup probably hasn't gone very far yet.

73, Jim KY2D.

From -1405152783378436780
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,28433f74ae4730f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-05 13:55:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: Packet radio digest on net.ham-radio -- A BAD IDEA
Message-ID: <680@vortex.UUCP>
Date: Wed, 5-Jun-85 16:55:44 EDT
Article-I.D.: vortex.680
Posted: Wed Jun 5 16:55:44 1985
Date-Received: Sat, 8-Jun-85 02:21:22 EDT
References: <727@burl.UUCP>
Organization: Vortex Technology, Los Angeles
Lines: 11

Like I said, anybody can be on the mailing list. In fact, I don't
know why anyone should think they have to be on ARPA to receive
it--the list is almost totally distributed via uucp (I receive
it from ihnp4). So there's no excuse in saying, "I can't receive
the mailing list." But in any case, even if the digest is deemed
a good idea, it should BE IN A SEPARATE NEWSGROUP so that people
already on the list and on net.ham-radio aren't forced to deal
with duplications. And so that the people locked into other
gateways don't have to receive THREE copies of everything.

--Lauren--

From -1522399321568031 82
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e25fc733f3bcc3b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-05 20:33:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: 1985 FCC microfiche delayed again
Message-ID: <589@ihu1h.UUCP>
Date: Wed, 5-Jun-85 23:33:40 EDT
Article-I.D.: ihu1h.589
Posted: Wed Jun 5 23:33:40 1985
Date-Received: Thu, 6-Jun-85 07:19:42 EDT
Distribution: net
Organization: AT&T Bell Laboratories

Lines: 30

x
I received this letter today:
==========

United States Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, Virginia 22161

May 31, 1985

Dear FCC Frequency Data Base Customer:

This is to notify you that the FCC has advised us that
the distribution of the FCC Master Frequency Data Base
on microfiche, which was originally scheduled for
January 1985, has been delayed until late Summer or
early Fall 1985.

Sincerely,

STUART M. WEISMAN
Product Manager

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 7330983117098034544
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a8ed6d978f332c9e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-05 20:45:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Car radio telephone freq allocations
Message-ID: <590@ihu1h.UUCP>
Date: Wed, 5-Jun-85 23:45:48 EDT
Article-I.D.: ihu1h.590
Posted: Wed Jun 5 23:45:48 1985
Date-Received: Fri, 7-Jun-85 02:20:20 EDT
Distribution: net

Organization: AT&T Bell Laboratories
Lines: 105

x

RADIO TELEPHONES

Bob Parnass, AJ9S

Cellular Car Telephone Frequency Allocations

Cellular car phones operate on paired channels, spaced 30 kHz apart, in the 825.030 - 844.980 and 870.030 - 889.980 MHz ranges. A cell site normally transmits on a frequency 45 MHz higher than it receives.

Conventional Car Telephone Frequency Allocations

In the tables that follow, providers of car phone services are divided into two categories:

1. Telco - landline companies such as Illinois Bell
2. RCC - Radio Common Carriers, or 'independents'

VHF-lo Car Phone Frequencies

User	Channel Designation	Frequency (MHz) Base	Mobile
Telco	ZO	35.26	base + 8 MHz
Telco	ZF	35.30	"
Telco	ZH	35.34	"
Telco	ZM	35.38	"
Telco	ZA	35.42	"
Telco	ZY	35.46	"
Telco	ZR	35.50	"
Telco	ZB	35.54	"
Telco	ZW	35.62	"
Telco	ZL	35.66	"

VHF-hi Car Phone Frequencies

User	Channel Designation	Frequency (MHz) Base	Mobile
RCC	1	152.03	158.49
RCC	3	152.06	158.52

RCC	5	152.09 158.55
RCC	7	152.12 158.58
RCC	9	152.15 158.61
RCC	11	152.18 158.64
RCC	13	152.21 158.67
Telco	JL	152.51 157.77
Telco	YL	152.54 157.80
Telco	JP	152.57 157.83
Telco	YP	152.60 157.86
Telco	YJ	152.63 157.89
Telco	YK	152.66 157.92
Telco	JS	152.69 157.95
Telco	YS	152.72 157.98
Telco	YR	152.75 158.01
Telco	JK	152.78 158.04
Telco	JR	152.81 158.07

UHF Car Phone Frequencies

User	Channel Designation	Frequency (MHz) Base	Mobile
RCC	21	454.025	base + 5 MHz
RCC	22	454.050	"
RCC	23	454.075	"
RCC	24	454.100	"
RCC	25	454.125	"
RCC	26	454.150	"
RCC	27	454.175	"
RCC	28	454.200	"
RCC	29	454.225	"
RCC	30	454.250	"
RCC	31	454.275	"
RCC	32	454.300	"
RCC	33	454.325	"
RCC	34	454.350	"
Telco	QC	454.375	"
Telco	QJ	454.400	"
Telco	QD	454.425	"
Telco	QA	454.450	"
Telco	QE	454.475	"
Telco	QP	454.500	"
Telco	QK	454.525	"
Telco	QB	454.550	"
Telco	QO	454.575	"
Telco	QR	454.600	"
Telco	QY	454.625	"
Telco	QF	454.650	"

--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 8851762116308425727
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13375c,897c3f3b5435c0a3,start
X-Google-Attributes: gid13375c,public
X-Google-Thread: 151e61,897c3f3b5435c0a3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-05 20:49:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.aviation
Subject: UHF Aircraft Air-to-Ground Telephone Freq Allocations
Message-ID: <591@ihu1h.UUCP>
Date: Wed, 5-Jun-85 23:49:05 EDT
Article-I.D.: ihu1h.591
Posted: Wed Jun 5 23:49:05 1985
Date-Received: Fri, 7-Jun-85 02:20:40 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 26
Xref: watmath net.ham-radio:2801 net.aviation:1603

x
     Domestic Public Air-to-Ground Telephone Frequency Allocations

          UHF Aircraft Phone Frequencies

Use	Channel Designation	Frequency (MHz) Ground	Aircraft
call setup		454.675	ground + 5 MHz
conversation	6	454.700	"
conversation	7	454.725	"
conversation	5	454.750	"
conversation	8	454.775	"
conversation	4	454.800	"
conversation	9	454.825	"
conversation	3	454.850	"
conversation	10	454.875	"
conversation	2	454.900	"
conversation	11	454.925	"
conversation	1	454.950	"
conversation	12	454.975	"

--
==

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -9098195791597334221
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1f6d56e83ce1cfc5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-06 06:39:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: proposed new novice privileges
Message-ID: <455@mtunh.UUCP>
Date: Thu, 6-Jun-85 09:39:21 EDT
Article-I.D.: mtunh.455
Posted: Thu Jun 6 09:39:21 1985
Date-Received: Fri, 7-Jun-85 03:02:00 EDT
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 115

jim -- please strip this header off and post to netnews. thanks, paul
---

Post Office Box 205
Holmdel, NJ 07733
201-834-1149 (W)
201-741-1151 (H)
June 5, 1985

Dr. Larry Price, W4RA
President
American Radio Relay League
Post Office Box 2067
Statesboro, GA 30458

Dear Larry:

I have been following the announcement of ARRL's proposal to expand Novice privileges with great interest. I have been a ham for more than 10 years and I, too, am concerned about the lack of growth of amateur radio. Also, as a professional involved with radio technology, I am concerned about the lack of talent entering and exiting learning institutions that train people to do RF work. It is almost impossible to locate quality engineering and technician talent from universities or technical schools. Most students have been drawn into the computer field. I feel that the ARRL proposal, as it appeared in the ARRL Letter, is a good start toward turning this trend around. However, I would like to make some comments and suggest some improvements to the proposal as it appeared in the Letter.

First, the provision allowing Novices to use but not maintain or sponsor voice repeaters is a good one. However, for packet radio stations, near-real-time single-frequency repeaters (digipeaters) are an integral part of mainstream operation. Since maintaining a digipeater requires less skill and knowledge than that needed for a packet station itself, there is no logical reason to deny Novices the privilege of acting as a digipeater. Novices should be allowed to act as digipeaters but not maintain or sponsor Computer Based Message Systems (CBMSs) or other non-real-time repeaters.

Secondly, the power limit for novices at VHF of 25 watts appears to be an excellent choice. But, there are many VHF rigs available in the 30 to 50 watt range. Wouldn't it be simpler for everyone concerned to set the power limit to 60 watts (50 watts + 20%) output, PEP. That would allow Novices to use about 99% of the VHF FM radios in the field. The +3 dB increase will hardly be noticeable since the majority of Novices, like other hams, will use a 10 or 25 watt radio.

Finally, and most controversially, I believe Novices should be given voice and data privileges on 2M. Most important are data privileges. Current packet radio plans call for using 2M for local access and 220 for long haul networking. Denying Novices 2M data privileges will deny them access to packet radio. It is unlikely that many non-Novice stations will

sponsor 10M/1240 MHz to 2M cross-band digipeaters.

Additionally, I feel that 2M voice privileges should be given to Novices. I can't imagine that banishing Novices to 10M SSB/FM or 1240 MHz will allow Novices, as the Letter suggests, "privileges so their numbers can be put to use in performing public service communications." How many NTS nets are there on 1240 MHz? Placing Novices onto these bands will certainly populate those bands but at what expense?

In my mind, one strong reason for retaining the CW requirement was that it almost forces a prospective ham to become involved with another ham or club before getting on the air (if for nothing more than to learn the code). This helps to ensure that the prospective ham will have a support network of experienced hams to help him or her when questions or problems arise. It also ensures that the new hams will be "indoctrinated"

on what constitutes good and bad operating habits. The 10M and 1240 MHz allocations will tend to throw all that preparatory work out the window.

How many mainstream hams are going to get onto 10 M SSB or 1240 MHz FM? If some mainstream privileges are not given to Novices they will, I think, acquire their own style of operating. That may be good or it may be bad. What will it be like on 10 M SSB? I hope 10 M SSB doesn't become another good buddy band and that 1240 MHz doesn't remain dormant.

I don't think the band will actually break if Novices are given 2M privileges. If nothing else, give them access to the lower half of the band. The quicker they are given an opportunity to join mainstream ham radio, the better for ham radio.

Overall, I think the ARRL proposal is a good one and the Executive Committee is to be commended for taking the bull by the horns before the FCC attempts to decide what is best for ham radio. I would appreciate any comments you might offer to my suggestions.

Sincerely,

Paul Newland, ad7i

Copy to:
Linda Ferdinand, N2YL
David Sumner, K1ZZ
misc. computer nets

From 5018536240727681029
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3af43bc7651c1e3f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-06 07:44:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!decwrl!dec-rhea!dec-eden!p_macdonald
From: p_macdonald@eden.DEC (Workstations Pubs 223-3439)
Newsgroups: net.ham-radio
Subject: Polarization of Oscar Antennas
Message-ID: <2522@decwrl.UUCP>
Date: Thu, 6-Jun-85 10:44:04 EDT
Article-I.D.: decwrl.2522
Posted: Thu Jun 6 10:44:04 1985
Date-Received: Sun, 9-Jun-85 04:03:57 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 4

Can someone tell me whether an Oscar-10 antenna should be right
or left circular polarized? Thanks.

Paul

From -3497995751337574713
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,28433f74ae4730f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-06 13:57:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
genrad!panda!talcott!harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Packet radio digest on net.ham-radio -- A BAD IDEA
Message-ID: <11234@brl-tgr.ARPA>
Date: Thu, 6-Jun-85 16:57:32 EDT
Article-I.D.: brl-tgr.11234
Posted: Thu Jun 6 16:57:32 1985
Date-Received: Sun, 9-Jun-85 01:18:46 EDT
References: <727@burl.UUCP> <680@vortex.UUCP>
Organization: Ballistic Research Lab
Lines: 14

> the mailing list." But in any case, even if the digest is deemed
> a good idea, it should BE IN A SEPARATE NEWSGROUP so that people
> already on the list and on net.ham-radio aren't forced to deal
> with duplications. And so that the people locked into other
> gateways don't have to receive THREE copies of everything.
>
> --Lauren--

Yes, net.ham-radio is dumped into INFO-HAMS. Thus you've now deluging
people who get INFO-HAMS by arpanet and the PACKET-RADIO list with
two copies of everything.

-Ron

From 4163312378320452708
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd9f5ebb122ff113,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,dd9f5ebb122ff113,start
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1985-06-06 14:30:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site oliveb.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!pesnta!hplabs!
oliveb!gnome
From: gnome@oliveb.UUCP (Gary Traveis)
Newsgroups: net.ham-radio,net.analog
Subject: EMP documentation?
Message-ID: <427@oliveb.UUCP>
Date: Thu, 6-Jun-85 17:30:16 EDT
Article-I.D.: oliveb.427
Posted: Thu Jun 6 17:30:16 1985
Date-Received: Sat, 8-Jun-85 06:37:19 EDT
Distribution: net
Organization: Olivetti ATC; Cupertino, Ca
Lines: 13
Xref: watmath net.ham-radio:2807 net.analog:316

Has anyone ever found any documentation on EMP-proofing
communications equipment or any other solid-state stuff?

I am considering this not because of nulear war, but
high-altitude nuclear accidents (a real mess generator).

The same theories might also apply to very-close lightning
hits. Hits just short of a complete blow-out.

What good is radio gear if it can't be used in an emergency?

Gary

From -6333052648985494009
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1f6d56e83ce1cfc5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-07 10:08:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
genrad!panda!talcott!harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: proposed new novice privileges
Message-ID: <11249@brl-tgr.ARPA>
Date: Fri, 7-Jun-85 13:08:30 EDT
Article-I.D.: brl-tgr.11249
Posted: Fri Jun 7 13:08:30 1985
Date-Received: Sun, 9-Jun-85 02:38:48 EDT
References: <455@mtunh.
Organization: Ballistic Research Lab
Lines: 7

Can someone explain to me the advantage of adding all these priveleges
to the novice class ticket, which requires next to no knowledge about

radio, rather than just encouraging these enthusiests to get a Technician
class license which would seem to have been designed for this type of
hobbyist?

-Ron

From 3276788854503587769
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,3393c33dc196618b,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,3393c33dc196618b,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,3393c33dc196618b,start
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1985-06-07 12:41:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
genrad!grkermi!panda!talcott!harvard!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA
Newsgroups: net.analog,net.audio,net.ham-radio
Subject: Electronics wearing out
Message-ID: <11251@brl-tgr.ARPA>
Date: Fri, 7-Jun-85 15:41:15 EDT
Article-I.D.: brl-tgr.11251
Posted: Fri Jun 7 15:41:15 1985
Date-Received: Tue, 11-Jun-85 03:39:30 EDT
Distribution: net
Organization: USAMC ALMSA
Lines: 47
Xref: watmath net.analog:320 net.audio:5110 net.ham-radio:2813

I have been hearing and reading disturbing things about electronic
components simply "wearing out" from use, or circuit designs which
use batteries for volatile ROMs and which will become useless after
some period of time unless deliberately maintained. The former
example includes a recent net.audio posting about the laser assembly
in a CD player having to be replaced after 5 years or so of use, and the
latter includes the control programming for the ICOM (and other brands)
of shortwave receivers and amateur equipment, wherein an on-board
battery must stay alive to keep a ROM programmed to keep the radio in
operable condition.

This troubles me. I had thought that we had a reasonable progression of
development of electronics during these days of solid-state gear
replacing tube equipment that meant longer life for any device. LED's
with essentially eternal lives replaced easily-burned-out incandescent
lamps. Transistors replaced tubes, and ICs and VLSI replaced discrete
components, and, assuming weeding out infant mortality and no actual
damage to the circuit, like overvoltage, it should continue to operate
indefinitely. Dipped caps replaced paper ones, etc.

But now I see that designers either deliberately build in inevitable failures (the use of volatile ROMs and batteries instead of PROMs or other permanent devices) or the solid-state stuff I was led to believe had indefinitely-long lives really is as short-lived as vacuum tubes (the laser diodes mentioned above).

I may be insane, but I really expect electronic equipment to operate forever. I don't want to buy any that has built-in and inevitable failure. I have a lot of old gear, some older than myself, that still works. I expect this tube gear to wear out from heat and voltage stresses but it hasn't yet. If I buy new stuff, without the tube-caused heat and high-voltage stress, I expect it to last longer than I will!

I realize that consumer products have built-in planned obsolescence. I'm not talking about small appliances, which I expect to die and be replaced. I'm talking about multi-hundred-dollar equipment. Am I totally unjustified in expecting such things to be designed to continue to work indefinitely without maintenance, except for mechanical stuff like motors, belts, pots, etc? (I would expect to maintain anything mechanical -- purely electronic gear is different.)

Am I alone in this concern?

Regards,
Will Martin

USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

From -7328284340655516768
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,74f0ccdb7643e7ac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-08 20:20:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Cellular phones and confidentiality
Message-ID: <595@ihu1h.UUCP>
Date: Sat, 8-Jun-85 23:20:35 EDT
Article-I.D.: ihu1h.595
Posted: Sat Jun 8 23:20:35 1985
Date-Received: Mon, 10-Jun-85 21:27:45 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 40

x
George Chao, a cellular phone user, provided this article, published in the May 1985 'Ameritech Connection' by Ameritech Mobile Communications, Inc. for its Chicago/Gary area

cellular telephone users:

Confidentiality Could Be A Three-Way Street

"One of the differences between cellular service and conventional mobile telephones is that cellular is 'private-like.' Each side of every cellular conversation is assigned its own private radio channel by our computerized system, so there is no operator to go through and there are no party lines to share."

"However, in the last six months, sophisticated electronic scanners able to monitor cellular radio frequencies have become available, and Ameritech Mobile cautions you about conversations of a highly confidential nature held over your mobile telephone."

"Scanners are only able to lock onto one channel at a time and can not simulate our computerized network. In fact, they can ONLY detect one side of the cellular conversation and ONLY for a brief period of time. That's because our computer routinely switches your call from one channel to another to keep the transmission quality of your conversation at a high level as you drive through the cellular service area."

"While scanners are expensive and not routinely used by the general public, be careful in discussing proprietary or very personal issues when using your
mobile telephone. Remember the airwaves are public property."

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -8018391941472948597
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,3393c33dc196618b
X-Google-Attributes: gid126c94,public
X-Google-Thread: 15c702,3393c33dc196618b
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,3393c33dc196618b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-09 04:20:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site umd5.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!genrad!mit-eddie!think!
harvard!seismo!umcp-cs!cvl!umd5!zben
From: zben@umd5.UUCP

Newsgroups: net.analog,net.audio,net.ham-radio
Subject: Re: Electronics wearing out
Message-ID: <564@umd5.UUCP>
Date: Sun, 9-Jun-85 07:20:17 EDT
Article-I.D.: umd5.564
Posted: Sun Jun 9 07:20:17 1985
Date-Received: Tue, 11-Jun-85 07:47:12 EDT
References: <11251@brl-tgr.ARPA>
Reply-To: zben@umd5.UUCP (Ben Cranston)
Distribution: net
Organization: U of Md, CSC, College Park, Md
Lines: 18
Xref: watmath net.analog:323 net.audio:5115 net.ham-radio:2815
Summary: Don't forget EPROMs

In article <11251@brl-tgr.ARPA> wmartin@brl-tgr.ARPA (Will Martin) writes:
>I have been hearing and reading disturbing things about electronic
>components simply "wearing out" from use, ...
>I may be insane, but I really expect electronic equipment to operate
>forever. ...
>Am I alone in this concern?
>Will Martin
>USENET: seismo!brl-bmd!wmartin   or   ARPA/MILNET: wmartin@almsa-1.ARPA

Don't forget that data saved in FAMOS (Floating Avalanche Metal Oxide Semi)
memories like 2732, 2764, etc is only guaranteed for a mean of 100 years!

I guess I'm thinking of early-sales versions of computer-controlled gear
that were shipped with EPROM instead of real ROM. For example, the first
person in our group who got an H19 got two 2716s, the next got two 2316s
(same pinout hard ROM), the next got one 2732, the next got one 2332 etc.
--
Ben Cranston ...{seismo!umcp-cs,ihnp4!rlgvax}!cvl!umd5!zben zben@umd2.ARPA

From 4194635052309632321
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef2c8fdc059c6586
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-09 07:22:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site umd5.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
mcnc!philabs!cmcl2!seismo!umcp-cs!cvl!umd5!louie
From: louie@umd5.UUCP
Newsgroups: net.ham-radio
Subject: Re: packet radio arpa list and net.ham-
Message-ID: <565@umd5.UUCP>
Date: Sun, 9-Jun-85 10:22:18 EDT
Article-I.D.: umd5.565
Posted: Sun Jun 9 10:22:18 1985
Date-Received: Thu, 13-Jun-85 02:18:42 EDT
References: <450@mtunh.UUCP> <52800055@trsvax>

Reply-To: louie@umd5.UUCP (Louis Mamakos)
Organization: U of Md, CSC, College Park, Md
Lines: 21

In article <52800055@trsvax> ron@trsvax writes:
>
>I suggest that you call it simply "net.packet" as net.ham-radio.packet is
>*much* longer than 14 characters which is the maxmimum length for a name
>using notes (or news services that depend on a directory name).

- Begin Flame -

Please, let's not. The amateur packet radio discussions are *clearly* related
to amateur radio, and should be a subgroup of net.ham-radio. Don't make the
net at large suffer because some are running broken software. Doesn't notes
have an alias feature of some kind anyway? At least the news software
doesn't generate those stupid Orphened response subject lines.

- End Flame -

There, I feel much better now.
--
Louis A. Mamakos WA3YMH   University of Maryland, Computer Science Center
 Internet: louie@umd5.arpa
 UUCP: {seismo!umcp-cs, ihnp4!rlgvax}!cvl!umd5!louie

From -2217849792877799427
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6af4a91888391019,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-09 16:50:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 8/21/84; site idi.UUCP
Path: utzoo!utcs!lsuc!pesnta!idi!kiessig
From: kiessig@idi.UUCP (Rick Kiessig)
Newsgroups: net.ham-radio
Subject: Leukemia Link in Ham Radio Operators
Message-ID: <288@idi.UUCP>
Date: Sun, 9-Jun-85 19:50:07 EDT
Article-I.D.: idi.288
Posted: Sun Jun 9 19:50:07 1985
Date-Received: Mon, 10-Jun-85 14:27:33 EDT
Distribution: net
Organization: Intelligent Decisions, Inc., Saratoga, CA
Lines: 21

From the Orange County Register, 5-29-85:

     "Statistics turned up by Dr. Samuel Milham Jr., an
     epidemiologist for Washington state, suggest that
     ham radio operators may be nearly twice as prone
     to leukemia as the rest of the population.

Reporting in The Lancet, Milham presented the results
of a survey of more than 1,900 amateur radio operators
in Washington and California who died from 1971 to 1983.

From dead certificates, he discovered that 24 of 1,691
subjects had died from various types of leukemia. The
expected number of leukemia victims in a suitably
matched control group would have been 12.6."

--
Rick Kiessig
{decvax, ucbvax}!sun!idi!kiessig
{akgua, allegra, amd, burl, cbosgd, decwrl, dual, ihnp4}!idi!kiessig
Phone: 408-996-2399

From 5496135176391945265
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e0cc91ed925abf48
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-10 11:41:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site hplvle.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!drutx!mtuxo!mtunh!mtung!mtunf!
ariel!vax135!cornell!uw-beaver!tektronix!hplabs!hpisla!hplvla!chris
From: chris@hplvla.UUCP (chris)
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <2800010@hplvle.UUCP>
Date: Mon, 10-Jun-85 14:41:00 EDT
Article-I.D.: hplvle.2800010
Posted: Mon Jun 10 14:41:00 1985
Date-Received: Sat, 15-Jun-85 06:26:13 EDT
References: <128@wavetek.UUCP>
Organization: HP Loveland Instrument Division
Lines: 5

As mentioned, Motorola, GE, RCA and maybe Johnson, are the best choices.
The two low-cost brands mentioned in the original posting are the ones
he gags at, not the MOT, GE, etc. Sorry if it wasn't clear.
-chris

From -7351504644502834573
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3393c33dc196618b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-10 15:49:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1m.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1m!mstach

From: mstach@ihu1m.UUCP (Dan Hoelker)
Newsgroups: net.ham-radio
Subject: Re: Electronics wearing out
Message-ID: <458@ihu1m.UUCP>
Date: Mon, 10-Jun-85 18:49:17 EDT
Article-I.D.: ihu1m.458
Posted: Mon Jun 10 18:49:17 1985
Date-Received: Tue, 11-Jun-85 05:08:57 EDT
References: <11251@brl-tgr.ARPA>
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 41

> I have been hearing and reading disturbing things about electronic
> components simply "wearing out" from use, or circuit designs which
> use batteries for volatile ROMs and which will become useless after
> some period of time unless deliberately maintained. The former
> example includes a recent net.audio posting about the laser assembly
> in a CD player having to be replaced after 5 years or so of use, and the
> latter includes the control programming for the ICOM (and other brands)
> of shortwave receivers and amateur equipment, wherein an on-board
> battery must stay alive to keep a ROM programmed to keep the radio in
> operable condition.
>
> .
> .
> .
>
> Regards,
> Will Martin
>
> USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

I don't think anything lasts forever. The "forever" LEDs that were mentioned
in the above article also wear out after a given amount of use. Fortunately
this is about 250,000 hours (~30 years), longer than most people
would keep something (except radio amateurs. :-)). I would assume
the CD laser life is rated in hours also, with 5 years probably being
the "average" based on some study of how often Joe Average uses his.
Losing all programmability when a battery goes dead does sound like
a design flaw. As far as I know my Yaesu 2M only loses its memory
when the battery goes. But I sure like the feature that I can turn off
the radio without losing the memory, so it seems like a small price
to pay.

You also have to remember that manufacturers make a tradeoff between
reliability and cost, with cost usually being much more important
to the manufacturer. A part that lasts longer may be significantly
more expensive, especially when talking in millions of units. When
it comes to the bottom line, the cheaper part wins.

Dan Hoelker
KA9MHK

ihu1m!mstach

From -8812324931585874954
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,13766dc587525af4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-10 17:18:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ritcv.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
genrad!grkermi!panda!talcott!harvard!seismo!rochester!ritcv!abh6509
From: abh6509@ritcv.UUCP
Newsgroups: net.ham-radio
Subject: Iceland Dx wanted
Message-ID: <8781@ritcv.UUCP>
Date: Mon, 10-Jun-85 20:18:36 EDT
Article-I.D.: ritcv.8781
Posted: Mon Jun 10 20:18:36 1985
Date-Received: Thu, 13-Jun-85 01:21:10 EDT
Distribution: net
Organization: Rochester Institute of Technology, Rochester, NY
Lines: 6

If anyone has advice on working Iceland I would certainly appreciate
hearing from them. I'm running a Ten Tec Argosy (50 watts) with assorted
wire antennas. Thanks and happy hunting - don't forget Field Day,
June 22-23 starting 1800 local.

Andrew Hudson

From 8034646177849388251
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,623f4e1273a3c3c8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-10 20:55:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: CD laser diode life
Message-ID: <687@vortex.UUCP>
Date: Mon, 10-Jun-85 23:55:54 EDT
Article-I.D.: vortex.687
Posted: Mon Jun 10 23:55:54 1985
Date-Received: Thu, 13-Jun-85 01:15:43 EDT
Organization: Vortex Technology, Los Angeles
Lines: 12

The laser diodes used in CD players (780 nm) are typically rated

at "over 5000 hours" use. Those little devils generate a considerable
amount of energy from a tiny chip area. As they age, they require
more and more current to generate the required amount of light, and
circuitry in the player automatically keeps the current high enough
to provide this level. Eventually, the diode simply won't emit
enough light without so much current that it burns out.

This isn't part of some devious plot--it's just the physics of
the little beasties.

--Lauren--

From 3122112229694265551
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd9f5ebb122ff113
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,dd9f5ebb122ff113
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1985-06-10 22:51:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 SMI; site sun.uucp
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
decwrl!sun!sunny
From: sunny@sun.uucp (Ms. Sunny Kirsten)
Newsgroups: net.ham-radio,net.analog
Subject: Re: EMP documentation?
Message-ID: <2289@sun.uucp>
Date: Tue, 11-Jun-85 01:51:02 EDT
Article-I.D.: sun.2289
Posted: Tue Jun 11 01:51:02 1985
Date-Received: Thu, 13-Jun-85 01:25:13 EDT
References: <427@oliveb.UUCP>
Distribution: net
Organization: Sun Microsystems, Inc.
Lines: 28
Xref: watmath net.ham-radio:2818 net.analog:325

> Has anyone ever found any documentation on EMP-proofing
> communications equipment or any other solid-state stuff?
>
> I am considering this not because of nulear war, but
> high-altitude nuclear accidents (a real mess generator).
>
> The same theories might also apply to very-close lightning
> hits. Hits just short of a complete blow-out.
>
> What good is radio gear if it can't be used in an emergency?
>
>
> Gary

Your first problem is to disconnect or surge suppress all antennae,

like, THE antenna, the power cord.

Then you screen all openings in the cabinet.

Then you surge suppress all the internal antennae, like every
conductor over a few inches long.

OR, you can revert to valve equipment, or as we yanks call 'em
tubes.

KA6PPP
--
{ucbvax,decvax,ihnp4}!sun!sunny (Ms. Sunny Kirsten)

From -3377159816056196231
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd9f5ebb122ff113
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-11 07:04:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.4 $; site trsvax
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!ariel!mtunf!mtung!
mtunh!inuxi!inuxc!pur-ee!uiucdcs!convex!trsvax!mikey
From: mikey@trsvax
Newsgroups: net.ham-radio
Subject: Re: EMP documentation?
Message-ID: <52800056@trsvax>
Date: Tue, 11-Jun-85 10:04:00 EDT
Article-I.D.: trsvax.52800056
Posted: Tue Jun 11 10:04:00 1985
Date-Received: Sat, 15-Jun-85 05:36:04 EDT
References: <427@oliveb.UUCP>
Lines: 16
Nf-ID: #R:oliveb.UUCP:-42700:trsvax:52800056:000:682
Nf-From: trsvax!mikey   Jun 11 09:04:00 1985

About 1980 or so, one of the Ham Magazines had an article dealing with
surviving the bang. It dealt with how to protect your radios so that
they would be functional after the pulse. I agree that protection from
use in confrontation is probably futile, as you won't be dealing with
just one bang but maybe 10 or 20 bangs spaced minutes apart for each
major target, but for an accident it might be a good idea. I don't
have the article but they presented the idea that it was pretty futile
and the only safe bet was to keep a "backup" rig in a shielded metal
box if it was solid state. Tube equipment may survive if you took some
of their precautions.

mikey at trsvax
KA5MJQ

From 274992267789577499
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,3393c33dc196618b
X-Google-Attributes: gid15c702,public
X-Google-Thread: 126c94,3393c33dc196618b
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,3393c33dc196618b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-11 19:17:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site azure.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!harpo!decvax!tektronix!teklds!azure!
michaelk
From: michaelk@azure.UUCP (Michael Kersenbrock)
Newsgroups: net.analog,net.audio,net.ham-radio
Subject: Re: Electronics wearing out
Message-ID: <255@azure.UUCP>
Date: Tue, 11-Jun-85 22:17:29 EDT
Article-I.D.: azure.255
Posted: Tue Jun 11 22:17:29 1985
Date-Received: Fri, 14-Jun-85 01:11:42 EDT
References: <11251@brl-tgr.ARPA>
Distribution: net
Organization: Tektronix, Beaverton OR
Lines: 26
Xref: watmath net.analog:327 net.audio:5141 net.ham-radio:2822

[]
> I have been hearing and reading disturbing things about electronic
> components simply "wearing out" from use, or circuit designs which
> use batteries for volatile ROMs and which will become useless after
> some period of time unless deliberately maintained. The former
> example includes a recent net.audio posting about the laser assembly
> in a CD player having to be replaced after 5 years or so of use, and the
> latter includes the control programming for the ICOM (and other brands)
> of shortwave receivers and amateur equipment, wherein an on-board
> battery must stay alive to keep a ROM programmed to keep the radio in
> operable condition.

I own one of those amateur radio devices (actually a Kenwood). After
five years or so, when the battery goes dead, I do not intend to
pay out several hundred dollars to replace the radio. I plan to pay
two dollars and replace the battery. It's just a little lithium
cell that keeps the 4-bit CMOS uC alive when the radio is turned off.
(Actually it isn't even necessary except that you'd have to reprogram
the radio everytime you changed out the ni-cads to another battery pack).
Other uses (like terminal baud rate storage, etc) would be similar.
It may be a pain to waste several minutes every 5 years to reprogram
whatever the battery went out in, but then ...

Mike Kersenbrock

Tektronix Microcomputer Development Products
Aloha, Oregon

From 9044607060233105324
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ed05500777236f2c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-12 08:44:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!grkermi!genrad!
decvax!harpo!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 39 (elections)
Message-ID: <17779@mgweed.UUCP>
Date: Wed, 12-Jun-85 11:44:21 EDT
Article-I.D.: mgweed.17779
Posted: Wed Jun 12 11:44:21 1985
Date-Received: Sun, 16-Jun-85 08:36:31 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 11

qst de k9eui
hr arrl bulletin nr 39 from arrl headquarters
newington ct june 10, 1985
to all radio amateurs bt

the following have been reelected with balloting as section
managers for their respective sections, colorado kq0j georgia
k4jnl southern texas w5kr and west virginia k8kt.   those
elected begin their new term of office october 1, 1985 ar

From -4883628758421706807
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dc4567966de41106,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-12 08:45:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!grkermi!genrad!
decvax!harpo!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 20
Message-ID: <17780@mgweed.UUCP>
Date: Wed, 12-Jun-85 11:45:07 EDT
Article-I.D.: mgweed.17780
Posted: Wed Jun 12 11:45:07 1985
Date-Received: Sun, 16-Jun-85 08:36:47 EDT

Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 25

qst de k9eui
hr crrl bulletin nr 20 from crrl headquarters
london, ont june 7, 1985
to all radio amateurs bt

doc has accepted a crrl proposal that a committee of amateurs, to be named by crrl and carf, review all applications for special prefixes before they are issued by doc. the committee will likely have 4 to 6 members, and should be operational by september.

the 1985 crrl repeater directory is now available. crrl members should send an sase to crrl, box 7009, station e, london, ontario n5y 4j9 for a copy.

nominations are now open for crrl amateur of the year. send your nomination, with supporting documentation, to the crrl address above.

the crrl board of directors will hold its annual meeting in toronto on july 13. anyone with input for this meeting should contact the nearest elected member of the crrl board, ve1asj, ve2ij, ve3cdm, ve3fn, ve3gro, ve6abc or ve7csd ar

From -4820433639515983890
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,51aebd9ee4df1205,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-12 08:46:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!grkermi!genrad!
decvax!harpo!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 23
Message-ID: <17781@mgweed.UUCP>
Date: Wed, 12-Jun-85 11:46:35 EDT
Article-I.D.: mgweed.17781
Posted: Wed Jun 12 11:46:35 1985
Date-Received: Sun, 16-Jun-85 08:37:04 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 38

qst de k9eui
hr propagation forecast bulletin nr 23 from arrl headquarters
newington ct june 9, 1985

to all radio amateurs bt

the solar flux numbers for may 30 through june 9 were almost identical to those for may 2 through 12. telescopic observation of the sun also showed very similar sunspot activity to that seen four weeks earlier. this is of interest because active areas have not lasted that long in recent months. if this trend continues we should see flux values in the 80s and 90s through about june 20, with a return to lower numbers later in the month.

the practical effects of the higher solar activity vary with the frequencies used. shorter skip can be expected on our lower bands and the dx potential of 14, 21 and 28 mhz will improve somewhat over that observed with the flux in the high 60s and low 70s earlier this year. the influence of higher flux and sunspot numbers is muted in the summer months however, as sporadic e layer ionization reaches its peak in late june. e skip becomes the dominant mode on 21, 28 and 50 mhz for the next few weeks and the effects are not directly related to sunspot numbers or the solar flux. they peak in late june, taper off in july, and disappear almost completely after early august, when the f layer takes over again for the fall and winter months.

as to current conditions, a long period of near quiet magnetic field ended with a geomagnetic storm june 7 to 9. the k index was rising again sunday evening, and a major aurora enlivened the closing hours of the arrl june vhf contest, around 2300 utc on june 9th.

american sunspot numbers for may 30 through june 5 were between 0 and 27 with a mean of 9.6 ar

From 2387479230259628029
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4208654644a1ad7d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-06-12 09:07:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!grkermi!genrad!
decvax!harpo!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Components wearing out
Message-ID: <17782@mgweed.UUCP>
Date: Wed, 12-Jun-85 12:07:31 EDT
Article-I.D.: mgweed.17782
Posted: Wed Jun 12 12:07:31 1985
Date-Received: Sun, 16-Jun-85 08:37:19 EDT
Organization: AT&T Consumer Products - Montgomery Illinois

Lines: 11

I am also concerned by some of what was said concerning products wearing out.
I don't know anything about CD's but I do find the ICOM battery problem
totally ridiculous! My Kenwood 930 has a backup battery but the only thing
it is for is to hold whatever the user puts in memory. The same is true of
my Azden PCS-2000 and my 2 meter handheld. The idea of a unit loosing some
of its essential operating software when a battery runs down is disgusting
(but then I have never been an ICOM fan anyway).

Bob K9EUI

From -1286507314722235393
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4ec934fd92325b3a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-13 06:03:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2g.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!hou2g!stekas
From: stekas@hou2g.UUCP (J.STEKAS)
Newsgroups: net.ham-radio
Subject: Re: Radio Hams Prone to Leukemia? - new study cited
Message-ID: <468@hou2g.UUCP>
Date: Mon, 13-May-85 09:03:03 EDT
Article-I.D.: hou2g.468
Posted: Mon May 13 09:03:03 1985
Date-Received: Tue, 14-May-85 20:15:42 EDT
References: <566@ihu1h.UUCP>, <3716@alice.UUCP>
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 20

> I would be interested in knowing what kind of shielding
> was in the radios of those amateurs studied, what kind
> of antennae they used, and how far away from them they
> were.

Also:
        - what frequencies they used,
        - what power they ran,
        - and for how long.

The E&M field is not the only thing that might account for a higher
rate of Leukemia in hams and electrical workers. There are many
toxic substances associated with electrical and electronic equipment.
In particular, PCBs were used as "transformer oil" in power distribution
transformers for many years. Fifteen years ago, every other QST had
a story from a ham who was given a free gallon of oil (i.e. PCBs) for
his Cantenna by a local supplier who did not deal with orders smaller
than a 55 gallon drum.

Jim - NJ2F

From 5455383286098290383
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6e1788a1b64a743d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-13 09:20:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ecsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
mcnc!ecsvax!jwb
From: jwb@ecsvax.UUCP (Jack Buchanan)
Newsgroups: net.ham-radio
Subject: Re: TV DXing discussion from Videotech
Message-ID: <1245@ecsvax.UUCP>
Date: Mon, 13-May-85 12:20:15 EDT
Article-I.D.: ecsvax.1245
Posted: Mon May 13 12:20:15 1985
Date-Received: Thu, 16-May-85 06:43:54 EDT
References: <10578@brl-tgr.ARPA>
Organization: UNC-CHAPEL HILL
Lines: 9

In the early 50's, we fairly frequently received Cuban TV on channel 2 in
central Kentucky. We had a fairly elaborate antenna system since, at that time,
the closest stations were in Louisville and Cincinnati (about 100 miles away).
As a 7 or 8 year old kid, the only programming I remember was a Shell oil
commercial featuring scantilly clad dancing girls singing in Spanish (This was
before Castro).
     Jack Buchanan
     UNC-Chapel Hill
     {decvax, akgua}!mcnc!ecsvax!jwb

From -554965062877477035
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,35a849372e69948b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-13 11:10:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ptb@Mitre-Bedford
From: ptb@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: Packet Radio mailing list
Message-ID: <10619@brl-tgr.ARPA>
Date: Mon, 13-May-85 14:10:54 EDT
Article-I.D.: brl-tgr.10619
Posted: Mon May 13 14:10:54 1985
Date-Received: Thu, 16-May-85 02:46:25 EDT
Sender: news@brl-tgr.ARPA
Lines: 4

I would like to be on the packet radio list. Thank you,

Peter baldwin, Wa1snh
(ptb@mitre-bedford)

From -7967901258066005618
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1029ed67e1c79299,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-13 12:41:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!hoffmann%marie@mit-mc
From: hoffmann%marie@mit-mc (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Need Azden info
Message-ID: <10632@brl-tgr.ARPA>
Date: Mon, 13-May-85 15:41:53 EDT
Article-I.D.: brl-tgr.10632
Posted: Mon May 13 15:41:53 1985
Date-Received: Thu, 16-May-85 02:53:04 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

Greetings to the group. Does anyone have Service manual/
schematics for an Azden PCS-200 2m FM rig? Mine has a
faint, but audible whine on the transmitted audio which
does not appear to be related to 60 Hz from the line supply.

Anyone have any ideas. 73, Ron-WA2EYC

From 5984514621715582967
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3787a6ac2de054df
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-13 12:58:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!YOUNG@DEC-MARLBORO
From: YOUNG@DEC-MARLBORO
Newsgroups: net.ham-radio
Subject: Re: Log-Periodic Dipole Array Antenna
Message-ID: <10635@brl-tgr.ARPA>
Date: Mon, 13-May-85 15:58:50 EDT
Article-I.D.: brl-tgr.10635
Posted: Mon May 13 15:58:50 1985
Date-Received: Thu, 16-May-85 02:57:33 EDT
Sender: news@brl-tgr.ARPA
Lines: 15

I think KLM offers a log periodic or two. The "problem" with log
periodics is that they trade gain for bandwidth. A properly designed
monoband yagi will have better gain than a multi-band log periodic.
From numbers that I've seen, a tribander will give more gain for a
given boom length than a log periodic (these were manufacturers gain
figures, not to be taken too seriously). The only advantage I can
come up with for the log periodic is that it will cover the WARC bands.
Log periodics also have disadvantages in that all the elements must
be insulated from the boom, split, and fed.

I would go with the monobanders, or a good tribander before I would
go to a log periodic.

              Paul Young, K1XM

From 8218823850834748594
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d9e80af43ad6a2df
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-13 13:01:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Midwest Aeronautical VLF Beacons (freq list)
Message-ID: <10636@brl-tgr.ARPA>
Date: Mon, 13-May-85 16:01:02 EDT
Article-I.D.: brl-tgr.10636
Posted: Mon May 13 16:01:02 1985
Date-Received: Thu, 16-May-85 02:58:12 EDT
References: <16985@mgweed.UUCP>
Organization: Ballistic Research Lab
Lines: 12

>
>   Low Frequency Aeronautical Radionavigation Beacons
>   (Illinois, Indiana, Iowa, Wisconsin, & Michigan)
>   200 - 415 kHz and 510 - 525 kHz
>
Can someone tell me why people are loading down this group/list
with this information when it is easily available by other sources?
If we are going to persist in having SWL fanatics and Scanner Freaks
on the Hams list, I think they should narrow their postings to things
that are of interest but not generally available otherwise. There is
no need to type in all the NAVAID frequencies when a much better references
are available through NOAA.

From -6444124887192262266
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,df8f8ee15bea165e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-13 13:46:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Michael.Chepponis@CMU-CS-C.ARPA
From: Michael.Chepponis@CMU-CS-C.ARPA (Mike Chepponis)
Newsgroups: net.ham-radio
Subject: HF Beams
Message-ID: <10641@brl-tgr.ARPA>
Date: Mon, 13-May-85 16:46:40 EDT
Article-I.D.: brl-tgr.10641
Posted: Mon May 13 16:46:40 1985
Date-Received: Thu, 16-May-85 02:26:16 EDT
Sender: news@brl-tgr.ARPA
Lines: 5

A local ham here has had monobanders on 10, 15 and 20 for some time, but he
was unable to solve the interaction problems. He now has a KLM KT-34XA, and
he claims his new antenna has better gain, f/b, and of course no interation
problems. -Mike

From 3951943916022295752
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c33f621ee6f550a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-13 16:10:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!
whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 33a (armed forces day x band contacts)
Message-ID: <17089@mgweed.UUCP>
Date: Mon, 13-May-85 19:10:19 EDT
Article-I.D.: mgweed.17089
Posted: Mon May 13 19:10:19 1985
Date-Received: Thu, 16-May-85 07:31:09 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

qst de k9eui
hr arrl bulletin nr 33a from arrl headquarters
newington ct may 7, 1985
to all radio amateurs bt

armed forces day, may 18 and 19, marks the 36th anniversary of
these communications tests between amateurs and the military
communications system. amateurs may make crossband contacts

with specified army, air force, and navy stations between 1300z may 18 and 0245z may 19. the cw reciving test, at 25 wpm, will begin at 0300z may 20, with the rtty receiving test beginning at 0335z. complete details may be found on page 87 of may qst ar

From -1756512815478681765
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d3951d765161b6c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-13 16:11:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 16/17 (160 mtr pwr & 24 MHz info)
Message-ID: <17090@mgweed.UUCP>
Date: Mon, 13-May-85 19:11:03 EDT
Article-I.D.: mgweed.17090
Posted: Mon May 13 19:11:03 1985
Date-Received: Thu, 16-May-85 07:31:41 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

qst de k9eui
hr crrl bulletin nr 16/17 from crrl headquarters
london ont may 13, 1985
to all radio amateurs bt

doc has informed crrl that an order in council lifting all power restrictions on the canadian 160 metre band has been passed by the privy council and is awaiting the signature of the communications minister.

as soon as the opening of the 24 mhz band to u.s. amateurs on june 22 was announced, crrl sent a telegram to the communications minister asking for similar consideration for canadian amateurs. chances of anything happening, however, are slim. in reply to previous requests, crrl has always been told to be patient and wait until 1989 ar

From -2804972837044201445
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1c9da2ec4489ad6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-13 17:51:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Help wanted: antique SW receiver (SX-28)
Message-ID: <572@ihu1h.UUCP>
Date: Mon, 13-May-85 20:51:21 EDT
Article-I.D.: ihu1h.572
Posted: Mon May 13 20:51:21 1985
Date-Received: Wed, 15-May-85 00:28:57 EDT
References: <10587@brl-tgr.ARPA>
Organization: AT&T Bell Laboratories
Lines: 59

x
our USENET backbone machine (ihnp4) has been erratic lately, so please
ignore any echoes of this posting:

Hallicrafters SX28 tube layout:

SX28 Super Skyrider TOP VIEW

Rear Panel

```
-----------------------------------------------

power             6AB7    6H6
xfmr
             6SK7    6AB7

5Z3          6SA7    6B8

6V6GT             6SA7     6L7

6V6GT     6SC7   6J5   6B8       6SK7
-----------------------------------------------
```

Front Panel

Hallicrafters SX28	
Tube	Function
6AB7	RF amp (1)
6SK7	RF amp (2)
6SA7	Mixer
6SA7	HF Oscillator
6L7	IF Amplifier (1), Noise Limiter
6SK7	IF Amplifier (2)
6B8	2nd Detector, S-Meter tube
6B8	AVC Amplifier
6AB7	Noise Amplifier

```
        | 6H6  |  Noise Rectifier             |
        | 6J5  |  Beat Oscillator             |
        | 6SC7 |  1st Audio Amplifier     |
        | 6V6GT|  P.P. Audio Amplifier     |
        | 6V6GT|  P.P. Audio Amplifier     |
        | 5Z3  |  Rectifier               |
        |______|__________________________|
```

> I have an antique Hallicrafters SX-28 `Super Skyrider' general
> coverage short-wave receiver that I used play with when I was in high
> school. It is a good receiver and since it won't cost me much, I would
> like to have it operating again, but I seem to have lost my manual and
> I do not remember which tubes it uses. I recall seeing a list of its
> tubes in an ancient CQ (QST?) or an old ARRL Handbook. Can an old-timer
> help me out? Thanks much in advance...
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 3838204957625938899
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,da194978b3c028e4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-14 05:30:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: re: Trick the BC220 (summary of responses)
Message-ID: <573@ihu1h.UUCP>
Date: Tue, 14-May-85 08:30:50 EDT
Article-I.D.: ihu1h.573
Posted: Tue May 14 08:30:50 1985
Date-Received: Wed, 15-May-85 00:49:41 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 45

Here are the 3 responses I received from Bearcat BC220 scanner
owners who tried tricking their radios to search 136-144 MHz.
Thanks for experimenting.
=======
> From: ihnp4!uw-beaver!ssc-vax!dma (Dennis Anderson)

> Bob,
> I tried the trick re the BC220 and searching 136-144 mHz. It seemed
> to work, but without knowledge of any indentifiable signals in that
> band I can't tell for sure. It did pick up images from the higher
> frequencies.
>

> My BC220 was purchased in early 1980.
>
> I tried the same trick to see if it would cover 50-54 and 108-118,
> but it didn't work. Could you please mail me some of the other
> frequencies supposedly accesible by this trick?
        ....
>   de WA7IEL
>   Dennis Anderson @ Boeing Aerospace

=========
> >From uw-beaver!fluke!rad Wed May 8 12:39:15 1985 remote from ihnp4
         ....
> Bob, the trick to receive 136 to 144 Mhz on my bc220 worked fine. I
> was able to hear the Noaa wx sat on 137.5 loud and clear. Thank you.
> Now if I could just get rid of the spur on 156.8 (marine channel 16!)
>
> Regards,
> Randy
=========
> >From seismo!clements@BBNCD1.ARPA Wed May 8 20:23:36 1985 remote from ihnp4
> From: Bob Clements <ihnp4!seismo!clements@BBNCD1.ARPA>
> Subject: Re: Trick the Bearcat BC220 to search 136 - 144 MHz
>
> I just tried it on mine, serial # 28761, vintage 1979.
> It seems to work, though I sure hear a lot of images
> in that range. Not sure if anything is real. I'll have to
> spend a bit more time to verify that real signals are there.
> According to the display, though, it works.
>
> (K1BC)
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6422515428388080234
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,458aa1c0c2b2e5e8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-14 05:53:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ptb@Mitre-Bedford
From: ptb@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: Radio Hams Prone to Leukemia? - new study cited
Message-ID: <10655@brl-tgr.ARPA>
Date: Tue, 14-May-85 08:53:35 EDT
Article-I.D.: brl-tgr.10655
Posted: Tue May 14 08:53:35 1985
Date-Received: Thu, 16-May-85 05:58:17 EDT
Sender: news@brl-tgr.ARPA
Lines: 27

I have another question on that study.... (FLAME ON)

Is 1600 some odd hams, and only 24 people who were affected REALLY statistically significant? I guess in order to really believe the results, it would have been nice to have been done on a much wider range of people. (I am not one of those who believes everything that they read, even if it IS in a medical journal.)

As far as I know, RF has also been linked to other things, including cataracts in the eyes (if the exposure is excessive), headaches, and skin burning effects. But with only 24 people (as opposed to 12.6 for a control group) I am skeptical. It is possible that the other 11.4 people were careless, affected by the water in that area, etc.

We are all aware that there is some hazards in this hobby, with cautions about high voltages, possible problems with lightening, etc., in the study material when we go for our licenses. I guess I'm not too worried at this time that my hobby poses a significant risk to my health. If we are really going to paranoid, how about cleaning up the water supplies, the air we breathe, and the food we eat (not to mention damage done by cigarettes, PCBs in DUMMY LOADS, etc.). I'm sure we could go on and on, but that's not the point.

(FLAME OFF)

Peter Baldwin, Wa1snh
(ptb@mitre-bedford)

From 5289498577731241371
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ffff62dbf25cc7f2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-14 07:26:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site topaz.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!columbia!topaz!gopstein
From: gopstein@topaz.ARPA (Gopstein)
Newsgroups: net.ham-radio
Subject: Satellite Equipment query
Message-ID: <1984@topaz.ARPA>
Date: Tue, 14-May-85 10:26:09 EDT
Article-I.D.: topaz.1984
Posted: Tue May 14 10:26:09 1985
Date-Received: Thu, 16-May-85 06:08:43 EDT
Organization: Rutgers Univ., New Brunswick, N.J.
Lines: 19

I am interested in purchasing some satellite equipment soon. My interests lie initially with listening to oscar 10,11, but I will eventually want to transmit also. My question is:

what equipment is worth considering?

  I don't want to spend a large amount of money, so I was considering
the TEN TEC 2510(b) which (I believe) is a 2M -> 10M converter and
a multimode 440Mhz transmitter. Does anyone have any information
about it?

  Are there any recommendations for antennae, rotors, preamps?
Any help would be greatly appreciated. Thanks.

Rich Gopstein
RCA Solid State Technology Center
Somerville, NJ

From -8782755267180442472
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1f4b3fc2d8c7ba5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-14 11:31:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!decwrl!
dec-rhea!dec-pisces!piermarini
From: piermarini@pisces.DEC (Thin Film Heads)
Newsgroups: net.ham-radio
Subject: hallicrafter
Message-ID: <2182@decwrl.UUCP>
Date: Tue, 14-May-85 14:31:59 EDT
Article-I.D.: decwrl.2182
Posted: Tue May 14 14:31:59 1985
Date-Received: Thu, 16-May-85 21:13:15 EDT
Sender: johnsson@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 8

     I am in need of a manual for a hallicrafter model HT-37
transmitter. If anyone out there has one that they could possibly
copy for me i will gladly pay for any cost incured. my phone #
is (617)537-1990 or you can send to me at decwrl::pisces::piermarini
or send mail to paul piermarini 56 south st,leominster ma.01453
thankyou

From 8654425248143788150
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,458aa1c0c2b2e5e8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-14 13:33:22 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Radio Hams Prone to Leukemia? - new study cited
Message-ID: <10666@brl-tgr.ARPA>
Date: Tue, 14-May-85 16:33:22 EDT
Article-I.D.: brl-tgr.10666
Posted: Tue May 14 16:33:22 1985
Date-Received: Thu, 16-May-85 20:10:26 EDT
Sender: news@brl-tgr.ARPA
Lines: 7

Re: Lukemia among radio Amateurs.

It is also possible and more likely that electrical workers and Hams or
more subject to the fumes from transformers which use carcinogenic
substances.

joe N2XS

From 3272948372816669279
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,44396bb4cb226d50,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-14 13:52:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Midwest Aeronautical VLF Beacons (freq list)
Message-ID: <10668@brl-tgr.ARPA>
Date: Tue, 14-May-85 16:52:03 EDT
Article-I.D.: brl-tgr.10668
Posted: Tue May 14 16:52:03 1985
Date-Received: Thu, 16-May-85 06:35:56 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

Re: LF aeronautical beacons on net

I think this info is great and I find it interesting. I tolerate the
packet radio stuff and a lot of other stuff that is not interesting.
Ham radio consists of about 50 separate hobbies wrapped into one. You
cannot expect just those things that interest you to be posted.

Keep up the frequency lists. I can use them.

Joe   N2XS spark forever

From 5806298034261610792
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,44396bb4cb226d50
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-14 14:10:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ron@BRL.ARPA
From: ron@BRL.ARPA (Ron Natalie)
Newsgroups: net.ham-radio
Subject: Re: Midwest Aeronautical VLF Beacons (freq list)
Message-ID: <10672@brl-tgr.ARPA>
Date: Tue, 14-May-85 17:10:41 EDT
Article-I.D.: brl-tgr.10672
Posted: Tue May 14 17:10:41 1985
Date-Received: Thu, 16-May-85 06:37:01 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

It's not frequency lists in general that bother me, it's stuff that is
so routinely available elsewere. It would have been better to post a
reference, if something was going to be posted. Bob Parnass, the king
of such postings, always publishes stuff that is unusual or not generally
obvious. The list I was complaining about is in the same vein as listing
all the AM broadcast stations in the State of Illinois. A little discretion
in posting can keep the entire list from wallowing in needless messages.

-Ron

From 1150665575527440365
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4025fb8ce9e126dc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-15 05:54:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!rachiele@NADC
From: rachiele@NADC
Newsgroups: net.ham-radio
Subject: re: Narrow their postings
Message-ID: <10686@brl-tgr.ARPA>
Date: Wed, 15-May-85 08:54:44 EDT
Article-I.D.: brl-tgr.10686
Posted: Wed May 15 08:54:44 1985
Date-Received: Thu, 16-May-85 21:41:36 EDT
Sender: news@brl-tgr.ARPA
Lines: 3

I disagree. I have very few sources of information available to me and enjoy
hearing all the good stuff. Besides, I am basically anti-sensorship.

From 6828131266832836625
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,458aa1c0c2b2e5e8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-15 07:08:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Taylor.Wbst@Xerox.ARPA
From: Taylor.Wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Radio Hams Prone to Leukemia? - new study cited
Message-ID: <10688@brl-tgr.ARPA>
Date: Wed, 15-May-85 10:08:10 EDT
Article-I.D.: brl-tgr.10688
Posted: Wed May 15 10:08:10 1985
Date-Received: Thu, 16-May-85 21:42:06 EDT
Sender: news@brl-tgr.ARPA
Lines: 7

I COULDN'T AGREE MORE! WITH SUCH SMALL NUMBERS THE SIGNIFICANT LEVEL OF CORRELATION SHOULD PROBABLY BE MORE LIKE A FACTOR OF TEN-- NOT TWO!

CHEERS--

JIM (W2OZH)

From -5863247043286587577
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63f062a05127576b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-15 11:58:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!AD.XRH@AFSC-HQ.ARPA
From: AD.XRH@AFSC-HQ.ARPA (NICK KASS AD/XR EGLIN AFB FL 32542)
Newsgroups: net.ham-radio
Subject: MANUAL FOR HALLICRAFTER SX-100
Message-ID: <10709@brl-tgr.ARPA>
Date: Wed, 15-May-85 14:58:51 EDT
Article-I.D.: brl-tgr.10709
Posted: Wed May 15 14:58:51 1985
Date-Received: Thu, 16-May-85 21:56:46 EDT
Sender: news@brl-tgr.ARPA
Lines: 7

I WOULD APPRECIATE ANY INFO ON THE SUBJECT MANUAL. I HAVE AN SX-100 WHICH IS IN DIRE NEED OF A TUNE. ANY POOP ON HOW TO OBTAIN THIS MANUAL (OR A COPY) WOULD BE APPRECIATED. THANX IN ADVANCE.

NICK KASS (AD.XRH@AFSC-HQ)

From 1176547914394405880
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6a7aa8b24425c531,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,6a7aa8b24425c531,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 126c94,6a7aa8b24425c531,start
X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1985-05-15 14:37:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version 1.0 Netnews CMS/BITNET; site PSUVM.BITNET
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!cmu-cs-pt!cadre!psuvax1!psuvm!gmw
From: GMW@psuvm.BITNET
Newsgroups: net.ham-radio,net.wanted,net.analog
Subject: Need Manuals for Singer Spectrum Analyzer
Message-ID: <1731GMW@psuvm>
Date: Wed, 15-May-85 17:37:26 EDT
Article-I.D.: psuvm.1731GMW
Posted: Wed May 15 17:37:26 1985
Date-Received: Fri, 17-May-85 03:06:53 EDT
Lines: 11
Xref: linus net.ham-radio:2071 net.wanted:5595 net.analog:289

   I need operating and/or service manuals for a Singer PanoramicPanalyzor Model
SB-12bs Type T-100 spectrum analyzer. The company
wants $150 just for Xerox copies, so my wallet will appreciate any
help. I also have what I think is a prescaler for it, model RF-7a,
and could use any information on that, too. Many thanks.

George Weaver
Penn State Astronomy Dept.
GMW at PSUVM.BITNET
...!allegra!psuvax1!gmw@psuvm.bitnet

From -6856976973232915702
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e2b8b91d110fdb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-15 14:56:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ittral.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!ittvax!
ittral!yakamavi
From: yakamavi@ittral.UUCP (Vincent J. Yakamaviich)
Newsgroups: net.ham-radio

Subject: Extra Class Study Guides
Message-ID: <145@ittral.UUCP>
Date: Wed, 15-May-85 17:56:55 EDT
Article-I.D.: ittral.145
Posted: Wed May 15 17:56:55 1985
Date-Received: Fri, 17-May-85 04:08:55 EDT
Distribution: net
Organization: ITT Telecom B&CC Eng. Group, Raleigh, NC
Lines: 10

Anybody know of any good study guides for the Extra exam???

I've been inactive for the past 8 or 9 years, and looking over
some of the questions on the local VE's list, I have * A L O T *
of catching up to do!!!

Thanks in advance,

Vince, WB7TXP @ ITT Raleigh

From 6581413754315840515
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5ea73b181daf846b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-15 20:45:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: More 6 MHz bootlegger, spy, and military loggings
Message-ID: <574@ihu1h.UUCP>
Date: Wed, 15-May-85 23:45:29 EDT
Article-I.D.: ihu1h.574
Posted: Wed May 15 23:45:29 1985
Date-Received: Thu, 16-May-85 22:24:41 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 28

x
   6.6790   KUA3______Aeronautical Radio, Inc, id="Honolulu Radio", wx, usb [H
                       onolulu, HI] (B. Parnass)
   6.6980   MKL_______Great Britain: RAF, cw [Pitreavie Castle, Scotland] (B.
                       Parnass)
   6.7380   call?_____Great Britain: RAF Strike Cmd, id="Architect", sounded l
                       ike color coded wx reports, usb [Bampton AB, Eng
                       land] (B. Parnass)
   6.8020   call?_____unidentified: numbers stn, am, yl/Spanish, 4 digit, xmti
                       ng concurrently with KKN50 on 6.9252 cw, both we
                       re the strongest signals on the band at s9+20 db

                                , 5/15/85 @0220Z [location?] (B. Parnass)
   6.9254   KKN50_____US: State, likely at the National Communications System
                                installation, embassy-related?, xmting concurren
                                tly with yl am Spanish language 4 digit numbers
                                station at 6.802 MHz, both were the strongest si
                                gnals on band at s9+20 db, cw, 5/15/85 @0220Z [W
                                arrenton, VA] (B. Parnass)
   6.9330   call?_____unidentified: bootleggers in 3 way CB-type conversation,
                                 one was mobile, at least one employed as a truc
                                k driver, ids= "9", "10", and "13", used Q signa
                                ls but no call letters, lsb, 5/15/85 @0100Z [loc
                                ation?] (B. Parnass)
   6.9460   CKN_______Canada: Canadian Forces Maritime Radio, navigational bul
                                letins, cw [Vancouver, BC] (B. Parnass)
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 2563093224072326310
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,35a849372e69948b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-16 05:46:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!ariel!mtunf!mtung!
mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: Re: Packet Radio mailing list
Message-ID: <447@mtunh.UUCP>
Date: Thu, 16-May-85 08:46:56 EDT
Article-I.D.: mtunh.447
Posted: Thu May 16 08:46:56 1985
Date-Received: Fri, 17-May-85 01:27:29 EDT
References: <10619@brl-tgr.ARPA>
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 2

What "packet radio mailing list"?????
73, Jim KY2D

From 3914947696015939730
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,458aa1c0c2b2e5e8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-16 07:59:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ecsvax.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!mcnc!
ecsvax!dgary

From: dgary@ecsvax.UUCP (D Gary Grady)
Newsgroups: net.ham-radio
Subject: Re: Radio Hams Prone to Leukemia? - new study cited
Message-ID: <1282@ecsvax.UUCP>
Date: Thu, 16-May-85 10:59:58 EDT
Article-I.D.: ecsvax.1282
Posted: Thu May 16 10:59:58 1985
Date-Received: Sun, 19-May-85 08:01:06 EDT
References: <10655@brl-tgr.ARPA>
Organization: Duke U Comp Ctr
Lines: 9

An acquaintance of mine suggests another reason for higher leukemia
rates among hams: Many hams get into the hobby late in life or after
disability of some kind. It could well be that the overall health of
hams is poorer than the general population.
--
D Gary Grady
Duke U Comp Center, Durham, NC 27706
(919) 684-3695
USENET: {seismo,decvax,ihnp4,akgua,etc.}!mcnc!ecsvax!dgary

From -6024987545527552479
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fb467af591c7ad94,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-16 08:16:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!CASTOR@USC-ECLB
From: CASTOR@USC-ECLB
Newsgroups: net.ham-radio
Subject: DELETE NET ADDRESS
Message-ID: <10734@brl-tgr.ARPA>
Date: Thu, 16-May-85 11:16:12 EDT
Article-I.D.: brl-tgr.10734
Posted: Thu May 16 11:16:12 1985
Date-Received: Fri, 17-May-85 03:29:08 EDT
Sender: news@brl-tgr.ARPA
Lines: 3

PLEASE -- Delete the EV-INFORMATION@ECLB address from you list.
Thank you

From 6538943193319493251
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b1cc258f8b37cd5f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-16 08:34:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!wmartin@Almsa-2
From: wmartin@Almsa-2 (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: New Radio Publications
Message-ID: <10735@brl-tgr.ARPA>
Date: Thu, 16-May-85 11:34:46 EDT
Article-I.D.: brl-tgr.10735
Posted: Thu May 16 11:34:46 1985
Date-Received: Fri, 17-May-85 03:29:24 EDT
Sender: news@brl-tgr.ARPA
Lines: 35

Just thought I'd second Bob Parnass' pointer to Newkirk's new "Enjoying Radio" publication. I was going to hold off on a real recommendation until I see another issue or two, just to insure that it is viable enough to last for at least the initial year's subscription, but I did find the first issue interesting. One slight quibble -- it is printed in "reverse format", so the pages open to the left, like a Chinese book, ostensibly to provide space for hole-punching to keep it in a binder, but the margins are too small for hole-punching in my opinion.

Another new publication is Radio Equipment Review. This is designed to be a successor to the old San Diego DXers Club newsletter, which disappeared when Larry Brookwell, who ran the SDDXC as sort of a one-man operation, died. That newsletter always emphasized equipment news and evaluations. This new publication is designed to continue in that tradition. I've sent it an edited compilation of some of the stuff I've posted here on portable receivers, for use in a future issue. The first issue of RER was mainly devoted to the Icom R-71A. It is available for $2 per issue, up to a 6-issue-subscription (for example, I sent $6 for the first three issues). Address:
Radio Equipment Review
Ronald Pokatiloff
2661 Sheridan Road
Zion, IL 60099
(312) 872-3633

Another product Mr. Pokatiloff is putting out is a Commodore 64 program which contains a comprehensive schedule of English-language shortwave broadcasts for the 2300-0700 GMT period. The program, on cassette, is $15, and a printout of the output is $5.

Regards,
Will Martin

ARPA/MILNET: wmartin@almsa-1.ARPA   USENET: seismo!brl-bmd!wmartin

From 2190795053530027255
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fe588bb0d88f34e8,start

X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,fe588bb0d88f34e8,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 14023a,fe588bb0d88f34e8,start
X-Google-Attributes: gid14023a,public
X-Google-ArrivalTime: 1985-05-16 13:05:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site olivee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!oliveb!olivee!gnome
From: gnome@olivee.UUCP (Gary Traveis)
Newsgroups: net.wanted,net.consumers,net.ham-radio
Subject: Gas-powered Generators?
Message-ID: <357@olivee.UUCP>
Date: Thu, 16-May-85 16:05:13 EDT
Article-I.D.: olivee.357
Posted: Thu May 16 16:05:13 1985
Date-Received: Fri, 24-May-85 02:06:50 EDT
Distribution: net
Organization: Olivetti ATC; Cupertino, Ca
Lines: 13
Xref: watmath net.wanted:6451 net.consumers:2321 net.ham-radio:2744

I'm looking for a discount source for a 800w-2200w gasoline
powered AC generator. Preferrably a Honda.

I've looked around the SF Bay area and have found that
there are an enormous number of styles and types.

The best thing about a discount mail-order place
would be the a) Price and b) no state sales tax.

Any ideas??

Gary
(hplabs,allegra,ihnp4)oliveb!olivee!gnome

From 4697879408831424640
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c2b52b3efc9491b0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-16 13:20:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!allegra!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: VLF beacon freq list comments from K9EUI
Message-ID: <17190@mgweed.UUCP>
Date: Thu, 16-May-85 16:20:33 EDT
Article-I.D.: mgweed.17190

Posted: Thu May 16 16:20:33 1985
Date-Received: Sun, 19-May-85 05:19:01 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 19

I appreciate comments I have seen on frequency lists. This is the second time that I have posted the Midwest Aeronautical Beacon list. The last time was at least 2 years ago and there have been some changes.

Perhaps pilots have an easier time getting this kind of info than I thought (I know they are on the maps). I remember trying to find a listing of the marine beacons on Lake Michigan for a friend and even stopped in at the Coast Guard station in Ludington, Mi. and they didn't even know what frequency their beacon was on, let alone any others!

Some time back, it was proposed that a separate "SWL" newsgroup be started, to keep this group strictly for hams. I think I agree with what the majority said, that there was not all that much traffic here and occasional lists would not clog the system up.

Bob K9EUI

From 7033103137685472258
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ace8ad3e716fe4e2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-16 13:28:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!bellcore!allegra!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Replacement NICADS for the Kenwood 2500
Message-ID: <17191@mgweed.UUCP>
Date: Thu, 16-May-85 16:28:46 EDT
Article-I.D.: mgweed.17191
Posted: Thu May 16 16:28:46 1985
Date-Received: Sun, 19-May-85 05:19:21 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 9

I have had my Kenwood 2500 HT for 3 years and the original nicad just developed a shorted cell. An exact replacement cell is made by G.E. and has a part number of GCL450ST 48F224. The pack is easy to open. Just stick a pointed object into the 2 holes on top and press down on the plastic tabs inside, then pry open, separating the 2 halves.

Bob K9EUI

From -2111286031783321393
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2a576cedf745b4c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-16 13:45:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site extel.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!tellab1!extel!larry
From: larry@extel.UUCP
Newsgroups: net.ham-radio
Subject: Re: Modified PLL rigs
Message-ID: <43300003@extel.UUCP>
Date: Thu, 16-May-85 16:45:00 EDT
Article-I.D.: extel.43300003
Posted: Thu May 16 16:45:00 1985
Date-Received: Sun, 19-May-85 00:58:42 EDT
References: <10100@brl-tgr.UUCP>
Lines: 17
Nf-ID: #R:brl-tgr:-1010000:extel:43300003:000:775
Nf-From: extel!larry   May 16 15:45:00 1985

I have thought many times of attempting to get my IC02AT to cover
a larger frequency range primarily to recieve the NOAA weather forcast.
I have tried to get a service manual from Icom America without too much
luck. Has anyone else gotten one? Ok so I got adventursome and opened
up the little monster after it losts its memory in cold weather. Pushing
the reset switch fixed that by the way. After finding the diodes used
to program the band plan I decided to quit rather than destroying the
thing as the diodes were acutally surface mounted transistors. While I
am pretty well equiped to work on small circuits I don't have much
experience with SMC's.

Has anyone been more adventursome than myself and would you like to share?

Larry
WA9QOO
ihnp4!tellab1!extel!larry

From 68666281013333120
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,34328521ae38f32d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-16 18:44:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: arrl dx bulletin nr 19
Message-ID: <17196@mgweed.UUCP>
Date: Thu, 16-May-85 21:44:53 EDT
Article-I.D.: mgweed.17196
Posted: Thu May 16 21:44:53 1985
Date-Received: Sun, 19-May-85 08:11:36 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 73

qst de k9eui
hr dx bulletin nr 19 from arrl headquarters
newington ct may 17 1985
to all radio amateurs bt

special prefix, sweden. the swedish amateur radio association is celebrating its 60th anniversary during may with the use of the special prefix 7s, in place of the normal sv prefix. work all eight swedish districts and receive an award from the ssa. qsl cards are not necessary.

special prefix, australia. to celebrate the 75th anniversary of the wireless institute of australia, australian amateurs may use the prefix vi through the end of the year. a special station, vk75a, will also be active.

jordan. kevin, jy9wr, is currently very active on 20, 40 and 80 meter cw around his sunrise. qsl to g4ats. kevin plans 160 meter operation later this month.

crete. frank, dl7ft, is visiting crete and signing dl7ft/sv9. his operation will be ssb only, on 80 through 10 meters. qsl to his callbook address, in the 1985 callbook only. also, hal, w0pu/sv9, is using his new callsign, sv0dv/9, and plans to erect a new antenna for the low bands at his new qth. qsl to wb4tdh.

guernsey. a group of belgian hams is visiting guernsey, signing gu0 followed by their home callsigns. the group has been reported on 160 through 15 meters in north america. qsl all calls to on7jf.

antigua. a group from the north jersey dx association is on their annual outing to the caribbean, this time signing v2a on cw and w2jt/v2a on ssb. operation is from two separate sites. qsl to the w2 qsl bureau.

cocos island qsls. wb4ubd is qsl manager for the february 1985 ti9tty dxpedition only. ti9j qsls go via ti2j.

franz josef land. val, uw3hy/1 reports that ua1ot has left the island and returned to the mainland. uw3hy plans to remain on fjl until at least the end of the summer. he reports there is

no word on replacement operators. also active from fjl is the club station, rz1owa. please note that rz1owb is not located in franz josed land.

israel. watch for special event station 4x85wse on 20 and 15 meter cw.

wpx contest. dont forget the cq wpx cw contest on may 25 and 26. several stations are already using special prefixes in anticipation of that weekend.

propagation. 10 and 15 meter propagation has been sporadically good over the last several days. north american stations report having worked western europe as late as 0200z on 15 meters. as the summer progresses, conditions may continue to improve.

china. by1pk was reported very active in last weekends cqm russian contest, handing out numbers over 700. in the u.s., this station was copied from 1130 to almost 1700z over the north pole.

djibouti. dany, j28ei, has been active on 40, 80 and 160 meter cw only. watch for him at his sunrisa peak, around 0230z, on 1836 khz. qsl to fc1jen or direct to box 2417, djibouti.

rhodes. although he does not sign /sv5, sv0ah is located at the voice of america in rhodes. watch for him around 2100 to 0230z on 40 meter cw ar

From -1947021202409585457
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3119d0babae17ab,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,a3119d0babae17ab,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1985-05-16 20:54:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!petrus!
karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio,net.space
Subject: Quality of NASA space-to-ground links
Message-ID: <353@petrus.UUCP>
Date: Thu, 16-May-85 23:54:26 EDT
Article-I.D.: petrus.353
Posted: Thu May 16 23:54:26 1985
Date-Received: Sat, 18-May-85 00:35:38 EDT
Distribution: net
Organization: Bell Communications Research, Inc
Lines: 22
Xref: watmath net.ham-radio:2713 net.space:3989

This is a question that's bugged me for some time.

Those of us who are space junkies have gotten used to listening to space-to-ground audio links that are, shall we say, somewhat less than "telephone quality". While the overall intelligibility has gotten better over the years, it is still worse than I would expect.

In the case of the space shuttle, which uses digital transmission (delta mod) for its primary (non-UHF) audio links, I had assumed that the noise you hear when an astronaut opens his mike must be due to things like ventilating fans on board (after all, air doesn't move by convection without gravity).

However, when Owen Garriott made his famous DX-pedition, using the same headset connected to a 2m FM handie-talkie, his audio quality was absolutely clear -- virtually no transmitted noise or distortion. If I hadn't already been familiar with his voice from things like interviews and press conferences, I would have suspected a hoax. So where does all the noise come from in the NASA chain? Do the orbiter avionics use large amounts of speech compression or clipping, or what? Should we hams offer to replace all of their communications gear?

Phil

From 1238205876537597955
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9abc2acc8e701437,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-17 05:44:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 Apollo 3/7/85; site apollo.uucp
Path: utzoo!linus!decvax!wanginst!apollo!rees
From: rees@apollo.uucp (Jim Rees)
Newsgroups: net.ham-radio
Subject: Need 6Kv capacitors
Message-ID: <2692dec9.2c46@apollo.uucp>
Date: Fri, 17-May-85 08:44:13 EDT
Article-I.D.: apollo.2692dec9.2c46
Posted: Fri May 17 08:44:13 1985
Date-Received: Sun, 19-May-85 10:07:02 EDT
Organization: Apollo Computer, Chelmsford, Mass.
Lines: 6

I am in need of some capacitors with 6Kv ratings. I need two each of 500pf, .001, and .03. Any ideas? I've already tried all the local distributors, and even called the Sprague factory. They offered to make them up special for lots of money.

Please reply by mail.

From -1860123804596401612

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,229eb32ccb9c4ce3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-17 06:23:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site biomed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!biomed!lagasse
From: lagasse@biomed.UUCP (Robert C. Lagasse)
Newsgroups: net.ham-radio
Subject: Telephone Innards
Message-ID: <58@biomed.UUCP>
Date: Fri, 17-May-85 09:23:23 EDT
Article-I.D.: biomed.58
Posted: Fri May 17 09:23:23 1985
Date-Received: Sat, 18-May-85 02:10:16 EDT
Organization: Mass. Gen. Hosp. - Dept. Biomed. Engineering
Lines: 35

I'm sure everyone who reads this group has opened up a telephone to see what's going on inside. No, I'm not writing about the new high-tech single-piece electonic pulse phones, I mean the good old all-American Western Electric black rotary dial desk phone. The kind that hard-wired to a wall junction block (called a 42A) with three or four wires (third was ground and fourth was lamp supply for lighted sets which used an accessory transformer hiding somewhere in your cellar). I believe it is called a "model 500" set or something. The guts of this phone are still used in 5-line with hold systems and also with DTMF dialing desk sets from W-E.

The large coil block riveted in the base which I believe is called the "network" has about fifty screw terminals and has got to be one of the most confusing pieces ever invented. In the first place, this thing is labelled with numbers and letters most of which are meaningless unless you are an installer. Half of the terminals are jumpered to others underneath where you can't see and the others connect to coil windings and ....caps?? Anyway, this network thing is filled with thick sticky goop either to keep people like myself out of it or to seal it from moisture.

The other strangeness in this phone is the number of contacts used in the "hook switch". This switch must be a million-pole double-throw. It seems that the only things that would be needed to be switched are the network (completely out of circuit) and the bell with it's series cap (in circuit) when the phone is "on-hook" and vice-versa for "off-hook". Sounds as if a SPDT switch would do just fine or maybe a DPDT if you need contacts for a dial lamp.

Now that all of the phone stuff is deregulated, none of this must be top-secret anymore. Does anyone know where I can get the training manuals that they teach the installers from? Those guys amaze me when they open up these phones and actually figure out how do anything they want to with them. Also, where do all of these new modular jack numbers come from (RJ-11, RJ-35, etc.) ? Is there a committee somewhere dreaming these up and do they relate to ANYTHING? Comments appreciated.

Bob Lagasse biomed. eng. MGH

From 8604942572664739656
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,229eb32ccb9c4ce3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-17 12:59:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA (Keith Petersen)
Newsgroups: net.ham-radio
Subject: Telephone Innards
Message-ID: <10792@brl-tgr.ARPA>
Date: Fri, 17-May-85 15:59:56 EDT
Article-I.D.: brl-tgr.10792
Posted: Fri May 17 15:59:56 1985
Date-Received: Sun, 19-May-85 08:17:45 EDT
Sender: news@brl-tgr.ARPA
Lines: 89

The following was recently posted to the Telecom mailing list. It
explains some of the things you asked about.

--Keith
Arpa: W8SDZ@SIMTEL20.ARPA
uucp: ...{decvax,unc,hao,cbosgd,seismo,aplvax,uci}!brl-bmd!w8sdz
uucp: ...{ihnp4!cbosgd,cmcl2!esquire}!brl-bmd!w8sdz

--cut here--
Date: Tuesday, 14 May 1985 14:04-MDT
From: *Hobbit* <AWalker at RUTGERS.ARPA>
To: Telecom at RUTGERS.ARPA
Re: Wiring

It's rather difficult to send out schematic diagrams to a network of people
using regular old ascii terminals, but since wiring inside most fones is
pretty standard, a description should do the trick. This applies to *all*
WE phones and ITT phones that use the standard dial/ringer/network block/
handset configuration. I've rebuilt lots of these suckers, and can
confidently say that they're all the same.

Everything basically talks to the network block. The network block contains
the ringer capacitor, the induction coil that handles the handset, and very
little else save some spare screw terminals. Left to itself, the network
block can function as a standard line load [it looks electrically like a
phone] when a line is connected across RR and C. These are the inputs to
the coil. The ringing capacitor is indeed across A and K as someone mentioned.
In addition, older blocks have a smaller capacitor across F and RR, to
decrease sparking across rotary dial contacts.

Handset:
Green and White: Earpiece leads. These connect to net R and GN respectively.

Black and Red: Mike leads. Connect to net B and R respectively.

Ringer [two-winding]:
Black and Red: To line. Connect to L1 and L2 [or whever your line comes in].
Grey and Grey/red [these may vary; they are the ''other two'' wires, anyway]:
     Connect to net A and K. The circuit thus formed runs from one side
     of the line to one ringer winding, thru the A-K cap, thru the other
     ringer winding, to the other side of the line. This configuration
     has infinite DC resistance, but picks up the AC ring voltage.
Ringer [one-winding, rare]: Connect the single winding [two wired] in
     series with the A-K capacitor somehow, and this whole thing across
     the line as above.

Rotary dial:
Blue and Green: Interruptor. Connect to net F and RR.
White [2]: Earpiece suppress. Connect to net B and GN if desired.

Touch-tone dial:
Green: + Line in. Connect to net F.
Black: + Line out. Connect to net RR.
Org/Blk: - Line in. Connect to net C.
Red/Grn: output common. Connect to net R.
Blue: output. Connect to net B.
*Note: the above 5 connections will give you a ''bare-bones'' dial
configuration without features. Features are mike disconnect, earpiece
suppress, etc which are done simply by routing leads to these through the
extra contacts on the dial instead of directly. If you want the features,
modify the wiring as follows. If your network block doesn't have the S and
T terminals, you have an old one designed for rotary dials, and you'll have to
do kludges.
Earpiece mute:
Move Handset lead at White to net S. Also connect Dial White-Blue to net S.
Connect Dial White to net GN. This routes the earpiece through
the dial switching mechanism which resistifies the circuit on button press.
Mike disable:
Move Handset Red to T. Also connect Dial Red to T. This completely disables
the mike on button press. Make sure Dial Red-Green is connected to R if you
do this mod!

Hookswitch:
You'll find many variants of this in different units; some configurations
switch both sides of the line, some only one, some switch out the ringer
when off-hook [which isn't necessary, really]. The following should work:
Yellow: Connect to net L2. This is where the line enters.
Brown: Connect to net C.
Green: Connect to net L1. This is the other side of the line.
White: Connect to F. This is switched line power to the dial and the rest.
Red: Connect to R. This, with Black, is shorting earpiece mute.
Black: Connect to GN.

Line in:
Green and Red connect to L1 and L2. Try one polarity; if the touchtone dial
doesn't work, then flip them. Rotary dials, of course, don't matter.

If someone sees errors in this, please notify the list with the correction...

_H*

From 6888675525611006630
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eda5d974f579d6df,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-17 13:28:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ihnp4!hpfcla!ajs@Ucb-Vax
From: ajs%Ucb-Vax@hpfcla.UUCP
Newsgroups: net.ham-radio
Subject: Geographic name/location data source
Message-ID: <10795@brl-tgr.ARPA>
Date: Fri, 17-May-85 16:28:51 EDT
Article-I.D.: brl-tgr.10795
Posted: Fri May 17 16:28:51 1985
Date-Received: Sun, 19-May-85 08:18:51 EDT
Sender: news@brl-tgr.ARPA
Lines: 40

This is a pointer to a source of data from the US government.

If you need a geographic locations data base, including names, latitudes, longitudes, elevations, etc., don't do what I did, which was gather it from atlases. Instead, you can order an incredible quantity and quality of such data from the United States Geological Survey (USGS) National Cartographic Information Center (NCIC). They've digitized from best available maps the name, location, type, etc. for just about every named node, line, or area in the entire country. There are thousands of entries for each State.

Unfortunately, they don't advertise themselves very well. It took several years of occasional calls, letters, and library visits to stumble over the information below. Even the local USGS office did not know about the computer mapping project. To get straight information you should contact the central office:

> Geographic Names Information Management
> National Center, Stop 523
> 12201 Sunrise Valley Drive
> Reston, Virginia 22092
>
> 703-860-6262

From this source you can get a couple of handouts which describe the data available. You can get each State's data in the form of:

> * Mag tape $75

    * Printed book(s) $29
    * Microfiche ..... $ 2

For example, the Colorado printout (which I happened upon at a
library) is two volumes, totalling about four inches thick, entitled:

    Colorado Geographic Names Alphabetical Finding List (917.88)

Please contact them for more information.

Alan Silverstein, Hewlett-Packard Fort Collins Systems Division, Colorado
{ihnp4 | hplabs}!hpfcla!ajs, 303-226-3800 x3053, N 40 31'31" W 105 00'43"

From -1697557573163967823
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f0686ed960be8be,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,f0686ed960be8be,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1985-05-17 13:48:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site bgsuvax.UUCP
Path: utzoo!watmath!clyde!cbosgd!osu-eddie!bgsuvax!sivagnan
From: sivagnan@bgsuvax.UUCP (Vasanthan Sivagnanadasan)
Newsgroups: net.ham-radio,net.wanted
Subject: Radio and TV Handbook
Message-ID: <445@bgsuvax.UUCP>
Date: Fri, 17-May-85 16:48:33 EDT
Article-I.D.: bgsuvax.445
Posted: Fri May 17 16:48:33 1985
Date-Received: Sat, 18-May-85 02:38:25 EDT
Organization: Bowling Green State University, OH
Lines: 2
Xref: watmath net.ham-radio:2715 net.wanted:6430

I am keen to get a copy of the Radio and TV Handbook 1985.
Can anyone give me details about where I can get it along with the price?

From -4787159842364045744
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3119d0babae17ab
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-17 13:53:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!jcp@BRL.ARPA
From: jcp@BRL.ARPA (Joe Pistritto)
Newsgroups: net.ham-radio
Subject: Re: Quality of NASA space-to-ground links
Message-ID: <10796@brl-tgr.ARPA>
Date: Fri, 17-May-85 16:53:38 EDT

Article-I.D.: brl-tgr.10796
Posted: Fri May 17 16:53:38 1985
Date-Received: Sun, 19-May-85 08:23:07 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

Some of the noise on the air to ground is due to marginal conditions getting into the ground stations. (On the last STS, I could tell how close to LOS/AOS the shuttle was by the signal/noise ratio on the air to ground). Some ground stations seem to be very good (TDRS is pretty good, the Indonesia/Australia ground stations are pretty bad).

A lot of this is due to the telephone links from the remote sites to Goddard, which are highly variable it seems.

-JCP-

From -5950763325687320537
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3119d0babae17ab
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,a3119d0babae17ab
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1985-05-17 14:28:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio,net.space
Subject: Re: Quality of NASA space-to-ground links
Message-ID: <10797@brl-tgr.ARPA>
Date: Fri, 17-May-85 17:28:41 EDT
Article-I.D.: brl-tgr.10797
Posted: Fri May 17 17:28:41 1985
Date-Received: Sun, 19-May-85 08:23:27 EDT
References: <353@petrus.UUCP>
Reply-To: wmartin@brl-bmd.UUCP
Distribution: net
Organization: USAMC ALMSA
Lines: 46
Xref: linus net.ham-radio:2085 net.space:2491
Summary: Radio equipment in spacecraft

A good question, and an opening for a topic I had been meaning to post for some time now, and always forgot to...

What has the radio equipment available to the astronauts been, over the history of the manned-spaceflight program, and especially now, in the Shuttle? As a longtime DXer, I have always wondered what it would be like to have radios in orbit, and be able to tune around and see what I get. Can the astronauts do this?

I would expect that you'd get some shortwave and medium wave signals --
the portion that punched through the ionosphere and wasn't reflected,
and that part radiated straight up, which doesn't get reflected, as
you pass over those antennae. Higher frequencies would go right through
the ionosphere, of course, but I'd expect to get a mixture of everything
on the hemisphere transmitting on that particular frequency (with the
closer transmitters dominating, so it would constantly change as the
receiver orbits).

So, do the astronauts now have general-coverage receivers that they can
tune, or is all the radio gear fixed-frequency and dedicated to the
mission? What about video reception? Do they have PAL and SECAM and
NTSC equipment to look at TV signals from all over the world as they orbit?
I like to think of getting a mix of every US station on channel 5 at
the same time... surrealistic TV DX!

The latest episode of the PBS "Spaceflight" series mentioned how
deadly bored the Gemini astronauts were during scheduled sleeptimes
(when they weren't sleepy) and during the last part of long-endurance
missions. I DX at times like those -- did they have the chance to?

What about antennae? Spacecraft being metal cans, it probably is
necessary to get some sort of antennae outside the craft and the
signal fed through. Are there spare or unused antennae that can be
used for recreational radio reception? What about HF -- are there
reeled-out longwire antennae on the Shuttle for HF, or is that
portion of the spectrum ignored? (Could you receive LF or VLF
from orbit, or are those all ground-hugging signals?)

Any NASA types out there who have info on the the radio-related
aspects of the space program, please post info on this! Inquiring
minds want to know!

Regards,
Will Martin

USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

From 9210231509391515935
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d568fcd11fecdf45,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-18 14:01:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!decvax!decwrl!dec-rhea!dec-eden!p_macdonald
From: p_macdonald@eden.DEC (Workstations Pubs 223-3439)
Newsgroups: net.ham-radio
Subject: PACKET
Message-ID: <2248@decwrl.UUCP>
Date: Sat, 18-May-85 17:01:23 EDT
Article-I.D.: decwrl.2248

Posted: Sat May 18 17:01:23 1985
Date-Received: Mon, 20-May-85 20:13:07 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 7

I recently put up a Heathkit HD-4040 TNC as WA1OMM in Nashua, NH.
I am a local user of the W0RLI Packet BBS in Westford, MA. I would be
interested in hearing from anyone using the Heathkit TNC with comments
about it. Are there any quirks or patches? How can I have messages stored
in RAM for later retrieval? Any help would be appreciated.

73   Paul - WA1OMM

From -9137939688483909767
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15f443,2fdec86914e5ea8b,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 151e61,2fdec86914e5ea8b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-18 14:10:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjk
From: rjk@mgweed.UUCP (Randy King)
Newsgroups: net.wanted,net.ham-radio
Subject: FM Broadcast band repeater
Message-ID: <17229@mgweed.UUCP>
Date: Sat, 18-May-85 17:10:39 EDT
Article-I.D.: mgweed.17229
Posted: Sat May 18 17:10:39 1985
Date-Received: Sun, 19-May-85 01:06:16 EDT
Distribution: net,att
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 24
Xref: watmath net.wanted:6433 net.ham-radio:2719

<><><>
I am soliciting advice and comments on the following. I live in a fringe
area for most of the good FM stations that broadcast from Chicago. I can
receive these broadcasts easily on my radio that connects to my TV antenna,
but clock radios and walkmans get little or nothing.

I think what I need is a limited area FM transmitter so that I can use my
walkman while out on the tractor. It's a two hour job to mow and I sure
would like to listen to the radio (note: radio, not tapes!). I'd also like
my other radios playing my choice of music which includes other FM stations,
discs, or reel tapes from the stereo. Here is my wish-list:

    *) stereo hi-Z audio inputs
    *) range of about 500' radius (is this legal?)
    *) signalling input; i.e. maybe I can detect a phone ringing

or some other signal and 'beep' my remote radio.

I sure would appreciate any pointers on available equipment, legal req's, similar experience, how-would-you-do-its, and any other comments. Please try to mail to me, even if you post a followup.

Randy King
AT&T-CP@MG
ihnp4!mgweed!rjk

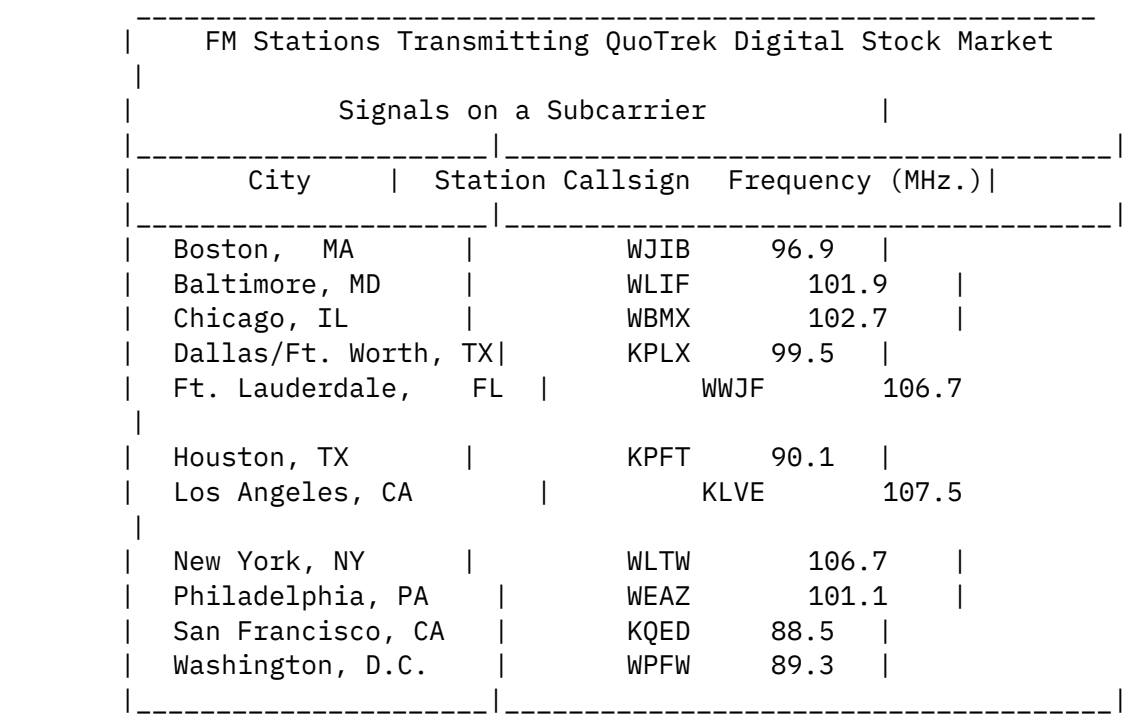
From 4327163733379751416
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,864e64d7ee6691a2,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,864e64d7ee6691a2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-18 15:03:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.audio
Subject: QuoTrek stock quotes transmitted on subcarriers
Message-ID: <575@ihu1h.UUCP>
Date: Sat, 18-May-85 18:03:59 EDT
Article-I.D.: ihu1h.575
Posted: Sat May 18 18:03:59 1985
Date-Received: Sun, 19-May-85 01:03:04 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 39
Xref: watmath net.ham-radio:2718 net.audio:4887

x

QUOTREK STOCK MARKET QUOTES TRANSMITTED
ON FM SUBCARRIERS

QuoTrek is a subscription service in which stock quotes are transmitted, without the standard 15 minute delay, on the subcarriers of commercial FM broadcast stations. Dataspeed, Incorporated provides this service, in which subscribers use a portable radio terminal, resembling a combination Sony Watchman TV/pocket calculator, to receive up-to-the-minute stock market prices.

With expansion planned to other cities, Dataspeed sales literature claims that QuoTrek digital stock information is currently transmitted on a subcarrier by these stations:



--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6602302198131253563
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15f443,2fdec86914e5ea8b
X-Google-Attributes: gid15f443,public
X-Google-Thread: 151e61,2fdec86914e5ea8b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-18 18:18:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.wanted,net.ham-radio
Subject: Re: FM Broadcast band repeater
Message-ID: <576@ihu1h.UUCP>
Date: Sat, 18-May-85 21:18:51 EDT
Article-I.D.: ihu1h.576
Posted: Sat May 18 21:18:51 1985
Date-Received: Sun, 19-May-85 06:20:02 EDT
References: <17229@mgweed.UUCP>
Distribution: net,att
Organization: AT&T Bell Laboratories
Lines: 54
Xref: watmath net.wanted:6434 net.ham-radio:2720

x

Sounds like you need to connect the headphone output jack of your indoor receiver (the one that can hear the stations you want) to the input connection of a "Mr. Microphone" or some other type FM wireless microphone. Radio Shack sells a kiddie's toy for $6.95 [#60-2109], but I don't know its transmission range. The catalog also lists a "Wireless FM Mini Tie-Clip Mike" for $19.95 [#33-1076], but the range is specified as 250 feet outdoors. This scheme only provides you with monaural reception.

I've used a wireless intercom on 200 kHz for a local area relay from the livingroom to the bedroom rather than running wires.

If you're not fussy about fidelity, you could use a pair of toy 49 MHz walkie-talkies, dedicating one to full time transmission, and one for reception. You'll have to contend with nearby cordless telephones on the same frequency. The latest John J Meshna catalog1 lists a 49.86 MHz walkie-talkie board on page 56 for $1.50 [H41A-26].

> Subject: FM Broadcast band repeater
>
> I am soliciting advice and comments on the following. I live in a fringe
> area for most of the good FM stations that broadcast from Chicago. I can
> receive these broadcasts easily on my radio that connects to my TV antenna,
> but clock radios and walkmans get little or nothing.
>
> I think what I need is a limited area FM transmitter so that I can use my
> walkman while out on the tractor. It's a two hour job to mow and I sure
> would like to listen to the radio (note: radio, not tapes!). I'd also like
> my other radios playing my choice of music which includes other FM stations,
> discs, or reel tapes from the stereo. Here is my wish-list:
>
> *) stereo hi-Z audio inputs
> *) range of about 500' radius (is this legal?)
> *) signalling input; i.e. maybe I can detect a phone ringing
> or some other signal and 'beep' my remote radio.
>
> I sure would appreciate any pointers on available equipment, legal req's,
> similar experience, how-would-you-do-its, and any other comments. Please
> try to mail to me, even if you post a followup.

---

1. John J. Meshna, Jr., Inc. 19 Allerton Street, Lynn, MA
   01904. Tel: (617)595-2275.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 1711513808085832968
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c9bf7db756a6ee14,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 08:15:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site tekigm.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tektronix!
tekigm!alanr
From: alanr@tekigm.UUCP (Alan Rovner)
Newsgroups: net.ham-radio
Subject: Is there enough interest in a packet radio subnet?
Message-ID: <341@tekigm.UUCP>
Date: Mon, 20-May-85 11:15:40 EDT
Article-I.D.: tekigm.341
Posted: Mon May 20 11:15:40 1985
Date-Received: Wed, 22-May-85 02:07:17 EDT
Distribution: net
Organization: Tektronix, Beaverton OR
Lines: 10

I've noticed quite a lot of packet related traffic on the net and thought
I'd just toss out this question to be commented on by you folks in
net land.

Should there be a packet radio subnet, maybe with official mailing list
or equivalent?

73,
Al Rovner, WA2TMP
Tektronix, Vancouver, WA

From -7310894128596202834
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,30ed0fd32482368b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 08:43:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!decwrl!dec-rhea!
dec-eden!p_macdonald
From: p_macdonald@eden.DEC (Workstations Pubs 223-3439)
Newsgroups: net.ham-radio
Subject: Packet

Message-ID: <2278@decwrl.UUCP>
Date: Mon, 20-May-85 11:43:09 EDT
Article-I.D.: decwrl.2278
Posted: Mon May 20 11:43:09 1985
Date-Received: Thu, 23-May-85 03:36:38 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 14

Here's the scenario - I am using a Heathkit TNC and a Commodore 64.
I connect the 64 to the TNC via an MSD RS232 interface and a straight-
through RS232 cable (pins 1-8 and 20). Terminal parameters are set
correctly, however I cannot receive anything on my screen. What is sent
seems to make it to the TNC since my my PTT light turns on.

Another computer with a real RS232 output works just fine. Heathkit says
they tested the TNC with a 64 using the Commodore 1012A RS232 adapter.
So, could it be that the MSD is not quite the same as the Commodore
adapter? Is anyone using a Commodore with an MSD RS232 interface?

Please advise. I can be contacted through the W0RLI PBBS in Westford, MA.

73 de WA1OMM Paul

From -3314112482592628609
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f0686ed960be8be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 09:11:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!wmartin@Almsa-2
From: wmartin@Almsa-2 (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: Re: Radio and TV Handbook
Message-ID: <10842@brl-tgr.ARPA>
Date: Mon, 20-May-85 12:11:03 EDT
Article-I.D.: brl-tgr.10842
Posted: Mon May 20 12:11:03 1985
Date-Received: Tue, 21-May-85 04:47:36 EDT
Sender: news@brl-tgr.ARPA
Lines: 43

The list price of the 1985 World Radio TV Handbook is $19.50, which is
far too much. I always order my copies by mail from Century Print Shop
in California, which sells them for a reasonable discount, especially
if you order in advance. Ordering after-the-fact, as you would now, you
don't get that much of a discount. I'll have to look up the cost and
address at home tonight and message you tomorrow about that.

Actually, though, I *don't* recommend you buy the 1985 issue now, unless
you really want it and have looked at it already and are convinced that

you need it. You see, the WRTH is prepared around the end of the year, with station schedules and frequency lists valid at that time, and with info for most broadcasters about their next schedule period, which ends in the summer. So buying it now, you are getting info which will become obsolete very shortly, yet are paying full price anyway. I always figured that if you couldn't order in advance, so you get the WRTH as soon as it is initially distributed, you were not getting your money's worth. It should be being sold for at least 33% off by now, and drop down to half-price or less as soon as the schedules listed in it are superseded. Around September or October, it should be closed out for a dollar or two.

This is only my personal opinion, but it is how I view the value of this sort of time-dependent data. The only things you'll find of value in the WRTH after the schedule listings are superseded are:

a) info on stations who do NOT change their schedules, like medium wave & TV, and

b) station addresses, interval signals, and technical information, and

c) the receiver reviews and articles in the back.

I buy this thing every year out of habit, mostly, read the back section when I get it, and stick it on the shelf. If I refer to it 10 times a year, I'd be surprised. I know that other people refer to it constantly, so this is just personal, but I wanted to point out that it is not a vitally necessary resource for every SWL. I get MUCH more out of a subscription to Review of International Broadcasting than out of the WRTH.

Regards,
Will Martin

ARPA/MILNET: wmartin@almsa-1.ARPA USENET: seismo!brl-bmd!wmartin

From 4810564690903581689
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ef759fe4f2c27ff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 10:44:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!decwrl!dec-rhea!
dec-eden!p_macdonald
From: p_macdonald@eden.DEC (Workstations Pubs 223-3439)
Newsgroups: net.ham-radio
Subject: HD4040
Message-ID: <2279@decwrl.UUCP>
Date: Mon, 20-May-85 13:44:37 EDT
Article-I.D.: decwrl.2279
Posted: Mon May 20 13:44:37 1985
Date-Received: Thu, 23-May-85 03:37:07 EDT

Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 19

Okay on the NOVRAM. I haven't had any problem with that. As a matter of fact the thing went together, calibrated, and ran by the book. I haven't tried any of the other baud rates. I am running 1200 baud on 145.01 using an Epson Geneva lap computer for control. As soon as I figure out my RS232 problem, I'll put it on the 64 with the monitor and virtual disk storage. Heathkit has informed me that the HA4040 was tested with a 64 using the Commodore 1012A RS232 interface and a straight-through RS232 cable with pins 1-8 and 20 active. So, I can only assume that the MSD interface is not quite Commodore capatible for all pinouts. Heath also informed me that a technical data sheet is available for putting together the filter for using the TNC on Oscar and HF. Apparently there is no special 300 baud modem kit as identified in the catalog. Its merely a different filter that plugs in. Also, the 6264 8K RAM is the only additional RAM that can be supported for a total of 16K (only 10K total for storage). The spec I believe mentions 16K for a total of 24K, but that is incorrect. The extra RAM is available as KIT # ETA-18-6 for $24.95 from Heath. I am sure you can get that RAM elsewhere for much less!

73 Paul-WA1OMM

From 4656541546154064231
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,6a7aa8b24425c531
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,6a7aa8b24425c531
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,6a7aa8b24425c531
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1985-05-20 11:07:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio,net.wanted,net.analog
Subject: Re: Need Manuals for Singer Spectrum Analyzer
Message-ID: <10844@brl-tgr.ARPA>
Date: Mon, 20-May-85 14:07:19 EDT
Article-I.D.: brl-tgr.10844
Posted: Mon May 20 14:07:19 1985
Date-Received: Tue, 21-May-85 04:48:54 EDT
References: <1731GMW@psuvm>
Reply-To: wmartin@brl-bmd.UUCP
Distribution: net
Organization: USAMC ALMSA
Lines: 20
Xref: linus net.ham-radio:2097 net.wanted:5622 net.analog:291
Summary: Possible source

One possible source for manuals for "professional" or industrial/non-consumer electronic equipment, when the originating company either is defunct or, as in this case, wants an outrageous price, might be some of the dealers in reconditioned and used electronic gear. The primary one of these that I know of is Tucker Electronics Co. (PO Box 461060, Garland, TX 75046 -- 800-527-4642* or (214) 348-8800). I've seen Singer spectrum analyzers and RFI/EMI gear in their catalogs; they might carry extra sets of manuals or be willing to Xerox some for less than the originating company would charge.

Even if they don't have the manuals, they put out a catalog with all sorts of neato stuff in it; I've always wanted to DX with some of those $30,000 surveillance and RFI/EMI test receivers and spectrum analyzers....

Regards,
Will Martin

USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

(*) I just noticed that they have a different 800 number shown on this card I have for catalog requests: 800-527-4645.

From 4171620420301729599
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ceff9c618952f749,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 11:25:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2.fluke 9/24/84; site vax1.fluke.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!fluke!cdy
From: cdy@fluke.UUCP (Bryan Yunker)
Newsgroups: net.ham-radio
Subject: need hallicrafters recvr. info
Message-ID: <1021@vax1.fluke.UUCP>
Date: Mon, 20-May-85 14:25:31 EDT
Article-I.D.: vax1.1021
Posted: Mon May 20 14:25:31 1985
Date-Received: Wed, 22-May-85 01:08:06 EDT
Distribution: net
Organization: John Fluke Mfg. Co., Inc., Everett, WA
Lines: 7

i have a hallicrafters "sky challenger" receiver which has no model or serial number markings inside or out. the sams photo fact index and local radio suppliers have been no help. if anybody is familiar with said unit i can email a description or us mail a picture for positive id. happy to pay for copy costs and postage... thanks

From 4111699377852468815

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2a576cedf745b4c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 12:53:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Modified PLL rigs
Message-ID: <10849@brl-tgr.ARPA>
Date: Mon, 20-May-85 15:53:00 EDT
Article-I.D.: brl-tgr.10849
Posted: Mon May 20 15:53:00 1985
Date-Received: Tue, 21-May-85 04:53:24 EDT
References: <10100@brl-tgr.UUCP> <43300003@extel.UUCP>
Organization: Ballistic Research Lab
Lines: 9

>
> I have thought many times of attempting to get my IC02AT to cover
> a larger frequency range primarily to recieve the NOAA weather forcast.

I don't know, but 20 MHz is an awfully big shift. You'd better be pretty
close to the transmitter, or willing to retune your radio away from the
ham bands. Why not go down to radio shock and by a weatherradio.

-Ron

From -857251785735333190
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,43c0f9ef50bfdb9a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 14:45:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site biomed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!ulysses!allegra!princeton!
astrovax!biomed!lagasse
From: lagasse@biomed.UUCP (Robert C. Lagasse)
Newsgroups: net.ham-radio
Subject: Motrac,Mocom,Mastr?
Message-ID: <64@biomed.UUCP>
Date: Mon, 20-May-85 17:45:40 EDT
Article-I.D.: biomed.64
Posted: Mon May 20 17:45:40 1985
Date-Received: Wed, 22-May-85 01:07:16 EDT
Organization: Mass. Gen. Hosp. - Dept. Biomed. Engineering
Lines: 17

1). Has anyone but myself noticed the audio tone quality that commercial
mobile FM gear has? Unlike your typical "police scanner" or even
mass-produced FM amateur radios which have a high pitched hiss when you

disable the squelch, commercial sets have a throaty sounding hiss and the voice quality is always pleasant, not buzzy. I have tried building audio filters to change the tone for my 2m gear but all I get is muffled audio. External speakers help a bit but I am convinced that they are doing something sneaky inside of the commercial stuff.

2). 6 meter questions:
    I am young enough to have missed the heyday of 6m popularity. Does anyone still produce it for hams? Should I build my own or modify a Motrac or something? How bad were the TVI problems from equipment used strictly car-to-car in rural areas? What kind of range advantage can I expect over 2m mobile-to-mobile? All I want are one or two freqs. Were there any "popular" ones like 146.520 simplex(2m) ?
Bob Lagasse N 1 A L G   Mass. Gen. Hosp.

From -3993732442139689416
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c7c135150cde13b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 14:53:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site biomed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!ulysses!allegra!princeton!
astrovax!biomed!lagasse
From: lagasse@biomed.UUCP (Robert C. Lagasse)
Newsgroups: net.ham-radio
Subject: Regency pocket scanner
Message-ID: <65@biomed.UUCP>
Date: Mon, 20-May-85 17:53:13 EDT
Article-I.D.: biomed.65
Posted: Mon May 20 17:53:13 1985
Date-Received: Wed, 22-May-85 01:07:32 EDT
Organization: Mass. Gen. Hosp. - Dept. Biomed. Engineering
Lines: 9

  Does anyone have any good or bad comments concerning the Regency HX-1000 pocket scanner?
  At last, it seems like the chassis voltage of this set is actually set up for use with a NiCad pack (Many other pocket scanners and tape recorders are set up for carbon-zinc cells. You know the problem....When you go to use NiCads you start with a volt or two less from a fresh pack using the same number of cells). Thanks for any comments before I buy.
Bob Lagasse N 1 A L G Mass. Gen. Hosp.

From 380855841080891825
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d547e015653391c9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 15:40:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!hoffman%pitt@csnet-relay.arpa
From: hoffman%pitt@csnet-relay.arpa (Bob Hoffman)
Newsgroups: net.ham-radio
Subject: RJ11, RJ45 numbers
Message-ID: <10857@brl-tgr.ARPA>
Date: Mon, 20-May-85 18:40:30 EDT
Article-I.D.: brl-tgr.10857
Posted: Mon May 20 18:40:30 1985
Date-Received: Tue, 21-May-85 05:07:41 EDT
Sender: news@brl-tgr.ARPA
Lines: 11

These numbers are the Universal Service Ordering Code (USOC). I don't know who assigns them, but a reference to them, including all connections, is available in the FCC Rules and Regulations, Part 68 (Telephone Interconnect).

Part 68 is a good reference for anyone interested in telephones. I bought my copy at our local Government Printing Office bookstore. The price was around $5.

---Bob Hoffman/N3CVL
Pitt Computer Science

From -3373625374379833857
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b194f130a7210ba5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 15:54:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 20
Message-ID: <17269@mgweed.UUCP>
Date: Mon, 20-May-85 18:54:34 EDT
Article-I.D.: mgweed.17269
Posted: Mon May 20 18:54:34 1985
Date-Received: Fri, 24-May-85 20:33:35 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 34

qst de k9eui
hr propagation forecast bulletin nr 20 from arrl headquarters
newington ct may 19, 1985
to all radio amateurs bt

for the first time in several months, there were three sizable

sunspot groups visible may 18 and 19. the solar flux reached 93 on the 16th, dropped back to 90 the next day, and was down to 88 by the 19th. the large group responsible for the 90 peak on may 10 went around the west limb on the 20th. it appeared to be shrinking and the two groups now in the eastern portion do not appear large enough to sustain flux values in the high 80s very long. the area of the sun that started a major flux rise on april 20 is back again, but thus far has not shown anything like its april vitality. a return to flux readings in the low 70s does not appear as an immediate prospect, but it could happen late in may.

a decline in average geomagnetic activity below the late april peaks is expected to help propagation prospects during the balance of may. the normal 27 day interval for recurrence of the major disturbance of april 21 has already passed. indications are for fairly good conditions through may 22, with recurrent disturbances may 23 to 26. these will degrade east west communication in the higher latitudes mainly. sporadic e skip was more prevalent last week. it will come more often with increased effect in late may. it will enliven the 10 and 6 meter bands with short skip increasingly through late june and the chances for 2 meter skip will improve.

american sunspot numbers for may 9 through 15 were between 43 and 21 with a mean of 29.7 ar

From 6572067622012369872
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e0cc91ed925abf48,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 16:39:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site wavetek.UUCP
Path: utzoo!decvax!bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!mhuxt!houxm!
vax135!cornell!uw-beaver!fluke!wavetek!john
From: john@wavetek.UUCP (John Moriarity)
Newsgroups: net.ham-radio
Subject: Request for advice in choosing 2-meter repeater equipment.
Message-ID: <128@wavetek.UUCP>
Date: Mon, 20-May-85 19:39:15 EDT
Article-I.D.: wavetek.128
Posted: Mon May 20 19:39:15 1985
Date-Received: Wed, 22-May-85 14:13:17 EDT
Distribution: na
Organization: Wavetek Engineering, Lynnwood, WA
Lines: 10

I'm looking for recommendations or caveats regarding the 2-meter
repeater packages currently offered. Our group is looking at the
systems offered by Spectrum and Micro Control Products (MK4, MK4 etc.).
Since we are faced with spending about $3K, we need any comments

you would like to make.

Please MAIL replies to: {uw-beaver, microsoft}!fluke!wavetek!john

John Moriarity, c/o Wavetek, 19015-H 36th Ave. W.
Lynnwood, WA 98036

From 1298390688581333537
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5ea73b181daf846b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-20 17:42:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: More 6 MHz bootlegger ... loggings (Q & A, + choosing scanners)
Message-ID: <577@ihu1h.UUCP>
Date: Mon, 20-May-85 20:42:01 EDT
Article-I.D.: ihu1h.577
Posted: Mon May 20 20:42:01 1985
Date-Received: Wed, 22-May-85 01:05:29 EDT
References: <574@ihu1h.UUCP>
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 105

x
> I was hoping to get the answer to this from the context of your
> loggings, but no luck. What is a "bootlegger" in a 1985 context? (I
> assume that these people are not making corn liquor out in the woods.)

I use the term 'bootlegger' to describe someone who engages
in 2-way radio conversations without being properly licensed
for the frequency being used. This is distinguished
from
'pirates', who are also unlicensed, but make one way broad-
casts.

Many bootleggers are radio hobbyists that can't (or haven't
tried to) obtain an amateur radio license, and have migrated
out of the Citizens Band. These people first started
operating illegally just above the highest allocated CB
channel, sometimes straying into the bottom of the 10 meter
ham band (28.0 MHz). More recently, the most brazen
have
been heard in the 6.5 - 7.0 MHz range. I've been monitoring
the same guys for a few days now. As I type, they've
just
started a conversation on 6.933 MHz LSB (lower sideband).

Other bootleggers are drug smugglers. Many of their Spanish language conversations can be heard in the 14.4 - 14.6 MHz band during the day. We monitored this traffic, as well as the joint USN/USCG/DEA anti-smuggling operation, during lunch time from the radio club at work.

There seems to be two categories of 'pirates':

1. clandestine radio stations that transmit for political purposes (e.g. anti-Castro Cuban exiles).

2. broadcasting phreaks that transmit entertainment (e.g. rock music, comedy, etc.)

> Finally, can you recommend a source of information on the current line
> of scanners available, the bands of interest, and the major services on
> those bands? I guess what I am looking for would be an introduction to
> scanners and a buyers guide rolled into one. I've searched local
> bookstores without success, and hesitate to try mail order without a
> recommendation.

Although the newer shortwave receivers sometimes contain scanning circuits, people use the term "scanner" to loosely describe a class of radio that receives the VHF and UHF bands. The first part of this letter deals with stations one can hear on the HF (high frequency) bands, not on a scanner. Since you asked specifically about scanners, I'll assume that you know that HF bands are received by shortwave radios, not the typical scanner. Let me divide the answer into two parts:

1. A good introduction to scanning is Louis Smith's book "The Complete Action Guide to Scanners & Monitors", available for $10.95 from CRB Research1. I think this book is published by TAB, so you may be able to get it through a large book store. I've seen it in electronics stores and in the Bell Labs library. Smith's book is a few years old, so it doesn't discuss the latest model scanners, but gives you an explanation of the features of a typical scanner, and shows several older scanners. It also contains information on what types of stations may be found on which bands.

2. Latest equipment information is available from manufacturers:

   - Radio Shack - annual catalog

   - Regency Electronics

- UNIDEN/Bearcat

Scanner dealers offer good catalogs also:

- Scanner World, USA (best catalog of scanners), 10 New Scotland Avenue, Albany, NY 12208. Tel: 1-518-436-9609.

- Grove Enterprises (good free catalog), 140 Dog Branch Road, PO Box 98, Brasstown, NC 28902.

- Galaxy Electronics ($1 catalog), Box 1202, 67 Eber Avenue, Akron, OH 44309. Tel: 1-216-376-2402.

- Amateur Electronics Supply (catalog), 4828 W. Fond du Lac Avenue, Milwaukee, WI 53216. Tel: 1-800-558-0411

There really is no "Consumer Reports" magazine of scanners, but sporadic equipment reviews are found in Grove's "Monitoring Times" magazine and the RCMA's "Newsletter". "Popular Communications" carries many scanner advertisements but doesn't carry objective product reviews to avoid upsetting their advertisers (but, they don't mind upsetting their readers).

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1. CRB Research, PO Box 56, Commack, NY 11725.

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==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -7592373082143750745
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3119d0babae17ab
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-21 07:12:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!philabs!cmcl2!seismo!brl-tgr!tgr!Taylor.Wbst@Xerox.ARPA
From: Taylor.Wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Quality of NASA space-to-ground links
Message-ID: <10865@brl-tgr.ARPA>
Date: Tue, 21-May-85 10:12:46 EDT
Article-I.D.: brl-tgr.10865
Posted: Tue May 21 10:12:46 1985

Date-Received: Fri, 24-May-85 04:25:48 EDT
Sender: news@brl-tgr.ARPA
Lines: 10

WILL, I'VE WONDERED THE SAME THING. IT WOULD CERTAINLY BE A FASCINATING STUDY--JUST TUNING ACROSS THE FULL FREQUENCY SPECTRUM WITH DIFFERENT CONDITIONS OF DAYLIGHT, SUN SPOTS, ETC.

I'LL BET THERE ARE SOME SURPRIZES OUT THERE!

CHEERS!

JIM (W2OZH)

From 3393352525970747653
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,399795063d36c9e8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-21 08:35:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!dpricha@apg-1
From: dpricha@apg-1 (David Prichard AMSTE-ADA 5279)
Newsgroups: net.ham-radio
Subject: Response to request for 6 meter info
Message-ID: <10870@brl-tgr.ARPA>
Date: Tue, 21-May-85 11:35:38 EDT
Article-I.D.: brl-tgr.10870
Posted: Tue May 21 11:35:38 1985
Date-Received: Fri, 24-May-85 06:46:56 EDT
Sender: news@brl-tgr.ARPA
Lines: 32

Some comments on your 6 meter questions:

Range.

Measurements of path loss using FM showed that 6m has 10-20 dB less path loss for distances up to 15 km in hilly, not mountainous, terrain. If either xmtr or rcvr is in a "hole" 6m has 15-30 dB less path loss. This equates to an increased range when using 6m (or a reduced power requirement). Range increase varied, but it was on the order of 5-8 km.

TVI.

TVI was minimized by the vertical polarization and the low (25 w) power output of the mobiles. Even when stationary, no complaints of TVI were received. (Chan 2 was 40 miles away, Chan 3 was 70) Also, no QRM was noted when operating in the parking lot of a Fire/Emerg/Civil Defense Hqs which used frequencies in the VHF-low, VHF-high, and UHF bands. A 2m repeater was also located on their towers.

Rigs.

The Yaesu FT625RD multi-mode rig was used. It is no longer in production, but it was very large for mobile use. Other 6m rigs noted in used eqpt lists: FT620, under $300, FT627RA FM, under $200. ICOM also has 6m rigs.

Frequencies.

52.525 is the National FM Simplex frequency. 52.49 and 52.51 are also designated for FM simplex. (See ARRL Repeater Directory)

73,
Dave, N3AFM

From 8833734428732607152
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,197276fcb8604bd1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-21 10:53:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Morton Jim@LLL-MFE.ARPA
From: Morton Jim@LLL-MFE.ARPA
Newsgroups: net.ham-radio
Subject: PACKET TNC RS-232
Message-ID: <10876@brl-tgr.ARPA>
Date: Tue, 21-May-85 13:53:20 EDT
Article-I.D.: brl-tgr.10876
Posted: Tue May 21 13:53:20 1985
Date-Received: Fri, 24-May-85 07:21:41 EDT
Sender: news@brl-tgr.ARPA
Lines: 19

From Morton Jim[702,703]@CCC.MFENET on May 21, 1985 at 9:39 PDT
Subject & Phone: packet

  On the serial link, try a cable with just pins 2,3,7 .   this is the minimum cable that will work, just transmit & recieve data and ground. you should be able to short pin 2 to 3 on the tnc end of the cable (without the tnc connected) and what you type on keyboard should echo to the screen. if this does not work, you need some pins connected together on the commodore end of the cable. possibly 4,5,8,20 all tied together. try it again.   once you can reliably type with this "loopback" configuration, you can connect the tnc and it should work. if not, i would venture to say something is wrong with the rs-232 driver in the tnc. perhaps its levels are ok for the epson but not for the commodore.
   i had many problems trying to use a commercial data cable.   i made one with two connectors and 3 conductors of ribbon cable that has worked quite reliably.
good luck.

jim morton WA6FWW

From -6293712521183783881
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,43c0f9ef50bfdb9a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-21 11:43:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Motrac,Mocom,Mastr?
Message-ID: <10883@brl-tgr.ARPA>
Date: Tue, 21-May-85 14:43:49 EDT
Article-I.D.: brl-tgr.10883
Posted: Tue May 21 14:43:49 1985
Date-Received: Fri, 24-May-85 07:23:35 EDT
References: <64@biomed.UUCP>
Organization: Ballistic Research Lab
Lines: 13

Before the days of synthesizers people used to swear by commercial
equipment. Everything else was JAP-TRAC. As a matter of fact it
wasn't until the multi-band synthesized radio (UV-3) came out that
most switched around here. I used to have a Micor (which was the
top of the Motorola line), nice solid radio (Western Electric used
to build telephones like this). I also have a 2m PROGLINE. Tubes,
T-Power (WHINE) (Remember "Progress is our most important product").
I never installed it in my new car. It only draws 6 amps on receive,
I'd expect my 4 cylender engine would stop if I transmitted.

-Ron

Anyone want a slightly used 4 channel progline?

From 188652439031957913
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,54cccbabb9e7007,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-21 13:41:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!jberets@bbn-vax
From: jberets@bbn-vax (Jim Berets)
Newsgroups: net.ham-radio
Subject: Articles of possible interest
Message-ID: <10892@brl-tgr.ARPA>
Date: Tue, 21-May-85 16:41:06 EDT
Article-I.D.: brl-tgr.10892
Posted: Tue May 21 16:41:06 1985

Date-Received: Fri, 24-May-85 07:08:52 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

"The high-tech hobbyhorse" by Glen Zorpette in May 1985 IEEE Spectrum
discusses amateur radio and model railroading as high-tech hobbies.

"Packet Radio in the Amateur Service" by Philip Karn, Harold Price,
and Robert Diersing in May 1985 IEEE Journal on Selected Areas in
Communications. (This issue of JSAC is entitled "Special Issue on
Communications for Personal Computers.)

Jim

From 791259106216695173
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,17b430c55d126daf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 03:40:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: SWL HF loggings 5/16/85 - 5/22/85 (again)
Message-ID: <580@ihu1h.UUCP>
Date: Wed, 22-May-85 06:40:12 EDT
Article-I.D.: ihu1h.580
Posted: Wed May 22 06:40:12 1985
Date-Received: Thu, 23-May-85 02:10:59 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 49

The first copy of this posting may not have made it very far on the net
due to local machine troubles.

```
   6.9330    call?_____unidentified: bootleggers in CB-type conversation, talke
                        d of mobile antennas and nearby RTTY QRM, ids= "
                        13", "33" (Dave), lsb, 5/19/85 @0024Z [location?
                        ] (B. Parnass)
   7.3150    AIR_______US: Air Force, HQ, Pentagon, wkg hams crossband for Arme
                        d Forces Day, usb, 5/19/85 @0017Z [Washington, D
                        C] (B. Parnass)
   7.4295    call?_____unidentified: pirate broadcaster playing the same rock s
                        ong repeatedly, long pause between songs which s
                        topped in the middle at times. Being jammed by a
                         youthful male using AM who had rcv capabilities
                         on the same freq. Both stations ceased at @0158
                        Z, am, 5/18/85 [location?] (B. Parnass)
  13.0275    DAL_______Norddeich Radio, cw marker, 5/17/85 @2217Z [W Germany] (
                        B. Parnass)
```

```
  13.1132    NMN_______US: Coast Guard, marine forecast, usb, 5/17/85 [Pungo, V
                           a] (B. Parnass)
  13.1442    WOM_______AT&T ship-to-shore radiotelephone, id="High Seas", calli
                           ng the "Brenda Joline", usb, 5/17/85 @approx 223
                           0Z [Ft Lauderdale, FL] (B. Parnass)
  13.1810    M3H_______US: Navy, yl gave test count, usb, 5/17/85 @approx 2235Z
                            [location?] (B. Parnass)
  13.2410    call?_____US: Air Force, SAC, freq Sierra , Foxtrot broadcast, usb
                           , 5/19/85 @2248Z [location?] (B. Parnass)
  13.2440    AFD14_____US: Air Force, in-flight aircraft I2L (Navy) made phone
                           patch to request NORAD and FAA be notified of an
                            upcoming flight, QSYed to 15.015 MHz due to poo
                           r patch quality, usb, 5/19/85 @2240 [Ascension I
                           sland] (B. Parnass)
             AFE8______US: Air Force, in-flight aircraft "MAC5022" , usb, 5/19/
                           85 @0243Z [MacDill AFB, FL] (B. Parnass)
  13.3300    KER6______Aeronautical Radio Inc, id="Houston", phone patching air
                           craft N600PM to "Flight Control", then both QSYe
                           d to 17.940, usb, 5/17/85 @1745Z [Houston, TX] (
                           B. Parnass)
  15.0150    AFD14_____US: Air Force, in-flight aircraft: I2L (Navy) QSYed from
                            13.244 MHz, usb, 5/19/85 @2245 [Ascension Islan
                           d] (B. Parnass)
             AHF3______US: Air Force, usb, 5/19/85 @2250 [Albrook AFS, Panama C
                           anal Zone] (B. Parnass)
  17.9400    KER6______Aeronautical Radio Inc, id="Houston", wkg aircraft N600P
                           M, QSYed here from 13.330, usb, 5/17/85 @1745Z [
                           Houston, TX] (B. Parnass)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From 5205170599045870225
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3119d0babae17ab
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 07:19:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!prls!amdimage!amdcad!amd!vecpyr!lll-crg!gymble!umcp-cs!
seismo!brl-tgr!tgr!Taylor.Wbst@Xerox.ARPA
From: Taylor.Wbst@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: Quality of NASA space-to-ground links
Message-ID: <10912@brl-tgr.ARPA>
Date: Wed, 22-May-85 10:19:07 EDT
Article-I.D.: brl-tgr.10912
Posted: Wed May 22 10:19:07 1985
Date-Received: Sat, 25-May-85 06:06:42 EDT
Sender: news@brl-tgr.ARPA
Lines: 6
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WILL, I AGREE!-- IT WOULD CERTAINLY BE AN INTERESTING EXPERIMENT!

I'LL BET THERE ARE SOME SUPRISES IN STORE FOR THE FIRST TO DO THIS ALL-BAND MONITORING.

CHEERS!
JIM (W2OZH)

From -302908197842551069
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ee724dcd2d992d7c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 08:41:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!prls!amdimage!amdcad!amd!vecpyr!lll-crg!gymble!umcp-cs!seismo!brl-tgr!tgr!wmartin@Almsa-2
From: wmartin@Almsa-2 (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: Century Print Shop & WRTH Info
Message-ID: <10915@brl-tgr.ARPA>
Date: Wed, 22-May-85 11:41:36 EDT
Article-I.D.: brl-tgr.10915
Posted: Wed May 22 11:41:36 1985
Date-Received: Sat, 25-May-85 06:07:40 EDT
Sender: news@brl-tgr.ARPA
Lines: 39

Note to Vasanthan Sivagnanadasan: Can't send directly to you, as "sivagnan@bgsuvax.UUCP" isn't recognized by the usual ARPA-to-USENET gateway; please give some path info in your signature in future postings, like host1!host2!bgsuvax!sivagnan...

Here is the info on Century Print Shop, a good source for radio-related publications of various kinds, Sams & Tab books at discount, back issues of RIB, FM Atlas, Police Call, etc. Note: this is a one-man operation, run by Don Erickson. I've never had any trouble with my orders from him, but I've heard that others have at times gotten mixed-up orders or delays. [The only delay I've experienced is that he took months to cash my check after shipping the goods! This is in my favor, not in his, so I have no complaint there!] However, he went through a bad period when some heavy rains damaged his stock, and many orders were delayed. I've been advance-ordering the WRTH from him for some years, getting it at a reasonable discount. However, he hasn't arranged yet for next year's advance ordering; he may be stopping that service.

Unfortunately, there isn't much of a discount on the 1985 WRTH if you buy one now. The list is $19.50 and the Century price is $19.00; there's a $1/order shipping charge, so, unless you buy more things than just that one item, it isn't worth it -- you might as well pay full list plus sales tax at a local bookstore. Maybe you have a local discount bookstore where you could get it cheaper?

Anyway, here's the address:

Century Print Shop
Donald E. Erickson
6059 Essex St.
Riverside, CA 92504-1599
(714) 687-5910

Probably be worthwhile writing for his sale flyers -- send an SASE.

Regards,
Will Martin

ARPA/MILNET: wmartin@almsa-1.ARPA   USENET: seismo!brl-bmd!wmartin

From 6741967473066770433
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,43c0f9ef50bfdb9a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 09:26:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.ARPA
Newsgroups: net.ham-radio
Subject: Re: Motrac,Mocom,Mastr?
Message-ID: <10917@brl-tgr.ARPA>
Date: Wed, 22-May-85 12:26:22 EDT
Article-I.D.: brl-tgr.10917
Posted: Wed May 22 12:26:22 1985
Date-Received: Sat, 25-May-85 08:36:32 EDT
Sender: news@brl-tgr.ARPA
Lines: 36

1. (Re: audio quality) I would think that loudspeaker response would be an
important part of it, but possibly IF filter response would be another.
For transmit audio, the microphone is very important and you can even hear
big differences among ham type transmitters.

For external speakers, by the way, it's HARD TO BEAT the Radio Shack
"CB Extension Speaker" which sells for about $12.95. Add this to even an
HT with low audio power output capability, and you can hear radio calls from
30 feet away from your vehicle (if you put the speaker on the roof or
something), even beside a busy highway. (I am NOT exaggerating!) This speaker
has excellent frequency response shaping for FM voice communications use.

As for microphones, buy a Turner or Shure mobile dynamic mic and you can't
go wrong.

The IF filter is harder to fiddle with. Also, you should be careful, because

the "pros" (meaning Motorola) found out early in the game that you DON'T want a nice square-topped filter -- you want a nice stoop-shouldered Gaussian one because its IMPULSE RESPONSE is also stoop shouldered and short in duration so IGNITION NOISE doesn't ring on into the middle of the 21st century as it would with a sharp-edged filter. Maybe you could buy a 455 KHz IF filter from the "Big M" and substitute it for the one in the el cheapo rig.

I dunno about audio shaping, but maybe you could analyze the offending ham rig with an FM generator and audio voltmeter and plot its frequency response at various points to see where the loss occurs.

2. Six meters. I am not a 6m user, but I have noticed that the ARRL Repeater Guide lists quite a few 6m repeaters. You might want to look at it for hints and maybe get on some of the repeaters and ask for further information.

Good luck!

73,
John Sangster, W3IKG
jhs at mitre-bedford

From 3708007596827711800
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b45a651d8dae1fc2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 09:39:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!DSDC-SDT2@GUNTER-ADAM.ARPA
From: DSDC-SDT2@GUNTER-ADAM.ARPA (Walt Livingston)
Newsgroups: net.ham-radio
Subject: zerox 820 board availability
Message-ID: <10919@brl-tgr.ARPA>
Date: Wed, 22-May-85 12:39:23 EDT
Article-I.D.: brl-tgr.10919
Posted: Wed May 22 12:39:23 1985
Date-Received: Sat, 25-May-85 08:37:06 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

I've heard that the zerox 820 board for use in packet radio can be obtained for about $50.. Where ?? Can anybody give me an address of a supplier?? I am going to be involved with an evaluation and recommendation session with the National American Red Cross (using packet radio during disasters) and have got to get up-to-speed. I am presently attempting to have our local chapter spring for one (we already have both HF and VHF gear purchased) and need to experiment and demonstrate. Any suggestions ??

Many thanks in advance....

Walt WA4YCM
Montgomery, Alabama

From 430837331159622080
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,68946a0b79eb6cc9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 10:01:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!
whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Motrac, Mocom, Mastr? comments on FM rig audio
Message-ID: <17297@mgweed.UUCP>
Date: Wed, 22-May-85 13:01:22 EDT
Article-I.D.: mgweed.17297
Posted: Wed May 22 13:01:22 1985
Date-Received: Fri, 24-May-85 21:53:19 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 38

People that manufacture FM gear for commercial uses (at least the BIG
manufacturers like Motorola and G.E.) paid attention to things like
proper pre-emphasis and de-emphasis curves in their transmitters & receivers.
That is why the audio sounds better. Also they tailored the response by
careful selection of the matching speakers. What is desired is not HI-FI
but most effective communications audio.

Several years ago, I reworked my ICOM 22-S because the audio was so "thin"
that I could not recognize who was talking to me. With no modesty whatsoever,
I must say that I paid special attention to the 2 meter repeater that I built
and that its frequency response is flat between 300 and 3000 Hz. Also, the
transmitter deviation is exactly what the received deviation is.
The main problem with the ICOM was that the low end was rolled off. This was
probably done because the amp is low power (less than 1 watt, as I recall)
and if it had full range response, it would have distorted at higher levels
needed in a noisy car.

During my travels around the country, I hear some pretty lousy sounding
repeaters! I think they must have just connected the transmitter input
directly to the rcvr speaker output, without regard for response.
In receivers with transformer outputs, such as a Motorola Motrac/Motran
or older tube types like the Sensicon "A" etc, the output at the speaker
terminals does not follow the standard de-emphasis curve. You have to
get back a stage and add a follower to get the proper response for
repeater use.

Another problem FM'ers face today is the way most "jap-track" rigs

are set up on transmit. Most have way too much mike gain. The deviation may be set properly but usually you can hear a fly fart in the next room! I am told that these rigs are set up this way because the oriental voice/language is not as "harsh" as ours, which requires a more sensitive speech amp setting. At least some of these rigs have a mic gain pot as well as a deviation control. When the gain is too high, there is excessive clipping, which makes it harder to understand the person.

Bob K9EUI

From 2759429523878519146
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ace8ad3e716fe4e2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 10:50:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Replacement NICADS for the Kenwood 2500
Message-ID: <10924@brl-tgr.ARPA>
Date: Wed, 22-May-85 13:50:20 EDT
Article-I.D.: brl-tgr.10924
Posted: Wed May 22 13:50:20 1985
Date-Received: Fri, 24-May-85 20:56:44 EDT
Sender: news@brl-tgr.ARPA
Lines: 37

Re: shorted Nicad cells. It is not always necessary to throw them out and start over! Often, zapping them with a burst of high current, followed by normal charging, will bring them back to life for several more years of service.

I do this with a power supply which has internal current limiting to about 1.5 Amps plus a large capacitor across its output. I set it to something above the Nicad cell voltage, like 12 or so volts, and connect it across the dead cell. The capacitor, which is charged to 12 or so volts, zaps much of its charge through the dead cell over a very short time. Judging from the sparks that fly, I would guess that 20 or 30 Amps flows during this burst. I'm not sure what the optimum would be, but 100 uFd at 12 volts seems to bring back most of my dead AA cells. Then the regulated supply goes into current limiting at 1.5 Amps or so and puts some charge into the restored cell. Finally, after 15 or 20 seconds of this, I check the cell with a voltmeter, and it usually reads about 1.3 or 1.4 volts, which, however, is typically dropping off slowly. I then pop the cell into a "normal" charger (50 mA or so for a 450 MAH, "C/10" type cell) and let it soak up a full charge over the recommended 16-hour period. Most of the cells I treat this way come back and work fine for many months thereafter.

Supposedly, one of the cell demise mechanisms is the growth of little conductive whiskers inside the cell which short them out. The zap of high

current burns out these shorts and allows normal cell operation. I speculate that some of the cells I have thrown out after trying my procedure could also be brought back if I had used a larger zapping capacitor, like 5000 uFd or more.

I have found that this procedure works best if applied to INDIVIDUAL 1.2 volt cells. Thus it is still desirable to open up the case to get at the individual cells. However, the procedure sometimes works OK when applied across a whole stack of cells at once, which can be done from the external terminals of a battery pack.

73,
John Sangster, W3IKG
jhs at mitre-bedford

From 2643587073111412692
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b194f130a7210ba5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 11:06:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: arrl propagation forecast bulletin nr 20
Message-ID: <10925@brl-tgr.ARPA>
Date: Wed, 22-May-85 14:06:07 EDT
Article-I.D.: brl-tgr.10925
Posted: Wed May 22 14:06:07 1985
Date-Received: Fri, 24-May-85 20:56:58 EDT
Sender: news@brl-tgr.ARPA
Lines: 3

Just a note to tell you that the ARRL bulletins are well appreciated.

Joe N2XS

From -8170707262074327218
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab4da7e199b019e1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 11:26:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: IC2aT BP-4 Battery Packs, Problems With
Message-ID: <10926@brl-tgr.ARPA>
Date: Wed, 22-May-85 14:26:25 EDT

Article-I.D.: brl-tgr.10926
Posted: Wed May 22 14:26:25 1985
Date-Received: Fri, 24-May-85 20:57:14 EDT
Sender: news@brl-tgr.ARPA
Lines: 31

HINTS AND KINKS Department:

If anybody out there in network-landt has had their IC2aT quit working with BP-4 packs and wonders why, it may be the same phenomenon that had me perplexed a couple of years ago:

There is a little spring contact which ties the two halves of the BP-4 pack together. The spring may lose its oomph after awhile and the two halves suddenly lose electrical contact.

This mysterious spring is in the upper left-hand corner if you hold the BP-4 pack with the "business end" facing you and the open side facing down (the side that you start it onto the radio with). By prying the contact up with a sharp instrument, you can restore contact.

Another problem I used to have with BP-4s is that the spring contacts at the ends of the AA cells tended to lose their oomph and leave the cells loose. This especially happens if you drop the pack on a hard surface. I cured this by buying a small sheet of cork material about 1/16 inch thick and cutting out some little pads maybe 1/8 or 3/16 inch square to glue in place inside each spring contact. Now the cork is what ultimately provides the spring tension, and my BP-4 cells NEVER lose their grip on the AA cells.

I understand that ICOM now sells a BP-4A battery pack, which is MUCH better contructed than the old BP-4s which I have. If you have a choice, insist on BP-4A not plain old BP-4 packs, and you may not have the problems I described in the foist place.

73,
John Sangster, W3IKG
jhs at mitre-bedford

From 5199015893323570067
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2fdec86914e5ea8b
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,2fdec86914e5ea8b
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1985-05-22 11:37:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1m.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1m!hanson
From: hanson@ihu1m.UUCP (R. J. Hanson)
Newsgroups: net.wanted,net.ham-radio
Subject: Re: FM Broadcast band repeater
Message-ID: <441@ihu1m.UUCP>

Date: Wed, 22-May-85 14:37:27 EDT
Article-I.D.: ihu1m.441
Posted: Wed May 22 14:37:27 1985
Date-Received: Thu, 23-May-85 04:04:33 EDT
References: <17229@mgweed.UUCP> <576@ihu1h.UUCP>
Distribution: net,att
Organization: AT&T Bell Laboratories
Lines: 10
Xref: watmath net.wanted:6448 net.ham-radio:2743

> Radio Shack sells a kiddie's toy for $6.95 [#60-2109],
> but I don't know its transmission range.

It's transmission range is about 5 feet !

At least while my stereo is hooked up to the outside antenna, any
FM station, even Wisconsin/Indiana, can knock Mr. Microphone off the air!
Driven from 1 AA battery, if my memory serves me correctly, it's not
worth the $6.

From 1516672391348234917
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c9bf7db756a6ee14
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 11:45:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-sem.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!brl-sem!abc
From: abc@brl-sem.ARPA (Brint Cooper)
Newsgroups: net.ham-radio
Subject: Re: Is there enough interest in a packet radio subnet?
Message-ID: <334@brl-sem.ARPA>
Date: Wed, 22-May-85 14:45:41 EDT
Article-I.D.: brl-sem.334
Posted: Wed May 22 14:45:41 1985
Date-Received: Fri, 24-May-85 20:59:04 EDT
References: <341@tekigm.UUCP>
Reply-To: abc@brl-sem (SECAD/CSMB) <abc>.ARPA (Brint Cooper (SECAD/CSMB) <abc>)
Distribution: net
Organization: Ballistic Research Lab
Lines: 3

Perhaps some good soul would gateway the Arpanet Packet Radio
distribution to Usenet.

From -5530488539905701514
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,546ec10da76144e6,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-05-22 12:24:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site lcuxc.UUCP
Path: utzoo!linus!philabs!prls!amdimage!amdcad!decwrl!decvax!bellcore!allegra!
ulysses!gamma!pyuxww!lcuxc!wjm
From: wjm@lcuxc.UUCP (B. Mitchell)
Newsgroups: net.ham-radio
Subject: Re: Bootleggers
Message-ID: <357@lcuxc.UUCP>
Date: Wed, 22-May-85 15:24:55 EDT
Article-I.D.: lcuxc.357
Posted: Wed May 22 15:24:55 1985
Date-Received: Sat, 25-May-85 05:51:34 EDT
Organization: Bell Communications Research, Inc.
Lines: 13

Lets make sure the ham bands are used properly. If you find a bootlegger
operating in a ham band (e.g. types running pseudo-CB on 10 meters), please
do all us hams a favor - report it to either the ARRL's Intruder Watch
and/or the FCC!!! We've had to fight for the spectrum we have and its our
responsibility to make sure it is used properly! One reason the FCC is
favoribly disposed toward us hams is that we police ourselves - we don't
need these lids spoiling it for everyone and breaking the law as well (my
breaking the law comment applies both to the illegal operation as well as
the illegal purposes, e.g. drugs, that the operation is for).
Thanx to Bob Purnass for bringing this item to our attentions.
73's
Bill Mitchell, WB2IAU (ihnp4!lcuxc!wjm)

From 8834916747309420399
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,266321898212e2a4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 18:20:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site timeinc.UUCP
Path: utzoo!decvax!bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!mhuxt!houxm!
vax135!timeinc!dave
From: dave@timeinc.UUCP (David Mutterer)
Newsgroups: net.ham-radio
Subject: Receiver for sale..
Message-ID: <200@timeinc.UUCP>
Date: Wed, 22-May-85 21:20:39 EDT
Article-I.D.: timeinc.200
Posted: Wed May 22 21:20:39 1985
Date-Received: Thu, 23-May-85 07:46:39 EDT
Distribution: na
Organization: Time, Inc. - New York
Lines: 19

I am selling a Heath SW-7800 receiver... covers 0-30 Mhz...
LSB/USB/AM.... digital frequency display...   New it sells for

around $320... I'll let it go for $200... and for an additional
$30. I will include a Crushcraft 10-80 meter vertical...

My area is just to swamped with am signals.... (I can listen to the closest
station just by picking the phone up while on hook...!) and my favorite
band is 80 which is to close to am for seperation in my area...

201-794-9285 home
212-554-5151 work...
--

David Mutterer
[vax135|ihnp4]!timeinc!dave

"Any opinions expressed herein are those of the writer and
do not necessarily reflect the opinion of Time Incorporated."

From -6579864324796777808
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63f062a05127576b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-22 21:50:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2.fluke 9/24/84; site vax2.fluke.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
fluke!tenspeed
From: tenspeed@fluke.UUCP (Jim Ehrmin)
Newsgroups: net.ham-radio
Subject: Re: MANUAL FOR HALLICRAFTER SX-100
Message-ID: <642@vax2.fluke.UUCP>
Date: Thu, 23-May-85 00:50:16 EDT
Article-I.D.: vax2.642
Posted: Thu May 23 00:50:16 1985
Date-Received: Fri, 24-May-85 23:49:52 EDT
References: <10709@brl-tgr.ARPA>
Organization: John Fluke Mfg. Co., Inc., Everett, WA
Lines: 14

>
>   I WOULD APPRECIATE ANY INFO ON THE SUBJECT MANUAL. I HAVE AN SX-100
> WHICH IS IN DIRE NEED OF A TUNE. ANY POOP ON HOW TO OBTAIN THIS MANUAL
> (OR A COPY) WOULD BE APPRECIATED. THANX IN ADVANCE.
>
> NICK KASS (AD.XRH@AFSC-HQ)
> -------
Nick,

You may be able to obtain a manual from Ardco Electronics, P.O. Box 95,
Berwyn, Ill. 60402. I was able to obtain a manual for my SX-110 from them
several years ago.

Jim Ehrmin

From 7580024938493889170
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82fa942e6a539dd1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-23 01:33:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 SMI; site sun.uucp
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!decwrl!
sun!sunny
From: sunny@sun.uucp (Ms. Sunny Kirsten)
Newsgroups: net.ham-radio
Subject: Re: Packet radio mailing list
Message-ID: <2209@sun.uucp>
Date: Thu, 23-May-85 04:33:04 EDT
Article-I.D.: sun.2209
Posted: Thu May 23 04:33:04 1985
Date-Received: Sat, 25-May-85 05:36:30 EDT
References: <2235@decwrl.UUCP>
Organization: Sun Microsystems, Inc.
Lines: 6

Please add me to the packet radio mailing list.

73's
KA6PPP
--
{ucbvax,decvax,ihnp4}!sun!sunny (Ms. Sunny Kirsten)

From 1259807144895527769
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 122486,11a2ab080cced549,start
X-Google-Attributes: gid122486,public
X-Google-Thread: 151e61,35a849372e69948b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-23 07:28:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mit-eddie.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harpo!whuxlm!whuxl!houxm!mhuxt!mhuxr!
ulysses!allegra!mit-eddie!bcn
From: bcn@mit-eddie.UUCP (Clifford Neuman)
Newsgroups: net.ham-radio,net.news.group
Subject: Packet Radio mailing list
Message-ID: <4329@mit-eddie.UUCP>
Date: Thu, 23-May-85 10:28:11 EDT
Article-I.D.: mit-eddi.4329
Posted: Thu May 23 10:28:11 1985
Date-Received: Fri, 24-May-85 22:48:10 EDT
Organization: MIT, Cambridge, MA
Lines: 13

Xref: linus net.ham-radio:2129 net.news.group:2512

I have seen a lot of requests for addition to the packet-radio-mailing
list on the info-hams mailing list (net.ham-radio). Let me remind
people that the correct place to send these messages is packet-radio-request
at mit-eddie. People on the UUCP side can join the mailing list. mit-eddie
can be reached through decvax!genrad, ihnp4, and others.

Some people have suggested setting up the sub group net.ham-radio.packet
to gateway the messages on the list to and from usenet. I haven't
decided if this would be a good idea. If we do this, eddie is the
logical place to do it since it is on usenet itself. Please send
replies to this message to me, not the whole list. Thanks,

     ~ Cliff (N1DMM)

From -1470257093393800325
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf49de04413d48c1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-23 12:58:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <10977@brl-tgr.ARPA>
Date: Thu, 23-May-85 15:58:50 EDT
Article-I.D.: brl-tgr.10977
Posted: Thu May 23 15:58:50 1985
Date-Received: Fri, 24-May-85 22:34:15 EDT
References: <-70800@infopro.UUCP> <19700003@hpfcmt.UUCP>
Organization: Ballistic Research Lab
Lines: 11

> In the May issue of "73" magazine I saw an ad for a microphone/earphone
> combination for use with HTs. It used a press to talk switch and the cost
> was about $100. It claimed a space age technology but looks very much like
> an earphone that doubles as a microphone to amplify the sound available in
> your ear canal when you speak. I don't know how this works, but folks here in
> the office speculate that this might be something like the earphones used by the
> secret service. (Never saw one of those guys with a boom mike)
>
A guy tried to sell some to us once. If it's the same thing it's called
an Ear-Mike (how creative) and it's made by a company in suburban Washington
(as I recall). Interesting idea, I can't say I understand the big advantage.

From 8710234736458006783
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c0bb8ab22bb0e307,start

X-Google-Attributes: gid151e61,public
X-Google-Thread: 119e09,c0bb8ab22bb0e307,start
X-Google-Attributes: gid119e09,public
X-Google-ArrivalTime: 1985-05-23 13:35:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.astro,net.ham-radio
Subject: The Quiet Sun
Message-ID: <10983@brl-tgr.ARPA>
Date: Thu, 23-May-85 16:35:16 EDT
Article-I.D.: brl-tgr.10983
Posted: Thu May 23 16:35:16 1985
Date-Received: Fri, 24-May-85 22:36:00 EDT
Distribution: net
Organization: USAMC ALMSA
Lines: 32
Xref: linus net.astro:537 net.ham-radio:2128

Those of us using the shortwave (HF) spectrum over the past few years have seen the solar flux decline and propagation conditions worsen as a result. Some comments in discussions of the sunspot cycle have mentioned fears that this low level is not just the normal trough of an eleven-year cycle, but the beginnings of a longer period of abnormally-low sunspot levels, with concomitant ill effects on our ionosphere.

I know there have historically been periods of low sunspots and these have had effects on earth. What is the current astronomical thinking about this prospect? Is it likely that we are entering into an extended period of low sunspot or solar flux numbers? If so, what is predicted for the extent and severity of this decrease? (Or is it unpredictable?) Or is it just a supposition that this is happening, and the odds are in favor of this being just the trough of a regular 11-year cycle, soon to move back up to levels considered "normal" over the observational history?

This has immediate economic consequences, in addition to the scientific interest. The glaciers might return, which would lower some property values and raise others. (:-) Also, if shortwave propagation is to continue to be as lousy as it has been recently, there is no reason to sink money into fancy and expensive radios, and we might as well wait for the turn of the century and see what technological marvels have been developed, instead of buying some now and watching them become obsolete while we get minimal usage from them...

So, astronomers and solar physicists, what is the answer? What is going to happen on the sun in the next 20 or so years?

Regards,
Will Martin

USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

From 4986449833670689526
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ed1f6c4cbb4b9c4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-24 04:05:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!umcp-cs!gymble!lll-crg!dual!decwrl!dec-rhea!dec-pisces!piermarini
From: piermarini@pisces.DEC (Thin Film Heads)
Newsgroups: net.ham-radio
Subject: hallicrafters
Message-ID: <2312@decwrl.UUCP>
Date: Fri, 24-May-85 07:05:11 EDT
Article-I.D.: decwrl.2312
Posted: Fri May 24 07:05:11 1985
Date-Received: Sat, 25-May-85 09:21:47 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 12

My last note may not have made it to the net due to system problems so here it is again.

I am in need of a manual for a Hallicrafters model HT-37 transmitter. If there is anyone out there that may have one they could copy for me i will gladly pay for anycost incured. write to me on the net or mail to Paul Piermarini,56 south st. leominster, ma. 01453
thanks!

Paul KA1MWQ

From -9137957227022181816
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eee9739c465deca0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-24 06:24:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!carpenter@NBS-VMS
From: carpenter@NBS-VMS
Newsgroups: net.ham-radio
Subject: Re: FM BC Band Repeaters
Message-ID: <11005@brl-tgr.ARPA>
Date: Fri, 24-May-85 09:24:01 EDT
Article-I.D.: brl-tgr.11005
Posted: Fri May 24 09:24:01 1985
Date-Received: Sat, 25-May-85 07:03:49 EDT
Sender: news@brl-tgr.ARPA

Lines: 10

As you may know, FM band repeaters are licensed by the FCC. The latest
count that I have heard says that there are about 1000 of them in the
books. The only one I actually know of repeats WFRE (Frederick, MD.)
in a shadow area about 5 miles from their mountain-top transmitter.
I suggest you look up Volume III of the FCC rules which cover bradcasting
to learn more.

Bob Carpenter, W3OTC

From -2587950912433296948
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ec59de4e2741e411,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-24 06:52:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site agrigene.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!uwvax!astroatc!nicmad!agrigene!gonzalez
From: gonzalez@agrigene.UUCP
Newsgroups: net.ham-radio
Subject: Ham Radio License Application
Message-ID: <112@agrigene.UUCP>
Date: Fri, 24-May-85 09:52:42 EDT
Article-I.D.: agrigene.112
Posted: Fri May 24 09:52:42 1985
Date-Received: Sat, 25-May-85 07:11:06 EDT
Distribution: net
Organization: Agrigenetics Madison,Wi.
Lines: 4

I will appreciate any info regarding getting into ham radio.
I am interested in getting my amateur radio license. What is
involved?
Who do I contact in the Madison, WI, area?*** REPLACE THIS LINE WITH YOUR MESSAGE
***

From 2033041889708097439
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8952801c178805a4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-24 11:09:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: The Quiet Sun
Message-ID: <11015@brl-tgr.ARPA>

Date: Fri, 24-May-85 14:09:21 EDT
Article-I.D.: brl-tgr.11015
Posted: Fri May 24 14:09:21 1985
Date-Received: Sat, 25-May-85 09:14:05 EDT
Sender: news@brl-tgr.ARPA
Lines: 59

Re: Sunspots in next 20 years

The Mauder minimum was a period without any sunspots for a period of about 60 years to the point where scientists doubted that they ever existed. During this time the earth experienced the "little ice age". Look at those old book with the people clothed from head to foot in Dickens and others. Remember that picture of Dante with only his face sticking out from a mass of clothes, and that was in "sunny" Italy. The Black Death was not due to plague virus but due to the drop, by an estimated factor of 1/2, in the world's food supply due to the lack of solar activity.

The Worlds temperature has been rising since this period where it reached a peak in 1945, then began to decrease, and by 1960 the growing season was shortened by 2 weeks in England. In the last 10 years the temperature has swung up again, probably mainly due to the extremely high sunspot activity, not the greenhouse effect with CO2 produced by man. Most of the world's CO2 is produced by termites digesting wood and by Ocean plankton, not by man.

We have been seeing the highest solar activity in recorded history, with the peak sunspot count exceeding 200 for the first few times. A decrease is very likely, not to a low but to a more "average" condition. In otherwords we are accustommed to an excessively high sunspot count and are somewhat spoiled by it. Sudden cut offs of solar activity are unlikely, the usual condition being that
the peaks die out over a period of many decades. So in all likelyhood the next peak will be similar to the last but probably may not break 200, although every other peak tends to be somewhat higher and wouldn tend to make this coming one bigger.

I would not let this stop me from buying new equipment. Even during sunspot minimums DX is good even if it is not spectacular, but you have to shift to the
Lower bands. But remember, in 1974, at almost the minimum, there was a solar flare that gave us the same conditions as were in effect during the 1969 peak for 2 weeks. Even without the flare you could work DX and make many contacts by selecting the right band at the right time. The guy that waits for a solar peak for his DX is missing all the challenge.

As far as world wide climatic conditions, the only thing that bothers me is that there is an Ice Age every 25000 years. We have 10,000 years of no ice. The last ice age ended 12000 years ago (10,000BC), and we are 2000 years overdue for another one.

As far as the ice coming gradually, it does not. Mammoths found in

Siberia, frozen in the Ice, had buttercups in their stomachs. What happened so that a mammoth that was eating Buttercups was frozen in ice before the Buttercups digested and remained frozen for over 15000 years? But I would not let this stop me from buying a house.

I hope that answers some of your Questions.

Joe N2XS (spark forever)

From -3912407860845968629
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef2c8fdc059c6586,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-24 11:11:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!ariel!mtunf!mtung!
mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: packet radio arpa list and net.ham-radio.packet
Message-ID: <450@mtunh.UUCP>
Date: Fri, 24-May-85 14:11:35 EDT
Article-I.D.: mtunh.450
Posted: Fri May 24 14:11:35 1985
Date-Received: Sat, 25-May-85 08:13:01 EDT
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 11

Since the ARPA packet radio list exists, I feel that there is neat info out there that those of us on USENET can't read. Further, a number of articles in net.ham-radio have delt with packet radio topics recently. Therefore, I strongly think a new newsgroup "net.ham-radio.packet" is appropriate and should be cross-fed to the ARPA packet list.

If there are no objections, I will create the new newsgroup.   Are you folks at mit-eddie willing to gateway the info between USENET and the ARPA list?

73, Jim KY2D

From -8215832043926442388
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8952801c178805a4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-24 11:47:20 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: The Quiet Sun
Message-ID: <11019@brl-tgr.ARPA>
Date: Fri, 24-May-85 14:47:20 EDT
Article-I.D.: brl-tgr.11019
Posted: Fri May 24 14:47:20 1985
Date-Received: Sat, 25-May-85 09:16:05 EDT
Sender: news@brl-tgr.ARPA
Lines: 32

Speaking of reduced Solar activity, whatever happened to the reports I remember hearing in the eary Seventies that the Sun's thermonuclear reaction had ceased?

Specifically, in the early Seventies, I read about some experiments that dealt with measuring neutrino flux from the Sun. As I recall, neutrino flux had been predicted theoretically and measured in the Fifties or so. Then somebody revised the theory and found that the actual flux should be a factor of two different from what they had thought earlier. So some universities set out to make some new measurements with higher precision, to see if the new theory was borne out by careful measurements. The new setup showed: ZERO neoutrino flux. They assumed that the instrumentation was malfunctioning and checked it all out. It was NOT malfunctioning. It still showed ZERO neutrino flux. According to the theory, if there were a thermonuclear reaction going on in the Sun, this would generate a measureable neutrino flux. In the absence of such a flux, it was concluded that there COULD NOT then be a thermonuclear reaction in the Sun. Since earlier measurements HAD shown the predicted neutrino flux, it was concluded that there HAD BEEN thermonuclear activity in the Sun in the Fifties, but that in the Seventies it had ceased. As I recall, the articles at that time went on to speculate whether it was a permanent change or just a cycle of periodic activity in the Sun.

Does anybody remember these articles? Does anybody know how this disturbing matter was finally interpreted? Assuming that the Sun's thermonuclear power source is now defunct, how long would it take for things to get unpleasantly cool out our way?

NOTE: I believe I can locate a copy of at least one article on this subject from the early Seventies, if anybody cares.

73,
John Sangster, W3IKG

From 4223010700546481265
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e0cc91ed925abf48
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-24 12:16:00 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site hplvle.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!decwrl!greipa!
pesnta!hplabs!hpisla!hplvla!chris
From: chris@hplvla.UUCP (chris)
Newsgroups: net.ham-radio
Subject: Re: Request for advice in choosing 2-meter repeater equipment.
Message-ID: <2800009@hplvle.UUCP>
Date: Fri, 24-May-85 15:16:00 EDT
Article-I.D.: hplvle.2800009
Posted: Fri May 24 15:16:00 1985
Date-Received: Thu, 30-May-85 00:41:36 EDT
References: <128@wavetek.UUCP>
Organization: HP Loveland Instrument Division
Lines: 20

I would consider adapting some used commercial gear in massively greater
preference to either brand mentioned. You can buy used GE, or Motorola
repeaters for $800 and up through places like Gregory Electronics (in
Pennsylvania, I think) or California Radio in Montrose, Colorado, or
another outfit in El Paso, Texas, etc....
While I have not used either brand mentioned, one look at the construction
should be revealing, and our Colorado frequency coordinator gags every time
someone mentions the brand names listed. He has left me with the impression
that all the major interference problems in the state can be traced to those
brands, either transmitter of receiver deficiencies being the primary cause.
I have no first-hand experience with these machines, but I have worked on
GE, Motorola, RCA and Johnson RF gear, and don't believe I'd put anything
less on a mountain.

Strictly opinions of the writer, not reflecting any position, statement,
opinion, belief or knowledge of any other person or organization which
presently or may in the future, exist.

73, Chris kelly...WD5IBS

From -1648541030688569304
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8952801c178805a4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-24 15:14:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: The Quiet Sun
Message-ID: <11022@brl-tgr.ARPA>
Date: Fri, 24-May-85 18:14:57 EDT
Article-I.D.: brl-tgr.11022
Posted: Fri May 24 18:14:57 1985

Date-Received: Sat, 25-May-85 09:18:16 EDT
Sender: news@brl-tgr.ARPA
Lines: 7

Re: DXing during periods of low Solar flux. Gee, guys, all we have to do is have even a SMALL nuclear war once in a while and the ionization will go back up and give us some real nice band openings at VHF followed by several good days of DXing on 10, 15 and 20. (Not to mention the WARC bands.)
Ya just gotta think positive, is all.

-John, W3IKG

From -6178122674524725280
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6c2548f9563e9ac4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-24 16:59:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!allegra!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 20
Message-ID: <17342@mgweed.UUCP>
Date: Fri, 24-May-85 19:59:51 EDT
Article-I.D.: mgweed.17342
Posted: Fri May 24 19:59:51 1985
Date-Received: Mon, 27-May-85 02:57:30 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 54

qst de k9eui
hr dx bulletin nr 20 from arrl headquarters
newington ct may 24, 1985
to all radio amateurs bt

faroe islands. oz5dl and oz5ur will sign oy/oz5dl and oy/oz5ur from june 3 to 14. the operation will mainly be on cw, although there will be some rtty and ssb. cw frequencies will be 1837, 3510, 7005, 14030, 21015 and 28015 khz, plus the warc bands. rtty will be on 3590, 7040, 14090, 21090 and 28090 khz with ssb on 3645, 7045, 7070, 14210, 21210 and 28510 khz. qsl via the home calls.

soviet georgia. an expedition to soviet georgia is planned for this weekend and the wpx contest. up3bp/uf will be on 160, up2nk/uf on 80 and up3bi/uf on 40.

lebanon. ted, od5lx, has been active on 7008 khz at 0300z.

jordan. jy9wr has been on 40 meters at 0000 and 0300z. qsl to

g4ats.

rodrigues. 3b9cd has been worked on 7004 khz at 1230z.

marshall islands. kx6ds has been on 7006 khz at 1030z.

tuvalu. t2aev has been active on 28522 khz at 0240z and has been worked from the u.s. east coast.

franz josef land. uw3hy continues activity on 14029 khz at 1200z. turkey. several stations have been active recently from turkey. ta1c has been on 7022 khz at 0100z, working europe and north america. qst to box 188, istanbul. ta1d has been on 14027 khz at 0130z. qsl to box 1167, istanbul. ta1a has been on 14025 khz at 2300z.

easter island. ce0zig has been active on 7009 khz at 0300z several days this week.

svalbard. jw0eq is active on 14002 khz at 0000z.

greenland. hb9apj and hb9asj will operate /ox from august 2 to 25. cw frequencies will be 7020, 14050, 21050 and 28050 khz while ssb will be on 7080, 14180, 21180 and 28580 khz.

satellite dxcc. contacts made via amsat oscar 10 will now be accepted for the satellite dxcc award. credit is retroactive to the date oscar 10 first became available for contacts. the satellite dxcc certificate is a non endorsable, one time only award. applicants must submit forms cd 164 and cd 253. forms are available from arrl hq for a business sized sase with 44 cents postage affixed ar

From 943078323599869829
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3119d0babae17ab
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-24 19:32:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Re: Quality of NASA space-to-ground links
Message-ID: <356@petrus.UUCP>
Date: Fri, 24-May-85 22:32:00 EDT
Article-I.D.: petrus.356
Posted: Fri May 24 22:32:00 1985
Date-Received: Sat, 25-May-85 09:40:45 EDT
References: <10912@brl-tgr.ARPA>
Organization: Bell Communications Research, Inc

Lines: 43

Regarding my own question, I recently had the chance to put it to an astronaut (Ron Parise, WA4SIR). He said he had wondered the same thing, and didn't really know the reason for certain. We came to a consensus on a couple of possibilities, which I paraphrase here:

1. Pickup from noise sources on board (Owen Garriott might have just found a quiet spot when he operated 2mFM). The orbiter is filled with blowers, fans, and is quite noisy. These might have been amplified by compressors in the regular speech processors (see #4).

2. The air-to-ground links are digital only to the TDRS ground station. From there they are relayed in analog form over a concatenation of satellite and landline links which can each add their share of noise.

3. Noise in the wireless headset links used on board.

4. Large amounts of compression and/or clipping in the speech processors, combined with incorrect gain settings and astronauts talking away from their microphones.

Regarding the sub-topic of monitoring the HF bands from orbit, I suspect that conditions on the lower frequencies would be rather poor. We hams have already had experiences with sending signals through the ionosphere with the Oscar and RS Mode A downlinks on 10m, and the HF beacons experiment on UoSAT-Oscar-9. In each case, if the band in question is "open", you'll have a hard time penetrating the ionosphere for earth/satellite communications. Even when a low frequency band, e.g., 80m, is closed, it's because of high ionospheric absorption so again you're going to have a rough time.

For example, whenever 10 meters is open, Mode A reception when the satellite is just above the horizon is very poor and in fact you're just as likely to hear the satellite when it's below the horizon.

DXing the VHF/UHF bands and above is likely to be more productive, since you can see everything in line of sight and the ionosphere rarely interferes. I remember a story a while ago (I forget where) which listed a few UHF TV stations which were receivable on the moon. The criteria wasn't signal strength, it was lack of other interfering assignments to the same channel. I remembered this story because one of the stations cited was WMPB-TV on channel 67 in Owings Mills, MD, where I used to spend college summers working as a broadcast technician.

Phil

From 7622860219865788904
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7409e6dfd96363d3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-26 10:12:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!jbn@FORD-WDL1
From: jbn@FORD-WDL1
Newsgroups: net.ham-radio
Subject: telephone innards
Message-ID: <11046@brl-tgr.ARPA>
Date: Sun, 26-May-85 13:12:39 EDT
Article-I.D.: brl-tgr.11046
Posted: Sun May 26 13:12:39 1985
Date-Received: Thu, 30-May-85 00:45:09 EDT
Sender: news@brl-tgr.ARPA
Lines: 13

One of the less-known capabilities of the old WE 600 series telephone instruments is that automatic compensation is provided for losses in the local loop; a varisistor driven by the DC level as seen at the instrument is used to adjust the signal level. This is not an audio compression circuit; it's the long-term DC voltage (``battery'' in telco terminology) as seen at the instrument that does it.

Since a varisistor is a non-linear component, this makes a telephone an RF detector in theory and sometimes in fact, and there was a fix kit for RFI available for the model 600 at one time; later models had it built-in.

This gives a little more insight into what's inside that potted network.

John Nagle

From 11995692028768714
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47c8000d72066579,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-26 11:11:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA (Keith Petersen)
Newsgroups: net.ham-radio
Subject: Packet radio files available from SIMTEL20
Message-ID: <11049@brl-tgr.ARPA>
Date: Sun, 26-May-85 14:11:55 EDT
Article-I.D.: brl-tgr.11049
Posted: Sun May 26 14:11:55 1985
Date-Received: Thu, 30-May-85 00:46:11 EDT
Sender: news@brl-tgr.ARPA
Lines: 15

Thanks to Don Merrit <merritt@BRL.ARPA> we now have the two Packet Radio files recently announced to packet-radio@MIT-EDDIE.ARPA.

Now available from SIMTEL20, via ANONYMOUS ftp with password GUEST:

```
Filename          Type  Bytes    CRC

Directory MICRO:<CPM.PACKET>
ROUTING.TXT.1          ASCII     28795  2D49H
TCP-IP.TXT.1           ASCII     56129  368BH

73, --Keith Petersen
Arpa:  W8SDZ@SIMTEL20.ARPA
uucp:  ...!{decvax,unc,hao,cbosgd,seismo,aplvax,uci}!brl-bmd!w8sdz
uucp:  ...!{ihnp4!cbosgd,cmcl2!esquire}!brl-bmd!w8sdz


From 1894956338629030943
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ec59de4e2741e411
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-26 11:40:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!ptb@Mitre-Bedford
From: ptb@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: Ham Radio License Application
Message-ID: <11050@brl-tgr.ARPA>
Date: Sun, 26-May-85 14:40:47 EDT
Article-I.D.: brl-tgr.11050
Posted: Sun May 26 14:40:47 1985
Date-Received: Thu, 30-May-85 00:46:32 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

Try
The American Radio Relay League
225 Main St
Newington, Ct. 06111.

They have a book out, called "Tune in the World with Amateur Radio",
which I would highly recommend in preparation for your novice exam.

They also would know where some exams are in your area.
You would want to get in touch with the Volunteer Exam Coordinator
office, same address, for exam dates and times.

                  Peter Baldwin, WA1SNH
                  (ptb@mitre-bedford)


From 3378586854504015591
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,81d325260e09d678,start
X-Google-Attributes: gid151e61,public
```

X-Google-ArrivalTime: 1985-05-27 07:32:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site extel.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!tellab1!extel!larry
From: larry@extel.UUCP
Newsgroups: net.ham-radio
Subject: Re: Modified PLL rigs
Message-ID: <43300004@extel.UUCP>
Date: Mon, 27-May-85 10:32:00 EDT
Article-I.D.: extel.43300004
Posted: Mon May 27 10:32:00 1985
Date-Received: Thu, 30-May-85 02:16:35 EDT
References: <10100@brl-tgr.UUCP>
Lines: 5
Nf-ID: #R:brl-tgr:-1010000:extel:43300004:000:115
Nf-From: extel!larry   May 27 09:32:00 1985

Actually receiving NOAA is a moot point as I don't want to mess with
the SMC's on the digital board anyway.

Larry

From 2662263266209664057
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ace8ad3e716fe4e2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-27 10:54:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.4 $; site trsvax
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!ariel!mtx5b!mtx5a!
mtunf!mtung!mtunh!inuxg!inuxc!pur-ee!uiucdcs!convex!trsvax!mikey
From: mikey@trsvax
Newsgroups: net.ham-radio
Subject: Re: Replacement NICADS for the Kenwood
Message-ID: <52800054@trsvax>
Date: Mon, 27-May-85 13:54:00 EDT
Article-I.D.: trsvax.52800054
Posted: Mon May 27 13:54:00 1985
Date-Received: Sat, 8-Jun-85 03:24:26 EDT
References: <17191@mgweed.UUCP>
Lines: 40
Nf-ID: #R:mgweed.UUCP:-1719100:trsvax:52800054:000:2165
Nf-From: trsvax!mikey   May 27 12:54:00 1985

There was a contsruction article in the old Popular Electronics about the spring
of 1976 for a NiCad Zapper. Basically, they used a charger of about 50 ma but
about 25 vdc to charge up a 3300 or so ufd cap and "zap" a shorted nicad cell.

After the zap, the cell would continue getting charged at the 50 ma rate.

NiCads ususally short from reverse voltage. "But honest, I didn't put the batteries in backwards!" You don't have to. Running NiCads to a partial discharge does more than lead to the potential for a "memory charge". Lets say that you have a new pack of multiple cells fuly charged. You run it down to about 30%. Since any two batteries are not EXACTLY equal, maybe one is at 28% and another is at 32%. If you don't fully charge the cells up to 100%, ie you let the 28% cell only charge to 95% while the rest are charged to 100%, the 95% cell will be the first to go dead. With one cell dead and the others still pumping power, the curent will effectively be trying to charge the dead cell "backwards". NiCads will actually take a small reverse charge, but the internal construction of the cell leads to small deposits when this happens and these are what "shorts" the cell.

How can you avoid this? Well, the easiest way is to always make sure that you give your pack a FULL rcharge. The standard .1C (usually 45ma) rate can be kept up almost indefinately with out cell damage. Running the full 14 hours certainly won't hurt the cell.

As for a simple "zapper" I used a 24 vac transformer, full wave bridge, current limiting resistor for about 50 ma on my 8 unit pack, and 3300 ufd cap. Don't try to use a switch on the cap to connect the cell, the pulse is SEVERAL amps. I just slip the cell into the holder. I used to get all my NiCads for free, or almost free, by hitting the local Radio Shack and Lafayette stores. They would give me the units that customers returned as "bad".

Also, you can do more than one cell at a time, but cells in series will limit the current pulse through the bad cell. If zapping a pak doesn't fix it, break the pak down and zap the bad cell by itself.

Mike Yetsko KA5MJQ
mikey at trsvax

From -7603154601184514945
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,146b59799a5f8be2,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,146b59799a5f8be2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-28 08:06:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
genrad!panda!talcott!harvard!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.audio,net.ham-radio
Subject: Local (household) FM broadcaster
Message-ID: <11076@brl-tgr.ARPA>
Date: Tue, 28-May-85 11:06:43 EDT
Article-I.D.: brl-tgr.11076
Posted: Tue May 28 11:06:43 1985

Date-Received: Thu, 30-May-85 08:20:29 EDT
Distribution: net
Organization: USAMC ALMSA
Lines: 31
Xref: watmath net.audio:4967 net.ham-radio:2778

Forgive me for misdirecting this if I have -- I recall seeing a recent query from someone who wanted to be able to broadcast over the FM band so that he could receive his choice of music over an FM Walkman-type radio while working on his farm. This is directed toward a possible solution or a device applicable to that need.

This could also be applied to the net.audio submitter who wanted to feed his TV audio through his stereo system.

I just received an ad from DECO Industries, Box 607, Bedford Hills, NY 10507 (914) 241-2827, for a device they call a "Video Simulcaster". This is designed to pick up the TV audio from the earphone jack and retransmit it over the FM band. It is an "easily assembled" (hmmm...:-) kit which sells for $29.95 (free shipping if prepaid). Claimed range is 300 feet -- for longer range operations, like the desired farm use, you could either simply illegally amplify the output, or maybe feed it into a loop wire antenna which goes into the fields (probably also illegal, due to that antenna's length).

I assume you could feed anything into this at audio line level, so it isn't limited to rebroadcasting TV audio, of course.

(COD's cost $4.00 more.)

Usual disclaimer -- I never heard of these people before; just thought it was interesting that I got their ad just after seeing a couple net inquiries that it would apply to...

Regards,
Will Martin

USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

From -8481474872328635642
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f39c440d07787e6e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-28 08:33:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
genrad!panda!talcott!harvard!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Cheap 1984 WRTH & military electronics book
Message-ID: <11077@brl-tgr.ARPA>
Date: Tue, 28-May-85 11:33:00 EDT

Article-I.D.: brl-tgr.11077
Posted: Tue May 28 11:33:00 1985
Date-Received: Thu, 30-May-85 06:44:51 EDT
Distribution: net
Organization: USAMC ALMSA
Lines: 58

Regarding our recent discussion about the World Radio TV Handbook (WRTH) and the prices thereof:

I just got a new catalog from ye olde Publishers Central Bureau, only the fifth or seventh this year so far (:-), but this is a "special sale" catalog (where have I heard that before...), with some of their books marked down to a lower price. (What hurts is that I bought some at the higher price! The knife of self-recrimination twists slowly in the gut...)

Anyway, one of the items on sale is newly-listed (I've never seen one of these listed in a PCB catalog before); the 1984 WRTH! For $6.00, which is probably about what it's worth, but is much lower than other sources of back issues (like Century Print Shop). The stock number is 446235. If you don't have a WRTH, getting last year's for this price is probably worthwhile. As I mentioned in an earlier posting, the 1985 frequency listings are already nearly obsolete, so the unchanging or more-stable data (like station addresses, interval signals, etc.) is probably good enough in the preceeding year's issue to be useful.

Another radio-related book, marked down on special sale, is a real bargain. It is the 1979-80 issue of JANE'S MILITARY COMMUNICATIONS, one of the authoritative Jane's series of guides to military equipment. It is marked down to $7.98 (original list $99.50) [I had bought my copy at around $15, sob!]. The stock number is 391562. This is a good guide to then-current military electronics gear, which might show up on the surplus market, or fall into your hands whilst strolling through Central America, and could be helpful in identifying this or that odd piece of surplus stuff you happen to get ahold of.

A few notes about ordering these, if you are interested:

1) You must mention "special sale department #345".

2) Offer is good through Labor Day, '85.

3) There is a per-order shipping charge of $2.60, no matter how much you buy -- I recommend you ask co-workers for recent catalogs or check you local or work libraries, so you can see if there is other stuff you want to add to ordering just one or two books.

4) These people always stick you with a "credit voucher" if you pay by check and stuff is out-of-stock, and back-orders take forever, if they ever show up. I tried asking for a refund check instead of a credit voucher with my just-sent-in order; we'll see if they pay attention...

Here is their address: Publishers Central Bureau

One Champion Ave., Dept 345
Avenel, NJ 07131

(Any of you New Jersey netters happen to know if they have a retail outlet
where you can just go and buy this stuff at the catalog sale prices?)

Usual disclaimer -- I've been buying from these people for years, but really
don't like them much. I certainly have no interest or connection with them.

Will Martin

USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

From 1466113012706268932
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e0cc91ed925abf48
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-28 08:55:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!ptb@Mitre-Bedford
From: ptb@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: Request for advice in choosing 2-meter repeater equipment.
Message-ID: <11078@brl-tgr.ARPA>
Date: Tue, 28-May-85 11:55:35 EDT
Article-I.D.: brl-tgr.11078
Posted: Tue May 28 11:55:35 1985
Date-Received: Thu, 30-May-85 06:45:43 EDT
Sender: news@brl-tgr.ARPA
Lines: 6

If he gags on those two, what DOES he recommend? (I have absolutely
no familiarity with repeater equipment, but I am curious).

Peter Baldwin, WA1SNH
(ptb@mitre-bedford)

From -7638999659912136333
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef2c8fdc059c6586
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-28 09:15:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.7.0.4 $; site trsvax
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!ariel!mtx5b!mtx5a!
mtunf!mtung!mtunh!inuxg!inuxc!pur-ee!uiucdcs!convex!trsvax!ron
From: ron@trsvax
Newsgroups: net.ham-radio

Subject: Re: packet radio arpa list and net.ham-
Message-ID: <52800055@trsvax>
Date: Tue, 28-May-85 12:15:00 EDT
Article-I.D.: trsvax.52800055
Posted: Tue May 28 12:15:00 1985
Date-Received: Sat, 8-Jun-85 03:24:43 EDT
References: <450@mtunh.UUCP>
Lines: 4
Nf-ID: #R:mtunh.UUCP:-45000:trsvax:52800055:000:211
Nf-From: trsvax!ron   May 28 11:15:00 1985

I suggest that you call it simply "net.packet" as net.ham-radio.packet is
much longer than 14 characters which is the maxmimum length for a name
using notes (or news services that depend on a directory name).

From 227967322544861129
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6b48856be18d7419,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-28 14:14:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ulysses.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!wmbr
From: wmbr@ulysses.UUCP (W. M. Brelsford)
Newsgroups: net.ham-radio
Subject: Hamfest in Central NJ
Message-ID: <973@ulysses.UUCP>
Date: Tue, 28-May-85 17:14:56 EDT
Article-I.D.: ulysses.973
Posted: Tue May 28 17:14:56 1985
Date-Received: Thu, 30-May-85 01:54:05 EDT
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 8

The Raritan Valley Radio Club (W2QW) hamfest / flea market will
be held Saturday, June 15, at Columbia Park in Dunellen NJ.
Talk-in on 146.025/.625 and 146.52. Contact me for further
information and advance-sale (discount) tickets.

Bill Brelsford K2DI
ulysses!wmbr
201 582-5811

From 356493709807404100
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,62d62b38930ee5d7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-01 16:32:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP

Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 29 (rtty, fax, & sstv on 160 june 17)
Message-ID: <16841@mgweed.UUCP>
Date: Wed, 1-May-85 19:32:52 EDT
Article-I.D.: mgweed.16841
Posted: Wed May 1 19:32:52 1985
Date-Received: Sat, 4-May-85 07:15:31 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr arrl bulletin nr 29 from arrl headquarters
newington ct april 25, 1985
to all radio amateurs bt

amateurs will be authorized on june 17 to use rtty, fax, and
sstv on the 160 meter band, 1800 to 2000 khz. the fcc has
released a report and order in docket 84 959 which finalizes
the process that began when arrl asked the commission to
authorize rtty on 160 last year.   please remember that the
effective date of this order is june 17, 1985.

From -2978229428027968719
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2b90b2887fe09a8b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-01 16:33:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 30 (421 to 430 mhz go to land mobile)
Message-ID: <16842@mgweed.UUCP>
Date: Wed, 1-May-85 19:33:30 EDT
Article-I.D.: mgweed.16842
Posted: Wed May 1 19:33:30 1985
Date-Received: Sat, 4-May-85 07:15:50 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 21

qst de k9eui
hr arrl bulletin nr 30 from arrl headquarters
newington ct april 26, 1985
to all radio amateurs bt

fcc has issued a notice of proposed rulemaking in general docket 85 113 which would amend part 2 to make land mobile a primary service on the frequencies 421 to 430 mhz in the cities of detroit, cleveland, and buffalo. amateurs are already secondary in this band, and those within 75 miles of canada are on notice that coordination will be required. moreover, adoption of the rules proposed in the docket does not mandate immediate change. there must be separate rulemaking actions in parts 22 and 90 before land mobile can start applying for frequencies. anyone interested in filing comments on this docket are strongly urged to send an s.a.s.e. to arrl hq. for a copy of the notice, and to read it carefully before filing. comments may be filed until may 28.

From 7205737534061153146
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b64a4089554bcdf8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-01 16:34:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 31 (we get 12 meters june 22)
Message-ID: <16843@mgweed.UUCP>
Date: Wed, 1-May-85 19:34:10 EDT
Article-I.D.: mgweed.16843
Posted: Wed May 1 19:34:10 1985
Date-Received: Sat, 4-May-85 07:16:08 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 19

qst de k9eui
hr arrl bulletin nr 31 from arrl headquarters
newington ct april 26, 1985
to all radio amateurs bt

the 24 mhz or 12 meter band will be released to u.s. amateurs at 0001 utc on june 22, 1985. the 10 mhz or 30 meter band becomes permanent at the same time. both bands are exclusive in the u.s., but amateurs must avoid interference to stations outside the u.s. in the fixed service. full power will be permitted in the 12 meter band. at 30 meters, power continues to be restricted to 200 watts pep. mode subbands will be as shown in december 1984 qst, page 61. the 420 to 430 and 902 to 928 mhz matters proposed in the same docket will be dealt with in a further report and order at a later date. copies of the order will be available from arrl hq. next week. please include a s.a.s.e. with your request.

From 7462229621744144432
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,94be76f646026e4f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-01 18:25:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ICOM 22S mods
Message-ID: <16846@mgweed.UUCP>
Date: Wed, 1-May-85 21:25:44 EDT
Article-I.D.: mgweed.16846
Posted: Wed May 1 21:25:44 1985
Date-Received: Fri, 3-May-85 02:49:45 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 143

Someone asked about mods for the Icom 22S. I have been well pleased
with mine, except for one minor problem, which I will mention later.

I don't know where this document came from that I will quote from
and I assume that the mods in mine were made from this dope.
(I got mine 2nd hand and it already worked below 146).

"to operate below 146 mhz:

1. locate IC1 on synthesizer board. remove diodes connected to
pins 7 and 8 going to pin 13, and the 10k resistor from pin
13 going to ground.

2. Connect pin 13 to pin 16 of IC-1.

3. locate IC-10 on the PLL board. Cut pin 2 close to the
board and bend upwards. Cut the path between pins 2 and 5.
Connect a 10k resistor from pin 5 to ground. Connect cathode
of a silicon switching diode to pin 2. Connect its anode to
pin 5 of IC-8. Connect a jumper between IC-10 pin 2 and 5.

4. Connect another diode on IC-10: cathode to pin 5, anode
to pin 6.

These mods still have the radio operating on 15 kHz channels.
The ./. N factor for the channel you want is figured
as F-144.39 / .015

For example, 144.990 is divide by 40, and 145.005 is divide
by 41.

I found that the RF stages in both the rcvr and xmtr needed repeaking to use below 146 MHz. There is no way the 22S will cover 144 to 148, RF-wise. You can get 3 out of the 4 MHz and that is about it.

My 22S block diagram shows that a reference frequency of 7.5 kHz is used, derived from a 7.68 MHz osc. I would assume that to get a 20 kHz spacing between channels, one would need to use a crystal that would derive a 10 kHz reference - I have not explored this.

The problem I mentioned was intermittent locking of the PLL. The problem was caused by corroded connections in the plug on the matrix board. Cleaning did no good, so I removed the pins and the board connector and "hard wired" the matrix board using ribbon cable.

/-/-/-/-/-/-/-/ additional changes /-/-/-/-/-/-/-/-/-/-/-/

I tripled the number of channels the 22S will operate on by adding one switch on the rear of the unit. This switch is now wired as the power switch. The original front panel power switch is now labeled C, E (center), and D. The original duplex switch is left alone - A, S (simplex) and B.

All diodes were removed from the matrix board and new ones were installed as shown below, except to rows 0, 6, and 7.

The C-E-D switch is now wired as follows:

1. ground the common contact.

2. connect the C contact of the switch to the D7 wire of the matrix board.

3. connect the D contact to the D6 wire of the matrix board.

4. Connect two 2.7k resistors from +9 volts to the C and D lines.

5. Install diodes in positions D1 thru D5 as follows:

CHAN	D5	D4	D3	D2	D1	FREQ	CHAN	D5	D4	D3	D2	D1	FREQ
1	x		x	x		146.01	11					x	146.34
2	x		x	x	x	146.04	12				x		146.37
3	x	x				146.07	13				x	x	146.40
4	x	x			x	146.10	14			x			146.43
5	x	x		x		146.13	15			x		x	146.46
6	x	x		x	x	146.16	16			x	x		146.49
7	x	x	x			146.19	17			x	x	x	146.52
8	x	x	x		x	146.22	18		x				146.55
9	x	x	x	x		146.25	19		x			x	146.58

10 x x x x x 146.28

NOTE: I have put no diodes in row D0. This row is only needed for frequencies ending in "5".

Position 24 on the selector is blank and is used to obtain 146.31, which requires no diodes.

With the modifications as outlined, the following channels are available:

SIMPLEX CHANNELS

CHAN	FREQ	CHAN	FREQ	CHAN	FREQ
		14D	146.43		
15C	145.50	15D	146.46	15E	147.42
16C	145.53	16D	146.49	16E	147.45
17C	145.56	17D	146.52	17E	147.48
18C	145.59	18D	146.55	18E	147.51
19C	145.62	19D	146.58	19E	147.54

REPEATER CHANNELS
(outputs shown)

CHAN	FREQ (Dup A)	CHAN	FREQ (Dup B)
1C	146.61		
2C	146.64	2D	147.00
3C	146.67	3D	147.03
4C	146.70	4D	147.06
5C	146.73	5D	147.09
6C	146.76	6D	147.12
7C	146.79	7D	147.15
8C	146.82	8D	147.18
9C	146.85	9D	147.21
10C	146.88	10D	147.24
11D	146.94	11E	147.30
12D	146.97	12E	147.33
13D	147.00	13E	147.36
		14E	147.39
24D	146.91	24E	147.27

I wired the following other channels as follows for local use:

CHAN	FREQ	DIODES	Sw pos.

20	145.635	0-1-4	C
21	145.575	0-1-2-3	C
22	145.800	1-2-3-4	C
23	147.375	0-1-2	E

From -3782405543637835440
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,514a1062bd6883bf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-02 05:49:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: How do you find these freqs? - Part I: books, microfiche, radio clubs
Message-ID: <559@ihu1h.UUCP>
Date: Thu, 2-May-85 08:49:37 EDT
Article-I.D.: ihu1h.559
Posted: Thu May 2 08:49:37 1985
Date-Received: Fri, 3-May-85 04:06:17 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 179

x

HOW DO YOU FIND THESE FREQUENCIES?
PART I - BOOKS, MICROFICHE, RADIO CLUBS

Bob Parnass, AJ9S

I am often asked, "How do you find these frequencies?" Scanner enthusiasts can obtain frequency information from several sources, including books, government microfiche records, or other listeners.

Books

The most convenient source of fire and police frequencies is the _P_o_l_i_c_e__C_a_l_l__R_a_d_i_o__G_u_i_d_e_, published each year in 9 regional volumes by Hollins Radio Data, and sold at Radio Shack and larger book stores for about $7. _P_o_l_i_c_e__C_a_l_l is basically a computer printout of FCC license information in the fire, police, local government, and conservation services in two lists: by licensee name within state, and by frequency. Later editions have included a few pages of local airport and nonsensitive federal government frequencies.

I highly recommend Richard Prelinger's new book, _M_o_n_i_t_o_r__A_m_e_r_i_c_a_, published by SMB Publishing, and available from Grove Enterprises for about $15. This single edition contains 582 pages of police, fire, local government, news media, sports, national park, and commercial broadcast frequencies for all 50 states. The information was compiled mainly from members of the world's largest scanning club, the Radio Communications Monitoring Association (RCMA). _M_o_n_i_t_o_r__A_m_e_r_i_c_a con-tains detailed communications system profiles and pre-cinct maps for major metropolitan areas. Police and fire radio codes and unit identifiers unique to local agencies are listed for several cities. This differs from _P_o_l_i_c_e__C_a_l_l_, which gives a more sterile, but uni-form treatment of licensees, listing even the smallest of towns.

The most readily available source of sensitive US government frequencies is still Tom Kneitel's 168 page

_T_o_p__S_e_c_r_e_t__R_e_g_i_s_t_r_y__o_f__U_S__G_o_v_e_r_n_m_e_n_t__R_a_d_i_o__F_r_e_q_u_e_n_c_i_e_s_.

Published by CRB Research, the 5th edition is available from Galaxy Electronics (Box 1202, 67 Eber Ave., Akron, Ohio) for about $15. Kneitel's book contains frequency listings for NASA, military, FBI, Secret Service, DEA, IRS, Border Patrol, arsenals, ammunition plants, mis-sile sites, and others in the 25 to 470 MHz range. Since the US government no longer offers frequency information for its own stations, and has never pub-lished sensitive frequencies, most of the information in Kneitel's book has been collected from listeners over the years. It is certainly not complete, nor 100% accurate, but is the best book in print for this diffi-cult to obtain information.

Magazines

Although national in circulation, local frequency information is sometimes available in Grove's _M_o_n_i_t_o_r_i_n_g__T_i_m_e_s and Kneitel's sensationalistic _P_o_p_u_l_a_r__C_o_m_m_u_n_i_c_a_t_i_o_n_s_.

Government Records

Every year, the US Government sells FCC license information, in the form of microfiche, to the public through the US Bureau of Commerce National Technical Information Service (NTIS).

These lists contain license information for the industrial (e.g. Illinois Amored Car, Pinkerton's Security, Joe's Towing, etc.), highway maintenance, commercial broadcast, aviation, common carrier, and maritime services, as well as for police and fire. Microfiche is not for the casual hobbyist, but rather for the ardent listener, who can easily spend a few hundred dollars for the fiche, not including the price of a microfiche reader.

Copies of some of the FCC microfiche files are sold by Grove Enterprises. Buying from Grove is usually cheaper than buying directly from NTIS, although Grove doesn't offer all the files available from the government.

Since federal government radio stations are not licensed by the FCC, they are not listed in FCC microfiche. In 1981, a group of 60 radio hobbyists split a $1300 fee, and obtained 80 microfiche cards of 'sanitized' information about federal government radio stations under the Freedom of Information Act (FOIA)1. Only 12 of the 21 information fields for each station were furnished. Fields like "Remarks", which indicate the exact usage of a channel (e.g. "Sky Marshall's Net"), and "Bureau", indicating agency subdivision (e.g. TAC within the USAF), were withheld. These 80 pages of microfiche are available from Grove Enterprises for $25. In a step backward, the US Government insists it will no longer release this type of information - it is now 'classified'2.

For a reason unknown to this author, the government recently released a 1984 vintage set of frequencies allocated to the FAA. Perhaps this was a mistake, because the information is marked 'unclassified', but all fields are furnished, including some which indicate security related usage. Grove sells this set of 33 microfiche cards for about $13.

Radio Clubs

One of the best parts of the hobby is sharing it with other radio buffs. Trading information with other hobbyists about frequencies, communication systems, and receiving equipment is more valuable than a pile of magazines.

In 20 years of being an amateur radio operator, and belonging to amateur radio clubs, I never realized there were any scanner clubs! In 1983, I joined the world's largest scanner club, the Radio Communications Monitoring Association (RCMA).

Founded in 1975, the RCMA is the "first national and international organization of monitor radio listeners." There are several regional chapters which hold regular meetings. Club dues are $16.50 per year, which includes a monthly newsletter of about 95 pages. Although the focus is on VHF and UHF ranges, there is coverage of HF utility stations below 30 MHz.

Inquiries about RCMA membership should be sent to:

RCMA General Manager
P.O. Box 542
Silverado, CA 92676
USA

The Scanner Association of North American (SCAN) is a scanner organization headquartered in Chicago. Having no elected officers or meetings, SCAN is not a club in the traditional sense, rather it is run by an advertising agency contracted by the manufacturer of Bearcat scanners. The $12 per year membership fee includes _S_C_A_N__M_a_g_a_z_i_n_e_, a thin, albeit glossy, bimonthly.

Membership information is available from:

Scanner Association of North America
240 Fencl Lane
Hillside, Illinois 60162

Do Your Own Sleuthing

The real challenge is deriving new spectrum usage information. Sometimes it requires several days of listening, taping, and compiling fragments of informa-

tion. Other times, the frequency information is there for the taking - without hassle. More about this in the next installment.

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1. See "The Government Giveth, the Government Taketh Away", by Richard Prelinger, in _M_o_n_i_t_o_r_i_n_g__T_i_m_e_s_, July 1982.

2. See "AFIO and the FOIA", by Bob Grove, in _M_o_n_i_t_o_r_i_n_g__T_i_m_e_s_, September 1982.

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 254018895070780509
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b8b67ea8efba5dac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-02 05:51:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cbnscs.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbnscs!jlk
From: jlk@cbnscs.UUCP (Jim Kerr x5558)
Newsgroups: net.ham-radio
Subject: ham_exam
Message-ID: <156@cbnscs.UUCP>
Date: Thu, 2-May-85 08:51:48 EDT
Article-I.D.: cbnscs.156
Posted: Thu May 2 08:51:48 1985
Date-Received: Fri, 3-May-85 05:24:41 EDT
Organization: AT&T Bell Laboratories, Columbus
Lines: 16

ARRL AMATEUR RADIO EXAMS

Saturday, May 18
9:00 AM
280 Morse Road
Columbus, Ohio

All exams will be given, Novice through Extra.
WALK-INs will be accepted as time and space and VEs permit.

Questions to:
Jim Kerr
614-860-5558 or 8-860-5558 (8AM-4PM,M-F)
cbosgd!cbnscs!jlk

Reply by telephone or electronic mail only.

From 2220335238592063099
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,62580335f083cba9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-02 08:16:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!vax135!ariel!mtunf!mtung!
mtunh!inuxg!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: NEW TAPR BOARD
Message-ID: <752@inuxd.UUCP>
Date: Thu, 2-May-85 11:16:05 EDT
Article-I.D.: inuxd.752
Posted: Thu May 2 11:16:05 1985
Date-Received: Sat, 4-May-85 02:21:58 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 7

The TAPR group was well represented at Dayton this year. For
those who didnt get a chance to see the new board it is Z80
based and is in a much smaller package similiar to a Hays
Smart Modem in size. The cost will be under $200 and it really
looks good. I forgot to bring in the feature sheet I got but
when I do , I will post more info.   de KN9K   RICH

From -5773381301134171633
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a9efa6ee07b898fd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-02 10:26:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!
mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: propagation answer for Tony Michel
Message-ID: <16857@mgweed.UUCP>
Date: Thu, 2-May-85 13:26:28 EDT
Article-I.D.: mgweed.16857
Posted: Thu May 2 13:26:28 1985
Date-Received: Tue, 7-May-85 02:43:11 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 10

Tony,

I do not originate the propagation forecasts, I just receive them

from W1AW, the ARRL station, and relay them here on the net.
I have not really studied propagation myself but do find it
interesting.

Bob K9EUI

From 254333935141224848
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,5dda0b373ffdacf5,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,5dda0b373ffdacf5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-02 10:41:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!think!mit-eddie!genrad!decvax!
decwrl!dec-rhea!dec-dvinci!fisher
From: fisher@dvinci.DEC
Newsgroups: net.columbia,net.ham-radio
Subject: Space shuttle on ham bands
Message-ID: <1973@decwrl.UUCP>
Date: Thu, 2-May-85 13:41:05 EDT
Article-I.D.: decwrl.1973
Posted: Thu May 2 13:41:05 1985
Date-Received: Sat, 4-May-85 08:09:55 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 19
Xref: linus net.columbia:962 net.ham-radio:2004

<...>

Space shuttle mission audio is being rebroadcast by WA3NAN, the Goddard
Amateur Radio Club, on the following frequencies:

      3860 Khz (Received here in Central Mass)
      7185 Khz ("   "   ")
     14295 Khz (not received here, but announced on WA3NAN)

     (all Upper Sideband)

They appear to miss some of it...e.g. during LOS, mission control
announced that they were going to play an interview with someone. Then
dead air for 5 min, then they announced that the interview was over.

In any case, if you can receive it, it is a lot cheaper than $.30 /minute
on the 900 number!

Burns

From -290884987491526952

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba9539e6a804689b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-02 14:03:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!vax135!ariel!mtunf!mtung!
mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: Eastnet packet station list wanted
Message-ID: <444@mtunh.UUCP>
Date: Thu, 2-May-85 17:03:32 EDT
Article-I.D.: mtunh.444
Posted: Thu May 2 17:03:32 1985
Date-Received: Fri, 3-May-85 05:30:44 EDT
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 11

I am looking for the Eastnet packet station map.
(For those unfamiliar with this, it is a list of packet stations
that can be used as repeaters covering the East coast from New England to
Florida.)
It has been circulating via packet radio but I can't find a copy ...
I have seen a few packets of it floating around when monitoring 145.01
but can't catch the whole thing.

Thanks.
73, jim KY2D
NEW ADDRESS: ihnp4!mtunh!jak

From -2507703268204482303
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,3bf01809d51d8da6,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,3bf01809d51d8da6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-02 14:36:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!decvax!decwrl!dec-rhea!dec-scotty!fisher
From: fisher@scotty.DEC
Newsgroups: net.ham-radio,net.columbia
Subject: Followup to my previous note about Shuttle on ham bands
Message-ID: <1979@decwrl.UUCP>
Date: Thu, 2-May-85 17:36:15 EDT
Article-I.D.: decwrl.1979
Posted: Thu May 2 17:36:15 1985
Date-Received: Tue, 7-May-85 20:07:22 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 21

Xref: linus net.ham-radio:2009 net.columbia:968

<...>

I should also mention that

1) WA3NAN indicated that they were also transmitting on
~14n Mhz FM. I presume this is a repeater frequency which
would not have a very great range, so I did not copy the
frequency down.

2) If I did not say so before, the transmissions originate in
Greenbelt Maryland, USA. Don't know how well they can be
heard at other places in the world. I'm new to this DX stuff.

3) During Spacelab 1, I was at Edwards AFB for the landing, and
found that the JPL Amateur club was transmitting the same
stuff on repeater frequencies. Those of you on the
near the Pacific may find that the same folks are also transmitting
on other AM frequencies just as Goddard is. Worth a try if you
can't get Goddard.

Burns

From -6172338046682278787
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7be6bd3503f7b634,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-02 15:00:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mtunh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!mtuxo!mtuxn!mtunh!jak
From: jak@mtunh.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: TAPR Announces TNC2
Message-ID: <440@mtunh.UUCP>
Date: Thu, 2-May-85 18:00:25 EDT
Article-I.D.: mtunh.440
Posted: Thu May 2 18:00:25 1985
Date-Received: Fri, 3-May-85 05:22:07 EDT
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 41

[Thought this would be of general interest ...
73, Jim KY2D]

M 8100 Lyle Johnson (WA7GXD,2973) 4/29/85 11:50 PM L:34
KEYS:/TAPR ANNOUNCES TNC 2/
TO: (Group 95)

TAPR Announces TNC 2
or

The Rumors You Heard About Dayton Were True!

Tucson Amateur Packet Radio (TAPR) proudly announces a low-cost, no-compromise Terminal Node Controller (TNC), the TAPR TNC 2.

TNC 2 is a complete packet radio controller, incorporating the experience gained in supplying nearly 2500 TNCs to the world's Radio Amateurs.

TNC 2 utilizes the proven TAPR modem design with a switched capacitor input filter and plug-in headers to configure the on-board modem for various modes of operation, including 1200 baud, 1000 Hz shift and 300 baud, 200 Hz shift.

TNC 2 is based on a CMOS version of the popular Z80 microprocessor, and utilizes the Z80 SIO with a state machine to implement the HDLC NRZI packet format required by the AX.25 Level Two standard. The 8 k bytes of RAM are backed with a Lithium battery to retain all stored commands and operating parameters.

TNC 2 's software provides enhanced monitor mode, full support of the AX.25 Level two protocol, including Version 2.0, and other evolutionary features.

TNC 2 operates from a 12 volt dc (nominal) power source and is significantly smaller than the previous TAPR TNC (now called TNC 1).

TNC 2 is curently in field testing and is expected to be released during the summer. At a price of only $185 for the complete kit, including cabinet, high performance packet radio operation is now affordable by most Amateurs.

PLEASE NOTE: TAPR is not accepting orders for TNC 2 at this time.
No waiting list is being maintained.

From 7867751120275165383
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8f6b75a5113273f8,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,8f6b75a5113273f8,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1985-05-03 06:42:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!decvax!decwrl!dec-rhea!dec-scotty!fisher
From: fisher@scotty.DEC
Newsgroups: net.columbia,net.ham-radio
Subject: Correction to ham-band shuttle coverage
Message-ID: <1993@decwrl.UUCP>
Date: Fri, 3-May-85 09:42:49 EDT
Article-I.D.: decwrl.1993
Posted: Fri May 3 09:42:49 1985
Date-Received: Tue, 7-May-85 07:46:55 EDT
Sender: daemon@decwrl.UUCP

Organization: DEC Engineering Network
Lines: 12
Xref: linus net.columbia:971 net.ham-radio:2012

Correction: That rebroadcast of shuttle mission audio from Goddard
Amateur Radio Club is on LOWER sideband, not upper.

Burns

     UUCP: ... {decvax|allegra|ucbvax}!decwrl!rhea!dvinci!fisher

     ARPA: fisher%dvinci.dec@decwrl.ARPA

From 5256047898849209424
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c24a7460f16ce3b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-03 12:59:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
mcnc!philabs!cmcl2!seismo!brl-tgr!tgr!W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA (Keith Petersen)
Newsgroups: net.ham-radio
Subject: Duplicate mail being distributed from usenet ...
Message-ID: <10415@brl-tgr.ARPA>
Date: Fri, 3-May-85 15:59:32 EDT
Article-I.D.: brl-tgr.10415
Posted: Fri May 3 15:59:32 1985
Date-Received: Mon, 6-May-85 01:29:06 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

    It seems that for some reason (beginning yesterday evening I
    think) mail from usenet bound for info-hams has been sent twice,
    with about a half hour between sendings. Can something be done
    to correct this? Thanks. /Lee Richardson, W6RFK

This appears to be a problem at BRL. It is happening with Info-Micro
and Info-Cpm as well as several other groups that receive usenet
forwarding.

--Keith <W8SDZ@SIMTEL20.ARPA> aka <INFO@HAMS-REQUEST@SIMTEL20.ARPA>
Usenet: ...!decvax!brl-bmd!w8sdz
  or   ...!unc!brl-bmd!w8sdz
  or   ...!seismo!brl-tgr!w8sdz

From 5034291038485091635

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ef41c60af3dccea,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-03 13:16:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
mcnc!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: vhf shuttle broadcasts
Message-ID: <10416@brl-tgr.ARPA>
Date: Fri, 3-May-85 16:16:53 EDT
Article-I.D.: brl-tgr.10416
Posted: Fri May 3 16:16:53 1985
Date-Received: Mon, 6-May-85 01:29:29 EDT
Sender: news@brl-tgr.ARPA
Lines: 42

------- Forwarded Message

"I should also mention that

1) WA3NAN indicated that they were also transmitting on ~14n Mhz FM. I presume this is a repeater frequency which would not have a very great range, so I did not copy the frequency down.

2) If I did not say so before, the transmissions originate in Greenbelt Maryland, USA. Don't know how well they can be heard at other places in the world. I'm new to this DX stuff.

3) During Spacelab 1, I was at Edwards AFB for the landing, and found that the JPL Amateur club was transmitting the same stuff on repeater frequencies. Those of you on the near the Pacific may find that the same folks are also transmitting on other AM frequencies just as Goddard is. Worth a try if you can't get Goddard.

- Burns"

------- End of Forwarded Message

I happened to be in Clear Lake City (Houston Suburb where NASA - Johnson Space Flight Center is located) during the October, 1984 Shuttle mission. They were playing Shuttle audio over the NASA club repeater. I especially got a kick out of it because I had innocently turned on my HT on the way down from my hotel room to breakfast, just to monitor for ham activity. I thought nothing much of it when I heard a woman's voice discussing some technical things I didn't quite get the context of until a man's voice came on saying, "Sally, this is Houston. Could you move the arm so that..." -- and then it hit me

what I was listening to! It must be fun to have access to that facility on a daily basis during Shuttle missions. You hear a lot of news in the making, and only a tiny fraction of the actual audio gets onto the TV newscasts.

73,
John S., W3IKG

From -6225007513299782259
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7be6bd3503f7b634
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-03 15:32:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbneb.UUCP
Path: utzoo!linus!decvax!bellcore!allegra!ulysses!mhuxr!ihnp4!cbosgd!cbsck!cbneb!adm
From: adm@cbneb.UUCP
Newsgroups: net.ham-radio
Subject: Re: TAPR Announces TNC2
Message-ID: <3138@cbneb.UUCP>
Date: Fri, 3-May-85 18:32:24 EDT
Article-I.D.: cbneb.3138
Posted: Fri May 3 18:32:24 1985
Date-Received: Tue, 7-May-85 08:18:26 EDT
Sender: adm@cbneb.UUCP
Organization: AT&T Bell Laboratories, Columbus, OHIO
Lines: 21
Nf-ID: #R:mtunh:-44000:cbnap:14800010:000:524
Nf-From: cbnap!gws   May 3 15:24:00 1985

> TAPR Announces TNC 2
> or
> The Rumors You Heard About Dayton Were True!

>Tucson Amateur Packet Radio (TAPR) proudly announces a low-cost, no-
>compromise Terminal Node Controller (TNC), the TAPR TNC 2.

TAPR also will have a 9600 baud modem available.

>PLEASE NOTE: TAPR is not accepting orders for TNC 2 at this time.
>   No waiting list is being maintained.

I cant even get them to answer the phone!

Gary W. Sanders (N8EMR)
ihnp4!cbnap!gws

From -2410673530698923985
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,da2d3cab6cb0410c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-05 09:29:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!jcp@BRL.ARPA
From: jcp@BRL.ARPA (Joe Pistritto)
Newsgroups: net.ham-radio
Subject: Hamfests MD/DC/VA/PA
Message-ID: <10434@brl-tgr.ARPA>
Date: Sun, 5-May-85 12:29:24 EDT
Article-I.D.: brl-tgr.10434
Posted: Sun May 5 12:29:24 1985
Date-Received: Tue, 7-May-85 07:16:26 EDT
Sender: news@brl-tgr.ARPA
Lines: 21

The following is an incomplete list of Hamfests scheduled in the Baltimore, Washington, Pennsylvania areas:

16 June Federick Hamfest/Frederick MD 301 845 6949
Frederick Fairgrounds, East Patrick St.

7 July Wilkes-Barre, PA (Murgas ARC) 717 388 6863
109th FA Armory, Market St. Kingtson, PA

28 July Maryland Hamfest (BRATS)
Howard County Fairgrounds

26 Aug Hersheypark Hamfest/Computerfest 717 697 1880
Hersheypark, PA

Anyone having more is encouraged to add to the list.
In particular, does anyone known when Manassas is?

-JCP-
N3CKF

From -1782408603458712290
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f3768f824ad01ff1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-05 12:10:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio

Subject: How do you find these freqs? - Part II: sleuthing
Message-ID: <561@ihu1h.UUCP>
Date: Sun, 5-May-85 15:10:52 EDT
Article-I.D.: ihu1h.561
Posted: Sun May 5 15:10:52 1985
Date-Received: Mon, 6-May-85 02:07:58 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 241

x

HOW DO YOU FIND THESE FREQUENCIES?
PART II - SLEUTHING

Bob Parnass, AJ9S

Part I of this series discussed how scanner enthusiasts can obtain frequency information from books, government microfiche records, or other listeners. This installment discusses digging up new frequencies on your own.

Do Your Own Sleuthing

There is a challenge in deriving new spectrum usage information on your own. Sometimes it requires several days of listening, taping, and compiling fragments of information. Other times, the frequency information is there for the taking - without hassle.

You can approach from two directions:

1. Listen first: Monitor a frequency or frequencies, and determine who's transmitting and what purpose the channel serves. Once you identify the user, log the information.

2. Compile first: Take advantage of opportunities, such as examining the frequency label on a guard's radio, or reading the FCC license hanging on the "radio room" wall1, to compile frequency lists, then monitor the listed frequencies to confirm that they are really in use.

Most listeners use a combination of both approaches.

What Makes Station Identification Difficult?

In most instances, FCC rules require radio users to identify their operations with FCC assigned call letters. Police and fire departments, especially those with trained radio dispatchers, seem particularly con-

scientious about station identification. Like commercial broadcasters, many of these stations identify on the hour and the half hour.

Some repeater stations have Morse code identification circuits which transmit call letters on a periodic basis, insuring compliance with FCC rules.

On the other hand, about half the industrial radio stations monitored within the last year ignore the FCC regulation, making it difficult for a listener to know who he's listening to. Some stations may operate for years using the undescriptive "base to mobile 2" or "Joe to base" protocol. One rung up the hierarchy are stations that identify using something like "Acme base to 107", giving the listener a clue for his log. If call letters are given, they are often rendered unintelligible by operators who fail to enunciate. The failure to identify is more likely due to sloppiness, rather than any attempt to hide station identity.

While not regulated by the FCC, federal government radio stations vary in the extent to which they identify their transmissions. Some federal stations do not have call letters. A nearby paging transmitter periodically transmits a voice recording announcing, "This is the Army Joliet Ammunition Plant." What more could a listener ask for?

The following examples illustrate techniques I've used to derive new frequency information.

Examine the Labels on Radio Equipment

Frequency information is engraved on labels on the back of many walkie-talkies, or inside the battery compartment, like in the Motorola HT220 model. Most pagers have labels on the bottom or inside. Like passwords taped onto terminals, it's not uncommon to find Dymo tape labels embossed with frequencies or call letters glued to the front of base stations.

You can make your own opportunities for eyeing the equipment or take advantage of "open house" events. If information is displayed publicly, then a reasonable person could assume it's not government secret.

- At the annual Glenview Naval Air Station open

house, I examined a military manpack radio being used by dispensary paramedics. The radio's tuning dial was set at 34.15 MHz.

- The Illinois Army National Guard proudly displayed two armored personnel carriers at the local county fair, each equipped with VHF-FM and HF-SSB transceivers.

  In addition to a tuning control (VFO), the VHF-FM radio had a set of channel select pushbuttons, much like those in a car radio. I asked a guardsman a few questions about the radio, and he gladly demonstrated the channel preset feature. A panel above the channel pushbuttons was labeled with the frequencies: 32.055, 34.45, 35.35, 40.55, and 40.60 MHz.

Hobbyists are urged to exercise a modicum of restraint and good judgement. In New Jersey, a radio technician/hobbyist called to service a transmitter in a county building, noticed a new unattended repeater installation in the same room. Being curious about what frequency this repeater was on, he opened the access door to copy the frequencies from the radio's crystals. It turns out that this radio belonged to the US Secret Service, and opening the access door had activated a "tamper alarm"!

The tech was skating on thin ice. He had nobody's permission to tamper with that equipment.

Equipment to Determine Frequency Usage

If you don't know the exact frequency, but have a general idea of the range (e.g. 150 - 152 MHz), use your scanner's "search" mode. Most programmable scanners afford the ability to search between two frequency limits set by the user. Two older models, the Bearcat 250 and Regency K500, have the ability to automatically store active frequencies found during an unattended search operation.

To find the frequency of a hotel communications system, one fellow installed his Bearcat 250 in his car and

parked in the hotel lot, leaving the scanner in the "search and store" mode. He left the antenna disconnected so the scanner would only respond to a transmitter in the immediate vicinity.

Test equipment can aid in the quest for new frequency information. I've used a spectrum analyzer connected to an outside antenna, and a frequency counter for close-in work.

How Can I Determine To Whom I'm Listening? - An Example

While scanning the industrial frequencies in the 150 MHz range, a van driver was overheard communicating with "base" while driving around my town. The stations involved never used FCC call signs - this would have made life a lot easier for me, and legal for them!2 Transmissions were short and infrequent, so it was decided to tape record all transmissions on this frequency for several days to determine the station's identity.

During daylight hours, a modified Regency K500 scanner was left tuned to the target frequency, connected to a cheap tape recorder through a home built interface. Using a carrier operated relay, the tape interface supplied power to the recorder only during radio transmissions, so a day's worth of traffic could be compressed into a 45 minute tape.

Each day, the tape was played back and notes on names, locations, and activities mentioned during the day's transmissions were taken. The van driver appeared to be making daily stops at a local bank and two shopping malls. A Walgreen's store seemed to be the only stop at one mall. A few times, "base" ordered the van "back to the Training Center." There were frequent references to "guests checking out", "dropping a guest off", and "instructor[s] missing a class". At times, "base" spoke with "security", who must have been using a walkie-talkie as his signals weren't strong enough to hear.

Was this a hotel? Calls to the three local hotels revealed that none provides shuttle bus service to the shopping malls. A call to the Walgreen's, inquiring about bus service to the store, drew another blank. During my shopping trips, I began to pay closer atten-

tion to vans with antennas driving through the parking lots.

I was leaving the mall one day, when a week's effort paid off. A maroon and white van, equipped with a VHF-Hi antenna, was dropping shoppers off at Walgreen's. A sign on the van's door read:

XYZ Central Training Center3
Lisle, Illinois

I watched the driver pick up a microphone, and listened to him on my portable scanner checking back with his "base".

All the pieces fit: the "guests", the "classes", the "instructors". Mystery solved; I had been monitoring the customer training center for a large computer manufacturer. The training center has hotel rooms and dining facilities to accommodate students from out of state. As a convenience, shuttle van service is provided to local shopping malls.

Summary

Through books, government records, and radio clubs, scanner listeners can make use of frequency information compiled by others. Since two-way radio users sometimes fail to identify their transmissions properly, making it more difficult for listeners to know who they are monitoring. By examining radio equipment labeling, and monitoring and taping transmissions, scanner enthusiasts can unearth new information.

---

1. Readers are urged to abide by the rules of good taste and local laws in the quest for frequency information. Don't trespass, wait for an invitation.

2. One may use FCC license microfiche, described in Part I of this article, to identify stations using call letters.

3. XYZ is a pseudonym for the actual licensee name.

--

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 8257546252887043736
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5dda0b373ffdacf5
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,5dda0b373ffdacf5
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1985-05-05 12:16:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site umd5.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!umcp-cs!cvl!umd5!louie
From: louie@umd5.UUCP
Newsgroups: net.columbia,net.ham-radio
Subject: Re: Space shuttle on ham bands
Message-ID: <494@umd5.UUCP>
Date: Sun, 5-May-85 15:16:00 EDT
Article-I.D.: umd5.494
Posted: Sun May 5 15:16:00 1985
Date-Received: Tue, 7-May-85 07:24:39 EDT
References: <1973@decwrl.UUCP>
Reply-To: louie@umd5.UUCP (Louis Mamakos)
Organization: U of Md, CSC, College Park, Md
Lines: 7
Xref: linus net.columbia:973 net.ham-radio:2019

The 2 meter frequency is 147.45 MHz FM. It is transmitted my WA3NAN from
the Goddard Space Flight Center in Greenbelt, Maryland. It can be copied
in the Baltimore-Washington Metro area.
--
Louis A. Mamakos WA3YMH   University of Maryland, Computer Science Center
 Internet: louie@umd5.arpa
 UUCP: {seismo!umcp-cs, ihnp4!rlgvax}!cvl!umd5!louie

From -6654092629679791930
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,987f6ede806c58f5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-05 20:30:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!SPECTOR@NYU-CMCL1.ARPA
From: SPECTOR@NYU-CMCL1.ARPA (David H M Spector)
Newsgroups: net.ham-radio
Subject: Sat. work from an Apt.
Message-ID: <10438@brl-tgr.ARPA>
Date: Sun, 5-May-85 23:30:10 EDT
Article-I.D.: brl-tgr.10438
Posted: Sun May 5 23:30:10 1985
Date-Received: Tue, 7-May-85 21:12:45 EDT
Sender: news@brl-tgr.ARPA
Lines: 18

Hello,

I would like to get into some satellite work from my apt. here in Manhattan, and I would like to know if anyone else has attempted such a feat from an urban area. If so, what type of antenna/rig/etc did you use (the roof is, {*Sigh*} out of the question)? Could you point me toward some good books on projects, etc? I am also interested in playing with some satv, any pointers here?

Thanks Much & 73,
David Spector, N2BCA
Spector@nyu-cmcl1.arpa
..!allegra!cmcl2!cmcl1!spector

From 4624519698272126635
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf49de04413d48c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-06 08:01:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site hplvle.UUCP
Path: utzoo!linus!philabs!prls!amdimage!amdcad!amd!pesnta!hplabs!hpisla!hplvla!chris
From: chris@hplvla.UUCP (chris)
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <2800008@hplvle.UUCP>
Date: Mon, 6-May-85 11:01:00 EDT
Article-I.D.: hplvle.2800008
Posted: Mon May 6 11:01:00 1985
Date-Received: Sat, 11-May-85 23:52:01 EDT
References: <10189@brl-tgr.UUCP>
Organization: HP Loveland Instrument Division
Lines: 31

Well, I cannot answer for your feelings of being burned, but there is something which everyone must remember about TAPR: they are NOT in business! TAPR is a nonprofit R&D corporation, and they all have other jobs, with the phone secretary being the only paid employee. Their interest in making the TNC's is strictly to promote packet radio, ham radio, and in this they have been diligent and successful. Ham radio will grow because TAPR has done what the commercial radio manufacturers will not or cannot do: produce first class products for a decent price, forming a bridge between the radio and the computer which most hobbyists can afford. When they sold the rights to Heathkit and AEA on the TNC 1 design, it was for a strictly nominal ammount.

Now, as the progress in packet makes a less expensive form of TNC available, more people yet can afford the mode, and TAPR had lots of money tied up in the remaining kits. As a naive buyer, would you prefer to send your dollars to an unknown outfit in Tucson or to Heathkit? Well, its my guess that after Heathkit came out with a $299 kit with cabinet, few TAPR TNCs sold at the old price, and TAPR had to clear out its inventory. All the "bearded experimenters" who were able to take the plunge already had their TNC's (I own 3) and the more cautious users preferred the bigger name of Heath.

TAPR will be spending more time yet developing 9600 baud modem boards, and possibly even 220 MHz RF decks for high speed packet, boosting both the computer-ham radio link and the use of the 220 band. I have lots of respect for those guys, both technically and personally, for continuing their efforts in an environment which would probably dishearten and tire me, especially after I already spent 8 hours at my regular job, and 4 years developing first class equipment for marginally grateful ham community.

-chris, WD5IBS
hpfcla!hplvla!chris

From -5737297370162666276
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6e8416d9f159412a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-06 10:38:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!GAUTHIER@JPL-VLSI.ARPA
From: GAUTHIER@JPL-VLSI.ARPA (Michael K. Gauthier)
Newsgroups: net.ham-radio
Subject: SHUTTLE ON HAM BANDS DE W6VIO@JPL
Message-ID: <10448@brl-tgr.ARPA>
Date: Mon, 6-May-85 13:38:52 EDT
Article-I.D.: brl-tgr.10448
Posted: Mon May 6 13:38:52 1985
Date-Received: Tue, 7-May-85 21:32:35 EDT
Sender: news@brl-tgr.ARPA
Lines: 14

JPL (JET PROPULSION LAB) PASADENA, CA. DOES RETRANSMIT THE SHUTTLE AUDIO ON 224.04 (W6VIO) REPEATER. A NUMBER OF OTHER REPEATERS PICK-UP THE AUDIO FROM JPL AND AGAIN RETRANSMIT IT.

YOU WILL FIND THE W6VIO RETRANSMISSIONS ON A NUMBER OF OTHER FREQUENCIES (MAINLY 2 METERS) HERE IN THE LOS ANGELES AREA AS WELL AS OTHER AREAS.

73,

MIKE GAUTHIER, K6ICS
JPL RADIO CLUB, W6VIO
GAUTHIER@JPL-VLSI.ARPA

From -5128126549583983797
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6db0c89bcc8b5c34,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-06 13:41:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!McAfee.ES@Xerox.ARPA
From: McAfee.ES@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: RE: Modified PLL rigs
Message-ID: <10453@brl-tgr.ARPA>
Date: Mon, 6-May-85 16:41:36 EDT
Article-I.D.: brl-tgr.10453
Posted: Mon May 6 16:41:36 1985
Date-Received: Tue, 7-May-85 21:38:20 EDT
Sender: news@brl-tgr.ARPA
Lines: 40

I thought that this information from JE1RYH would be of interest to the
net.

Pete   KD6HR

Date: 3 May 85 19:06:14 +0900 (Friday)
Subject: Re: Modified PLL rigs
To: HamRadio^.ES
From: JE1RYH <Ozaki.FX>
cc: Ozaki
Reply-To: Ozaki.FX

Do you think that ICOM, YAESU, KENWOOD and others are making separate
CPUs for each band of rigs? No! They use same CPU for series of
rigs(e.g. IC-02, IC-03, IC-04s). Nonetheless, they even use the exactly
same CPU for JA's, Europes, USAs and other contries(you know, their
band plans are bit different from one another). So, you can simply
change your rig to cover freq ranges as wide as the CPU has been
programed. What makes all the differences are the DIODES and some
registors. It's just combination of those diodes and registors to tell
CPU which mode(freq range) to operate. For example, my IC-03N (which
might be IC-04A in the States) would display 50MHz, 144MHz, 220MHz,
440MHz, and even 1200MHz, too. Of course, it does not receive nor
transmits on other bands, because PLL circuit is made for 440MHz band
only. Our band plan for 440MHz band is between 430.00MHz thru
439.99MHz, but I could easily enlarge its coverage from 420MHz to
450MHz, by cutting one lead of a diode. If you have thumb wheel type
rig, it's much easier to widen its coverage. Try to find the chip named
9122 near the PLL circuitry, that's a programmable devider which control
PLL to determine the output frequency. Maybe, you'd have to study a bit

about PLL circuits, but once you know the principle of its operation, it would be nothing to change it to whatever the ways you want to. Have fun with your PLLs.

73 & 88s

de JE1RYH -- Yuki Ozaki

From 6745042592038364816
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cad6e2eeb7cc65e8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-06 19:15:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: SUMMARY OF ARRL BULLETINS 29/31 (NEW BAND & MODES)
Message-ID: <16932@mgweed.UUCP>
Date: Mon, 6-May-85 22:15:11 EDT
Article-I.D.: mgweed.16932
Posted: Mon May 6 22:15:11 1985
Date-Received: Fri, 10-May-85 20:25:14 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 22

qst de k9eui
hr summary of bulletins 29 and 31 and dec. 1984 qst
to all radio amateurs bt

effective june 17 amateurs can operate rtty, fax and sstv on 160 meters per report & order in docket 84-959.

effective 0001 utc june 22 the 30 meter band becomes official (10,100 to 10,150 khz).

also effective 0001 utc june 22, we get the 12 meter band. while the 30 meter band will remain restricted to a1 and f1 emissions with 200 watts pep, the 12 meter band will not have power restrictions. 12 meter band emissions will be as follows:

24,890 to 24,930   a1 and f1
24,930 to 24,990   a1, a3, a4, a5, f3, f4, and f5

at this time, there is no plan to release 18,068 to 18,168 khz to u.s. amateurs before 1989   ar

From 8024088322927430185
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ec7a4c006f054215,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-06 19:15:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 33 (armed forces day info)
Message-ID: <16933@mgweed.UUCP>
Date: Mon, 6-May-85 22:15:39 EDT
Article-I.D.: mgweed.16933
Posted: Mon May 6 22:15:39 1985
Date-Received: Fri, 10-May-85 20:25:34 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

qst de k9eui
hr arrl bulletin nr 33 from arrl headquarters
newington ct may 6, 1985
to all radio amateurs bt

armed forces day, may 18 and 19, marks the 36th anniversary of
these communications tests between amateurs and the military
communications system. amateurs may make crossband contacts
with specified army, air force, and navy stations between 0300z
may 18 and 0245z may 19. the cw reciving test, at (garble)
wpm, will begin at 0300z may 20, with the rtty receiving test
beginning at 0335z. complete details may be found on page 87
of may qst ar

From 5799692075321668967
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,59c327f6c727b17a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-06 19:16:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 15
Message-ID: <16934@mgweed.UUCP>
Date: Mon, 6-May-85 22:16:26 EDT
Article-I.D.: mgweed.16934
Posted: Mon May 6 22:16:26 1985

Date-Received: Fri, 10-May-85 20:25:54 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr crrl bulletin nr 15 from crrl headquarters
london ont may (??) 1985
to all radio amateurs bt

congratulations to ve3cie, who won a qst cover plaque for his article in january qst, and to ve3gyq, who was recently appointed vice chairman of the arrl repeater advisory committee.

doc is negotiating a reciprocal operating agreement with spain
ar

From 7948808506314713194
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f1f72cc6a60a9276,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-06 19:17:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 21
Message-ID: <16935@mgweed.UUCP>
Date: Mon, 6-May-85 22:17:18 EDT
Article-I.D.: mgweed.16935
Posted: Mon May 6 22:17:18 1985
Date-Received: Fri, 10-May-85 20:26:15 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 42

qst de k9eui
hr propagation forecast bulletin nr 21 from arrl headquarters
newington ct may 5, 1985
to all radio amateurs bt

there is little to be said for the period april 20 to may 2 except that, if your interest in amateur radio survived those two weeks, you need not worry about anything much worse to come. the generally low muf and the preponderance of weak signals and severe fading also showed that higher solar flux and sunspot numbers do not necessarily make for improved long distance communication. during late april solar activity came in sudden surges, mostly of short duration, resulting in very

high surges in the earths magnetic field. this is about the worst thing that could happen for hf propagation in the higher (garble). the severity of these disturbances was such that almost total blackouts of wwv reception were observed in the writers florida location for the first time in several years of part time southern living.

somewhat improved propagation can be expected this week, but not because of higher solar flux or sunspot numbers. on may 3, 4 and 5 the solar flux curve is superimposed on the curve for april at 71, 70 and 70. as in early april we should be moving into periods of more stability and better hf propagation, especially may 10 through 16. this will affect 14 mhz and lower frequencies mainly.

on may 5 we had our first good sporadic e skip on 28 mhz, and there were a few contacts on 50 mhz as well. more of this will be showing up later this month, but the real peak usually comes late in june. most likely hours are mid morning and early evening, but e skip can come at any time. multiple hop propagation may extend the skip range to transcontinental or even transatlantic distances, though a few hundred miles is much more (common). sporadic e skip openings are not directly related to sunspot numbers or the solar flux level.

american sunspot numbers for april 25 to may 1 were between 35 and 19 with a mean of 27.1 ar

From -8379951353991553598
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4dd4a79b9ca44ad9,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,4dd4a79b9ca44ad9,start
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1985-05-06 19:53:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.video
Subject: Listen to Cellular Phones On Your TV Set
Message-ID: <562@ihu1h.UUCP>
Date: Mon, 6-May-85 22:53:08 EDT
Article-I.D.: ihu1h.562
Posted: Mon May 6 22:53:08 1985
Date-Received: Wed, 8-May-85 02:39:21 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 37
Xref: watmath net.ham-radio:2666 net.video:1141

x

Listening to Cellular Telephones Using a Television Set

Several weeks ago, I posted an article in which I told of being able to hear 800 MHz land mobile communications on my 800 MHz television set.

Here are some excerpts from a letter to the editor appearing in the May 1985 issue of Personal Communications magazine:

> "In reference to your March 1985 article on cellular privacy, I have developed a technique for eavesdropping on cellular users that requires no fancy scanner, no computer, no sophisticated antennas or any other gimcracks....."
>
> "....By using the manual tuning on the varactor tuner in my VCR I have little difficulty listening to the neighborhood cell sites on my 1973 model Zenith TV.... Since sidetone is transmitted I hear both ends of the conversation....."
>
> "Handoff is an irritation, but frequently I am able to manually sweep across the band and pick up where they left me. What really irks me is the low audio level from the TV due to the deviation mismatch."
>
> "The real significance of all this is that anyone with a TV and VCR connected to a TV antenna can get the same results with a little practice...."

--

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -4326261776115835577
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a0b52d8a08364925,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-07 06:13:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Trick the Bearcat BC220 to search 136 - 144 MHz
Message-ID: <563@ihu1h.UUCP>
Date: Tue, 7-May-85 09:13:01 EDT
Article-I.D.: ihu1h.563
Posted: Tue May 7 09:13:01 1985

Date-Received: Wed, 8-May-85 04:49:53 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 39

x

Trick the Bearcat BC220 to Search 136 - 144 MHz

Here's a trick for altering the frequency limits of the early version of the BC220, which appears in Grove's "The Best of 1982 Monitoring Times".

I don't have a BC220 to try this trick - does it work?

To search 136 - 144 MHz:

1. turn the set off and on to clear the memory
2. manually select any channel
3. enter 136.0 MHz
4. enter 144.0 and press LIMIT
5. press SEARCH (reads ERROR)
6. press LIMIT (reads 136.0 MHz)
7. press SEARCH

You may restrict this out of band search sequence further once steps 1 through 7 have been executed. While the receiver is searching, open the squelch at whatever frequency you would like to select as the upper search limit; then:

a. press 136.0 LIMIT
b. press SEARCH (reads ERROR)
c. press LIMIT (reads the frequency at which you stopped searching)
d. press SEARCH and close squelch again to resume searching

A number of frequency ranges may be substituted for the example above, but only in the early versions of the BC220 with the older microprocessors.

--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6991864348541963997
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e955a38f7040986b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-08 07:21:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!rachiele@NADC
From: rachiele@NADC
Newsgroups: net.ham-radio
Subject: manassas
Message-ID: <10498@brl-tgr.ARPA>
Date: Wed, 8-May-85 10:21:07 EDT
Article-I.D.: brl-tgr.10498
Posted: Wed May 8 10:21:07 1985
Date-Received: Fri, 10-May-85 20:47:20 EDT
Sender: news@brl-tgr.ARPA
Lines: 3

Manassas is about 30 min out of DC (east on I66 I think) in VA.
Jim

From -1708878074978387327
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c606b898d333bb6b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-08 13:23:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!rachiele@NADC
From: rachiele@NADC
Newsgroups: net.ham-radio
Subject: request for info
Message-ID: <10515@brl-tgr.ARPA>
Date: Wed, 8-May-85 16:23:13 EDT
Article-I.D.: brl-tgr.10515
Posted: Wed May 8 16:23:13 1985
Date-Received: Fri, 10-May-85 08:51:17 EDT
Sender: news@brl-tgr.ARPA
Lines: 13

Two elementary questions from a novice:

1. What is a good reference book giving characteristics of various types
of transisters?

2. Is there an outfit (there must be) from which you can mail order componants
(I particularly need some small coupling transformers, Radio shack doesn't
seem to have them in their catalog)?
   is there a way to measure the inductance of a home-made transformer?

Thanks.
JR

From 4393922980582866118
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,bf49de04413d48c1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-09 10:30:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!tektronix!hplabs!hp-pcd!hpfcmt!dick
From: dick@hpfcmt.UUCP (dick)
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <19700003@hpfcmt.UUCP>
Date: Thu, 9-May-85 13:30:00 EDT
Article-I.D.: hpfcmt.19700003
Posted: Thu May 9 13:30:00 1985
Date-Received: Thu, 23-May-85 01:27:39 EDT
References: <-70800@infopro.UUCP>
Lines: 18
Nf-ID: #R:infopro:-70800:hpfcmt:19700003:37777777600:823
Nf-From: hpfcmt!dick   May 16 09:30:00 1985

In the May issue of "73" magazine I saw an ad for a microphone/earphone combination for use with HTs. It used a press to talk switch and the cost was about $100. It claimed a space age technology but looks very much like an earphone that doubles as a microphone to amplify the sound available in your ear canal when you speak. I don't know how this works, but folks here in the office speculate that this might be something like the earphones used by the secret service. (Never saw one of those guys with a boom mike)

This device was available for the ICOM-02AT and was advertised as a good solution for noisy environments.

I don't want to think about what could happen to your ear if you crash while using this thing. (The proof is left as an exercise for the student......

73s

dick anderson
hp fort collins

From -1404413388703896462
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6e1788a1b64a743d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-09 11:05:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!wmartin@Almsa-2
From: wmartin@Almsa-2 (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: TV DXing discussion from Videotech
Message-ID: <10545@brl-tgr.ARPA>
Date: Thu, 9-May-85 14:05:07 EDT

Article-I.D.: brl-tgr.10545
Posted: Thu May 9 14:05:07 1985
Date-Received: Sat, 11-May-85 08:17:22 EDT
Sender: news@brl-tgr.ARPA
Lines: 127

The following discussion has recently arisen on the Videotech list;
I thought Info-Hams (& net.ham-radio) people might be interested in it:

Date: Mon, 06 May 85 09:34:28 CDT
From: mooremj@Eglin-Vax
Subject: What is the maximum range of VHF reception?
To: videotech@Sri-Csl

Questions about (gasp! how primitive) broadcast TV.

I live in an area where, due to local politics, we do not have cable TV
and probably won't for a few years. Realizing this, I bought a 30-foot
mast, the biggest antenna I could find, a rotator and a pre-amplifier;
I also live on top of a hill, so my configuration is pretty close to
optimum. After experimenting I find that my maximum range for a good
VHF picture is about 200 miles (New Orleans) on cloudy days, 150 miles
on clear days. Occasionally I get a picture from a Birmingham station
(230 miles), but it's not reliable. Now I thought that was pretty good;
but several of the old-timers in this area swear that one can sometimes
receive stations in the Yucatan, which is over 400 miles away across the
Gulf. Question #1: Is this possible? I know some Mexican stations are
much more powerful than American stations.

Question #2: My antenna has what is called an "FM filter", but I still
get blasted away by a station at 88.1 MHz when I try to watch Channel 6.
(The FM station is 50 miles away, channel 6 is 180 miles away, in opposite
directions.) Is there any way I can further reduce the FM signal without
affecting Channel 6?

Question #3: Is my 200-mile limit the best that can be done? What IS the
extreme range of VHF reception?

Thanks in advance,
Marty Moore (MOOREMJ@EGLIN-VAX.ARPA)

Date: Tue, 7 May 85 3:40:59 CDT
From: Will Martin -- AMXAL-RI <wmartin@Almsa-1>
To: mooremj@Eglin-Vax.arpa
cc: videotech@Sri-Csl.arpa
Subject: Re: What is the maximum range of VHF reception?

TV DXing (which is what you are really talking about) is a hobby in its
own right. I have never indulged, myself, but a friend, Glenn Hauser, is
one of the nation's top TV DXers (he once had an article on the subject
published in TV Guide, and also has had articles in various radio-related
publications, like the World Radio-TV Handbook).

There are several methods for long-distance propagation of high-frequency (VHF and up) signals, such as "tropospheric ducting", "Sporadic E", and "meteor scatter". (I don't know much more about these than the names, though I know the last one involves catching the short-term reflections of signals off the ionized trails of meteors -- that one always struck me as fairly exotic...)

There is a club devoted to this hobby -- if I recall correctly, the name is the Worldwide TV/FM DX Club, and their bulletin is The VHF/UHF Digest. I don't have their address here at work; if you or others are interested, I can look it up and post it. (You can find it in a back issue of Popular Communications, if a local library gets that magazine...)

Anyway, Glenn and many other TV DXers have had quite long-range catches. One I recall offhand, when he was in the USAF in Thailand, was when he picked up Saudi Arabia. Of course, equatorial conditions are different from those here in the temperate zone, but that can give you an idea.

I wouldn't be surprised if there was NO "theoretical" limit on the distance you could pick up a signal -- it would all depend on the propagation conditions, local electrical noise and interference, transmitter power, and antenna configuration at both ends... So the maximum would be 12,500 miles or so, on the opposite side of the globe. And there are ways to receive signals via the "long path", which means going the "wrong" way around the earth, which could increase that [and, if you figure multi-circumferential paths, you can go up indefinitely!]. (This, of course, only refers to terrestrial transmission & reception; we've seen TV pictures from Saturn, after all...)

Will Martin

ARPA/MILNET: wmartin@almsa-1.ARPA USENET: seismo!brl-bmd!wmartin

Date: Thu, 9 May 85 9:37:18 CDT
From: Will Martin -- AMXAL-RI <wmartin@almsa-2>
To: mooremj@eglin-vax, videotech@sri-csl
Subject: Re: What is the maximum range of VHF reception?

I looked up the data on the TV (and FM & public-service stuff, too) DXing club. Here it is:

Worldwide TV/FM DX Association
PO Box 514
Buffalo, NY 14205

Their monthly bulletin is The VHF/UHF Digest. Sample copies were $1.25 as of the 1983 copy I happen to have (though the address was verified as still being OK in the 1985 World Radio TV Handbook).

They also put out a pamphlet as an introduction to the hobby; if you are at all interested in this (and the equipment investment mentioned indicates a definite interest!), it would be worth sending them $2.00 (again, the price as of 1983, but probably still good) for a copy of

"Beyond Shortwave". This should answer any questions about modes of propagation, expected distances of reception under typical conditions, and general info on receivers and antennas.

The monthly bulletins consist mainly of reception reports and news about new and changed stations, call letters, powers, etc. There are sometimes equipment reviews; the issues I bought back in 1983 had some info on the then-new Carver tuner. Equipment reviews in this sort of publication can be quite useful; since they are informal, written by people who own the gear, and often are printed after the equipment has been around a while, they contain data on aspects like reliability, which is seldom mentioned in just-released-product reviews in the "slick" magazines. For example, years ago I bought a Pioneer TX-9100 tuner based on a review which discussed using it for mobile FM DXing while travelling cross-country by car (with an inverter power supply). It got much abuse but still worked well. Based on that info, I picked one up when they were being closed-out at discount from a local hi-fi emporium and was well pleased with it thereafter. Now, seeing some references in the audio press to this tuner, I find I have a "classic"! So I place some faith in this sort of equipment review, whether it is positive or negative. Since there is no advertising (or payment!), there can be no pressure on the reviewer.

Hope this info is of interest...

Regards,

ARPA/MILNET: wmartin@almsa-1.ARPA USENET: seismo!brl-bmd!wmartin

From -1754353548568694793
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a2597e0dce8f4e9a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-09 11:51:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Sy.SLogin@CU20B
From: Sy.SLogin@CU20B (Thomas De Bellis)
Newsgroups: net.ham-radio
Subject: Space shuttle info wanted
Message-ID: <10549@brl-tgr.ARPA>
Date: Thu, 9-May-85 14:51:33 EDT
Article-I.D.: brl-tgr.10549
Posted: Thu May 9 14:51:33 1985
Date-Received: Sat, 11-May-85 08:22:47 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

I've really been interested in that space shuttle rebroadcasting stuff. My sister was one of the hundreds of teachers from New York State who filled out those teacher in space program applications. Boy, what a mess... They give you tiny sheets that you have to type on. I eventually wound up scribing the whole mess to make it fit just

perfectly. I wonder if there's anyway to find out what the story is
on all that stuff.

-- Tom

From -6504375583927372962
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d9e80af43ad6a2df,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-09 18:14:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!
whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Midwest Aeronautical VLF Beacons (freq list)
Message-ID: <16985@mgweed.UUCP>
Date: Thu, 9-May-85 21:14:19 EDT
Article-I.D.: mgweed.16985
Posted: Thu May 9 21:14:19 1985
Date-Received: Sun, 12-May-85 11:36:16 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 283

Low Frequency Aeronautical Radionavigation Beacons
(Illinois, Indiana, Iowa, Wisconsin, & Michigan)
In order of frequency
200 - 415 kHz and 510 - 525 kHz

May, 1985

200	HXF	Hartford, Wi.
201	GYG	Grayling, Mi.
203	BXR	Siren, Wi.
203	PVB	Platteville, Wi.
206	AP	Alpena, Mi.
206	BDJ	Boulder Junct. Wi.
206	CKP	Cherokee, Ia.
206	IIB	Independence, Ia.
206	LA	Lansing, Mi.
206	RA	Racine, Wi.
206	TEL	Tell City, In.
209	CLI	Clintonville, Wi.
209	CNC	Chariton, Ia.
209	DKB	DeKalb, Il.
209	GDW	Gladwin, Mi.
212	AWW	Winchester, In.
212	DCY	Washington, In.
212	JX	Jackson, Mi.

212	MC	Mason City, Ia.
212	MHW	Mt. Pleasant, Mi.
212	MJY	Middleton, Wi.
212	MPZ	Mt. Pleasant, Ia.
212	SSQ	Shell Lake, Wi.
212	VP	Valparaiso, In.
215	ISW	Wis. Rapids, Wi.
215	ML	Moline, Il.
215	PZQ	Presque Isle, Mi.
215	UIZ	Utica, Mi.
216	RCR	Rochester, In.
218	AL	Alton, Il.
218	DRM	Drummond Island, Mi.
219	AWG	Washington, Ia.
219	EV	Evansville, In.
219	MD	Chicago, Il.
219	MK	Muskegon, Mi.
221	ARV	Lakeland, Wi.
222	CVX	Charlevoix, Mi.
223	DM	Detroit, Mi.
224	BBC	Cody, Ia.
224	II	Sturgeon Bay, Wi.
227	SLB	Storm Lake, Ia.
227	TZY	Warsaw, In.
230	AT	Appleton, Wi.
230	HPT	Hampton, Ia.
230	HSB	Harrisburg, Il.
230	PYN	Chicago (Pine), Il.
230	RDK	Red Oak, Ia.
230	VQ	Detroit, Mi.
232	CO	Indianapolis, In.
233	GRE	Greenville, Il.
233	HLM	Holland, Mi.
233	OEO	Osceola, Wi.
233	OI	Sioux City, Ia.
236	ADU	Audubon, Ia.
236	BHW	West Branch, Mi.
236	CTK	Canton, Il.
236	GY	Gary, In.
236	RUF	Woodruf, Wi.
239	EA	Eau Claire, Wi.
239	HNB	Huntingburg, In.
239	MIW	Marshalltown, Ia.
239	SAR	Sparta, Il.
242	GM	Milwaukee, Wi.
245	EZI	Kewanee, Il.
245	HU	Terra Haute, In.
248	FLD	FondDuLac, Wi.
248	HZP	Zionsville, In.
248	MX	Kedzie, Il.
251	CXK	Calm Lake, Mi.
251	FW	Fort Wayne, In.
251	HBW	Kickapoo, Wi.

251	MQB	Macomb, Il.
251	OEA	Vincennes, In.
251	PRO	Perry Ia.
254	BDD	Brookport, Il.
254	BOZ	Sterling, Il.
254	ENY	Ashland, Wi.
254	SBM	Sheboygan, Wi.
257	FWC	Fairfield, Il.
257	MB	Saginaw, Mi.
257	PEA	Pella City, Ia.
257	PLD	Portland, In.
257	RNH	New Richmond, Wi.
257	RRL	Merrill, Wi.
257	RV	Chicago, Il.
260	BL	Milwaukee, Wi.
260	OLZ	Oelwein, Ia.
260	SUW	Superior, Wi.
263	BFA	Boyne Falls, Mi.
263	CVM	Alton, Il.
263	GGP	Logansport, In.
263	GR	Grand Rapids, Mi.
263	PBH	Phillips, Wi.
266	DU	Marshfield, Wi.
266	IN	Indianapolis, In.
266	OIX	Ottawa, Il.
269	BEX	Bloomfield, Ia.
269	CAD	Cadillac, Mi.
269	FN	Flint, Mi.
269	NBU	Glenview, Il.
272	BT	Battle Creek, Mi.
272	HNR	Harlan, Ia.
272	LS	La Crosse, Wi.
272	MUT	Muscatine, Ia.
272	OLY	Olney, Il.
275	AMW	Ames, Ia.
275	CEV	Connersville, In.
275	CM	Hancock, Mi.
275	DE	Decatur, Il.
275	RF	Rockford, Il.
278	ADG	Adrian, Mi.
278	AHH	Amery, Wi.
278	FKR	Frankfort, In.
278	XWY	West Union, Ia.
281	HMJ	Homer, Il.
281	IDG	Ida Grove, In.
281	MIX	Metropolis, Il.
281	ROQ	Roscommen, Mi.
281	VOK	Volk, Wi.
282	OXD	Oxford, In.
284	OXV	Knoxville, Ia.
284	PDW	Evansville, In.
285	RT	????
286	A	S. Ste. Marie, Ont.

293 CJJ Cresco, Ia.
293 UI Quincy, Il.
296 CRZ Corning, Ia.
308 EQZ Seymore, In.
314 POH Pocahontas, Ia.
323 EBS Webster City, Ia.
326 CI Cedar Rapids, Ia.
326 EK Wis. Rapids, Wi.
326 LTU Spencer, Ia.
326 SIV Sullivan, In.
326 SU E. St. Louis, Il.
329 AAA Lincoln, Il.
329 AMN Alma, Mi.
329 IWH Wabash, In.
329 LLE Kettle Moraine, Wi.
332 CUL Carmi, Il.
332 EPE Pellston, Mi.
332 FFL Fairfield, Ia.
332 HK Herman, Il.
332 PHN Port Huron, Mi.
332 SG Green Bay, Wi.
335 FEP Freeport, Il.
335 MDZ Medford, Wi.
335 MEY Mapleton, Ia.
335 RWN Winimac, In.
338 DE Detroit, Mi.
338 GFZ Greenfield, Ia.
338 LM St. Louis, Mo.
338 PKW Kenosha, Wi.
338 SHL Sheldon, Ia.
338 VTI Vinton, Ia.
341 DB Dubuque, Ia.
341 EGV Eagle River, Wi.
341 FO Fort Dodge, Ia.
341 LDM Ludington, Mi.
341 PRG Paris, Il.
341 SB South Bend, In.
344 BFR Bedford, In.
344 DS Des Moines, Ia.
344 DTG Dwight, Il.
344 PPQ Pittsfield, Il.
344 SLY Hayward, Wi.
344 UNU Juneau, Wi.
347 AIG Antigo, Wi.
347 ANQ Angola, In.
347 DEH Decorah, Ia.
347 MT Matoon, Il.
350 DNS Denison, Ia.
350 ME Medina, Il.
353 FOA Flora, Il.
353 ICL Clarinda, Ia.
353 QG Windsor, Ont.
356 GR Green Bay, Wi.

356	PI	Peoria, Il.
356	RCX	Ladysmith, Wi.
356	SKI	Sac City, Ia.
359	CZB	Casey, Il.
359	FXY	Forest City, Ia.
359	YI	Detroit, Mi.
362	BCK	Bk River Falls, Wi.
362	BL	Bellville, Il.
362	RZL	Rensselear, In.
362	SRK	Spirit Lake, Ia.
365	AIO	Atlantic, Ia.
365	MI	Muncie, In.
365	MRJ	Mineral Pt., Wi.
365	SYZ	Shelbyville, Il.
365	TV	Traverse City, Mi.
366	EOK	Keokuk, Ia.
368	FRH	French Lake, In.
368	IFA	Iowa Falls, Ia.
368	OH	Chicago, Il.
368	SOY	Sioux Center, Ia.
368	VIQ	Neilsville, Wi.
371	AI	Anderson, In.
371	AZ	Kalamazoo, Mi.
371	LTD	Litchfield, Il.
371	RYV	Watertown, Wi.
374	OVO	North Vernon, In.
375	ALV	Gaylord, Mi.
375	CCY	Charles City, Ia.
375	CPS	E. St. Louis, Il.
375	JVL	Janesville, Wi.
375	OGM	Ontonagon, Mi.
377	CWI	Clinton, Ia.
377	MCX	Monticello, In.
378	DQV	Deckersville, Mi.
379	CSQ	Creston, Ia.
379	UG	Waukeegan, Il.
382	AL	Waterloo, Ia.
382	BM	Bloomington, In.
382	IRS	Sturgis, Mi.
382	LRJ	Lemars, Ia.
382	MW	Marion, IL.
382	PCZ	Waupaca, Wi.
382	SP	Springfield, Il.
385	ID	Chicago, Il.
385	UWL	New Castle, In.
386	OQW	Maquoketa, Ia.
387	CAV	Clarion, Ia.
388	CFJ	Crawfordsville, In.
388	DT	Detroit, Mi.
388	MD	Carbondale, Il.
388	OCQ	Oconto, Wi.
390	BR	Burlington, Ia.
391	CPB	Culver, In.

```
   391     EFW     Jefferson, Ia.
   391     MFI     Marshfield, Wi.
   391     PLX     Robinson, Il.
   392     DSN     Marquette, Mi.
   394     OR      Chicago, Il.
   395     OS      Oshkosh, Wi.
   395     TAZ     Taylorville, Il.
   396     LNL     Land O' Lakes, Wi.
   397     BE      Benton Harbor, Mi.
   397     CIN     Carroll, Ia.
   397     CIR     Cairo, Il.
   397     MXO     Monticello, Ia.
   398     G       Windsor, Ont.
   400     CI      S. St. Marie, Mi.
400  MS   Monah, Wi.
   400     SLO     Salem, Il.
   401     LA      LaFayette, In.
   403     AXA     Algona, Ia.
   404     IMS     Madison, In.
404  LVV  Delevan, Wi.
   404     ST      St. Louis, Mo.
   404     ZR      Sarnia, Ont.
   407     BNW     Boone, Ia.
   407     CM      Champaign, Il.
   407     FXV     Appleton, Wi.
   407     HAI     Three Rivers, Mi.
   407     RIE     Rice Lake, Wi.
407  RXW  Watersmeet, Mi.
   410     BA      Columbus, In.
   410     EGQ     Emmetsburg, Ia.
   410     MK      Milwaukee, Wi.
   411     SDA     Shenandoah, Ia.
   412     CMY     Camp McCoy, Wi.
   414     BEE     Benton, Il.
   414     IA      Chicago, Il.
   414     OOA     Oskaloosa, Ia.
   414     SU      Sioux City, Ia.
   414     SUE     Sturgeon Bay, Wi.
   515     RRQ     Rock Rapids, Ia.
517  FN   Clinton, Ia.
   521     ORC     Orange City, Ia.
524  AJG  Mount Carmel, Il.
524  UOC  Iowa City, Ia.
```


```
From -2668629701005445828
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1da656d891a1a568,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-09 18:16:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!harpo!
```

whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: VLF Maritime CW stations
Message-ID: <16986@mgweed.UUCP>
Date: Thu, 9-May-85 21:16:22 EDT
Article-I.D.: mgweed.16986
Posted: Thu May 9 21:16:22 1985
Date-Received: Sun, 12-May-85 11:37:03 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 24

Maritime CW stations heard (416 - 500 kHz)

kHz	Call	Location
416	WPA	Port Arthur, Tx.
418	WSL	Amagansett, NY.
432	NMG	New Orleans, La.
435	CLQ	Cuba
436	WCC	Chatham, Ma.
437	CFH	Halifax, N.S.
438	WLO	Mobile, Al.
448	NMN	Norfolk, Va.
472	WOE	Lantana, Fl.
476	WSL	Amagansett, N.Y.
478	WNU	Slidell, La.
484	KLC	Galveston, Tx.
500	KLC	Galveston, Tx.
500	NMG	New Orleans, La.
500	WLO	Mobile, Al.
500	WNU	Slidell, La.
500	WOE45	Lantana, Fl.

Note: 500 kHz is the worldwide calling and distress frequency.

From -5281280574084867921
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c54500060280ddcb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-09 19:28:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: recent 6.4 - 6.8 MHz SWL loggings
Message-ID: <564@ihu1h.UUCP>
Date: Thu, 9-May-85 22:28:19 EDT
Article-I.D.: ihu1h.564
Posted: Thu May 9 22:28:19 1985
Date-Received: Sat, 11-May-85 00:34:33 EDT

Distribution: net
Organization: AT&T Bell Laboratories
Lines: 31

This band is becoming another new home for CB'er type bootleggers.

```
   6.4075    GKC_______Portishead Radio, cw [England] (B. Parnass)
   6.4160    WLO_______Mobile Marine Radio, Inc, cw [Mobile, AL] (B. Parnass)
   6.4215    FFL2______St. Lys Radio, cw [France] (B. Parnass)
   6.4300    CFH_______Canada: Canadian Forces Maritime Radio, maritime ice rep
                       orts, cw [Halifax, NS] (B. Parnass)
   6.4460    WLO1______Mobile Marine Radio, Inc, cw [Mobile, AL] (B. Parnass)
   6.4915    VCS_______Canada: Canadian Coast Guard, cw marker [Halifax, NS] (B
                       . Parnass)
   6.4950    GKE_______Portishead Radio, cw [England] (B. Parnass)
   6.5005    KPH_______RCA Global Communications, maritime/coastal, cw [Bolinas
                       , CA] (B. Parnass)
   6.5932    call?_____unidentified: 2 male American bootleggers?, usb, 5/9/85
                       @0119Z [location?] (B. Parnass)
   6.6040    call?_____New York Radio, aviation wx, usb [New York] (B. Parnass)
   6.6500    call?_____unidentified: 2 male American bootleggers?, one with eas
                       t coast accent, usb, 5/9/85 @0120Z [location?] (
                       B. Parnass)
   6.6900    L5Y_______US: unidentified: network of military stations xmitting
                       fields of info, mentioned "mechanized rifle comp
                       any movement" and that "target neutralized", oth
                       er calls include P3J and I7G, usb, 5/9/85 @0123Z
                        [location?] (B. Parnass)
   6.7530    CHR_______Canada: RCAF/MACS "Trenton Military" gave wx report, id'
                       d itself, then asked what may have been a bootle
                       gger to change frequency, usb [Trenton] (B. Parn
                       ass)
```

--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -761900763943940050
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6e1788a1b64a743d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-10 14:36:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: TV DXing discussion from Videotech
Message-ID: <10578@brl-tgr.ARPA>
Date: Fri, 10-May-85 17:36:44 EDT
Article-I.D.: brl-tgr.10578
Posted: Fri May 10 17:36:44 1985
Date-Received: Sun, 12-May-85 02:09:02 EDT

Sender: news@brl-tgr.ARPA
Lines: 24

Re: TV DXing

In reference to how far you can get on TV, here on the Great Lakes we regularly receive stations 200 miles away with a radio shack $25 antenna and an old rotar. The antenna is about 20 feet off the ground. During Summer, particularly, we get excellent reception, but almost never during the Winter. The duct formed is due to the humidity and temperature differentials. We can regularly pick up stations in Ottawa,Toronto, and Quebec. My son sent in a DX report and asked for QSL cards and he got a long distance phone call from the station manager in Quebec because he thought it was impossible and wanted to know how we did it.

During World War II there was a guy in Boston that that picked up Rommels Afrika Corps regularly on about 150 MHz. The data was relayed to Washington and decoded, one of the factors leading to Rommels failure. (The "key to Rebecca" story about the same thing was pure fiction).

Also, one night, my wife picked up a New Orleans FM station (about a 1000 miles away) on her radio in the kitchen with an internal antenna. We all verified that the station was one in New Orleans.

Joe N2XS

From 5548731744023878587
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,db17462db16867ac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-10 14:37:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: reply to your questions
Message-ID: <10579@brl-tgr.ARPA>
Date: Fri, 10-May-85 17:37:02 EDT
Article-I.D.: brl-tgr.10579
Posted: Fri May 10 17:37:02 1985
Date-Received: Sun, 12-May-85 02:09:25 EDT
Sender: news@brl-tgr.ARPA
Lines: 120

------- Forwarded Message

Date: 9 May 1985 0731-EST (Thursday)
From: bccvax!rachiele@nadc
Received: from nadc by SIMTEL20.ARPA with TCP; Wed 8 May 85 13:43:49-MDT

To: info-hams@simtel20.arpa
Subject: request for info

Two elementary questions from a novice:

1. What is a good reference book giving characteristics of various types of transisters?

******* Most transistor manufacturers publish reference books on their own products, and often include cross-reference lists to type numbers which they don't supply so you can pick one of their products to substitute. Often these books have fairly hefty prices printed on them, but don't be fooled: they really are intended to be given away to good customers. If you work for a company that buys electronic components, or if you KNOW someone who does (and what ham doesn't!) you can probably wheedle a free copy of such books with a little diplomatic effort. And don't feel guilty, the goodwill and future sales of the product are worth it to the transistor manufacturer! After all, YOU might work for Zenith or DEC or IBM some other day even if you don't now!

You might also write or call Semiconductor Specialists in Elk Grove Village, Illinois. They probably will send you some useful catalogs, cross-reference lists, etc.

Other sources can be found by browsing at your local radio store's bookshelf. Also, the Radio Amateur's Handbook always used to have tables of tube and transistor parameters at the back. Is this still true???
******

2. Is there an outfit (there must be) from which you can mail order components (I particularly need some small coupling transformers, Radio shack doesn't seem to have them in their catalog)?

Is there a way to measure the inductance of a home-made transformer?

****** Try to get hold of a catalog from Newark Electronics (I think they are still around, based in Chicago) or Schweber or Page or Gerber (in Norwood, MA) or many other places. Most of 'em will gladly ship a mail order to an individual. Can anybody suppply addresses and phone numbers? I can if you persist.

As for measuring inductance, there are instruments (reactance bridge, Q-meter) designed to do it, but you can do it simply if you have an AC signal source by making an LC tuned circuit and finding its resonant frequency. For RF, the easy way to do this is with a "dip meter" (formerly called a grid-dip meter until they did away with grids). It's worthwhile to buy a dip meter if you can find one at a price you like, maybe at a flea market or something. You will get a lot of use out of it if you are inclined to experiment with circuits and antennas etc.

If you don't have a dip meter and don't have a tuneable signal source, you can still make a measurement by getting an AC current to flow through the transformer winding and measuring the current and the AC voltage across the winding while the current is flowing. This will let you calculate the winding's reactance and from that its inductance.

From your question, I suspect you are talking about audio transformers. For this case, you can use 60 Hz from the power line as a signal source if you have nothing else. However, you should be careful how you go about it, as the voltage is hazardous. If you have ANY other option, such as borrowing or buying an audio signal generator, I would recommend you do so.

If you HAVE to use the AC line as your signal source, one way that can be used safely IF YOU ARE VERY CAREFUL would be to run one wire to a known ground, either at the AC outlet or elsewhere, and then make up a test cord with ONLY ONE PRONG connected. When you plug this in, you either get ground (no voltage) or the hot lead. You reverse it until you get voltage. By connecting your ground lead separately DIRECTLY TO GROUND, you make sure you won't ever get voltage on what you thought was your ground lead and therefore onto the cases of voltmeters etc.

Run the hot lead to a voltage divider that can be something like a 10 K Ohm, 2-Watt resistor on top and a 1 K Ohm resistor from the bottom of this to ground. This will take the 115 volts down to about 12 volts measured across the 1 K Ohm resistor to ground. Be careful to do all this in such a way that you are unable to touch the 115 volt points after you have wired it all up and before plugging it in. Electrical tape could be used to cover up points that will be "hot" before plugging it in, for example.

Now the 12-volt rms signal taken from across the 1 K Ohm resistor can be fed into the inductor for measurement purposes, and you can work safely with this signal without fear of a shock. Run a wire from the 12-volt output of the voltage divider to one side of the transformer winding whose inductance you wish to measure, and run the other side of the winding through a resistor or other known impedance to allow you to measure the current. (If your meter will measure AC current directly, then you can just wire the meter in the circuit instead of the resistor. But it is best to make sure that the current doesn't change when you include the meter in the circuit! If you can leave the current meter wired in and measure the voltage across the inductor with a separate meter, that's best.)

Once you know the voltage V across the inductor with a known current I running through it, you find XL by computing V/I. Then you can find L by computing L = XL / (2pi f).

PLEASE NOTE THAT THE PROCEDURE DESCRIBED CAN BE HAZARDOUS IF YOU ARE AT ALL CARELESS IN CARRYING IT OUT. PLEASE NOTE THAT

I RECOMMEND YOU TRY TO FIND ANOTHER WAY SUCH AS BORROWING EQUIPMENT DESIGNED FOR THE TASK. PLEASE ADVISE YOUR HEIRS BEFORE THE EXPERIMENT THAT I WILL TAKE NO RESPONSIBILITY FOR ANY HARM TO THE EXPERIMENTER! (Whew, I hope that clears me if you goof!)

Good luck
-John S., W3IKG

******

From 8797425965033710249
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1c9da2ec4489ad6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-10 15:52:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ender@SU-ISL
From: ender@SU-ISL
Newsgroups: net.ham-radio
Subject: Help wanted: antique SW receiver
Message-ID: <10587@brl-tgr.ARPA>
Date: Fri, 10-May-85 18:52:54 EDT
Article-I.D.: brl-tgr.10587
Posted: Fri May 10 18:52:54 1985
Date-Received: Sun, 12-May-85 02:25:10 EDT
Sender: news@brl-tgr.ARPA
Lines: 8

I have an antique Hallicrafters SX-28 `Super Skyrider' general coverage short-wave receiver that I used play with when I was in high school. It is a good receiver and since it won't cost me much, I would like to have it operating again, but I seem to have lost my manual and I do not remember which tubes it uses. I recall seeing a list of its tubes in an ancient CQ (QST?) or an old ARRL Handbook. Can an old-timer help me out? Thanks much in advance...

From 10152768842340317 59
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab0b4f01dd8e7f23,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-10 19:37:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
tektronix!uw-beaver!cornell!vax135!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 18 (5-10-85)
Message-ID: <17011@mgweed.UUCP>

Date: Fri, 10-May-85 22:37:44 EDT
Article-I.D.: mgweed.17011
Posted: Fri May 10 22:37:44 1985
Date-Received: Tue, 14-May-85 07:23:49 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 60

qst de k9eui
hr dx bulletin nr 18 from arrl headquarters
newington ct may 10, 1985
to all radio amateurs bt

china. by1qh has been on 14226 khz at about 2345z with w7pho. qsl to box 2654, beijing. by1pk was on 14060 khz at 0045z last saturday.

mali. lz6fe showed up on 14188 khz at 0030z. qsl to dl4bc.

marshall islands. dave, kx6dc, has been quite active recently on 14227 khz around 2330z.

central african republic. tl8ck has been worked on 14205 khz at 2200z.

turks and caicos. gary, wb8yuc/9vp5 has been on 1833 khz at 0030z.

bahrain. a92p was worked on 3799 khz last night at about 0100z.

easter island. ce0fqv, fernando, is on 14188 khz around 0100z. qsls go to box 59, easter island.

macquarie island. vk0gc continues to be active on 75 meters. look for him on 3795 khz at 0100z.

alaska on 160. kl7bus has been worked on the east coast recently on 1834 khz at 0530z.

greece on 160. sv0aa has been worked on 1835 khz at 0300z.

dxcc desk/cyprus. a list of zc4 call signs good for uk sovereign base areas credit is still being compiled. operations from either dhekelia or akrotiri are good. this is an updated list of the zc4s that have been found to have operated from the uk sovereign bases. zc4s ak, akr, asg, au, bi, cb, cu, cn, cs, ct, cz, da, epi, es, esb, gb, gm, hc, hs, ik, io, ju, kf, lc, mr, mt, nl, pc, rb, rm, gp, sc, sj, ss, ti, tx, wd and ww. inquiries are still being made to determine the locations of others. please send any information you may have to the dxcc desk. see march qst, page 62, for details. submissions will not be accepted before june 19.

also cyprus. zc4ab has been active on 20 meters around 2100z.

cocos island qsls. wb4ubd is qsl manager for the february 1985
ti/tty dxpedition only. ti9j qsls go via ti2j.

sweden. to celebrate the 60th anniversary of the ssa, 7s1ssa
through 7s7ssa plus 7s0ssa will be active until the end of may.
there will be an award for working all eight stations.

saudi arabia. hz1hz has been active around 0300z on 7007 khz.

gabon. look for tr8ig on 3501 khz at 0115z ar

From 3963077131121681746
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,da2d3cab6cb0410c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-11 06:41:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ki4pv.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!petsd!peora!ucf-cs!ki4pv!
tanner
From: tanner@ki4pv.UUCP (Tanner Andrews)
Newsgroups: net.ham-radio
Subject: Re: Hamfests MD/DC/VA/PA
Message-ID: <247@ki4pv.UUCP>
Date: Sat, 11-May-85 09:41:49 EDT
Article-I.D.: ki4pv.247
Posted: Sat May 11 09:41:49 1985
Date-Received: Mon, 13-May-85 02:22:33 EDT
References: <10434@brl-tgr.ARPA>
Organization: CompuData South, DeLand
Lines: 9

Does anyone out there yet know when Gaithursburg will be this year,
or the address of the sponsoring association?

                            tanner
ps: there don't seem to be a whole lot of hamfests down here in
     this area; at least not any to get listed in "73"
--
<std dsclm, copies upon request>   Tanner Andrews, KI4PV
uucp: ...!decvax!ucf-cs!ki4pv!tanner

From -5978689242462864094
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f8b89bed82af7872,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-11 07:53:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10 5/3/83 based; site homxb.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
tektronix!uw-beaver!cornell!vax135!houxm!homxb!tmsmp
From: tmsmp@homxb.UUCP (T.SWIFT)
Newsgroups: net.ham-radio
Subject: Log-Periodic Dipole Antenna
Message-ID: <609@homxb.UUCP>
Date: Sat, 11-May-85 10:53:49 EDT
Article-I.D.: homxb.609
Posted: Sat May 11 10:53:49 1985
Date-Received: Thu, 16-May-85 02:33:44 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 26

I am interested in building a directional antenna to replace my trap
vertical. The ARRL Antenna book contains plans for a log-periodic dipole
array. This caught my attention as an alternative to stacked monoband
beams. I have obtained the original QST article (Nov. 1973) and will try
to contact the author.

Does anyone have any experience with or knowledge of this type of antenna?
Does any commercial manufacturer offer one? If not, why is there no
commercial interest? Is there a fatal flaw in the design? The QST
article states that the author uses a transmatch to "eliminate possible
harmonic radiation caused by the frequency-independent nature of the
array." Is interference a major consideration?

Any help is greatly appreciated.

Thanks

Tom Swift
KD2MF (formerly WA2JEH)
AT&T Information Systems
Holmdel
homxb!tmsmp
201-949-3374 (W) or 201-577-6945 (H)

From 6026353854136141290
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4ec934fd92325b3a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-11 15:47:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Radio Hams Prone to Leukemia? - new study cited
Message-ID: <566@ihu1h.UUCP>

Date: Sat, 11-May-85 18:47:23 EDT
Article-I.D.: ihu1h.566
Posted: Sat May 11 18:47:23 1985
Date-Received: Sun, 12-May-85 06:03:43 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 41

x

HAM RADIOS AND LEUKEMIA

reprinted from the New York Times

"Statistics turned up by Dr. Samuel Milham Jr., an epidemiologist for Washington State, suggest that ham radio operators may be nearly twice as prone to leukemia as the rest of the population."

"Reporting in a recent issue of The Lancet, Dr. Milham presented the results of a survey of more than 1,900 amateur radio operators in the states of Washington and California who died from 1971 to 1983. After obtaining death certificate information for 1,691 of the subjects, he discovered that 24 had died from various types of leukemia. The expected number of leukemia victims in a suitable matched control group would have been 12.6. The incidence of lymphatic and monocytic leukemias was not higher among the radio hobbyists than normal, but myeloid and unspecified leukemias showed sharp increases."

"Dr. Milham noted that in 1982 he had presented evidence of a link between leukemia and exposure to electrical and/or magnetic fields. His latest study, he said, offers 'some further support for the hypothesis that electromagnetic fields are carcinogenic.'"

"In a separate study reported in The Lancet, government researchers in New Zealand found the leukemia rate unduly high for occupations involving exposure to the electrical and magnetic fields associated with alternating current. Comparing 546 male leukemia victims with 2,184 men selected as controls, the group found the statistics 'generally support the suggestion that electrical workers are at increased risk of leukemia.'"

--

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -5040003631858144095
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,857739ea60163840,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-11 17:28:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: More recent SWL loggings (inc. 6 MHz bootleggers)
Message-ID: <567@ihu1h.UUCP>
Date: Sat, 11-May-85 20:28:29 EDT
Article-I.D.: ihu1h.567
Posted: Sat May 11 20:28:29 1985
Date-Received: Sun, 12-May-85 06:08:03 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 42

The 6.5 - 6.7 band is becoming more popular for CB'er-type bootleggers
(see entries for 6.5932, 6.6500, and 6.7530 MHz below).

```
   6.4075    GKC_______Portishead Radio, cw [England] (B. Parnass)
   6.4160    WLO_______Mobile Marine Radio, Inc, cw [Mobile, AL] (B. Parnass)
   6.4215    FFL2______St. Lys Radio, cw [France] (B. Parnass)
   6.4300    CFH_______Canada: Canadian Forces Maritime Radio, maritime ice rep
                        orts, cw [Halifax, NS] (B. Parnass)
   6.4460    WLO1______Mobile Marine Radio, Inc, cw [Mobile, AL] (B. Parnass)
   6.4915    VCS_______Canada: Canadian Coast Guard, cw marker [Halifax, NS] (B
                        . Parnass)
   6.4950    GKE_______Portishead Radio, cw [England] (B. Parnass)
   6.4954    KFS_______ITT World Communications, maritime/coastal, cw marker [P
                        alo Alto, CA] (B. Parnass)
   6.5005    KPH_______RCA Global Communications, maritime/coastal, cw [Bolinas
                        , CA] (B. Parnass)
   6.5157    WCM_______WCM Radio Pittsburgh Inc, maritime/coastal, usb @ 1kw [W
                        ithamsville, OH] (B. Parnass)
   6.5932    call?_____unidentified: 2 male American bootleggers?, usb, 5/9/85
                        @0119Z [location?] (B. Parnass)
   6.6040    call?_____New York Radio, aviation wx, usb [New York] (B. Parnass)
   6.6500    call?_____unidentified: 2 male American bootleggers?, one with eas
                        t coast accent, usb, 5/9/85 @0120Z [location?] (
                        B. Parnass)
   6.6900    L5Y_______US: Navy, network of military stations xmitting fields o
                        f info, mentioned "mechanized rifle company move
                        ment" and that "target neutralized", other calls
                         include P3J and I7G, usb, 5/9/85 @0123Z [locati
                        on?] (B. Parnass)
   6.6930    call?_____Canada: RCAF/MACS "Halifax Military", usb [Halifax, NS]
                        (B. Parnass)
```

```
   6.7530    CHR_______Canada: RCAF/MACS "Trenton Military" gave wx report, id'
                               d itself, then asked what may have been a bootle
                               gger to change frequency, usb [Trenton] (B. Parn
                               ass)
  14.4577    CIW62_____Canada: Canadian Forces Amateur Radio Network, phone pat
                               ch with CIS91 and CIS91B, usb [location?] (B. Pa
                               rnass)
  14.4600    Y7L36_____East Germany: embassy, cw [Havana] (B. Parnass)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From 4193352058294751327
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3787a6ac2de054df,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-12 06:30:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!decvax!harpo!whuxlm!whuxl!
houxm!homxb!tmsmp@Ucb-Vax
From: tmsmp%Ucb-Vax@homxb.UUCP
Newsgroups: net.ham-radio
Subject: Log-Periodic Dipole Array Antenna
Message-ID: <10606@brl-tgr.ARPA>
Date: Sun, 12-May-85 09:30:26 EDT
Article-I.D.: brl-tgr.10606
Posted: Sun May 12 09:30:26 1985
Date-Received: Tue, 14-May-85 08:19:25 EDT
Sender: news@brl-tgr.ARPA
Lines: 23

I am interested in building a directional antenna to replace my trap
vertical.  The ARRL Antenna book contains plans for a log-periodic
dipole array.  This caught my attention as an alternative to stacked
monoband beams.  I have obtained the original QST article (Nov. 1973)
and will try to contact the author.

Does anyone have any experience with or knowledge of this type of
antenna?  Does any commercial manufacturer offer one?  If not, why is
there no commercial interest?  Is there a fatal flaw in the design?
The QST article states that the author uses a transmatch to "eliminate
possible harmonic radiation caused by the frequency-independent nature
of the array."  Is interference a major consideration?

Any help is greatly appreciated.

Thanks

Tom Swift
KD2MF (formerly WA2JEH)
AT&T Information Systems
```

Holmdel
homxb!tmsmp
201-949-3374 (W) or 201-577-6945 (H)

From 2392072572604720105
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4ec934fd92325b3a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-12 09:11:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site alice.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!alice!alb
From: alb@alice.UUCP (Adam L. Buchsbaum)
Newsgroups: net.ham-radio
Subject: Re: Radio Hams Prone to Leukemia? - new study cited
Message-ID: <3716@alice.UUCP>
Date: Sun, 12-May-85 12:11:19 EDT
Article-I.D.: alice.3716
Posted: Sun May 12 12:11:19 1985
Date-Received: Mon, 13-May-85 03:22:30 EDT
References: <566@ihu1h.UUCP>
Organization: Bell Labs, Murray Hill
Lines: 4

I would be interested in knowing what kind of shielding
was in the radios of those amateurs studied, what kind
of antennae they used, and how far away from them they
were. That is, if the report took those things into account.

From 5312175073323726050
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5bb1df745331da29,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-12 10:44:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: new publication: "Enjoying Radio"
Message-ID: <568@ihu1h.UUCP>
Date: Sun, 12-May-85 13:44:30 EDT
Article-I.D.: ihu1h.568
Posted: Sun May 12 13:44:30 1985
Date-Received: Mon, 13-May-85 03:30:18 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 33

x
     "Enjoying Radio" is a new publication for the SWL/ham

tinkerer. Editor and publisher David Newkirk, who also writes the Radio Equipment Forum column in the "Review of International Broadcasting", describes his new paper as:

> "....a running open forum concentrating on our personal enjoyment of and participation in radio and its effect on and place in our lives. It is thought of by its editor/publisher as centering on but not being limited to radio's technical side. Consideration of related topics, be they speculative, poetic, philosophical, satiric, dadaist or gaga, will also be included at the discretion of the editor/publisher...."

Subscriptions to "Enjoying Radio" are made in single increments of 240 pages only for $19.50 (US 1st class postage) and are available from:

Enjoying Radio
Box 85024
Seattle, WA 98145-1024

Some people will not enjoy "Enjoying Radio", but if you think you may, I recommend you first send for a sample issue ($1.75, check or US stamps ok) from the address cited above.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 8746613465711236331
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,35a849372e69948b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-12 19:59:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!BCN%MIT-EECS@MIT-MC.ARPA
From: BCN%MIT-EECS@MIT-MC.ARPA (Clifford Neuman)
Newsgroups: net.ham-radio
Subject: Packet Radio mailing list
Message-ID: <10609@brl-tgr.ARPA>
Date: Sun, 12-May-85 22:59:41 EDT
Article-I.D.: brl-tgr.10609
Posted: Sun May 12 22:59:41 1985
Date-Received: Tue, 14-May-85 08:30:43 EDT
Sender: news@brl-tgr.ARPA
Lines: 12

I am about to start a mailing list for discussion of packet-radio.
The list is intended to provide a forum where people can exchange
ideas and describe projects they are working on. The list will be
maintained on mit-eddie. Mail for the list should be sent to
packet-radio@mit-eddie. Administrative requests (addition and
deletion, etc) should be sent to packet-radio-request@mit-eddie.
mit-eddie can be reached through the internet, MIT's chaosnet, and via
UUCP ({decvax!genrad,ihnp4}!mit-eddie).

     ~ Cliff
          N1DMM

From -2391967446402053606
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f36690b9a02c75e4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-13 05:51:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: NJ residents fight microwave installation
Message-ID: <570@ihu1h.UUCP>
Date: Mon, 13-May-85 08:51:08 EDT
Article-I.D.: ihu1h.570
Posted: Mon May 13 08:51:08 1985
Date-Received: Tue, 14-May-85 20:23:26 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 16

x
     RESIDENTS TAKE MICROWAVE FIGHT TO STATEHOUSE,
     Daily Record, May 9, p. B1. A dozen members of
     Citizens Against the Towers brought their fight
     against microwave installations in Vernon
     Township to the N.J. statehouse Tuesday. The
     group cited unusually high incidences of
     cancer, miscarriages, Down's syndrome and other
     birth defects, although a 1983 study by the
     state Department of Health found no evidence of
     health hazards. AT&T-T, RCA, and American
     Satellite have built microwave towers in the
     Vernon Township area.
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -3661481136895729266

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de7f852474a715b7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-20 09:11:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
godot!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: FM Intercom/TV Interference
Message-ID: <9365@brl-tgr.ARPA>
Date: Wed, 20-Mar-85 12:11:29 EST
Article-I.D.: brl-tgr.9365
Posted: Wed Mar 20 12:11:29 1985
Date-Received: Sat, 23-Mar-85 02:27:19 EST
Sender: news@brl-tgr.ARPA
Lines: 58

I dunno if we qualify as "experts" but of course flattering us will at least get us to try to help you!

I would have thought a line filter might help. Did you place it at the TV set or at the intercom? If you haven't tried both, you might do so. If it works at the TV set end, that's best because then you only need one line filter.

Does anybody know what frequency those FM carrier-current intercoms work on? I have some at home but have never bothered to look into this question, as mine have worked fine. It might be that the line filters supplied by RS aren't effective at this frequency. If that is the case, a more effective line filter (boughten or designed and built for the purpose) would help.

Does your intercom have an adjustable squelch setting buried on the bottom somewhere? You might cure the problem just by tightening up the squelch. This raises the question: does the buzz come on as soon as you turn on the TV even if the intercom is idle or only when the push to talk switch is actuated? My "cure" would only work if the former is the case, I think.

If line filters simply don't fix it, even with one on each of the three line cords involved, then the set is probably radiating junk pretty strongly at the intercom frequency. Then you might have to go in and modify the TV set in some way to fix it. My suspicions would run to an oscillation or ringing in some wiring in the TV set, excited by the vertical retrace signal - the very sharp waveform that makes the CRT beam zap up from the end of the frame to the beginning of the next one. This occurs at about a 60-Hz rate and has LOTS of harmonic energy in it. If a piece of wiring in the TV set's vertical sweep circuit is resonant near the carrier frequency of your intercom, this could radiate RF pulses at the vertical sweep rate of the TV, which could indeed be picked up as a buzz. Changing the length of this wire or "dressing" it close to the chassis or maybe replacing it with shielded cable could be solutions.

Another possibility is that some stage of the vertical sweep circuit is

breaking into oscillation at the intercom frequency during some part of its cycle. I would think you would see something funny in your TV picture if this were the case, but "only the electrons know for sure"!

If you can get hold of an oscilloscope for a weekend, you may be able to track the problem down more systematically: Look at the AC line where it connects to your intercom that is hearing the buzz and see if you see spikes on it when you turn on the TV set. If so, try to speed up the sweep and see if you can see the basic frequency of oscillation or "ringing" in the pulses. If you don't see anything on the AC line, tear your TV set apart and see if you see anything funny in the vertical sweep waveshape anywhere along the chain from the sweep oscillator to the CRT itself.

Anybody else got any ideas on this one?

Good luck, and get back to the net with info on where you put the line filters and such like if you need more hairbrained ideas.

"73" (old ham/telegrapher
abbreviation for "best
regards"),

John Sangster, W3IKG
jhs at MITTRE-Bedford.arpa

From 3020960099382859386
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4b3594d38774cacd
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-20 09:50:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
godot!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Open wire feedline
Message-ID: <9370@brl-tgr.ARPA>
Date: Wed, 20-Mar-85 12:50:12 EST
Article-I.D.: brl-tgr.9370
Posted: Wed Mar 20 12:50:12 1985
Date-Received: Sat, 23-Mar-85 02:27:55 EST
Sender: news@brl-tgr.ARPA
Lines: 67

Three possible sources of open-wire feedline:

1. Make it yourself. Various ham handbooks tell how to make spacers.
   Wooden dowel, drilled through the ends and boiled in paraffin to make
   it waterproof, was one way the old timers used. You tie the feedline
   conductors to the ends of the dowels with short wires through the holes.

Or use polystyrene dowel cut to suitable lengths or sheet cut into strips of suitable length.

With polystyrene you can use the same trick of drilling holes and tying the wires on, or you may be able to MELT the wires into the ends of the spacers, for example if you use bare Copperweld wire.

Another method I have seen used is to start with PCV tubing, available at any hardware or building supplies store. Cut it to the desired length of spacer. Then slice each short length of tubing on a band saw to get 4 or 6 or so spacer strips. Then notch the ends to a width just tight enough to force the wires into. Or use the melting method mentioned above. NOTE: Source #2 below used this method when he made some feedline for me a few years ago.

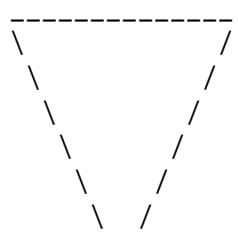
2. Dick Austin, of Austin Custom Antennas, PO Box 357, Sandown NH 03873, has been known to sell open wire feedline. I don't know if he is currently interested in doing so or not as he is now almost busier than he wants to be making antennas.

3. U-Do-It Electronics in Needham, MA, has rolls of OWL available. I don't know who the vendor is but I'm sure they could tell you and that the stuff is probably available a lot of other places.

This could be a good little specialty business for sombody who wants to go to the trouble. There are 400,000 lazy hams out there to buy the stuff, and every one of them is a potential customer as soon as they find out how one should REALLY feed an antenna! It's funny to see how the lore of open wire line has already been almost forgotten except by the guys with the REALLY big signals on 160, 80, and 40 meters. It's almost time for the world to "discover" this hot new technology for eliminating feedline losses and making antennas work well on all bands!

-73,
John S., W3IKG

P.S. Archeologists are working on a rumor that the ancients had some secret knowledge in antenna design, too. There is highly convincing evidence in the form of ancient Log Books that some hams used to have 20 over S9 signals in Europe on 80 and 40 meters! There is growing suspicion that the rumored "Delta Loop" antenna may have something to do with this performance, though the evidence that remains today is primarily in the suggestive shape the ancients chose for the ANTENNA SYMBOL in their religious diagrams:



\/

(Seriously, try a Delta Loop fed at the bottom with heavy open wire line on 40 or, if you have the sky hooks for it, on 80. You'll NEVER go back to trap dipoles, I guarantee you!)

  * * * * * * *   S P A R K   G A P S   F O R E V E R   * * * * * * * * *

From -272171801099369049
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4b3594d38774cacd
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-20 12:35:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
godot!harvard!seismo!brl-tgr!tgr!ERWINVL.DLOS@XEROX.ARPA
From: ERWINVL.DLOS@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Open wire feedline
Message-ID: <9384@brl-tgr.ARPA>
Date: Wed, 20-Mar-85 15:35:03 EST
Article-I.D.: brl-tgr.9384
Posted: Wed Mar 20 15:35:03 1985
Date-Received: Sat, 23-Mar-85 02:30:10 EST
Sender: news@brl-tgr.ARPA
Lines: 10

MIKE,

MANY OF THE HAM RADIO SUPPLY STORES CARRY THIS ITEM IN STOCK ALTHOUGH IT
IS NOT NECESSARILY "OPEN WIRE" BUT RATHER IT IS WIDE SPACED INSULATED
"OPEN WIRE". IT IS AVAILABLE IN 300 AND 450 OHMS Z. THE OLD STYLE
UNINSULATED OPEN WIRE FEEDER IS RATHER HARD TO FIND. SUGGEST YOU CONTACT
DAVE HALLIDY AT A HAM RADIO STORE IN PLANO TEXAS CALLED "TEXAS TOWERS".
DIRECTORYINFO CAN GIVE U THE #. GOOD LUCK--

                                VAL L. ERWIN, W5PUT

From 7157771781119184792
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de7f852474a715b7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-22 03:14:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site redwood.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!hpda!fortune!redwood!rpw3
From: rpw3@redwood.UUCP (Rob Warnock)
Newsgroups: net.ham-radio
Subject: Re: FM Intercom/TV Interference

Message-ID: <192@redwood.UUCP>
Date: Fri, 22-Mar-85 06:14:46 EST
Article-I.D.: redwood.192
Posted: Fri Mar 22 06:14:46 1985
Date-Received: Thu, 28-Mar-85 01:42:27 EST
References: <9359@brl-tgr.ARPA>
Organization: [Consultant], Foster City, CA
Lines: 38

+---------------
| ...bought a wireless FM intercom for my house (two-station). It works fine
| until I turn the TV on, then buzzes like mad. I tried a Radio Shack AC
| line filter, but that didn't have any effect at all. It also makes the
| noise no matter how far from the TV either station is.
| So, what is causing the buzz? ... And how do I quiet the little
| bugger down? | John (DINGMAN@RADC-20.ARPA)
+---------------

You don't say what frequency the intercom works on, or anything about
your T.V., so this is pure speculation:

Try cleaning the inside of your television very well, particularly the
high-voltage lead to the picture tube, and all around where it plugs
into the picture tube (especially the glass between the connector and
the conductive outer coating). There can be arcing or corona discharge
through the accumulated dust (which is naturally attracted to the high-
voltage D.C. areas) causing your RFI problem. The corona can also occur
in other parts of the high-voltage system.

** BE VERY CAREFUL! ** If you do not understand the safety precautions
yourself, don't attempt to do it. Get a hardware wizard or service person.
(There is a trick to discharging the tube, which can store a nasty shock.
While said technique is quite easy, I couldn't safely attempt a detailed
decription here, beyond saying it basically involves slipping a grounded
probe up under the insulated "nipple" of the high-voltage wire.)

Another possibility is that the one of the horizontal or vertical output
stages has a parasitic oscillation in the F.M. band (somewhat harder to
diagnose and cure). Borrow a wide-band receiver to check this one out.

Rob Warnock
Systems Architecture Consultant

UUCP: {ihnp4,ucbvax!dual}!fortune!redwood!rpw3
DDD: (415)572-2607
USPS: 510 Trinidad Lane, Foster City, CA 94404

From -627548200717858616
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4868cb4bdca1cba5,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-03-22 12:42:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!mcnc!
philabs!cmcl2!seismo!brl-tgr!tgr!menton@lambda.decnet
From: menton@lambda.decnet (LAMBDA::MENTON)
Newsgroups: net.ham-radio
Subject: MODS TO WIRE ANTENNA
Message-ID: <9448@brl-tgr.ARPA>
Date: Fri, 22-Mar-85 15:42:31 EST
Article-I.D.: brl-tgr.9448
Posted: Fri Mar 22 15:42:31 1985
Date-Received: Tue, 26-Mar-85 05:05:25 EST
Sender: news@brl-tgr.ARPA
Lines: 21

Due to antenna restrictions, I use an inverted-L wire antenna and load it
on all bands (to 1:1 SWR) with a tuner. The nearly-vertical part of the
inv-L is about 70 ft high, and the nearly-horizontal part is 70ft high and
130 ft long. The "ground plane" (hi hi) under this wire antenna consists
of my station ground: an 8 ft copper-clad rod !! (and, of course, whatever
the earth of my back yard is doing).
     I like to work EU and SA on the low end of 40m and 80m, and I'd
LOVE to try working DX on 160m. Also, I want to maintain a sked between
DC and CT, which presently gives S7 sigs (100 watts TX) on 75m.
     Questions: if I lay some radials out from the ground rod,

     1. How many, and how long, to affect performance?
     2. Is it OK to bury plastic-insulated copper wire a few inches
           below ground surface as the radials?
     3. Will DX improve?
     4. If it does, will I be throwing away my DC-to-CT QSO due to a
        lower angle of radiation?

                         Bob Menton KG3J

From -5852225843020628831
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eefc5b299cdbc251,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-22 14:45:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!mcnc!
philabs!cmcl2!seismo!brl-tgr!tgr!ABN.ACOS-CE@USC-ISID.ARPA
From: ABN.ACOS-CE@USC-ISID.ARPA (Paul Ramey)
Newsgroups: net.ham-radio
Subject: PACKET RADIO
Message-ID: <9456@brl-tgr.ARPA>
Date: Fri, 22-Mar-85 17:45:28 EST

Article-I.D.: brl-tgr.9456
Posted: Fri Mar 22 17:45:28 1985
Date-Received: Tue, 26-Mar-85 05:27:31 EST
Sender: news@brl-tgr.ARPA
Lines: 10

KANTRONICS HAS A NEW ONE TO BE OUT IN APRIL. THE TNC USES RS-232 OR TTL.
ALMOST ALL OF THE CAMMANDS AND OPERATION PROCEDURES USED BY THE TARRPR GROUP
ARE USED WITH THE UNIT. BOTH THE AX.25 AND VANCOUVER PROTCOLS ARE INCORPORATED
IN THE UNIT. THE UNIT SUPPORTS 300,400,600,AND 1200 ,BUT DOES NOT SUPPORT
FULL DUPLEX. THE UNIT IS 1.9"H X 5.9" W X 8"D. THE PRICE IS $389.95.
THE INFO HERE IS FROM THE RELEASE TO BE PUT IN THE MAY HAM MAGS. ALSO THE
UNIT CAN BE USED AS A STAND ALONE 1200 BAUD RADIO MODEM.
73'S
KA4VUB

From 8509954147537522108
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ad95b82aae08a990,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-22 16:43:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Okla FAA stations: 1330 - 8390 MHz
Message-ID: <517@ihu1h.UUCP>
Date: Fri, 22-Mar-85 19:43:50 EST
Article-I.D.: ihu1h.517
Posted: Fri Mar 22 19:43:50 1985
Date-Received: Sun, 24-Mar-85 04:28:48 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 88

Here is a list of Oklahoma FAA stations (as of May 1984) in the
1330 - 8390 MHz range. I compiled this list in response to
a question received via mail, but hate to let information go to waste.

US: FAA, Aero Center, radiolocation land station, beacon operation, training &
                        testing, 10M00P0N emission @ 650kw
                       [Oklahoma City, OK]__1330.8400____call?   (govt recds)
US: FAA, ATC radar from Okla City Tracon, located on Will Rogers Apt property,
                        8M00P0N emission @ 1.2Mw, op freq 2770 MHz, 2863 MHz, d
                       iplex
                       [Oklahoma City, OK]__2700.0000____call?   (govt recds)
US: FAA, ATCT to RR site, Will Rogers Apt, 800K00F9W emission @1w, paired with
                        1820 MHz
                       [Oklahoma City, OK]__1740.0000____call?   (govt recds)
US: FAA, ATCT to RR site, Will Rogers Apt, 800K00F9W emission @1w, paired with

1840 MHz
[Oklahoma City, OK]__1760.0000____call? (govt recds)
US: FAA, experimental research station, Rockwell Intl Corp, to test radar abso
rbing structures and materials, 70M00A3N emission @0.01w
[Tulsa, OK]_____5000.0000____call? (govt recds)
US: FAA, Ft Worth - Oklahoma Cty link, 20M00F9 emission @ 20kw
[Arbuckls, OK]_____7160.0000____call? (govt recds)
" [Arbuckls, OK]_____7205.0000____call? (govt recds)
" [Arbuckls, OK]_____7250.0000____call? (govt recds)
" [Arbuckls, OK]_____7295.0000____call? (govt recds)
" [Arbuckls, OK]_____7340.0000____call? (govt recds)
" [Arbuckls, OK]_____7385.0000____call? (govt recds)
" [Arbuckls, OK]_____7430.0000____call? (govt recds)
" [Arbuckls, OK]_____7475.0000____call? (govt recds)
" [Arbuckls, OK]_____7515.0000____call? (govt recds)
" [Arbuckls, OK]_____7560.0000____call? (govt recds)
" [Arbuckls, OK]_____7605.0000____call? (govt recds)
" [Arbuckls, OK]_____7650.0000____call? (govt recds)
" [Maguire, OK]_____7160.0000____call? (govt recds)
" [Maguire, OK]_____7385.0000____call? (govt recds)
" [Maguire, OK]_____7475.0000____call? (govt recds)
" [Maguire, OK]_____7515.0000____call? (govt recds)
" [Maguire, OK]_____7560.0000____call? (govt recds)
" [Maguire, OK]_____7605.0000____call? (govt recds)
" [Maguire, OK]_____7650.0000____call? (govt recds)
" [Marietta, OK]_____7160.0000____call? (govt recds)
" [Marietta, OK]_____7205.0000____call? (govt recds)
" [Marietta, OK]_____7250.0000____call? (govt recds)
" [Marietta, OK]_____7295.0000____call? (govt recds)
" [Marietta, OK]_____7340.0000____call? (govt recds)
" [Marietta, OK]_____7340.0000____call? (govt recds)
" [Marietta, OK]_____7385.0000____call? (govt recds)
" [Marietta, OK]_____7430.0000____call? (govt recds)
" [Marietta, OK]_____7475.0000____call? (govt recds)
" [Marietta, OK]_____7560.0000____call? (govt recds)
" [Marietta, OK]_____7650.0000____call? (govt recds)
" [Oklahoma City, OK]__7160.0000____call? (govt recds)
" [Oklahoma City, OK]__7205.0000____call? (govt recds)
" [Oklahoma City, OK]__7250.0000____call? (govt recds)
" [Oklahoma City, OK]__7295.0000____call? (govt recds)
" [Oklahoma City, OK]__7340.0000____call? (govt recds)
" [Oklahoma City, OK]__7430.0000____call? (govt recds)
" [Oklahoma City, OK]__7515.0000____call? (govt recds)
" [Oklahoma City, OK]__7605.0000____call? (govt recds)
" [Stratford, OK]_____7160.0000____call? (govt recds)
" [Stratford, OK]_____7205.0000____call? (govt recds)
" [Stratford, OK]_____7250.0000____call? (govt recds)
" [Stratford, OK]_____7295.0000____call? (govt recds)
" [Stratford, OK]_____7340.0000____call? (govt recds)
" [Stratford, OK]_____7385.0000____call? (govt recds)
" [Stratford, OK]_____7430.0000____call? (govt recds)
" [Stratford, OK]_____7475.0000____call? (govt recds)
" [Stratford, OK]_____7515.0000____call? (govt recds)

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              "        [Stratford, OK]______7560.0000____call?     (govt recds)
              "        [Stratford, OK]______7605.0000____call?     (govt recds)
              "        [Stratford, OK]______7650.0000____call?     (govt recds)
US: FAA, radionavigation land station, training & testing ops, intermittent eq
                       uipment tests, 8M00P0N emission @75kw
                       [Oklahoma City, OK]__5400.0000____call?     (govt recds)
US: FAA, RR site to ATCT, Will Rogers Apt, 800K00F9W emission @1w, paired with
                        1740 MHz
                       [Oklahoma City, OK]__1820.0000____call?     (govt recds)
US: FAA, RR site to ATCT, Will Rogers Apt, 800K00F9W emission @1w, paired with
                        1760 MHz
                       [Oklahoma City, OK]__1840.0000____call?     (govt recds)
US: FAA, surveillance radar station, ZFW, diplex operation, 10M00P0N emission
                       @2Mw
                       [Oklahoma City, OK]__1345.0000____call?     (govt recds)
US: FAA, Tracon, 6M00P0N emission @400kw, paired with 2765 MHz
                       [Tulsa, OK]__________2800.0000____call?     (govt recds)
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================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From 7595756456648319235
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3fefcef7d04343ae,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-23 05:24:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: TV/Intercom interference
Message-ID: <16003@mgweed.UUCP>
Date: Sat, 23-Mar-85 08:24:36 EST
Article-I.D.: mgweed.16003
Posted: Sat Mar 23 08:24:36 1985
Date-Received: Sun, 24-Mar-85 04:04:26 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15


The few FM intercoms I ran across operated near the 160-9190 kHz range.

Sounds like the problem could be harmonics of the TV's sweep circuits.

I would suggest a brute-force line filter on the TV set's power line.
I don't know if wrapping the TV power cord around a ferrite rod would
help or not. My RCA XL-100 has a transformer-type power supply but the
chassis is connected to one side of the line cord since the transformer
is also used as an autotransformer. I measured the horizontal sweep
signal being fed back into the power line with a Stoddard VLF rcvr
and it was quite high....
```

Bob K9EUI

From -1846279212987647277
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,727af9a7a8629be8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-25 10:08:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!mcnc!
akgua!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: MODS TO WIRE ANTENNA comments
Message-ID: <16038@mgweed.UUCP>
Date: Mon, 25-Mar-85 13:08:09 EST
Article-I.D.: mgweed.16038
Posted: Mon Mar 25 13:08:09 1985
Date-Received: Tue, 2-Apr-85 06:30:35 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 19

I believe the "simple" rules for radials are: The more the better, and
should be 1/4 wave long (some 1/4 wave long for each band for multi-
band antenna systems).

I have an inverted "L" also however mine is about 25'vert and 75' horiz.
I buried 5 radials which are fanned out from the base of the tower that
supports the L portion of the antenna. The radials vary in length from
50 feet to 75 feet. The radials are #12 insulated, stranded "appliance
wire". I don't think it makes any difference if the wire is bare or not.
I use this antenna on 160, 80, and 30 meters with no rf in the shack.
(about half-way out the horiz. portion I have a loading coil that tunes
it to just above the high end of 160 meters).

Any radials are better than none, regardless of length. I don't know what
it will do to the radiation angle.

Bob K9EUI

From -700841352214905344
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a6818cb98ab6029,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-25 19:53:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!zehntel!dual!lll-crg!gymble!umcp-cs!seismo!brl-tgr!tgr!bedford!mintaka!

Gor#f@mit-eddie.ARPA
From: Gor#f@mit-eddie.ARPA
Newsgroups: net.ham-radio
Subject: Strange antenna
Message-ID: <9489@brl-tgr.ARPA>
Date: Mon, 25-Mar-85 22:53:58 EST
Article-I.D.: brl-tgr.9489
Posted: Mon Mar 25 22:53:58 1985
Date-Received: Fri, 29-Mar-85 01:41:09 EST
Sender: news@brl-tgr.ARPA
Lines: 18

I find myself desiring an antenna that has a funny patern, and the usual
HAM literature on antennas doesn't seem to cover what I want.

I run a packet BBS, and many of my users get to me via a distant digipeater.
They are in an area where there is no PBBS, and mine is closest to the
mountain mounted digipeater. The trouble is that the digipeater can hear
so well, that during busy times the path is not very usable, due to collisions
between my packets and those of stations who can't hear me at the digipeater
receiver. I don't want to increase power because the area north of Boston is
congested enough. I don't want to simply use a beam pointed at the digipeater
because I do have truely local users, and other PBBSs that I have a mail
forwarding relationship with.

What I would really like is a significant antenna gain in the direction of the
digipeater, without any significant nulls in other directions.

Any thoughts?
73's -Bill

From -7022961445098211988
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a6a7c190a9089dfb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-25 20:10:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some hf FAA freqs for SWLs
Message-ID: <521@ihu1h.UUCP>
Date: Mon, 25-Mar-85 23:10:37 EST
Article-I.D.: ihu1h.521
Posted: Mon Mar 25 23:10:37 1985
Date-Received: Tue, 26-Mar-85 06:29:16 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 110

(as of May 1984)

US: FAA, aeronautical wx for Carribean, 0.1F1 emission
[Perrine, FL]_____ 14.8530____WBR70 (govt recds)
US: FAA, Eastern Area Emergency Net, lsb
[Des Plaines, IL]____ 13.6285____WHX51 (govt recds)
" [Farmington, MN]_____ 13.6285____KCJ20 (govt recds)
" [Hampton, GA]_____ 13.6285____KDM50 (govt recds)
" [Indianapolis, IN]___ 13.6285____KLB48 (govt recds)
" [Nashua, NH]_____ 13.6285____WHX45 (govt recds)
" [Ronkoncoma, NY]_____ 13.6285____KJK72 (govt recds)
" [Washington, DC]_____ 13.6285____KEM80 (govt recds)
US: FAA, Eastern Area Emergency Net, usb
[Des Plaines, IL]____ 13.6315____WHX51 (govt recds)
" [Farmington, MN]_____ 13.6315____KCJ20 (govt recds)
" [Hampton, GA]_____ 13.6315____KDM50 (govt recds)
" [Indianapolis, IN]___ 13.6315____KLB48 (govt recds)
" [Nashua, NH]_____ 13.6315____WHX45 (govt recds)
" [Ronkoncoma, NY]_____ 13.6315____KJK72 (govt recds)
" [Washington, DC]_____ 13.6315____KEM80 (govt recds)
US: FAA, Eastern Region Emergency Readiness Net, lsb
[Aurora, IL]_____ 13.6285____KJB96 (govt recds)
" [Islip, NY]_____ 13.6285____KCD73 (govt recds)
" [Jamaica, NY]_____ 13.6285____KJK82 (govt recds)
" [Leesburg, VA]_____ 13.6285____KJK80 (govt recds)
" [Martinsburg, WV]____ 13.6285____KIT88 (govt recds)
" [Nashua, NH]_____ 13.6285____KLD70 (govt recds)
" [Oberlin, OH]_____ 13.6285____KLA25 (govt recds)
US: FAA, Eastern Region Emergency Readiness Net, usb
[Aurora, IL]_____ 13.6315____KJB96 (govt recds)
" [Islip, NY]_____ 13.6315____KCD73 (govt recds)
" [Jamaica, NY]_____ 13.6315____KJK82 (govt recds)
" [Leesburg, VA]_____ 13.6315____KJK80 (govt recds)
" [Martinsburg, WV]____ 13.6315____KIT88 (govt recds)
" [Nashua, NH]_____ 13.6315____KLD70 (govt recds)
" [Oberlin, OH]_____ 13.6315____KLA25 (govt recds)
US: FAA, Emergency Net, lsb
[Los Angeles, CA]____ 13.6285____KJK73 (govt recds)
" [Oklahoma City, OK]__ 13.6285____KIA21 (govt recds)
US: FAA, Emergency Net, usb
[Los Angeles, CA]____ 13.6315____KJK73 (govt recds)
" [Oklahoma City, OK]__ 13.6315____KIA21 (govt recds)
US: FAA, emergency network, J7B and J3E emissions
[USA-wide]_____ 4.0535____several (govt recds)
" [USA-wide]_____ 4.0565____several (govt recds)
US: FAA, emergency readiness net, usb
[Auburn, WA]_____ 13.9050____KCJ70 (govt recds)
" [Denver, CO]_____ 13.9050____WHX46 (govt recds)
" [Fremont, CA]_____ 13.9050____KMR96 (govt recds)
" [Hampton, GA]_____ 13.9050____KDM50 (govt recds)
" [Longmont, CO]_____ 13.9050____KCP63 (govt recds)
" [Los Angeles, CA]____ 13.9050____KOJ77 (govt recds)
" [Palmdale, CA]_____ 13.9050____KJK77 (govt recds)

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              "        [Salt Lake City, UT]_  13.9050____KJK75     (govt recds)
US: FAA, maintenance, usb
                       [Bismark, ND]________  13.9050____call?    (govt recds)
US: FAA, NW Maintenance Net, usb @ 150w
                       [Boise, ID]__________   6.8715____WMX22    (govt recds)
US: FAA, scene of accident and command & control net, usb
                       [Diamondhead, HI]____  14.4655____KCC97    (govt recds)
              "        [Guam]_______________  14.4655____KCD72    (govt recds)
              "        [Pago Pago, America]_  14.4655____KDM48    (govt recds)
US: FAA, Southwestern Area Emergency Net, lsb
                       [Albuqurqe, NM]______  13.6285____KGH23    (govt recds)
              "        [Ft Worth, TX]_______  13.6285____KBR25    (govt recds)
              "        [Ft Worth, TX]_______  13.6285____KDM47    (govt recds)
              "        [Houston, TX]________  13.6285____KMU31    (govt recds)
              "        [Memphis, TN]________  13.6285____KLE86    (govt recds)
US: FAA, Southwestern Area Emergency Net, usb
                       [Albuqurqe, NM]______  13.6315____KGH23    (govt recds)
              "        [Ft Worth, TX]_______  13.6315____KBR25    (govt recds)
              "        [Ft Worth, TX]_______  13.6315____KDM47    (govt recds)
              "        [Houston, TX]________  13.6315____KMU31    (govt recds)
              "        [Memphis, TN]________  13.6315____KLE86    (govt recds)
US: FAA, SW Hurricane Net, usb @ 100w
                       [Albuqurqe, NM]______   6.8715____KEA37    (govt recds)
              "        [Baton Rouge, LA]____   6.8715____KAO31    (govt recds)
              "        [Brownsville, TX]____   6.8715____KCA37    (govt recds)
              "        [Corpus Christi, TX]_   6.8715____KJB35    (govt recds)
              "        [Ft Worth, TX]_______   6.8715____KDM47    (govt recds)
              "        [Gulfport, MS]_______   6.8715____KEG95    (govt recds)
              "        [Houston, TX]________   6.8715____KIC30    (govt recds)
              "        [Houston, TX]________   6.8715____KMU31    (govt recds)
              "        [Lafayette, LA]______   6.8715____KCK47    (govt recds)
              "        [Mobile, AL]_________   6.8715____KMU20    (govt recds)
              "        [New Orleans, LA]____   6.8715____WEK71    (govt recds)
              "        [Palacios, TX]_______   6.8715____KGC36    (govt recds)
              "        [San Antonio, TX]____   6.8715____KIA48    (govt recds)
              "        [Santa Fe, NM]_______   6.8715____KBY35    (govt recds)
              "        [Shreveport, LA]_____   6.8715____KOB92    (govt recds)
              "        [Tucumcare, NM]______   6.8715____KAB34    (govt recds)
              "        [Wichita Falls, TX]__   6.8715____KPA54    (govt recds)
US: FAA, SW Hurricane Net, usb @ 1kw
                       [Beaumont, TX]_______   6.8715____KED67    (govt recds)
              "        [Chickasm, OK]_______   6.8715____KOS41    (govt recds)
              "        [Oklahoma City, OK]__   6.8715____KIA21    (govt recds)
US: FAA, Western Area Emergency Net, lsb
                       [Kansas City, MO]____  13.6285____KKU40    (govt recds)
              "        [Longmont, CO]_______  13.6285____KCP63    (govt recds)
              "        [Olathe, KA]_________  13.6285____KKA82    (govt recds)
US: FAA, Western Area Emergency Net, usb
                       [Anchorage, AK]______  13.6315____KDM53    (govt recds)
              "        [Kansas City, MO]____  13.6315____KKU40    (govt recds)
              "        [Longmont, CO]_______  13.6315____KCP63    (govt recds)
              "        [Olathe, KA]_________  13.6315____KKA82    (govt recds)
              "        [Palmdale, CA]_______  13.6315____KJK77    (govt recds)
```

--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -8150758551735015962
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e2dcddfda352eca5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-26 13:57:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: recent SWL loggings in the HF spectrum
Message-ID: <523@ihu1h.UUCP>
Date: Tue, 26-Mar-85 16:57:58 EST
Article-I.D.: ihu1h.523
Posted: Tue Mar 26 16:57:58 1985
Date-Received: Wed, 27-Mar-85 04:47:07 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 31

Canada: Canadian Forces Maritime Radio, cw marker, "VVV de CKN C13E"
                        [Vancouver, BC]______ 12.1250____CKN   (B. Parnass)
Cowan, Stuart D, experimental research station, usb
                        [Harrison, NY]_______ 18.1110____KM2XDU   (B. Parnass)
Orr, William I, experimental research station, usb @ 600w
                        [Menlo Park, CA]_____ 18.1110____KM2XDW   (B. Parnass)
US: Air Force, Vice President's aircraft in-flight, lsb
                        [location?]__________ 18.0270____AF2   (others)
                "   [location?]__________   6.6830____AF2   (others)
US: Coast Guard, cw marker, note had AC ripple, "QRU NUKO de NMN/NAM/NAR..."
                        [Pungo, VA]__________ 12.1350____NMN   (B. Parnass)
US: NASA, "go ahead, Dog 1", "x function on, x function off", "carrier off", t
                        alk of setting up a telemetry reader and computer for te
                        sts, lsb, 3/26/85 @ 1830Z
                        [location?]__________ 18.0090____call?   (B. Parnass)
US: NASA, phone patch, "Redstone" talking to "Patrick" AFB, other patches disc
                        ussing test results of & translators in "birds", could b
                        e USS Redstone (tracking ship) or the Marshall Space Fli
                        ght Center in Huntsville AL, lsb
                        [location?]__________ 18.0090____call?   (B. Parnass)
US: NASA, phone patch, lsb, 1955Z
                        [Ascension Island]___ 19.9610____AFE83   (B. Parnass)
US: unidentified: 7D set up phone patch to 2W, 20th Engineers, mentioned Autovo
                        n, usb
                        [location?]__________ 19.7480____call?   (B. Parnass)
WCM Radio Pittsburgh Inc, maritime/coastal, usb @ 1kw
                        [Withamsville, OH]___   6.5157____WCM   (B. Parnass)

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==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -8314294600828979859
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f726be0b68323b88,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-26 14:30:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!jshaver@apg-3
From: jshaver@apg-3 (John Shaver STEEP-TM-AC 879-7602)
Newsgroups: net.ham-radio
Subject: Undeliverable mail
Message-ID: <9511@brl-tgr.ARPA>
Date: Tue, 26-Mar-85 17:30:46 EST
Article-I.D.: brl-tgr.9511
Posted: Tue Mar 26 17:30:46 1985
Date-Received: Fri, 29-Mar-85 03:13:18 EST
Sender: news@brl-tgr.ARPA
Lines: 27

----BEGINNING OF FORWARDED MESSAGES----
Date: 26 Mar 1985 10:34:57 EST (Tuesday)
From: Daemon <daemon@apg-3>
Subject: Undeliverable mail
To: jshaver@apg-3

Mail addressed to info-ham at simtel20 could not be sent.
550 No such local mailbox as "info-ham", recipient rejected
------- Unsent message is below -------

Date: 26 Mar 1985 10:30:28 EST (Tuesday)
From: John Shaver STEEP-TM-AC 879-7602 <jshaver@apg-3>
Subject: RF 'hats'?
To: info-ham@simtel20
Cc: jshaver@apg-3

Does anyone have information on the 'RF hats' which the Navy and Air Force
use to couple RF into their aircraft on the flight lines. I need to locate
a source of information on that technology.

Thanks in advance

John

----END OF FORWARDED MESSAGES----

From 7638185232536193034
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,deef4a9834e84304,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-26 15:59:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!philabs!cmcl2!seismo!brl-tgr!tgr!
SECRIST%OAK.SAINET.MFENET@LLL-MFE.ARPA
From: SECRIST%OAK.SAINET.MFENET@LLL-MFE.ARPA
Newsgroups: net.ham-radio
Subject: Request for Packet Pointers
Message-ID: <9512@brl-tgr.ARPA>
Date: Tue, 26-Mar-85 18:59:47 EST
Article-I.D.: brl-tgr.9512
Posted: Tue Mar 26 18:59:47 1985
Date-Received: Sun, 31-Mar-85 04:14:35 EST
Sender: news@brl-tgr.ARPA
Lines: 14

Although I have had a lot of fun with my HW-16, I'd really like to get into packet radio. As the world of packet is new to me, I am searching for microcomputer software to make this possible, as well as good sources of general information. Does anyone have any tips on getting into packet and/or have knowledge of some sorts of packages in the public domain or otherwise I could use on my Apple ? (I can shoehorn anything from most any language ONTO the Apple, so that is not a big qualification, but if something was already set up for it that would be nice, of course.)

73's, Richard (formerly WN5PV0)

-=-
SECRIST%OAK.SAInet.MFEnet@LLL-MFE.ARPA * Science Applications Int'l Corp.

From -3869427509656712086
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a6818cb98ab6029
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-26 18:26:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!philabs!cmcl2!seismo!brl-tgr!tgr!
Taylor.Wbst@XEROX.ARPA
From: Taylor.Wbst@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Strange antenna
Message-ID: <9514@brl-tgr.ARPA>
Date: Tue, 26-Mar-85 21:26:11 EST
Article-I.D.: brl-tgr.9514
Posted: Tue Mar 26 21:26:11 1985

Date-Received: Sun, 31-Mar-85 04:15:53 EST
Sender: news@brl-tgr.ARPA
Lines: 11

I WONDER WHAT THE POLARIZATION OF THE RECEIVING ANTENNA IS? ASSUMING THAT IT'S VERTICAL, I WOULD SUGGEST A VERTICAL ANTENNA FED IN PHASE WITH A VERTICAL YAGI. THIS WILL GIVE THE VECTOR SUM OF THE TWO (A CIRCLE PLUS A CARDIOID). THE ONLY FLY IN THE CARDIOINTMENT IS THAT THE YAGI HAS SOME MINOR LOBES WHICH ALSO ADD VECTORIALLY. I WOULD ASSUME THAT THEY'RE WEAK ENOUGH TO BE NEGLECTED.

HAVE FUN!

JIM (W2OZH)

From 6528253190227307870
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a6818cb98ab6029
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-26 18:55:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!philabs!cmcl2!seismo!brl-tgr!tgr!McAfee.ES@XEROX.ARPA
From: McAfee.ES@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Strange antenna
Message-ID: <9516@brl-tgr.ARPA>
Date: Tue, 26-Mar-85 21:55:46 EST
Article-I.D.: brl-tgr.9516
Posted: Tue Mar 26 21:55:46 1985
Date-Received: Sun, 31-Mar-85 04:18:43 EST
Sender: news@brl-tgr.ARPA
Lines: 8

There are a couple of ways you can go.
1. Combine a directional antenna (yagi) with an omni antenna using a spliter has been used in commercial installations to control the pattern.
2. Use a collinear dipole array and skew the pattern by placing more dipoles on one side of the mast toward the distant mountain top.

Pete KD6HR

From 3012482106013601646
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a6818cb98ab6029
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-27 06:30:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site ecsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!mcnc!ecsvax!uchuck
From: uchuck@ecsvax.UUCP (Charles Bennett)
Newsgroups: net.ham-radio
Subject: Re: Strange antenna
Message-ID: <912@ecsvax.UUCP>
Date: Wed, 27-Mar-85 09:30:18 EST
Article-I.D.: ecsvax.912
Posted: Wed Mar 27 09:30:18 1985
Date-Received: Sat, 30-Mar-85 01:31:03 EST
References: <9489@brl-tgr.ARPA>
Organization: UNC - Chapel Hill
Lines: 16

A friend of mine once had a similar problem. He had several repeaters
(back when they were a new thing) on 6M linked and wanted local
general coverage and beamed coverage to the next link. He solved the
problem using a omnidirectional (ground plane, colinear, etc.) antenna
coupled to (and spaced on the tower appropriately) a 15 element yagi.
This created a "Keyhole" pattern and worked quite well. I don't
remember the exact coupling or spacing but you can probably find out
from a good antenna reference manual.

        -Chuck (WA4IFA)-   (akgua,decvax)!mcnc!ecsvax!uchuck
--

                  -Chuck Bennett-
                   919-966-1134
...   ...!(decvax,akgua)!mcnc!ecsvax!uchuck

From -6459095436170013727
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,981b9786372ae392,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1622d3,981b9786372ae392,start
X-Google-Attributes: gid1622d3,public
X-Google-ArrivalTime: 1985-03-27 06:59:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site mhuxl.UUCP
Path: utzoo!decvax!harpo!whuxlm!whuxl!houxm!mhuxt!mhuxv!mhuxh!mhuxi!mhuxl!res1
From: res1@mhuxl.UUCP (STEALEY)
Newsgroups: net.micro.apple,net.ham-radio
Subject: Apple IIc on RTTY (ham-radio Teletype)
Message-ID: <176@mhuxl.UUCP>
Date: Wed, 27-Mar-85 09:59:12 EST
Article-I.D.: mhuxl.176
Posted: Wed Mar 27 09:59:12 1985
Date-Received: Wed, 27-Mar-85 19:36:34 EST
Distribution: na
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 16

Has anyone had any luck interfacing an Apple IIc for RTTY use?
I have been unable to locate a schematic for the IIc to enable me to be certain that I correctly connect the TU (modem). The instructions that came with my RTTY program (Super-Ratt) indicate that I connect to the modem port (vs. the game port on a II+ or IIe), and that the interface be at TTL levels. Since the game port on a II+ is quite different from the serial modem port on a IIc in terms of its function, I am concerned that the proper circuit interface be made.

My Apple dealer has told me that a maintenance manual will be available shortly for the IIc for $50!(presumably including a schematic).

Thanks for the help.
Rick Stealey KT2Q
AT&T Springfield NJ
mhuxl!res1
201-467-7322

From -484824138212882718
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e1171c52b7e7cfcd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-27 15:57:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: PRO-30 Scanner Owner Arrested!
Message-ID: <524@ihu1h.UUCP>
Date: Wed, 27-Mar-85 18:57:46 EST
Article-I.D.: ihu1h.524
Posted: Wed Mar 27 18:57:46 1985
Date-Received: Thu, 28-Mar-85 03:20:41 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 16

x

PRO-30 Scanner Owner Arrested

The three TV networks presented film coverage tonight of the FBI's capture in Georgia of Mr. ? Pierce, a member of the right wing group "The Order". Pierce was wanted for the armed robbery of two armored cars.

Did anybody else notice the Radio Shack PRO-30 portable scanner lying amidst the guns, grenades, and banana clips confiscated by the FBI?

:-)
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -3985931145162887148
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a6818cb98ab6029
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-29 08:13:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2g.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!hou2g!stekas
From: stekas@hou2g.UUCP (J.STEKAS)
Newsgroups: net.ham-radio
Subject: Re: Strange antenna
Message-ID: <440@hou2g.UUCP>
Date: Fri, 29-Mar-85 11:13:21 EST
Article-I.D.: hou2g.440
Posted: Fri Mar 29 11:13:21 1985
Date-Received: Sat, 30-Mar-85 01:23:38 EST
References: <9489@brl-tgr.ARPA>
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 9

> What I would really like is a significant antenna gain in the direction of the
> digipeater, without any significant nulls in other directions.
> Any thoughts?
> 73's -Bill

How about a vertical for the locals AND a beam pointed at the digipeater?
You would need to design a splitter/matching network but it sounds "do-able".

Jim

From 7452313142961336723
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,526da6f1233bfc9c,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,526da6f1233bfc9c,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1985-03-29 08:51:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site tesla.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!vax135!cornell!tesla!
brucef
From: brucef@tesla.UUCP (Bruce Fingerhood)
Newsgroups: net.ham-radio,net.wanted
Subject: R390A Schematic wanted
Message-ID: <546@tesla.UUCP>

Date: Fri, 29-Mar-85 11:51:42 EST
Article-I.D.: tesla.546
Posted: Fri Mar 29 11:51:42 1985
Date-Received: Sat, 30-Mar-85 04:04:55 EST
Reply-To: brucef@tesla.UUCP (Bruce Fingerhood)
Organization: Cornell University, Electrical Engineering Dept.
Lines: 14
Xref: watmath net.ham-radio:2581 net.wanted:6114

I am looking for a schematic for an R390A receiver. I will pay copying and postage costs. Also, has anyone had experience with the "partial repo of service manual" that Fair Radio and others sell? Does it contain enough info to be worthwhile?
Thanks in advance for any answers.

73
KA7I
Bruce Fingerhood
235 Phillips Hall
School of Electrical Engineering

Cornell University
Ithaca,NY 14853

From 93801455375812213
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f2d37eb49f39d258,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-29 09:24:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!dcdwest!ittvax!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: RADIALS to improve inverted L performance
Message-ID: <9578@brl-tgr.ARPA>
Date: Fri, 29-Mar-85 12:24:33 EST
Article-I.D.: brl-tgr.9578
Posted: Fri Mar 29 12:24:33 1985
Date-Received: Tue, 2-Apr-85 00:19:20 EST
Sender: news@brl-tgr.ARPA
Lines: 12

Anyone interested in my longwinded reply to menton's recent question on the above subject may request a copy thereof from me. The reply basically recommends alternative antenna configurations rather than radials for the existing one, but goes through quite a lot of "intuitive antenna theory"

in the process. Thus the length (250 lines or so) which inhibited me from appalling the entire net with it.

I would specifically appreciate comments on the long form by any sufficiently addicted antenna theorists that they would be unable to resist reading it!

73,
John S., W3IKG

From 3533428364856159400
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c126038ca0d8fe8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-29 09:49:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site hplvle.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hplvla!chris
From: chris@hplvla.UUCP (chris)
Newsgroups: net.ham-radio
Subject: Orphaned Response
Message-ID: <2800007@hplvle.UUCP>
Date: Fri, 29-Mar-85 12:49:00 EST
Article-I.D.: hplvle.2800007
Posted: Fri Mar 29 12:49:00 1985
Date-Received: Tue, 2-Apr-85 04:48:09 EST
References: <43300002@extel.UUCP>
Organization: HP Loveland Instrument Division
Lines: 6

> If you have access to the British journal "Wireless World", I believe
> you will find a 2 or 3 part series about a home 1.6 Ghz satellite
> receiver system described, sometime in the last several years. I am
> sorry I have no more specific information, but I remember photocopying
> the series, which I have since lost.....Good Luck....Chris

From 8571135244580776646
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,99417d01bf9eb57d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-29 11:35:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!dcdwest!ittvax!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!TAKAHASHI@SRI-KL.ARPA
From: TAKAHASHI@SRI-KL.ARPA
Newsgroups: net.ham-radio
Subject: Users in the 45-60Mhz
Message-ID: <9588@brl-tgr.ARPA>
Date: Fri, 29-Mar-85 14:35:17 EST
Article-I.D.: brl-tgr.9588

Posted: Fri Mar 29 14:35:17 1985
Date-Received: Tue, 2-Apr-85 00:21:02 EST
Sender: news@brl-tgr.ARPA
Lines: 8

I would like to know if anyone on the net has information, or can steer me to information regarding users in the 45-60Mhz band. In particular, I'd like info. on the frequency of operation and power levels.
Thanks in advance,

Allen Takahashi, N6KDM
TAKAHASHI@SRI-KL.ARPA

From -8282977796749905720
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,45cf521675dc33e1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-29 15:29:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Satellites on 149.985 MHz?
Message-ID: <526@ihu1h.UUCP>
Date: Fri, 29-Mar-85 18:29:03 EST
Article-I.D.: ihu1h.526
Posted: Fri Mar 29 18:29:03 1985
Date-Received: Sat, 30-Mar-85 04:02:11 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 66

Satellites on 149.985 MHz?

> I've been hearing signals that sound like satellite passes, on 149.985 MHz.
> I remember discussion on the net some time ago about Russian satellites
> on 150 MHz. Is this the same thing? (I hear sigs on 149.985 only; I've
> checked my calibration.) Do you have any info on what kind of data is
> being transmitted? Tnx in advance...

How much, if any, Doppler shift is there on the signals you hear? These records aren't that fresh, but there are non-terrestial stations listed.

```
 149.9250    call?_____US: Air Force, CAP [USA-wide] (magazines)
 149.9750    call?_____US: Air Force, base & land mobile stations, 16F3 emissio
                           n [Barksdale AFB, LA] (govt recds)
             call?_____US: Air Force, base & land mobile stations, 16F3 emissio
                           n [Richards AFB, MO] (govt recds)
 149.9787    call?_____US: Navy, experimental testing station, 4.94A3 emission
```

[Laguna Pk, CA] (govt recds)
call?_____US: Navy, experimental testing station, 4.94A3 emission [Prospect Harbor, ME] (govt recds)
call?_____US: Navy, experimental testing station, 4.94A3 emission [Rosemont, MN] (govt recds)
call?_____US: Navy, experimental testing station, 4.94A3 emission [Wahiawa, HI] (govt recds)
call?_____US: Navy, experimental testing station, 4.94A3 emission [space, nongeos] (govt recds)
149.9825 call?_____US: Air Force, base & land mobile stations, 16F3 emission [Edwards AFB, CA] (govt recds)
149.9850 call?_____US: Air Force, base & land mobile stations, 16F3 emission [Robbins AFB, GA] (govt recds)
149.9950 call?_____US: Air Force, land mobile station, 16F3 emission [Aldie, VA] (govt recds)
call?_____US: Air Force, land mobile station, 16F3 emission [Garden City, VA] (govt recds)
call?_____US: Air Force, land mobile station, 16F3 emission [Indpnhll, VA] (govt recds)
call?_____US: Air Force, land mobile station, 16F3 emission [Silver Springs, MD] (govt recds)
call?_____US: Air Force, land mobile station, 16F3 emission [Suitland, MD] (govt recds)
150.0000 call?_____Satellites, Russian - telemetry heard about 100 minutes for approximately 10 minutes duration [space] (B. Parnass)
call?_____US: Air Force, experimental testing station, 50F9 emission [Vandenberg AFB, CA] (govt recds)
call?_____US: Navy, experimental testing station, 40F9 emission [Atlantic Ocean] (govt recds)
call?_____US: Navy, experimental testing station, 40F9 emission [Pacific Ocean] (govt recds)
call?_____US: Navy, experimental testing station, 40F9 emission [USA-wide] (govt recds)
call?_____US: Navy, experimental testing station, 40F9 emission [space, nongeos] (govt recds)
call?_____non-govt experimental developmental station, 0A0 & 1A1 emissions [Callaghn, TX] (govt recds)
call?_____non-govt experimental developmental station, 0A0 & 1A1 emissions [Laredo, TX] (govt recds)
call?_____non-govt experimental developmental station, 0A0 & 1A1 emissions [Waterloo, IA] (govt recds)
KM2XFK____McDonnell Douglas, non-govt experimental contract station, 2A9 emission [Torrance, CA] (govt recds)
150.0250 call?_____US: Air Force, fixed & land mobile stations, 16F3 emission [Niagra Falls, NY] (govt recds)
call?_____US: Air Force, land & mobile stations, 16F3 emission [Grand Forks, ND] (govt recds)

From -3291455691605885439
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d10ba765a2348c1,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-30 13:52:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ucla-cs.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!trwrb!trwrba!cepu!ucla-cs!
wales
From: wales@ucla-cs.UUCP
Newsgroups: net.ham-radio
Subject: Do call-sign plates encourage theft? (one more time)
Message-ID: <4593@ucla-cs.ARPA>
Date: Sat, 30-Mar-85 16:52:56 EST
Article-I.D.: ucla-cs.4593
Posted: Sat Mar 30 16:52:56 1985
Date-Received: Mon, 1-Apr-85 03:49:11 EST
Reply-To: wales@ucla-cs.UUCP (Rich Wales/WA6SGA)
Organization: UCLA Computer Science Department
Lines: 40

I asked this question a few weeks ago, and I only got one response, so
I'm going to try one more time:

Do "call-sign" license plates increase the likelihood that your ham gear
will be stolen from your car? (The theory is that crooks will recognize
from the plates that the car contains expensive goodies.)

Let's make the following assumptions (which happen to apply to my car):

    (1) The car contains a 2-meter rig in plain view (not hidden or
    camouflaged in any way). There is also a 1/4-wave vertical
    whip, permanently mounted on the roof.

    (2) The car has a good burglar alarm, and notices to that effect
    are prominently displayed on the car.

    (3) The rig is insured (ARRL policy) -- just in case.

Surely there must be some people out there in "net.ham-radio" with
strongly held opinions one way or the other on this question. Please
share them with me via mail, and I will summarize to the net (assuming
I hear anything, that is).

Thanks.
--

-=-
                                                    Rich Wales
                            University of California, Los Angeles (UCLA)
                                                Computer Science Department
                                                        3531 Boelter Hall
                                        Los Angeles, California 90024 // USA
-=-
Phone: (213) 825-5683 // +1 213 825 5683
ARPANET: wales@UCLA-LOCUS.ARPA

UUCP: ...!{cepu,ihnp4,trwspp,ucbvax}!ucla-cs!wales
-=-
           "UCLA" is a registered trademark of
          The Regents of the University of California
-=-

From -1888307824130026746
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58be1265fce7e689,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-30 20:02:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Rajneesh cult freqs in Antelope, Oregon
Message-ID: <527@ihu1h.UUCP>
Date: Sat, 30-Mar-85 23:02:20 EST
Article-I.D.: ihu1h.527
Posted: Sat Mar 30 23:02:20 1985
Date-Received: Sun, 31-Mar-85 04:51:57 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 10

Chidvilas RMC, Inc_____[Antelope]__________ 461.8500____KNCB363   (govt recds)
Neo-Balance____________[Antelope]__________ 461.7000____KNDC438   (govt recds)
Rajneesh Investment, aero & fixed, airport
                       [Rasjneeshpuram]_____ 122.8000____WWQ8   (govt recds)
Rajneesh Neo-Sannyas International Community
                       [Antelope]__________ 461.5000____KNDC379   (govt recds)
Rajneesh Puram, Inc____[Antelope]__________ 461.5500____KNBR691   (govt recds)
Rajneeshpuram: Fire____[Rasjneeshpuram]_____ 460.5750____KNGG554   (govt recds)
Rajneeshpuram: Police__[Rasjneeshpuram]_____ 460.2750____KNGE528   (govt recds)

From 2430223745986378450
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,41f3a4789471d1c3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-31 02:29:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tektronix!
hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: ARRL Computer Networking Conference Presentations
Message-ID: <426@dsd.UUCP>
Date: Sun, 31-Mar-85 05:29:32 EST

Article-I.D.: dsd.426
Posted: Sun Mar 31 05:29:32 1985
Date-Received: Thu, 4-Apr-85 05:45:05 EST
Organization: AMPEX DSD, Redwood City, CA.
Lines: 78

To: All attending the ARRL Fourth Computer Networking Conference
From: Hank Magnuski, KA6M
Date: 24 March, 1985

Subject: Final list of presentations

The following is the final list of presentations to be given at the
ARRL Fourth Computer Networking Conference which will be in Moscone Center
in San Francisco on March 30th, 1985. The conference will be in Room 232,
and all attendees of the Computer Faire are welcome to attend.

The papers presented will be in the proceedings, available from the ARRL.

10:30 Opening Remarks and Keynote Speech
  Paul Rinaldo, American Radio Relay League

10:45 Pete's Packet Primer
  Peter Eaton, TAPR

11:30 Applications of Packet Radio Papers -

  "Packet Radio Development - 1985"
    Lyle Johnson, TAPR
  "The Implications of Traditional Operating Practices for Net Design"
    Gwyn Reedy, FADCA
  "Packet Radio for Distance Teaching in the Third World"
    Phil Gray, University of Oregon
  "Packet Radio and the National Hurricane Center"
    Joel Kandel

12:15 Papers from the Proceedings - Operational Reports

  "The Realities of Packet Radio in the ARS circa 1985"
    Harold Price, LAPG
  "The FADCA Gator Link 1"
    Howard Goldstein, FADCA, and Ted Huf, FADCA
  "EASTNET: A Year Later"
    Bob Bruninga, AMRAD
  "Computer Networking in Japan, 1985 and Onwards"
    Robert Richardson, Richcraft Engineering
  "Activity Report of Japan's PARNET"
    Yamazaki, et al

13:30 Technical Papers - Part I

  "TCP/IP: A Proposal for Amateur Packet Radio Levels 3 and 4"
    Phil Karn, AMSAT

"Addressing and Routing Issues in Amateur Packet Radio"
Phil Karn, AMSAT
"Of Virtual Circuits, Datagrams, and the Circular File"
Terry Fox, AMRAD
"CCITT X.224 Transport Layer Protocol Basic Description"
Terry Fox, AMRAD
"Communications Protocols for the Network and Transport Layers"
Gordon Beattie, Jr., RATS, and Tom Moulton, EIES
"Proposal: Recommendation AX.121NA, a Numbering Plan"
Gordon Beattie, Jr., RATS, and Tom Moulton, EIES
"X.3 and X.28 Protocols for Terminal Node Controllers"
Douglas Lockhart, VADCG
"AX.25 Net Operation in the Connected Mode"
Robert Richardson, Richcraft Engineering

15:15 Technical Papers - Part II

"The RUDAK Packet Radio Experiment for Phase III-C"
Karl Meinzer, AMSAT-DL and Hans Peter Kuhlen, AMSAT-DL
"Modifying the Hamtronics FM-5 for 9600 bps Operation"
Steve Goode, CAPRA
"The Frequency Agile Message System"
Dave Borden, AMRAD
"Packet Radio Timing Considerations"
Dave Engle, PPRS
"A More Watchful Watchdog for Microcomputers"
Paul Newland
"Another Application Note Describing a Low-Power RS232 Interface"
Paul Newland
"A Few Thoughts on User Verification Within a Party-line Network"
Paul Newland

From 7008084624338759822
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1bd69c3acf9e5d44,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-01 07:32:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!decwrl!
dec-rhea!dec-pisces!partain
From: partain@pisces.DEC (Chuck Partain, SHR3/E-8, DTN 237-3157 LOCATION
G-23)
Newsgroups: net.ham-radio
Subject: Need info on heath \"apache\" and National nc-303
Message-ID: <1421@decwrl.UUCP>
Date: Mon, 1-Apr-85 10:32:50 EST
Article-I.D.: decwrl.1421
Posted: Mon Apr 1 10:32:50 1985
Date-Received: Fri, 5-Apr-85 12:25:47 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network

Lines: 21

1). I am in need of info on the heathkit "apache" transmitter model TX-1.
I have all of the schematics and building guides for it but need more info
on the sb-10 sideband adapter. Do any of them still exist? Does any
info still circulate on these? Can i get anything from anyone???
Not that i'm desperate but..just need to know.

2). National nc-303. adapters nc300c1, c2, c6. same problem.
need all info available....PLEASE.

I am willing to pay postage for schematics or helpful non-postable
info.

Chuck Partain
Digital Eq. Co.
shr3/E8
330 South St.
Shrewsbury, Ma.
01454
617-841-3157

From -6544985790302599891
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1b609f00a72f8afd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-01 13:25:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site watrose.UUCP
Path: utzoo!watmath!watrose!jrkesselman
From: jrkesselman@watrose.UUCP (jrkesselman)
Newsgroups: net.ham-radio
Subject: Sony 2010
Message-ID: <7410@watrose.UUCP>
Date: Mon, 1-Apr-85 16:25:08 EST
Article-I.D.: watrose.7410
Posted: Mon Apr 1 16:25:08 1985
Date-Received: Tue, 2-Apr-85 00:26:13 EST
Distribution: net
Organization: U of Waterloo, Ontario
Lines: 9

Has anyone out there purchased the new Sony 2010 Shortwave Receiver?
Up here in Canada it's priced at 489$CAN and I'm looking for
some reviews before I make the purchase. Has anyone seen a
review in any of the Ham magazines?

Jack Kesselman
University of Waterloo

From -850879726335570667
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c3cb4b5bd273b83,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-01 15:49:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 25 (FCC ADOPTS NPRM on ANTENNA PREEMPTION)
Message-ID: <16237@mgweed.UUCP>
Date: Mon, 1-Apr-85 18:49:17 EST
Article-I.D.: mgweed.16237
Posted: Mon Apr 1 18:49:17 1985
Date-Received: Fri, 5-Apr-85 15:02:25 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst be k9eui
hr arrl bulletin nr 25 from arrl headquarters
newington ct march 29, 1985
to all radio amateurs bt

arrl observers at an fcc open meeting on march 28 report that
the commission has adopted a notice of proposed rulemaking
concerning federal preemption of satellite dish antennas.
details will be made available when the nprm is released. it
is believed that this action by the fcc is a good omen for
favorable action on the arrl request for federal preemption of
amateur antennas, prb 1, later this spring ar

From -4807062267872206533
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c6d158f05f01b2d8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-01 15:49:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 10 (survey results)
Message-ID: <16238@mgweed.UUCP>
Date: Mon, 1-Apr-85 18:49:39 EST
Article-I.D.: mgweed.16238
Posted: Mon Apr 1 18:49:39 1985

Date-Received: Fri, 5-Apr-85 15:03:29 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

QST DE K9EUI
HR CRRL BULLETIN NR 10 FROM CRRL HEADQUARTERS
LONDON ONT MARCH 27, 1985
TO ALL RADIO AMATEURS BT

IN THE RECENT CRRL SURVEY, 3126 SHEETS WERE RETURNED. ON THE POSSIBLE EXPANSION OF THE CANADIAN 75 METRE PHONE BAND, 35.7 PERCENT SUPPORTED A BAND THAT BEGAN AT 3675 KHZ, 29.1 PERCENT FAVORED ONE THAT BEGAN AT 3700 KHZ, 19.1 PERCENT FAVORED NO CHANGE, AND 16.2 PERCENT WERE NOT SURE. ON POSSIBLE DEREGULATION OF MORE SUBBANDS 31.6 PERCEN SUPPORTED DEREGULATION, 48.1 PERCENT OPPOSED IT AND 36 PERCENT WERE NOT SURE. ON A POSSIBLE COMMUNICATORS CLASS LICENCE, 19.4 PERCENT SUPPORTED SUCH A LICENSE, 69.5 PERCENT OPPOSED IT AND 11.1 PERCENT WERE NOT SURE. MORE DETAILS WILL APPEAR IN THE CANADIAN NEWSFRONTS COLUMN IN APRIL QST AR

From -7966074800362368478
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,29565226b180d6c3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-01 15:50:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 13
Message-ID: <16239@mgweed.UUCP>
Date: Mon, 1-Apr-85 18:50:25 EST
Article-I.D.: mgweed.16239
Posted: Mon Apr 1 18:50:25 1985
Date-Received: Fri, 5-Apr-85 15:03:57 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 51

qst de k9eui
hr propagation forecast bulletin nr 13 from arrl headquarters
newington ct march 31, 1985
to all radio amateurs bt

the solar flux reached 80 on march 2 but fell back gradually in the past week, to 72 on march 31. it rose to 74 on the next day, and is expected to be in the middle to high 70s this week. probably because there were no large changes in solar activity,

there were no severe ionospheric disturbances during march. propagation was generally better than is usual for this season but 21 and 28 mhz showed the effects of the quiet sun to a marked degree. the dx spectrum was largely 1.8 to 14 mhz, except for recent days, when all continents were workable on 21 mhz, and there was one day of 28 mhz propagation to africa, as well as to south america.

activity in the sunspot group responsible for the late march flux rise dropped off markedly last week, but another active area is expected shortly. its principle effect may be increased geomagnetic activity, which will degrade east west propagation in the higher latitudes. te, or transequatorial circuits, especially to australia, new zealand, and the south pacific islands, will continue good on 14 mhz and lower frequencies.

the te scatter mode is producing good results fairly often on 28 mhz, and occasionally on 50 mhz. te activity has been noted only after 2100 utc on 50 mhz but the possibility of morning openings should not be ruled out.

traces of early spring sporadic e skip on 28 mhz point to the possibility of work by this mode soon on 50 mhz. it is not related to solar activity in any clear way and good seasons have been experienced in the lowest years of past solar cycles. it is most common in mid morning and early evening hours local time. skip distances can be anything up to about 1300 miles. signals may be very strong, but wide range fading and quick fade outs are common. when ionization is very intense there can be propagation on 144 mhz also, most commonly in june and july.

another seasonal mode for vhf and uhf dx is tropospheric ducting, now beginning to show up in the gulf states. transgulf dx up to 1000 miles or more was worked on 144 and 432 mhz march 24 and 29. 1296 and 2304 mhz have also been used with this mode.

american sunspot numbers for march 21 to 27 were between 21 and 0 with a mean of 13.1 ar

From 4667584498175817147
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3398c8eacd86037f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-01 18:55:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!LOGSAMS@USC-ISID
From: LOGSAMS@USC-ISID (Charles F. Ashley)
Newsgroups: net.ham-radio

Subject: New Ham Info
Message-ID: <9684@brl-tgr.ARPA>
Date: Mon, 1-Apr-85 21:55:11 EST
Article-I.D.: brl-tgr.9684
Posted: Mon Apr 1 21:55:11 1985
Date-Received: Sun, 7-Apr-85 10:45:00 EST
Sender: news@brl-tgr.ARPA
Lines: 7

I am a new novice at Ft. Lee Virginia and I desire to improve my
abilities. I would like to join a local club in the area. Can anyone
provide some Points of Contacts? 2nd. I desire to work up to satalite
communications. I have an Apple IIe which can serve as a RTTY
terminal and an inoperatable ELDICO. Any recommendations, after
getting a General CLASS LISCENSE, as to an efftive sat rig tied into
an Apple?

From -6004772684523686960
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,99417d01bf9eb57d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-02 08:37:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Users in the 45-60Mhz
Message-ID: <530@ihu1h.UUCP>
Date: Tue, 2-Apr-85 11:37:08 EST
Article-I.D.: ihu1h.530
Posted: Tue Apr 2 11:37:08 1985
Date-Received: Wed, 3-Apr-85 02:32:38 EST
References: <9588@brl-tgr.ARPA>
Organization: AT&T Bell Laboratories
Lines: 68

>
>   I would like to know if anyone on the net has information, or can
> steer me to information regarding users in the 45-60Mhz band. In particular,
> I'd like info. on the frequency of operation and power levels.
> Thanks in advance,
>   Allen Takahashi, N6KDM
>   TAKAHASHI@SRI-KL.ARPA
> -------

     For some reason, I am unable to   reply to you
     suc-
     cessfully   via electronic   mail,   so I'm posting
     this
     response.

There are thousands of users in the 45 - 60 MHz range, including an experimental contract station for SRI International to operate on 49.84 MHz, USA-wide.

Businesses and state and local governments have frequencies in this range.

You already know the 6 meter US ham band is 50 - 54 MHz. Channel 2 TV is in the 54 - 60 MHz range. Cordless phones (see attachment) operate in this range also.

There are US govt stations in the 46 - 60 MHz range also (e.g. US Navy at Scott AFB).

The FCC has released 10 new frequency pairs for cordless phones. The base / handset frequencies (MHz) are:

Ch	base	handset
1	46.61	49.67
2	46.63	49.845
3	46.67	49.86
4	46.71	49.77
5	46.73	49.875
6	46.77	49.83
7	46.83	49.89
8	46.87	49.93
9	46.93	49.99
10	46.97	49.97

This interim ruling will be in effect for 5 years. Future allocations will likely be made in other parts of the spectrum.

Cobra cordless phones use these and other frequencies:

Ch	Handset	Base
1A	or 1	49.83	1.69
7A	or 2	49.845	1.71
13A	or 3	49.86	1.73
19A	or 4	49.875	1.75
25A	or 5	49.89	1.77

Grove Enterprises (Brasstown NC) sells FCC records on
microfiche. That's your best source.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -6751680196928349551
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a374a44b02b7afc3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-02 09:24:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!biro%oracle.DEC@decwrl.ARPA
From: biro%oracle.DEC@decwrl.ARPA
Newsgroups: net.ham-radio
Subject: 150 MHZ SATELLITE INFO REQUEST
Message-ID: <9692@brl-tgr.ARPA>
Date: Tue, 2-Apr-85 12:24:02 EST
Article-I.D.: brl-tgr.9692
Posted: Tue Apr 2 12:24:02 1985
Date-Received: Mon, 8-Apr-85 00:11:26 EST
Sender: news@brl-tgr.ARPA
Lines: 38

Hi,

Can anyone help me in find out I am trying to find outh
what satellite I am hearing an info. on others.

1) what Satellites that I am hearing on 150 Mhz

2) information on Satellites on from 0 to 550 Mhz
that are used for data and or scientific studies
especially one with studies on radiation, solarwinds,
and magnetic fields studies and where to find the
decode information.

I've been hearing signals that sound like a satellite on 150.0 mhz.
There is +- 5Khz doppler shift and it is going in the right direction
(-5 khz as the bird disappears) so this should rule out a command
station. It has a high inclination as I have seen it as high as
20 degrees elevation to the north of my qth which is located at
71.40328 w long, 42.62233 n lat.I have calculated that its period is
about 116 min (assuming that there is only one satellite). The data
sound like random send RTTY data with a 850 hz shift. There are burst
of varying lengths of "characters" that all seem random and I have
heard it for over 15 min. before LOS. The transmission are NBFM and
the signal is linearly pol.

I remember discussion on the net some time ago about Russian satellites
on 150 mhz. Is this the same thing? If so has anyone figured how to

decode the beast. There are also Navigational satellites on this freq.
could it be one of them (I have not check yet to see if there is a
similar transmission at the same time on 400 Mhz.)

> 150.0000   call?_____Satellites, Russian - telemetry heard about 100 minutes
                              for approximately 10 minutes duration [space] (B
Tnx in advance...

John K1KSY
617-568-4465

From -885255694640939899
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c18ce37316efae,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12961d,c18ce37316efae,start
X-Google-Attributes: gid12961d,public
X-Google-ArrivalTime: 1985-04-02 19:22:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.religion
Subject: scanning the "Moonies" ?
Message-ID: <531@ihu1h.UUCP>
Date: Tue, 2-Apr-85 22:22:57 EST
Article-I.D.: ihu1h.531
Posted: Tue Apr 2 22:22:57 1985
Date-Received: Wed, 3-Apr-85 02:51:32 EST
Distribution: na
Organization: AT&T Bell Laboratories
Lines: 15
Xref: watmath net.ham-radio:2592 net.religion:6459

Are these licensees the "Moonies"? Perhaps someone familiar with
the Unification Church or the New York area could help.

Unification Church Inc
                        [Beacon, NY]_________ 463.3000____KZD613   (govt recds)
                "   [Irvington, NY]______ 464.3250____KKN865   (govt recds)
                "   [Irvington, NY]______ 464.3750____WQS552   (govt recds)
                "   [Irvington, NY]______ 468.3000_mo_WBK930   (govt recds)
                "   [New York, NY]_______ 463.3000____KZD612   (govt recds)
                "   [NY]_________________ 468.3000_mo_KW5242   (govt recds)
Unification Theological
                        [Barrytown, NY]______ 151.8650____KMF987   (govt recds)
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -3337370746783867290
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,94961b10269fe13a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-03 11:14:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Trow.pa@XEROX.ARPA
From: Trow.pa@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Fun with Weather Satelites ??
Message-ID: <9717@brl-tgr.ARPA>
Date: Wed, 3-Apr-85 14:14:44 EST
Article-I.D.: brl-tgr.9717
Posted: Wed Apr 3 14:14:44 1985
Date-Received: Mon, 8-Apr-85 00:12:52 EST
Sender: news@brl-tgr.ARPA
Lines: 11

According to the March QST there will be a conference in April that
should be of interest to weather satellite enthusiasts. It is called
the International Satellite Direct Broadcast Service Users' Conference
and will be held at the Holiday Inn at Baltimore-Washington
International Airport on April 15-19. For more information contact

     Robert Popham
     NOAA CoChairman
     ISDBSUC, NOAA/NESDIS
     Washington, DC 20233
     202/763-7820.

From 4082240108883852168
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58be1265fce7e689
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-03 13:21:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site shark.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!cornell!uw-beaver!
tektronix!orca!shark!davew
From: davew@shark.UUCP (Dave Williams)
Newsgroups: net.ham-radio
Subject: Re: Rajneesh cult freqs in Antelope, Oregon
Message-ID: <1316@shark.UUCP>
Date: Wed, 3-Apr-85 16:21:07 EST
Article-I.D.: shark.1316
Posted: Wed Apr 3 16:21:07 1985
Date-Received: Fri, 5-Apr-85 03:40:26 EST
References: <527@ihu1h.UUCP>
Reply-To: davew@shark.UUCP (Dave Williams)
Distribution: net
Organization: Tektronix, Inc., Engineering Computing Systems

Lines: 20
Keywords: Abrasive, obnoxious, Rolls-Royces, bondage, Sheela
Summary: Another slow newsday in Orygun.

*** REPLACE THIS LINE WITH A RAJNEESHEE ***
Thanks to Bob Parnass we fortunate folks up here in Oregon
can not only catch up on the latest happenings at Rajneeshpuram
on broadcast radio and TV (after all, things have been a little
slow since Mount Saint Helens quieted down), but now we can tune
in our scanners and hear Sheela, or some other spokesperson
for the Baghwan, call
a public official a four letter word first-hand. Truly, this is
what the Information Age is all about. Thanks again Bob. ;-)

--

Dave Williams
Tektronix, Inc.
Engineering Computing Systems

"6000"
"The workstations that made
Wilsonville famous."

From 8218594187952849444
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13544e,624814a44082ebae,start
X-Google-Attributes: gid13544e,public
X-Google-Thread: 151e61,624814a44082ebae,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-03 14:18:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site loonam.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!stolaf!umn-cs!circadia!loonam!
joe
From: joe@loonam.UUCP (Joseph R. Mann)
Newsgroups: net.unix,net.ham-radio
Subject: Geostationary satelite reception of Netnews
Message-ID: <114@loonam.UUCP>
Date: Wed, 3-Apr-85 17:18:25 EST
Article-I.D.: loonam.114
Posted: Wed Apr 3 17:18:25 1985
Date-Received: Sat, 6-Apr-85 02:44:18 EST
Distribution: net
Organization: Loonam computer products, Mpls., Mn.
Lines: 22
Xref: watmath net.unix:4127 net.ham-radio:2596

Greetings video buffs, I have recently installed a home satelite
receiver, and am over the initial shock of the awesome amount of

signals that can be received.

Using a Kenwood R-1000 I am able to recieve many data channels, phone conversations and fax signals, but the signal that interests me the most is netnews.

I understand that netnews is on the VBI (vertical blanking interval) of WTBS on Galaxy 1, channel 18. The book "Tune The Hidden Signals on Satelite TV" (available from Universal Electronics, 4555 Groves Rd. Suite 3, Columbus, OH 43232 614-866-4605) touches on teletext, and VBI information.

If anyone has experience in receiving ascii data over a satelite antenna or any articles about non-video signals available on any satelites, please let me know.

Thanks in advance, Joe.

ihnp4!umn-cs!{digi-g,circadia}!loonam!joe

From -7109738345283060808
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef9926d66cea1dac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-04 09:45:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
David.Anderson@CMU-CS-K.ARPA
From: David.Anderson@CMU-CS-K.ARPA
Newsgroups: net.ham-radio
Subject: alternatives to modems (query)
Message-ID: <9730@brl-tgr.ARPA>
Date: Thu, 4-Apr-85 12:45:54 EST
Article-I.D.: brl-tgr.9730
Posted: Thu Apr 4 12:45:54 1985
Date-Received: Sun, 7-Apr-85 10:51:22 EST
Sender: news@brl-tgr.ARPA
Lines: 9

I'm looking for information on higher bandwidth alternatives to modems for communications from our department to off-campus users. The technologies that I'm considering include using an otherwise unused cable channel, packet radio, and anything else you can suggest. I'm looking for pointers to existing systems in other cities, technical articles describing these technologies, and vendors of off-the-shelf equipment. Please respond by mail, and I'll post a summary later.
--
David.Anderson@cmu-cs-k.ARPA ..!seismo!cmu-cs-k!dba (412) 422-1255

From 8431806794460553526

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3e148952ab6bb783,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-04 16:33:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ucla-cs.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!ittvax!dcdwest!
sdcsvax!sdcrdcf!trwrb!cepu!ucla-cs!wales
From: wales@ucla-cs.UUCP
Newsgroups: net.ham-radio
Subject: Results of call-sign license plate query
Message-ID: <4664@ucla-cs.ARPA>
Date: Thu, 4-Apr-85 19:33:55 EST
Article-I.D.: ucla-cs.4664
Posted: Thu Apr 4 19:33:55 1985
Date-Received: Sun, 7-Apr-85 03:27:45 EST
Reply-To: wales@ucla-cs.UUCP (Rich Wales/WA6SGA)
Organization: UCLA Computer Science Department
Lines: 26

I got five replies to my question about whether having call-sign license
plates on your car makes you a more conspicuous target for thieves.
Thanks to everyone who replied.

The unanimous consensus of those who replied to me (admittedly, only
five people) was that call-sign plates do NOT seem to increase your
likelihood of being victimized.

One person suggested that call-sign plates might actually help protect
you -- because most thieves are out for CB radios and the like, rather
than the far less widely marketable ham gear, and anyone who recognized
ham plates for what they were would not want to waste his time stealing
stuff he wouldn't be able to unload. (This theory is admittedly contro-
versial, and assumes a certain level of intelligence that may or may not
exist among auto thieves in general.)

In any case, as I mentioned in my previous article, I have a good alarm
system on my car, and the equipment is covered by the ARRL insurance.

So, I guess I'll go ahead and order plates with my call on them. If
there is anyone out there who feels this is a cavalierly stupid thing to
do -- but who hasn't said anything yet -- my mailbox is always open.
--
Rich Wales // UCLA Computer Science Department // +1 213-825-5683
     3531 Boelter Hall // Los Angeles, California 90024 // USA
     wales@UCLA-LOCUS.ARPA   {ihnp4,ucbvax}!ucla-cs!wales

From -5221212950812724103
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,736f965ce20dba12,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-04 16:36:32 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: April '85 RCMA Chicago Chapter Newsletter
Message-ID: <533@ihu1h.UUCP>
Date: Thu, 4-Apr-85 19:36:32 EST
Article-I.D.: ihu1h.533
Posted: Thu Apr 4 19:36:32 1985
Date-Received: Fri, 5-Apr-85 04:51:38 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 90

Here are some excerpts from the local RCMA April newsletter, written by Ed Sirovy (IL-4):

Radio Communications Monitoring Association
Chicago Chapter Newsletter

Regency

"Plenty of Regency HX2000 and MX4000 radios were in attendance at our last meeting. Opinion was quite favorable."

"Now the MX7000 is out and I borrowed one and a laboratory to go with it. First the good news, 1/2 uv at 899 MHz before the Cushman quit. IT WORKS! Coverage 25 - 550 MHz and .8 to 1.3 GHz!"

"Now the bad news. It IS an extended MX5000. Scan rate is very slow and slower. Images are as expected: 200 - 550, double the xmit frequency and subtract 750
MHz IF and there is your image. 800+, double the xmit frequency and subtract about 750 MHz IF and there is your image!"

"Caught DuPage Sheriff and Toll Road at 954 with cellular telco nearby. I sent this info on the MX5000 images (200 - 550) to our technical editor last time and he sez he would defer publishing it till he got further info! That's as useful as Radio Moscow."

"This radio is hot. I heard the WCFL studio-transmitter link near 947 MHz. I was about 1 mile south of the transmit path about the same distance from downtown. Signal fluttered on the back of the set whip but the

receive sight uses a humongous dish."

"Cellular telco came in fine with BOTH sides of the conversation heard. Privacy of Cellular radio-telco is a MYTH. All the news people who ran out and got cellular carphones so as not to let the opposition eavesdrop got took."

FCC Microfiche

"The long expected format change is here. The FCC merged its broadcast, old format, marine coast, aircraft ground, Chicago regional study (of 5 years ago), microwave, 470 - 512, among others databases into one new file. Left out (thank goodness) was the ham, boat, and aircraft mobile files (900,000 extra entries). Also left out was the AM-BC direction antenna file."

"Microwave is especially large as receive sights are covered. Receive and transmit info includes azimuth, elevation and beamwidth. Also, all services, make and model of transmitter and antenna. Those who buy a copy later this year when it becomes available will find it more than double in size and price." [latest word from NTIS is that FCC announce another delay, so the fiche won't be available before May 1985! - Bob].

What About Bearcat

"....Uniden which bought out Bearcat from Electra is presently working off its contractual obligations. Electra had ordered parts for X many units and Uniden agreed to buy the manufactured gear. When this is gone, Uniden will be free to bring out what ever equipment it wants and it will take over manufacturing."

"While Bearcat was frozen, Regency took advantage of this weakness to buy everything it could find in Japan (1000, 2000, 4000, 5000, 7000)."

Odds 'n Ends

"Arizona may ban use of a 2-way radio while a vehicle is in motion.

US-Canada-DOD closing Pine Tree RADAR net.... FCC has proposed weakening cable-TV radiation standards, hope

APCO and NABER can stop this before there's another "Hillside"...."

--

==========

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -3078288983495917344
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef9926d66cea1dac
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-05 09:40:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ptb@Mitre-Bedford
From: ptb@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: alternatives to modems (query)
Message-ID: <9740@brl-tgr.ARPA>
Date: Fri, 5-Apr-85 12:40:43 EST
Article-I.D.: brl-tgr.9740
Posted: Fri Apr 5 12:40:43 1985
Date-Received: Mon, 8-Apr-85 00:17:53 EST
Sender: news@brl-tgr.ARPA
Lines: 6

Try reading up in the "Auerbach" book on selsction info. There are a whole bunch of vendors out there, in every different kind of Local Area Network. A few that come to mind are Ungermann-Bass, Xerox, ACC, etc. ad nauseam.

Peter, WA1SNH

From 1687932453409602490
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13544e,624814a44082ebae
X-Google-Attributes: gid13544e,public
X-Google-Thread: 151e61,624814a44082ebae
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-05 20:24:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.unix,net.ham-radio
Subject: Re: Geostationary satelite reception of Netnews
Message-ID: <624@vortex.UUCP>
Date: Fri, 5-Apr-85 23:24:16 EST
Article-I.D.: vortex.624
Posted: Fri Apr 5 23:24:16 1985
Date-Received: Sun, 7-Apr-85 03:50:44 EST
References: <114@loonam.UUCP>

Organization: Vortex Technology, Los Angeles
Lines: 19
Xref: watmath net.unix:4135 net.ham-radio:2598

The "netnews" that is on the WTBS satellite vertical interval
is controlled by, uh, me. It's part of the Stargate experiment
that I developed to test the various issues surrounding transmission
of netnews-type materials in a broadcast-type mode. Note that at
this time I do not have current netnews data running, though some
selected current materials may appear in the fairly near future.
Right now about a 100 or so demo messages from some months ago
circulate endlessly.

The encoding system used for the data is considered proprietary
by the satellite carrier (I don't even know the details) and in
any case will be changed in the fairly near future to an encrypted
system as part of an upgrade to newer decoding equipment (which
also has built in ECC functionality). As a practical matter, even
without encryption, extracting the data in a meaningful way is
a lot of work without access to the appropriate (proprietary)
LSI chips. Not impossible, but probably not worth the effort.

--Lauren--

From -3605649391811014147
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,56ff6e88c41687a3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-06 09:03:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: PopCom's Alice Brannigan is balding
Message-ID: <534@ihu1h.UUCP>
Date: Sat, 6-Apr-85 12:03:04 EST
Article-I.D.: ihu1h.534
Posted: Sat Apr 6 12:03:04 1985
Date-Received: Sun, 7-Apr-85 04:10:54 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 12

x
         PopCom's Alice Brannigan == Tom Kneitel?

     A friend, who is also a Contributing Editor for a regu-
     lar monthly column appearing in "Popular Communica-
     tions", insists that Alice Brannigan is a pen name for
     Tom Kneitel.

This is hardly surprising, just disappointing.
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -4105807142725620102
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,56ff6e88c41687a3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-06 15:32:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: PopCom's Alice Brannigan is balding
Message-ID: <626@vortex.UUCP>
Date: Sat, 6-Apr-85 18:32:51 EST
Article-I.D.: vortex.626
Posted: Sat Apr 6 18:32:51 1985
Date-Received: Wed, 10-Apr-85 06:11:34 EST
References: <534@ihu1h.UUCP>
Organization: Vortex Technology, Los Angeles
Lines: 12

Is Tom Kneitel still around? I used to read his columns in
Electronics Illustrated YEARS ago.

I still remember one of the letters he answered:

"I have this strange problem. I hear telephone calls in my head.
I hear the ringing, the answering, the conversation, and the parties
hanging up. This is very annoying. What can I do?"

--- "Get an unlisted head."

--Lauren--

From -5461037068428930542
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d5641f0cafdd29a4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-08 14:41:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles - hp 1.2 08/01/83; site hp-pcd.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!hp-pcd!dirk
From: dirk@hp-pcd.UUCP (dirk)
Newsgroups: net.ham-radio
Subject: AMTOR information needed!
Message-ID: <5200003@hpcvmb.UUCP>
Date: Mon, 8-Apr-85 17:41:00 EST

Article-I.D.: hpcvmb.5200003
Posted: Mon Apr 8 17:41:00 1985
Date-Received: Sat, 13-Apr-85 14:54:13 EST
Organization: Hewlett-Packard - Corvallis, OR
Lines: 9
Nf-ID: #N:hpcvmb:5200003:000:340
Nf-From: hpcvmb!dirk   Apr 8 14:41:00 1985

I am trying to find out some information about AMTOR. I need to know the
detailed specifications so I can write my own program for the decoding.
I am having a hard time finding anybody who has that information. If
somebody out there knows where I can get the information it would be
appreciated.

Dirk Bodily kd7ub
hp-pcd!dirk

From -6188843536387843209
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 12961d,c18ce37316efae
X-Google-Attributes: gid12961d,public
X-Google-Thread: 151e61,c18ce37316efae
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-08 14:55:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site teklds.UUCP
Path: utzoo!decvax!tektronix!teklds!larryg
From: larryg@teklds.UUCP (Larry Gardner)
Newsgroups: net.ham-radio,net.religion
Subject: Re: scanning the "Moonies" ?
Message-ID: <540@teklds.UUCP>
Date: Mon, 8-Apr-85 17:55:17 EST
Article-I.D.: teklds.540
Posted: Mon Apr 8 17:55:17 1985
Date-Received: Tue, 9-Apr-85 09:04:05 EST
References: <531@ihu1h.UUCP>
Reply-To: larryg@teklds.UUCP (Karen Clark)
Distribution: na
Organization: Tektronix, Beaverton OR
Lines: 5
Xref: tektronix net.ham-radio:02600 net.religion:06961
Summary:

yes, the unification church is the moonies.

karen

From -3076049449356693446
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,96a6d33a70334725,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-09 06:25:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!hoffmann%marie@mit-mc.arpa
From: hoffmann%marie@mit-mc.arpa (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Amateur exam session
Message-ID: <9819@brl-tgr.ARPA>
Date: Tue, 9-Apr-85 09:25:07 EST
Article-I.D.: brl-tgr.9819
Posted: Tue Apr 9 09:25:07 1985
Date-Received: Fri, 12-Apr-85 04:39:53 EST
Sender: news@brl-tgr.ARPA
Lines: 11

The MIT Radio Society and UHF Repeater Associations will conduct
a volunteer exam session for all classes of Amateur license. The
session will take place on Thursday, Aprli 18 at 7:00 pm.
Address: 77 Massachusetts Avenue, Cambridge. Bring with you to
the exam: a completed FCC form 610 (provided by you), and $4.00
for the exam fee. Also required will be two forms of
identification. Please contact Craig Rogers, WA4C at either (617)
225-6616 or (617) 494-8637 no later than Tuesday, April 16 if you
are planning to attend. A limited number of walk-in candidates
will be accepted, depending on space available. This is a W5YI
VEC exam session.

From -1740212374901419343
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,50f73322a51c0788,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-26 22:24:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site frog.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
cybvax0!frog!die
From: die@frog.UUCP (Dave Emery)
Newsgroups: net.ham-radio
Subject: More on Moore code
Message-ID: <157@frog.UUCP>
Date: Wed, 27-Feb-85 01:24:36 EST
Article-I.D.: frog.157
Posted: Wed Feb 27 01:24:36 1985
Date-Received: Sat, 2-Mar-85 03:52:10 EST
Reply-To: decvax!frog!die
Organization: Charles River Data Systems, Framingham MA
Lines: 176

     In answer to a question about Moore code transmissions on hf

radio, I understand that there are still a few of these ARQ circuits in use, particularly by eastern block countries to and from Cuba.

Most are diplex (which is to say they transmit two channels of traffic bit wise interleaved in a crude form of time division multiplexing) and all are full duplex point to point circuits.

Moore code transmissions are isochronous self synchronizing bit streams consisting of bit interleaved (alternate bits from channel A and channel B) 7 element characters. Each character has exactly 3 mark bits and four space bits, making it possible to detect mutilated characters with any single bit error and many multiple bit errors. In order to make it possible for a receiver to distinguish channel A from B some of the characters are sent inverted (one's complement) with a different sequence of inversions used on channel A than on channel B. This pattern of inversions repeats every 8 characters, the channel A sequence is (IINI), while the channel B sequence is (INNN), the resultant sequence is abaBABaB (capital=noninverted=N).

Moore code characters consist of all 35 possible combinations of 3 ones and 4 zeros, 32 of those combinations map into the 32 possible characters of Baudot (Murray) code (most conventionally the CCITT alphabet #2 assignments), and the other 3 are used for error control and idle state indication.

In the past (1971) I copied Moore circuits running at 96 baud, or slightly faster than the 94.34 baud rate that it would take to encode two 50 baud 7.42 element code Baudot circuits. There were a few circuits running at 192 baud with 4 channels in use then, I do not know whether there are any still around. I suspect that many Moore circuits in use now still use these rates, but I haven't checked. 50 baud telegraph/telex circuits are a world standard. (A synchronous Moore circuit would have to run slightly faster than an incoming Baudot circuit to compensate for time wasted on retransmissions and allow for slight speed errors in the sending Baudot equipment, thus my memory of 96 baud seems right.)

All standard Moore circuits use ARQ protocol, which is to say that if the receiver gets a character in error it asks the transmitter to resend the character in error by sending a special character (the RQ or Signal I). The transmitter then resends the character, if I remember correctly along with a special idle character to mark the retransmission. This cycle repeats until the character is received with correct parity by the receiver. Since something must be sent when there is no traffic an idle signal is transmitted if no character is available from the incoming line. A different idle is transmitted if the other end of the circuit has lost sync. (Idlea alpha and beta). My memory of all of this is a bit hazy, but I think most Moore circuits are go back 2 ARQ, which is to say that they retransmit the character sent two characters before the one being sent when they see an RQ.

HF transmissions carrying Moore traffic are mostly single channel FSK 400/425 hz shift, although fdm multiplex Moore transmissions with channels

240 hz apart were used in the past (among other things to carry a backup circuit for the Moscow-Washington hotline). They can be received with a general coverage receiver and any ordinary FSK converter such as AEA CP-1.

Recovering traffic from a Moore signal requires some additional hardware or software or a combination of both beyond what is needed to recover normal Baudot or ASCII. The required functionality is some means of phase locking to the incoming bit stream, and recovering timing and sampling each bit at the center of a bit cell (baud).

This can be done on a microcomputer system by a real time clock driven interrupt routine (software phase lcoked loop) that samples the incoming digital signal every tick of say a one millisecond real time clock and from those samples computes which sample is closest to the center of a baud, and exactly how many ticks and fraction of ticks a baud is and so forth. Such a routine is not difficult for an experianced real time programmer to write, and many micro systems have suitable real time clocks. Probably such a routine would have to be in assembly language because of the relatively tight timing on a slow microcomputer. A number of AMTOR programs (which handle a very similar signal) use this technique, and if one should have source of one one probably could easily modify it to lock onto Moore transmissions. I understand that software phase lock loops have also been used for packet radio AX-25 HDLC recovery so such code may be in the public domain somewhere.

The other method of recovering timing is to use one of the bit-synchronous USART chips which have integral digital phase lock loops to lock onto the signal. My favorite (we use it at CRDS) is the Zilog 8530 SCC. This chip can be programmed to recover 7 bit characters and to lock onto the bit stream given an approximate baud rate. With clever programming it ought to be possible to start the SCC chip at the beginning of a character (by trial and error) so that it delivers a stream of 7 bit characters directly (or halves of 14 bit diplexed characters).

Recovery of the information once one has a stream of bits (or characters) requires software that acquires lock onto the 4 marks/ 3 spaces framing of a character, detects the channel A and B inversion sequence (in case of diplex - the most common case) and translates the characters from Baudot code to ASCII and prints or displays them. This software is not very hard to write, and could probably be done in some higher level language for a micro, as there are only about 13.5 characters a second to translate.

This should deliver a readable copy of whatever was being sent (presuming it's not encrypted). It should be a slightly corrupt copy because of occasional go-back-2 retransmissions. I suppose that it is possible to eliminate some of those retransmitted characters by statistical filters based on the probabilities of pairs of identical characters being part of the text or retransmissions, but for casual curiosity that seems overkill. (Or one could monitor both sides of the circuit if one had the equipment and were suitably located).

It is possible to build hardware to do all of this - I

did so in 1971 using TTL SSI and MSI - but in this day and age one would have to be more than slightly crazy to try. It is also possible to use a microcomputer on a chip such as the Intel 8096 to do all of the work (it has nice counter timers and even a DPLL) and build a few chip micro system that takes the TTL or RS-232 output of a FSK converter and translates it and puts it out as ASCII on a RS-232 port. In general my advice would be to use an existing microcomputer system with minimum hardware (a real time clock if one isn't already provided, and a readable bit connected to the FSK converter) and do it all in software.

I would be interested in hearing what turns up on Moore, someday I am going to dig into the tty driver of the Charles River UNIVERSE system on which I am typing this and make it receive Moore transmissions (and blow the dust off my HF receivers in the process) but I haven't gotten around to doing it yet ...

Appendix

The following is a Moore to Baudot table taken from
"Reference Date for Radio Engineers" Howard W Sams 1975 p 35-40

Unshift	Shift	Moore	Baudot
Null	Null	70	0
E	3	0E	1
Line Fd	Line Fd	0D	2
A	-	2C	3
Space	Space	0B	4
S	'	2A	5
I	8	07	6
U	7	26	7
CR	CR	61	8
D	WRU	1C	9
R	4	13	A
J	Bell	62	B
N	,	15	C
F	!	64	D
C	:	19	E
K	(	68	F
T	5	51	10
Z	+	46	11
L	)	23	12
W	2	52	13
H	#	25	14
Y	6	54	15
P	0	29	16
Q	1	58	17
O	9	31	18
B	?	4C	19
G	&	43	1A
Figs	Figs	32	1B
M	.	45	1C

```
X    /    34   1D
V    =    49   1E
Ltrs Ltrs 38   1F

     Control Characters

Signal I (RQ) 16
Idle  alpha   4A
Idle  beta    1A

Transmission order is LSB first.
```

--
          David I. Emery   Charles River Data Systems
983 Concord St., Framingham, MA 01701 (617) 626-1102 uucp: decvax!frog!die

From -1011193807591525268
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,96afd030b472c31
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-27 07:15:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!whuxl!whuxlm!akgua!
sdcsvax!sdcrdcf!hplabs!hao!seismo!brl-tgr!tgr!decvax!decwrl!sun!wmb@Ucb-Vax
From: wmb%Ucb-Vax@sun.UUCP
Newsgroups: net.ham-radio
Subject: MOV transient protectors
Message-ID: <8713@brl-tgr.ARPA>
Date: Wed, 27-Feb-85 10:15:02 EST
Article-I.D.: brl-tgr.8713
Posted: Wed Feb 27 10:15:02 1985
Date-Received: Sun, 10-Mar-85 06:52:20 EST
Sender: news@brl-tgr.ARPA
Lines: 31

> What is the proper configuration for hooking up an MOV to a power
> line? (i.e. in series or in parallel?).

Parallel.

> If it hooks up in parallel to the power line, why wouldn't one MOV
> work for your entire house? It seems that it would, because all the
> lines in the house are connected to together in parallel.

That would work if you expect all the transients to be developed on the
wiring outside of your house. This may be a reasonable expectation in
some instances. However, if you are interested in protecting againt
lightning strikes nearby, there could be significant spikes induced
in the wiring inside the house.

The other problem with using one MOV for the whole house is protecting

the MOV's. MOV's are sort of like big zener diodes, in that
above a certain voltage, they start conducting heavily, but below that
voltage they don't conduct very much. Notice I said "sort of", because
they don't work on the same principle as zener diodes, nor are their
breakdown characteristics as sharp or as well-defined as for zeners.
Anyway, the problem is this: when the voltage across the MOV reaches
the breakdown voltage and it starts conducting, something has to limit
the current flow or the MOV will be itself destroyed. Typically, the
current is limited by the resistance and inductance in the wiring.
Since the wiring coming into a house is typically much heavier than the
internal wiring, it is not as effective at limiting the current into
the MOV as the smaller gauge internal wiring. This means you need a
bigger MOV.

Mitch Bradley

From -8791820388011844343
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6d746cd01152759,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-27 09:47:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site iddic.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxj!mhuxr!ulysses!allegra!bellcore!
decvax!tektronix!orca!iddic!brucec
From: brucec@iddic.UUCP (Bruce W. Cheney)
Newsgroups: net.ham-radio
Subject: FT757 and RS232
Message-ID: <1940@iddic.UUCP>
Date: Wed, 27-Feb-85 12:47:08 EST
Article-I.D.: iddic.1940
Posted: Wed Feb 27 12:47:08 1985
Date-Received: Mon, 4-Mar-85 04:45:05 EST
Organization: Tektronix, Beaverton OR
Lines: 14

The FT757 has an optional RS232 interface that I'm interested
in. Therefore the following questions:

1) Does anybody in netland have it ?

2) If so, could you describe its capabilities and how you
   are using it.

3) If you don't have it, but have more info on it, please let
   me know.

regards
NI7M   tektronix!iddic!brucec

From 2064364181367844414
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cbf1131399681c18,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-27 14:46:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!bedford!mintaka!Gor#f@mit-eddie.ARPA
From: Gor#f@mit-eddie.ARPA
Newsgroups: net.ham-radio
Subject: Sugart 901 pinout
Message-ID: <8742@brl-tgr.ARPA>
Date: Wed, 27-Feb-85 17:46:30 EST
Article-I.D.: brl-tgr.8742
Posted: Wed Feb 27 17:46:30 1985
Date-Received: Sat, 2-Mar-85 03:18:14 EST
Sender: news@brl-tgr.ARPA
Lines: 14

I have a friend who has acquired a Sugart 910 without manual. This drive
does not have the usual 50 pin, 0.100" centers paddle. Instead it has a 44 pin,
0.156" centers connector (like those used on KIM-1s, the expansion port of
VIC-20s, and commonly available at Radio Shack. There is a spot for the usual
9 pin power connector, but none is mounted, and the power etch does go to the
edge connector, so I assume it is intended to get it's DC there too. Can anyone
help us with the pinout? I don't relish the prospect of producing a schematic
from staring at the etch. (Might be fun though, this thing is a real relic,
there is only one analog IC on the board, the rest of the analog is done with
descrete transistors, in metal cans no less.)

         tnx 73s -Bill, KE1G

(for direct replies, use lll-crg!bedford!jinx#Gor#f, or f@lll-crg may also work.)

From -9099761404478503619
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,52aa3a4d4d7e6bb1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-27 16:04:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ucla-cs.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!trwrb!trwrba!cepu!ucla-cs!
wales
From: wales@ucla-cs.UUCP
Newsgroups: net.ham-radio
Subject: Call-sign plates and theft?
Message-ID: <4102@ucla-cs.ARPA>
Date: Wed, 27-Feb-85 19:04:54 EST
Article-I.D.: ucla-cs.4102
Posted: Wed Feb 27 19:04:54 1985
Date-Received: Sun, 3-Mar-85 05:08:37 EST

Reply-To: wales@ucla-cs.UUCP (Rich Wales)
Organization: UCLA Computer Science Department
Lines: 34

I am considering getting "call sign" license plates for my car, but I
am concerned that doing so might more overtly advertise the fact that I
am carrying expensive "goodies" in my vehicle -- thus making me a more
likely target for theft.

Is this a valid concern?

Since the rig (a Kenwood TR-7950) is mounted in plain view under the
dash, and since I keep the roof-mounted vertical antenna in place all
the time, I suppose someone so inclined could already determine that I
had ham gear in the car -- even without distinctive license plates.

Admittedly, however, having plates screaming "WA6SGA" for all the world
to see could attract unwanted attention from someone who might otherwise
overlook my rig.

In any case, I have a good car alarm (with stickers on the windows call-
ing attention thereto), and I also have the ARRL equipment insurance
policy (so inexpensive there's practically no excuse not to have it!).

So far, I've been lucky.
--

-=-=-=

Date: Thu, 28-Feb-85 03:47:24 EST
Article-I.D.: brl-tgr.8762
Posted: Thu Feb 28 03:47:24 1985
Date-Received: Sat, 2-Mar-85 04:18:53 EST
Sender: news@brl-tgr.ARPA
Lines: 11

>Does anyone know of a source of reasonably priced magazine storage
>boxes? (I think ~$1.00 or less per box is reasonable.)

Quill Corporation, 100 S. Schelter Rd., P.O. Box 4700, Lincolnshire,
IL 60197-4700, (312) 634-4800, has these files starting at $10.68 per
dozen for the 11-3/4 x 4 x 9" size in fiberboard. The price per dozen
goes down in larger quantities. They have other sizes at a higher
price ($14.99/doz.) and more deluxe files at still higher prices.

Leah A Zeldes
...ihnp4!wlcrjs!lazeldes

From 6546180966037988816
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f5060874b241ed3f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-28 07:58:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!ariel!hou5f!hou5g!hou5h!jak
From: jak@hou5h.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: drake 4 line still needs a new home
Message-ID: <399@hou5h.UUCP>
Date: Thu, 28-Feb-85 10:58:36 EST
Article-I.D.: hou5h.399
Posted: Thu Feb 28 10:58:36 1985
Date-Received: Fri, 1-Mar-85 20:36:28 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 9

FOR SALE!
Drake T4XB, R4B, speaker and power supply.
Excellent condition. $375 or best offer.

73, Jim KY2D
ATTIS Freehold, NJ
...!houxn!jak or hou5h!jak
(201) 577-5374 (w)
(201) 530-0548 (h)

From -490305309471272261
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2931249188c6c005

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-28 10:01:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxj!mhuxr!ulysses!allegra!bellcore!
decvax!genrad!mit-eddie!godot!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: SWL receiver in $100 range purchase
Message-ID: <8779@brl-tgr.ARPA>
Date: Thu, 28-Feb-85 13:01:11 EST
Article-I.D.: brl-tgr.8779
Posted: Thu Feb 28 13:01:11 1985
Date-Received: Mon, 4-Mar-85 04:40:09 EST
Sender: news@brl-tgr.ARPA
Lines: 9

You might look for an old boat-anchor like a Hammarlund SP600 series
receiver or an R390. Or even an old HQ-129-X, HQ-140, HQ-110, HQ-170,
or similar tube-type receceiver. Many of these are available at flea
markets for under $100, and they ar FAR better (if working correctly)
than anything new you could get for $100. Also, they will probably
retain their $100 resale value indefinitely, should you decide to
unload them.

-John S., W3IKG

From 5298749524781921947
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,abc2d41424880d76,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-01 05:35:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!zehntel!dual!decwrl!dec-rhea!
dec-eden!p_macdonald
From: p_macdonald@eden.DEC
Newsgroups: net.ham-radio
Subject: ICOM Lithium Battery
Message-ID: <813@decwrl.UUCP>
Date: Fri, 1-Mar-85 08:35:08 EST
Article-I.D.: decwrl.813
Posted: Fri Mar 1 08:35:08 1985
Date-Received: Sun, 3-Mar-85 03:02:05 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 6

There is a way for the end-user to change the Lithium Battery by applying
5 v to a point on the battery board. I have the procedure at home and
will add here at the earliest possible time. Recommended that you perform
the battery change every 5 years.

Paul - WA1OMM

From 1691343259785596277
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dcb21c906a2645ac
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-01 06:59:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!ptb@Mitre-Bedford
From: ptb@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: dead backup battery in ICOM => reprogram the RAM
Message-ID: <8807@brl-tgr.ARPA>
Date: Fri, 1-Mar-85 09:59:53 EST
Article-I.D.: brl-tgr.8807
Posted: Fri Mar 1 09:59:53 1985
Date-Received: Mon, 4-Mar-85 06:09:49 EST
Sender: news@brl-tgr.ARPA
Lines: 11

Does anyone know if they use that same microcode setup for the ICOM 02AT
handy-talkie too? In other words, if you get one, are you going to
have to send it back in 7 years to reprogram it too? This does have a
lithium battery to do the memory, but I am not sure about any
"personality" setups on the rig.

Thanks in advance,

Peter Baldwin, WA1SNH
ptb@mitre-bedford
(617) 271-2886

From 1836945782870193051
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a0b8a829eea81366,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-01 08:51:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site lcuxc.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!pyuxww!lcuxc!wjm
From: wjm@lcuxc.UUCP (B. Mitchell)
Newsgroups: net.ham-radio
Subject: Re:MOV's
Message-ID: <312@lcuxc.UUCP>
Date: Fri, 1-Mar-85 11:51:51 EST
Article-I.D.: lcuxc.312
Posted: Fri Mar 1 11:51:51 1985
Date-Received: Sat, 2-Mar-85 04:57:54 EST

Organization: Bell Communications Research, Inc.
Lines: 8

GE also makes a surge protector suitable for connecting to a 120/240 v single phase residential service entrance. It is self-contained with a conduit nipple, and is attached to a knockout hole in the service entrance panel by the main switch (I don't remember the catalog number but any electrical supply house should be able to get it (or an equivalent made by a competitor) for you).
Regards,
Bill Mitchell WB2IAU ({ihnp4!}lcuxc!wjm)

From 3078883950065990494
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b63ab088119f0640
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-01 09:09:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: update: listening to SCA (subcarrier) transmissions
Message-ID: <8826@brl-tgr.ARPA>
Date: Fri, 1-Mar-85 12:09:56 EST
Article-I.D.: brl-tgr.8826
Posted: Fri Mar 1 12:09:56 1985
Date-Received: Mon, 4-Mar-85 06:20:34 EST
Sender: news@brl-tgr.ARPA
Lines: 4

Ring? Not Sleeve? On an AM/FM radio? With stereo headphones? That would give out-of-phase audio in the two earpieces!

de W3IKG

From -7107021234896851759
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3ed0d6f4d7a878bc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-01 14:44:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!bedford!mintaka!Gor#f@mit-eddie.ARPA
From: Gor#f@mit-eddie.ARPA
Newsgroups: net.ham-radio
Subject: Network Management Meeting
Message-ID: <8846@brl-tgr.ARPA>
Date: Fri, 1-Mar-85 17:44:51 EST

Article-I.D.: brl-tgr.8846
Posted: Fri Mar 1 17:44:51 1985
Date-Received: Mon, 4-Mar-85 06:39:41 EST
Sender: news@brl-tgr.ARPA
Lines: 7

Looks like I will be at the Fourth ARRL Networking Conference. Does anybody know whether the Front Page Bar has Guinnes Stout? I'll take the stay up late challenge, but only if the west coast packeteers will match the potency of my brew.

73's -Bill, KE1G

From -748989878696558418
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,33f242d141d15dc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-01 18:43:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site watmath.UUCP
Path: utzoo!watmath!hardware
From: hardware@watmath.UUCP (MFCF Hardware Lab)
Newsgroups: net.ham-radio
Subject: electronic lock
Message-ID: <11748@watmath.UUCP>
Date: Fri, 1-Mar-85 21:43:30 EST
Article-I.D.: watmath.11748
Posted: Fri Mar 1 21:43:30 1985
Date-Received: Sat, 2-Mar-85 03:11:03 EST
Distribution: net
Organization: U of Waterloo, Ontario
Lines: 21

To all those who would like to be able to 'lock up' their equipment
there are two neat circuits, both of which can be built in the space of
a nine volt battery (less keyboard) using mostly spare parts (all mine
were found in the spare parts bucket.) in the spring 1985 edition of

C&E hobby handbooks, 101 electronic projects

one circuit uses time limited and gates then a s.c.r. to trigger a relay,
and the other uses 2n3906 transistors to trigger a few s.c.r.'s (one for each
digit in the combo).

they are worthwile projects, and if you want to stop others from turning on
your stero, kilowatt linear, home computer, or whatever, then these locks are
ideally suited to your needs.
I use mine to stop my room mate from using my computer! (he is a little upset
right now.)

regards,
Andrew Rahme.

From 7501625031138120646
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab470f5ff4bd7612
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-02 16:02:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!andy@aids-unix
From: andy@aids-unix (Andy Cromarty)
Newsgroups: net.ham-radio
Subject: Re: info on TH-21AT wanted
Message-ID: <8867@brl-tgr.ARPA>
Date: Sat, 2-Mar-85 19:02:06 EST
Article-I.D.: brl-tgr.8867
Posted: Sat Mar 2 19:02:06 1985
Date-Received: Tue, 5-Mar-85 02:07:24 EST
Sender: news@brl-tgr.ARPA
Lines: 20

The TH-21AT is a nice little rig. It really is as small (and hence
convenient) as they say -- shirt-pocket size. The power difference
between it and "normal" HT's is negligible -- less than the difference
between a rubber duck and a 5/8 whip, say -- and the price is right,
On the negative side, it's not compatible with anything else,
necessitating additional expenditures for battery packs, antennas, etc.
(the antenna socket is essentially RCA phono with screw threads).
Also, the Kenwood leatherette case is a little unimpressive and the
buttons are a little small, at least for my fingers. It does have a
full 16-tone pad (unlike, e.g., the IC-2AT, which has only 12) -- the
extra tones are used by new repeater hardware, so it really does matter.

My YL and I have had one for a couple months; we like it enough that
I've been thinking of getting another just because it's so handy.
(And Lord knows I don't need another HT lying around just for its
own sake -- I've got three or four already, which are now being "put
out to pasture" as dedicated packet transceivers or left in my briefcase
"just in case.")

73, Andy N6JLJ

From -3094658549237577843
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,22b7d5bbad43e495,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-03 08:27:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!IAIPS-DCAS@USC-ISI
From: IAIPS-DCAS@USC-ISI
Newsgroups: net.ham-radio
Subject: PACKET RADIO
Message-ID: <8881@brl-tgr.ARPA>
Date: Sun, 3-Mar-85 11:27:03 EST
Article-I.D.: brl-tgr.8881
Posted: Sun Mar 3 11:27:03 1985
Date-Received: Tue, 5-Mar-85 02:37:09 EST
Sender: news@brl-tgr.ARPA
Lines: 14

I'm an amateur radio operator but I've been inactive for some time. Lately, I've been thinking of getting back on the air and I thought it would be nice to get into packet radio.

I've noticed that there are many programs on Simtel20 related to Ham Radio but I was wondering, what kind of hardware do I need (besides a Transmitter-Receiver) in order to get started? Where can I get it? How much do I have to spend?

I know I'm asking an awful lot of questions but, if you could just steer me in the general direction of some answers I would be most grateful. Thanks very much.

Daniel Reigada, K4JWW

From -5812670983081545815
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,52aa3a4d4d7e6bb1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-03 08:55:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Call-sign plates and theft?
Message-ID: <494@ihu1h.UUCP>
Date: Sun, 3-Mar-85 11:55:46 EST
Article-I.D.: ihu1h.494
Posted: Sun Mar 3 11:55:46 1985
Date-Received: Mon, 4-Mar-85 20:20:11 EST
References: <4102@ucla-cs.ARPA>
Organization: AT&T Bell Laboratories
Lines: 16

In addition to call letters, Illinois ham plates have the words HAM RADIO embossed on them. If a thief didn't see any signficance in the plate AJ9S, this extra verbage may help attract his attention. :-)

> I am considering getting "call sign" license plates for my car, but I
> am concerned that doing so might more overtly advertise the fact that I
> am carrying expensive "goodies" in my vehicle -- thus making me a more
> likely target for theft.

.....

> Admittedly, however, having plates screaming "WA6SGA" for all the world
> to see could attract unwanted attention from someone who might otherwise
> overlook my rig.

--

==========

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -1279722263579528811
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e94f3402a00bf951
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-03 17:32:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ecsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!mcnc!ecsvax!cjl
From: cjl@ecsvax.UUCP (Charles Lord)
Newsgroups: net.ham-radio
Subject: Re: Automobile Ham call sign plates
Message-ID: <795@ecsvax.UUCP>
Date: Sun, 3-Mar-85 20:32:15 EST
Article-I.D.: ecsvax.795
Posted: Sun Mar 3 20:32:15 1985
Date-Received: Wed, 6-Mar-85 02:45:47 EST
References: <8484@brl-tgr.ARPA>, <397@terak.UUCP>
Organization: NC Educational Computing Service
Lines: 12

"No more right than CBers" ?

"Hams no longer perform public service" ?

Where does this guy come from? Speaking for the local
Amateur ops that have been the ONLY communications links
in local disasters (and we get our share!)-

  YOU'RE FULL OF IT!

                        Charles wd4chw

From -3700126732665551923
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8308bd95acaa0189,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-03 17:56:44 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: The Sony 2010s are available
Message-ID: <495@ihu1h.UUCP>
Date: Sun, 3-Mar-85 20:56:44 EST
Article-I.D.: ihu1h.495
Posted: Sun Mar 3 20:56:44 1985
Date-Received: Mon, 4-Mar-85 20:33:30 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 19

x
     The Sony 2010's are here! I saw the new Sony
     2010
     receiver at Spectronics ($279). Didn't have much time
     to put it through its paces, but it looks like a win.

     The digital display reads out to 100 Hz, and doesn't
     change when you alternate between usb and lsb. One
     detracting   note: as I turned the tuning   knob, there
     seemed to   be a noise burst each time the frequency was
     incremented.

     No problem copying SAC foxtrot broadcasts with built in
     telescoping antenna. The vhf-am aircraft band is a
     nice touch. Good fidelity on FM broacast.

     Anyone bought one yet? Let's hear about it.
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 8127130511873195202
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,290b6197f5047716,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-03 22:12:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
godot!harvard!seismo!brl-tgr!tgr!W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA (Keith Petersen)
Newsgroups: net.ham-radio
Subject: Updated Packet Radio MailBox/BBS/GateWay program ver 8.6
Message-ID: <8898@brl-tgr.ARPA>
Date: Mon, 4-Mar-85 01:12:16 EST
Article-I.D.: brl-tgr.8898
Posted: Mon Mar 4 01:12:16 1985

Date-Received: Wed, 6-Mar-85 04:13:54 EST
Sender: news@brl-tgr.ARPA
Lines: 93

Thanks to Bob Clements <clements@bbn-cd.arpa>, version 8.6 of the
W0RLI Packet Radio MailBox/BBS/GateWay system is now available from
SIMTEL20:

```
Filename           Type  Bytes    CRC

Directory MICRO:<CPM.PACKET>
PACKET86.LBR.1              BINARY   154112  68C9H
```

Here are Bob's comments about the package.
---
3 March 1985

Here are the files that make up version 8.6 of the W0RLI
Packet Radio MailBox/BBS/GateWay system.

There have been many changes since version 6.9 was posted to
the SIMTEL20 archives. A change history is in the file
NOTES.TNC. A few of the major ones are:

 1) The program has been converted to M80/L80 source language.
     It got too big for ASM/MAC.
 2) Automatic forwarding of mail among packet systems is
     supported. This requires a user list in the file FWD.TNC.
 3) The BIOS got too big, too. There is now a two stage bootstrap,
     with the second stage in the file CBIOS.COM, also as described
     in NOTES.TNC.

This system runs on the following hardware:

Computer:
     Xerox 820-1 computer (the ones that were available for $50,
                    and are still around for not much more),
     one or more 8" single density, single or double sided disk drives,
     parallel keyboard, CRT monitor.

Packet Radio gear:
     One or Two TAPR (or AEA) TNCs with version 3.1 or later software.
          (Two TNCs if you are going to run a crossband Gateway.)

Radio gear:
     One or two transceivers.

The W0RLI software supports sending, receiving and forwarding
mail, uploading and downloading files, capturing typescripts,
logging channel activity and mailbox activity, and gateway
operation between two TNCs on two bands.

Read the file NOTES.TNC to start working your way through the

documentation.

Hank, W0RLI, does not have access to ARPANET or Usenet. I will be glad to try to answer questions and/or relay questions and comments to Hank via 2 meters. You can reach me at
ARPANET: clements@BBN
Usenet: {ihnp4, linus, wivax, decvax, wjh12, ima}!bbncca!clements

Hank would appreciate knowing of users who are running this software. A QSL to Hank or a net message to me would be appreciated.

Here is Hank's update from the February 1985 NEPRA PacketEar:

The MailBox/GateWay has now been sent to 25 states and 5 countries. As far as I know for sure, it is on the air at least 20 places now. In the Boston area, 4000 messages have passed through it. The local forwarding network now includes 9 nodes: W0RLI, WB2OSZ, WB1DSW, K1BC, WA2RRKN-2, K7PYK, WA4SZK, KA1T, W1AW-4. The last two run their own software, but allow for forwarding from the W0RLI systems.

A message put into any one of these systems will find its way to the system nearest the intended recipient.

There are several other areas of the country now using the software: Georgia, Arizona, Iowa, Washington DC, Seattle, ENY/NYC/NNJ, Dallas, Illinois, Southern New Jersey, Los Angeles have all been heard from. All have the software in daily use.

Expect to see it on Oscar-10 at KL7GNG soon.

Look for it from Australia, New Zealand, Japan, Hungary.

Sacramento county RACES will be using it.

GateWays are running at W0RLI, K7PYK, WA4SZK and WB7DCH.

de Hank Oredson, W0RLI

73,
Bob
K1BC

From 5482308966219549777
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d93bfa5055e478b6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-04 05:09:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!JSTARR@SIMTEL20.ARPA
From: JSTARR@SIMTEL20.ARPA (Jim Starr)
Newsgroups: net.ham-radio
Subject: DUCKIE -- 5/8 WHIP.
Message-ID: <8902@brl-tgr.ARPA>
Date: Mon, 4-Mar-85 08:09:54 EST
Article-I.D.: brl-tgr.8902
Posted: Mon Mar 4 08:09:54 1985
Date-Received: Wed, 6-Mar-85 04:21:33 EST
Sender: news@brl-tgr.ARPA
Lines: 11

  I do nor consider the difference between a rubber duckie and a 5/8 whip
to be negligible..

6 db is never negligible at those low power levels.

Jim Starr

WA4QLB

From -3595936805572117708
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c4bbf1ec16fbae52,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-04 05:55:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ecsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!mcnc!ecsvax!hes
From: hes@ecsvax.UUCP (Henry Schaffer)
Newsgroups: net.ham-radio
Subject: Re: MOV transient protectors -ratings
Message-ID: <797@ecsvax.UUCP>
Date: Mon, 4-Mar-85 08:55:39 EST
Article-I.D.: ecsvax.797
Posted: Mon Mar 4 08:55:39 1985
Date-Received: Wed, 6-Mar-85 04:17:46 EST
Organization: NC State Univ.
Lines: 8

I looked at some GE literature I have, and it appears that the
voltage rating is in terms of the DC voltage level at which the
MOV starts conducting. GE gives both the DC and AC levels in
their specs. For example, for the V18ZA1, Maximum Continuous
Voltage: DC 14 V; AC 10 V RMS.
--henry schaffer n c state univ
References: <8426@brl-tgr.ARPA>

From 728892906637479527
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ff7254d686e5ec9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-04 11:24:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!brian%sdcc3.uucp%brl-tgr.arpa@UCI-ICSD
From: brian%sdcc3.uucp%brl-tgr.arpa@UCI-ICSD (Brian Kantor)
Newsgroups: net.ham-radio
Subject: California law and Bulletin Board Computers
Message-ID: <8916@brl-tgr.ARPA>
Date: Mon, 4-Mar-85 14:24:13 EST
Article-I.D.: brl-tgr.8916
Posted: Mon Mar 4 14:24:13 1985
Date-Received: Sat, 9-Mar-85 11:42:12 EST
Sender: news@brl-tgr.ARPA
Lines: 104

This was passed to me; I am passing it to the net for general
consumption.. Please! If you support it, remember that a letter to your
legislator will have much more effect then a note on the net.

     Brian Kantor UC San Diego

     decvax\ brian@ucsd.arpa
     akgua >--- sdcsvax --- brian
     ucbvax/   Kantor@Nosc

Date: Fri Feb 08, 1985 8:43 am PST
From: Robert Jacobson / MCI ID: 224-4013
Subject: Constitutional Amendment on Telecomputing

Please spread the word on the following Assembly
Constitutional Amendment introduced in the California
Legislature last week. We need ALL the support we can
muster! The opposition may try to paint this as a
"pro-hacker" bill, although our intention is actually
to encourage the growth and development of the electronic
commerce industry in California, a top priority.

Call me for details.

BOB JACOBSON
Principal Consultant
Assembly Utilities and Commerce Committee
State Capitol, Room 2117
Sacramento, CA 95814 * (916) 445-8800

XXX = new text   [XXX] = deleted text
==========

ASSEMBLY CONSTITUTIONAL AMENDMENT NO. 9

Introduced by Assembly Member Moore

January 30, 1985

ASSEMBLY CONSTITUTIONAL AMENDMENT NO. 9--A resolution to propose to the people of the State of California an amendment to the Constitution of the State, by amending subdivision (a) of Section 2 and Section 13 of Article I thereof, relating to electronic communications.

LEGISLATIVE COUNSEL'S DIGEST

ACA 9, as introduced. Moore. Electronic communications: information systems and data bases.

The California Constitution guarantees the freedom to speak, write, and publish on all subjects and prohibits abridgment of the liberty of speech or press.

This measure would guarantee the right to electronically communicate on all subjects, and would provide that a law may not restrain or abridge liberty of electronic communication.

The California Constitution also guarantees the right of the people to be secure in their persons, houses, papers, and effects against unreasonable seizures and searches. A warrant may not issue unless, among other things, it particularly describes the place to be searched.

This measure would extend the search and seizure guarantees to electronic information systems and data bases, as defined, and provide in this regard that in order for a warrant to be issued, the electronic information system and data base be particularly described.

Vote: 2/3. Appropriation: no. Fiscal committee: no. State-mandated local program: no.

RESOLVED BY THE ASSEMBLY, THE SENATE CONCURRING, That the Legislature of the State of California at its 1985-86 Regular Session commencing on the third day of December 1984, two-thirds of the members elected to each of the two houses of the Legislature voting therefor, hereby proposes to the people of the State of California that the Constitution of the State be amended as follows:

First--That subdivision (a) of Section 2 of Article I thereof is amended to read:

SEC. 2 (a) Every person may freely speak, write [and], publish, ***or electronically communicate*** his or her sentiments on all subjects, being responsible for the abuse of this right. A law may not restrain or abridge liberty of speech [or], press, ***or electronic communication.***

Second--That Section 13 of Article I thereof is amended to read:

SEC. 13. The right of the people to be secure in their persons, houses, papers, [and] effects, ***and electronic information systems and data bases*** against unreasonable seizures and searches may not be violated; and a warrant may not issue except on probable cause, supported by oath or affirmation, particularly describing the place ***or electronic information system and data base*** to be searched and the persons and things to be seized.

An electronic information system is any combination of telecommunication and data-processing devices and procedures used for the collection, manipulation, and distribution of information. A data base is the information organized and maintained within an electronic information system.

(This bill must first be passed by 2/3's of both houses, then receive an affirmative vote of voters in a general election.)

From 7510714994875993796
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dcb21c906a2645ac
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-04 11:43:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!BISBEY@USC-ISIB.ARPA
From: BISBEY@USC-ISIB.ARPA
Newsgroups: net.ham-radio
Subject: Re: dead backup battery in ICOM => reprogram the RAM
Message-ID: <8919@brl-tgr.ARPA>
Date: Mon, 4-Mar-85 14:43:10 EST
Article-I.D.: brl-tgr.8919
Posted: Mon Mar 4 14:43:10 1985
Date-Received: Sat, 9-Mar-85 09:05:09 EST
Sender: news@brl-tgr.ARPA
Lines: 18

I would recommend changing the Lithium Battery with the radio powered on, i.e., let the radio hold up the ram while you're swapping batteries.

Last week, Bob Parnass posted a message on setting frequencies outside the band limits of the R71A. The computer interface can be used for this purpose on the 751, 271, and 471. If I remember correctly, the radios only cover 1 MHz above and below the band limits before folding takes place, and you can only tune towards the band limits. For greater coverage, you need to change the band limits themselves; I changed my 271 from the standard 143.8-148.2 MHz to 140-150 MHz.

Finally, for satellite users, the computer interface makes working satellites

a delight. Just tune the receiver and let a computer calculate and set the transmitter frequency.

Richard
NG6Q

From -1868274515099492141
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8697e9a98141996e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-04 16:51:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 18 (3rd party FCC NPRM)
Message-ID: <15732@mgweed.UUCP>
Date: Mon, 4-Mar-85 19:51:25 EST
Article-I.D.: mgweed.15732
Posted: Mon Mar 4 19:51:25 1985
Date-Received: Wed, 6-Mar-85 02:17:30 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 16

qst de k9eui
hr arrl bulletin nr 18 from arrl headquarters
newington ct march 4, 1985
to all radio amateurs bt

the fcc has released an nprm concerning third party participation in amateur communications. the commission proposes to amend part 97 to prohibit participation by any amateur whose license has been revoked, suspended or
 canceled. the fcc states in the proposal that persons whose amateur privileges have been terminated have taken advantage of the third party rule by partcicpating in communications from stations licensed to amateurs in good standing. the proposal also calls for sanctions for any amateur licensee who knowingly allows a disqualified person to participate in third party

From 6380675606935554145
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,22363e1519035d0b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-04 16:52:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr

From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 17 (CABLE TV FCC NPRM)
Message-ID: <15733@mgweed.UUCP>
Date: Mon, 4-Mar-85 19:52:12 EST
Article-I.D.: mgweed.15733
Posted: Mon Mar 4 19:52:12 1985
Date-Received: Wed, 6-Mar-85 02:17:43 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 19

qst de k9eui
hr arrl bulletin nr 17 from arrl headquarters
newington ct march 1, 1985
to all radio amateurs bt

fcc has released a notice of proposed rulemaking concerning
cable television. the nprm, designated docket 85 38, asks for
comments as to whether the home subscriber quality standards
are still important, and comments as to whether signal leakage
limits are still required. the nprm proposes to increase the
cable tv leakage limit from 20 microvolts per meter at 10 feet
to 50 microvolts per meter at 3 meters. comments on this nprm
are due by march 29, 1985. formal comment requires the filing
of an original and five copies to the secretary, fcc,
washington dc 20554. the most useful type of comments would be
those incorporating test data and measurements of leakage which
has caused interference to the amateur service ar

From -5047799025896108121
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3d2ec595a4877d9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-04 16:53:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 6/7
Message-ID: <15734@mgweed.UUCP>
Date: Mon, 4-Mar-85 19:53:23 EST
Article-I.D.: mgweed.15734
Posted: Mon Mar 4 19:53:23 1985
Date-Received: Wed, 6-Mar-85 02:17:59 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 28

qst de k9eui
hr crrl bulletin nr 7/6 from crrl headquarters

london ont march 4, 1985
to all radio amateurs bt

the (garble) word on the special prefix for the ontario winter games is that amateurs in ontario may use the prefix cz3 from march 1 through 17.

the 1985 canadian repeater directory is now being prepared. please send repeater updates and corrections to bill bowman, ve4afo, 744 christie avenue, selkirk, manitoba r0a 2h9, or call 204 482 3402.

docs latest regulatory agenda includes plans to permit repeaters in the 29 to 29.7 mhz band, sstv in the hf bands, up to 6 mhz bandwidth for fast scan tv in the uhf and microwave bands, and foreign amateurs operating under a reciprocal agreement access to the top 2 khz of the 144 to 148 mhz band. other proposed changes would remove all power restrictions in the 1.8 to 2 mhz band, remove the oral examination requirement for the amateur certificate, provide for figures, punctuation marks and q sinals in the advanced amateur code test, and relax licensing requirements for the handicapped. a study is being conducted on the possible restructuring of the amateur service in canada ar

From -9099269472571182465
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e07363c3f9a30de0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-04 16:53:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 9
Message-ID: <15735@mgweed.UUCP>
Date: Mon, 4-Mar-85 19:53:50 EST
Article-I.D.: mgweed.15735
Posted: Mon Mar 4 19:53:50 1985
Date-Received: Wed, 6-Mar-85 02:18:19 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 29

qst de k9eui
hr propagation forecast bulletin nr 9 from arrl headquarters newington ct march 3, 1985
to all radio amateurs bt

the gradual drop in the solar flux that began at 81 on february 19 ended on the 27th, at 70, the lowest since february 1. it

wavered between 70 ane 75 through march 3. there was very little visible activity on the sun all last week. to make propagation matters worse, there was a major geomagnetic storm on the 28th. this produced auroral effects in the higher latitudes and enhanced transequatorial propagation on frequencies below about 30 mhz, but made for poor high latitude communications over the arrl dx contest weekend.

flux readings close to quiet sun levels are expected to continue through march 6, after which a minor rise is likely. march is upon us for auroral propagation on 28 mhz and the vhf bands. a good auroral warning is a wwv k index of 3, and rising. weak and wavery signals are usually heard on lower frequencies, especially on high latitude paths, and late afternoon on through the night. the incidence of auroral conditions is not closely related to sunspot numbers. very intense auroras can occur in low sunspot years, as of present.

american sunspot numbers for february 21 to 27 were between 25 and 8 with a mean of 14 ar

From -7879703729733798840
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4ba1bc037c7a08c0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-04 17:05:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 18 (The whole thing this time)
Message-ID: <15736@mgweed.UUCP>
Date: Mon, 4-Mar-85 20:05:12 EST
Article-I.D.: mgweed.15736
Posted: Mon Mar 4 20:05:12 1985
Date-Received: Wed, 6-Mar-85 02:18:33 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 21

qst de k9eui
hr arrl bulletin nr 18 from arrl headquarters
newington ct march 4, 1985
to all radio amateurs bt

the fcc has released an nprm concerning third party participation in amateur communications. the commission proposes to amend part 97 to prohibit participation by any amateur whose license has been revoked, suspended or
canceled. the fcc states in the proposal that persons whose amateur privileges have been terminated have taken advantage of

the third party rule by partcicpating in communications from stations licensed to amateurs in good standing. the proposal also calls for sanctions for any amateur licensee who knowingly allows a disqualified person to participate in third party communications. the nprm is designated docket 85 51. comments are due by may 14, 1985, reply comments by june 17, 1985. formal comment requires the filing of an original and five copies, but a single copy may be considered informally ar
/////////

From 9035929264137168229
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d0bd34bf604772d9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-05 09:34:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: 5/8 whip vs duck
Message-ID: <8948@brl-tgr.ARPA>
Date: Tue, 5-Mar-85 12:34:23 EST
Article-I.D.: brl-tgr.8948
Posted: Tue Mar 5 12:34:23 1985
Date-Received: Sat, 9-Mar-85 19:02:42 EST
Sender: news@brl-tgr.ARPA
Lines: 39

I have compared an ICOM "rubber duck" with a Larceny (? I think they make it) flexible quarter wave, and there was a distinct difference in favor of the flexible quarter wave. We tried the antennas on two identical IC2ATs sitting on a restaurant table and with all four combinations of antennas, radios, and positions on the table, to show up any differences due to power output, standing wave patterns, or whatever. On several marginal repeaters, the quarter wave always brought up the repeater but the duck always did not. The result was the same, incidentally, in all four test setups (antenna on radio A or B and in position 1 and position 2 on the table).

Based on this test, I would recommend the flexible quarter wave as a better "standard" antenna than the duck.

I have also compared rubber duck antennas with telescoping 5/8 waves, and found an ENORMOUS advantage to the 5/8. The ones I have used were the Vocom and the Tuned Antenna Co. 5/8 waves. They seemed to work about the same. In tests between a Larceny mag-mount "Kulrod" 5/8 wave, mounted in the center of a car roof and the telescoping 5/8 waves, I couldn't see much difference when bringing up distant repeaters. The Larceny 5/8 wave is widely regarded as "about the best" 5/8 wave implementation around.

Note that the 5/8 wave antenna on a hand-held has a significant advantage over a 1/4 wave in that it is much less sensitive to ground planes.

Therefore it is reasonable that a 5/8 wave on a hand-held should do nearly as well as an ideally mounted 5/8 wave over a decent ground plane.

Note also that an ideal HALF WAVE should be even less sensitive to ground impedance and ground planes, because of its very high feed point impedance (assuming it is end fed). One source of a well-executed half wave HT antenna is Austin Custom Antennas of Sandown NH. (I can get his phone nr. but dont have it handy. Area code is 603, though.) This antenna should be excellent both for HT operation and for those "talk-in stations" you set up with a whip stuck on the back of your misappropriated mobile rig. As it is totally ground-independent, it should work happily on picnic tables or whatever. Its pattern should remain nearly ideal (this is characteristic of Dick Austin's antennas in my experience) in both HT and picnic table use.

73,
John S., W3IKG

From 3232423368281890038
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6d746cd01152759
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-05 12:13:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version nyu B notes v1.5 12/10/84; site acf4.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!cmcl2!acf4!sullivan
From: sullivan@acf4.UUCP (David J. Sullivan)
Newsgroups: net.ham-radio
Subject: Re: FT757 and RS232
Message-ID: <2550001@acf4.UUCP>
Date: Tue, 5-Mar-85 15:13:00 EST
Article-I.D.: acf4.2550001
Posted: Tue Mar 5 15:13:00 1985
Date-Received: Sat, 9-Mar-85 09:06:05 EST
References: <1940@iddic.UUCP>
Organization: New York University
Lines: 8

And speaking of RS232 Interfaces, does anyone have the one for the ICOM R71-A receiver? Or specs? My Macintosh is waiting...

David Sullivan
New York University
sullivan@nyu.ARPA
...!ihnp4!cmcl2!sullivan

From -1424159107628422008
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,52aa3a4d4d7e6bb1
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-03-05 12:49:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Call-sign plates and theft?
Message-ID: <8961@brl-tgr.ARPA>
Date: Tue, 5-Mar-85 15:49:08 EST
Article-I.D.: brl-tgr.8961
Posted: Tue Mar 5 15:49:08 1985
Date-Received: Sat, 9-Mar-85 19:05:44 EST
References: <4102@ucla-cs.ARPA>
Organization: Ballistic Research Lab
Lines: 20

> I am considering getting "call sign" license plates for my car, but I
> am concerned that doing so might more overtly advertise the fact that I
> am carrying expensive "goodies" in my vehicle -- thus making me a more
> likely target for theft.
>
> Is this a valid concern?
>
I've had HAM tags and a scuzzy KDK 2m in my car for a while. I was
real careful about locking up the car (not that that does a whole lot
of good) because I feared that someone would steal it mistaking it for
a CB. Well it just sits there in a slide out bracket. All you do is
unplug the power and the antenna and away it goes. Someone broke into
my car, took a whole bunch of quarters out of the ashtray and the buck
knife in my first-aid kit and left the radio.

I have had my walkie-talkie ripped off. The guy who took it tried using
it as a CB. I convinced him to sell it back to me because it wasn't a
CB. I think he got sentenced to about a year.

-Ron

From -7119675875207574561
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,55c435a2b2c577c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-05 14:55:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!andy@aids-unix
From: andy@aids-unix (Andy Cromarty)
Newsgroups: net.ham-radio
Subject: Re: DUCKIE -- 5/8 WHIP.
Message-ID: <8968@brl-tgr.ARPA>
Date: Tue, 5-Mar-85 17:55:58 EST
Article-I.D.: brl-tgr.8968
Posted: Tue Mar 5 17:55:58 1985

Date-Received: Sat, 9-Mar-85 19:08:26 EST
Sender: news@brl-tgr.ARPA
Lines: 19

You're right; in fact, the difference is often more than 6dB,
since some duckies have negative gain. My comparison was an
attempt to provide intuitive bounds on the expected performance
loss of the TH-21AT given its lower-than-average power. In fact,
I generally carry a 5/8 wave whip with me and swap antennas when
the going gets rough, despite the bulk of a collapsed whip vs. a
duckie.

By the way, it's instructive to consider the cost-effectiveness
of amps vs. antennas for most 2m work in the same light, while
we're on the subject. In general, if you have a 2m linear feeding
a tiny antenna you've probably wasted a lot of money. Not only
do you get more dB of transmit gain per dollar invested from a
good antenna, but you get the same gain improvement on receive,
too. Linears may be good for one's self-image, but if what you're
interested in is communication then there are usually some better
alternatives that could be explored first.

                    Andy N6JLJ

From -7276998591718742511
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b53cad01aed1e207,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-06 08:02:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!decwrl!dec-rhea!
dec-fsleng!virgona
From: virgona@fsleng.DEC
Newsgroups: net.ham-radio
Subject: I WANT TO SEE MORE LETTERS ON HAM PLATES ACROSS THE NATION AND IN NEW
ENGLAND STATES
Message-ID: <903@decwrl.UUCP>
Date: Wed, 6-Mar-85 11:02:00 EST
Article-I.D.: decwrl.903
Posted: Wed Mar 6 11:02:00 1985
Date-Received: Fri, 8-Mar-85 04:27:13 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 138

[2"z[12m

Newsgroup : net.ham-radio
From : FSLENG::VIRGONA

Organization : Digital Equipment Corp.
Subj: RE: New Hampshire hams need your Support to pass a law for us

To all New Hamshire Hams and Hams Across the Nation!

My name is Pete Virgona N1DHD ex KA2KSR/1. Over the last year
I have been trying to get the New Hampshire Legislature to get
 pass a law to get ham plates at a
reduce rate. the current rate is $25.00 and it is clasified as a vanity plate.
We want to have the plates clasified as special plates and reduce the fee to
$10.00 for the first year then $5.00 for the rest of the time.
 Please send your letters to gov sununu at the State house in concord n.h.
 03301
to your local state rep and to Rep Phil LaBombardi W1OMZ , at
  60 Indian Rock Rd Nashua NH

there was a bill intoduced in 1981 HR292-FN which was knocked down but
 I have gotten about 350+ petitions signed and sent to Gov Sununu and
 Richard Flyn Commisioner of Safety.

The time is getting near so your letter are a must!!

Please help our Cause !

I have the ARRL sending a letter also.

we need this.

Why should we have to pay $25.00 while national guard pay only $3.00??

thanks !

my DEC node is FSLENG::Virgona
my net node is decvax!decwrl!dec-rhea!dec-fsleng!virgona
Home # 603 659-6294
Work # 617 938-2301

As of 2/18/85 there are two bills which are coming up to have a public
hearing I will keep you posted as to when it will be we need your support
on this so come out and speak your mind!!!!!!

73's

DE

N1DHD ex KA2KSR/1

Epilog Dated 3/6/85

Below is some responses to my plea as you can see they are from states out

side the New England States so I want to hear from NH, VT, MA, CT, RI also. Keep those letters coming.

My Home Address is:
Peter Virgona N1DHD
172 Lita Lane
Newmarket, NH 03857

Again PLEASE GIVE MY CAUSE SUPPORT!!!!!!!!!!!!!!!

Path: decwrl!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!Hardie@MIT-MULTICS.ARPA
Subject: Re: License Status in California
Posted: Mon Feb 25 09:47:55 1985

I have ham plates from Calif. I paid something like $25 for them the first time. There does not appear to be a reoccuring charge each year. Its my understanding that vanity plates have a special charage each year, but ham plates are one time only.

-- Doug WA6VVV

Path: decwrl!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!BRAD@SU-CSLI.ARPA
Subject: Re: License Status In California (what is it?)
Posted: Mon Feb 25 15:00:24 1985

Ham plates in California cost $15 initially (up from $3 before 1979), with no yearly charge. They cost $7 to transfer them to another vehicle. Vanity plates cost something like $25 (blue) or $30 (reflective white) initially with a $10 yearly charge.

--Brad N6BDE

Path: decwrl!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!ron
Subject: Re: Automobile Ham call sign plates
Posted: Mon Feb 25 11:56:47 1985

My problem is that I can't get tags for my car bearing both the fire department insignia and my call letters. I have to choose one or the other. Even though FD tags are 4 dollars cheaper a

year I go for HAM TAGS. More indicative of who I am, but I am
always explaining to gas station attendants what they are as they
write them down on the credit slip. There are also legal reasons
why I want to keep my anonymity about being a fire fighter while
driving down the road.

-Ron

Path: decwrl!decvax!bellcore!allegra!ulysses!mhuxr!ihnp4!ihu1h!parnass
Subject: Re: Call-sign plates and theft?
Posted: Sun Mar 3 08:55:46 1985

In addition to call letters, Illinois ham plates have the
words HAM RADIO embossed on them. If a thief didn't see any
signficance in the plate AJ9S, this extra verbage may help
attract his attention.   :-)

> I am considering getting "call sign" license plates for my car, but I
> am concerned that doing so might more overtly advertise the fact that I
> am carrying expensive "goodies" in my vehicle -- thus making me a more
> likely target for theft.
                                  .....
> Admittedly, however, having plates screaming "WA6SGA" for all the world
> to see could attract unwanted attention from someone who might otherwise
> overlook my rig.

==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 7278122174358714597
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,41dc71334e2ef37f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-06 09:43:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ED@MIT-MC
From: ED@MIT-MC (Ed Schwalenberg)
Newsgroups: net.ham-radio
Subject: ICOM R71A and RS232
Message-ID: <8999@brl-tgr.ARPA>
Date: Wed, 6-Mar-85 12:43:11 EST
Article-I.D.: brl-tgr.8999
Posted: Wed Mar 6 12:43:11 1985
Date-Received: Sat, 9-Mar-85 20:33:47 EST
Sender: news@brl-tgr.ARPA
Lines: 29

> From: "David J. Sullivan" <sullivan%acf4.uucp@BRL-TGR.ARPA>
> Date: 5 Mar 85 20:13:00 GMT
> Xref: seismo net.ham-radio:2535
>
> And speaking of RS232 Interfaces, does anyone have the one for the ICOM
> R71-A receiver? Or specs? My Macintosh is waiting...

The ICOM computer interface comes in two halves: The EX-xxx is an external parallel interface to the internal processor bus, and the CT-10 is (allegedly) a combination RS-232 interface and terminal unit.

I called ICOM in Dallas to find out the status of the CT-10, and was told that the CT-10 as sold in Japan only did 45 baud, and was therefore deemed unacceptable for the US market. The man I spoke to was trying to figure out the Japanese manual for the CT-10, in hopes of designing his own RS-232 interface.

The more recent spec sheets from ICOM on the R71A do not mention the CT-10, from which I deduce that they don't intend to either market the Japanese CT-10 or make a US version.

I have ordered the IR remote control, thinking that maybe I could figure out how to build an RS-232 -> IR -> R71A interface, but haven't gotten the unit yet.

There was a recent message to this list that implied that there are RS-232 interfaces to other ICOM equipment. Could these be adapted to the R71A?

If anyone else finds out more about this mess, please pass it on..

From -5063487420945901589
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c126038ca0d8fe8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-06 10:19:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site extel.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!tellab1!extel!larry
From: larry@extel.UUCP
Newsgroups: net.ham-radio
Subject: Fun with Weather Satelites ??
Message-ID: <43300002@extel.UUCP>
Date: Wed, 6-Mar-85 13:19:00 EST
Article-I.D.: extel.43300002
Posted: Wed Mar 6 13:19:00 1985
Date-Received: Fri, 8-Mar-85 03:58:59 EST
Lines: 28
Nf-ID: #N:extel:43300002:000:1159
Nf-From: extel!larry Mar 6 12:19:00 1985

I am seriously considering putting together a weather satellite receiver

for 1691mhz and have 2 questions which perhaps some individuals in net-land could help on. I will summarize any mail received though I hope most reply will be to this group so everyone can share.

First question: Is there anything of interest transmitted other than cloud pictures and service information? Weather maps and radar summaries would be very nice.

Second question: Where can I get info on other services offered by NOAA such as: weather maps maybe via HF fax, video from local radar sites (somehow the TV stations get it I suspect via a dial up line), and any other public domain weather information.

With the TVRO signals due to be scrambled maybe this info might be useful someday to others on the net. Also my display device will be a PC so there could be some fun software to share.

Lastly should there be enough interest I would be willing to serve as a clearing house for a mailing list on the subject provided I can get to the users of interest from my network (usenet) connection.

73

Larry Pajakowski
UUCP: ihnp4!tellab1!extel!larry
TELCO: 312-291-4991

From -4559227308667981321
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,52aa3a4d4d7e6bb1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-06 15:46:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ucla-cs.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!whuxl!whuxlm!akgua!
sdcsvax!sdcrdcf!trwrb!trwrba!cepu!ucla-cs!wales
From: wales@ucla-cs.UUCP
Newsgroups: net.ham-radio
Subject: Followup on mounting a rig in a Honda Accord
Message-ID: <4199@ucla-cs.ARPA>
Date: Wed, 6-Mar-85 18:46:32 EST
Article-I.D.: ucla-cs.4199
Posted: Wed Mar 6 18:46:32 1985
Date-Received: Sun, 10-Mar-85 05:36:27 EST
References: <4019@ucla-cs.ARPA> <4102@ucla-cs.ARPA>
Reply-To: wales@ucla-cs.UUCP (Rich Wales/WA6SGA)
Organization: UCLA Computer Science Department
Lines: 48

In <4019@ucla-cs.ARPA>, I explained how I mounted a Kenwood TR-7950 in my 1984 Honda Accord hatchback by attaching the slide-mount bracket to a pop-out plastic panel under the center of the dash. I indicated that I

was having trouble with car vibrations causing the assembly to squeak and rattle, and asked for suggestions.

I got several replies -- one from a person who said he had done exactly what I described and had no problems at all. He suggested that I check again to make sure that the panel was pushed back in far enough so that the two metal clips on its far end (toward the front of the car) were securely in place.

So I took the panel out and wrapped electrical tape around the two metal clips (this in addition to the electrical tape which I had previously wrapped around the plastic tabs on the other end of the panel). I then put the panel back in -- making sure that the clips were firmly seated (I used a flat-blade screwdriver to give each one a final "oomph").

The "squeaky-creaky" sounds are now, for all intents and purposes, gone.

Just as an additional safety measure, by the way, I drilled a small hole in the center of the back of the plastic panel (between the metal clips) and wrapped a short piece of stranded, insulated wire through this hole and around a metal support just above the panel in the dash. I wrapped the wire around twice, then twisted the free ends together. The purpose of this extra support is to keep the panel from popping completely out of the dash if I should hit an excessively bumpy "dip" in the road (this actually happened to me once!).

Oh -- I'm still waiting for some feedback (ANY feedback) on my other article -- <4102@ucla-cs.ARPA> -- asking whether "call-sign" license plates on one's car should be shunned because they advertise you to car thieves. Of course, it's only been a week since I posted that one, and I understand that some sites still depend on the Pony Express :-} to get their news feeds.
--

-=-=-=

Posting-Version: version B 2.10 5/3/83 based; site hou2e.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!hou2e!rs173
From: rs173@hou2e.UUCP (R.SILVER)
Newsgroups: net.ham-radio
Subject: shortwave receivers for automobiles
Message-ID: <495@hou2e.UUCP>
Date: Wed, 6-Mar-85 19:38:35 EST
Article-I.D.: hou2e.495
Posted: Wed Mar 6 19:38:35 1985
Date-Received: Fri, 8-Mar-85 03:14:53 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 12

a

I have been listening to some transmissions on the 6 and 7 Mhz bands in my
car using an oscillator/frequency converter i built some years ago. since
i find myself enjoying it again, i would like to know if there are auto
receivers (preferably with digital tuning) available in this country.
   I have been told that there are european recievers (blaupunkt,becker?)
like this but have never seen one. Can anyone help?

                    Thanks!
                                Ron Silver   ......hou2e!rs173

From -3799593938983863169
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d4c19598945131f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-06 17:01:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Update: eavesdropping on SCA transmissions
Message-ID: <499@ihu1h.UUCP>
Date: Wed, 6-Mar-85 20:01:37 EST
Article-I.D.: ihu1h.499
Posted: Wed Mar 6 20:01:37 1985
Date-Received: Fri, 8-Mar-85 03:14:24 EST
References: <8666@brl-tgr.ARPA>
Organization: AT&T Bell Laboratories
Lines: 27

> SOUNDS LIKE A LOT OF TROUBLE JUST TO LISTEN TO SCA. I HAVE BEEN
> LISTENING TO SCA FOR AROUND 8 YRS NOW. LOOK AT ONE OF THE OLDER
> SIGNETICS APPLICATIONS BOOKS AND THERE IS A SLICK LITTLE CIRCUIT THAT
> WILL ALLOW YOU TO DO IT WITH A 565 PHASE LOCK LOOP CHIP. THE 565 DOES
> THE DETECTION AT 67 KHZ WHICH MEANS THAT YOU DON'T NEED TWO RECEIVERS!!.
> JUST TUNE THE FM RECEIVER AND THE PLL DOES ITS THING!!
>

> REGARDS,
>
> VAL L. ERWIN
> W5PUT

Thanks for the advice, Val. I built the Signetics 565 circuit in my lab,
but alas, it doesn't work!

The detector output of the average AM/FM radio is not high enough
to drive the 565. An additional stage of amplification is needed.

I spoke with the proprietor of FM Atlas, who had the same results
with the 565 circuit.

Please post details of the simple circuit you've been using to detect SCA
for 8 years. I might experiment with the XR2211 next, but it's a $6
chip. The 565 was on sale at Radio Shack for $1.19.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 1699144273615343365
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8eab2f632fe4adba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-06 22:26:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!jrv@mitre-bedford
From: jrv@mitre-bedford
Newsgroups: net.ham-radio
Subject: MOV transient protectors
Message-ID: <9024@brl-tgr.ARPA>
Date: Thu, 7-Mar-85 01:26:47 EST
Article-I.D.: brl-tgr.9024
Posted: Thu Mar 7 01:26:47 1985
Date-Received: Sun, 10-Mar-85 06:47:44 EST
Sender: news@brl-tgr.ARPA
Lines: 13

I can't see why more than one MOV would be necessary to protect the AC
power (hot to neutral), because I can't see anything that would drive
a transient from hot to ground or ground to neutral. Big, inductive
loads switching on and off (motors, relays) create transients from hot
to neutral. Any sources outside the building can only drive
transients from hot to both ground and neutral, because ground and
neutral are connected at the circuit breaker box. Assuming the
building is wired with grounded outlets, all three wires run in
parallel from the breaker box to the outlet, so even VHF radiation
can't drive a big differential mode signal. The only source I could
think of for a big signal from ground to something else is a lightning

strike to just one wire - and I wouldn't expect any MOV to handle
that! - Jim Van Zandt

From -7854940225552274580
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e2acc5034b532c4d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-06 22:55:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!pcarah.es@XEROX.ARPA
From: pcarah.es@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: dead backup battery in ICOM => reprogram the RAM
Message-ID: <9025@brl-tgr.ARPA>
Date: Thu, 7-Mar-85 01:55:51 EST
Article-I.D.: brl-tgr.9025
Posted: Thu Mar 7 01:55:51 1985
Date-Received: Sun, 10-Mar-85 06:48:02 EST
Sender: news@brl-tgr.ARPA
Lines: 6

No, the 02AT, 04AT use diodes soldered onto the processor board for
their personality. I have the impression that the reset button works by
disconnecting the battery.
-- Pete, K6JRR
PCarah.es@Xerox.arpa
{...,ihnp4}!vortex!pelican!pete

From -4162310700005686387
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e2e473b18abe8ea7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-06 23:04:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!Trow.pa@XEROX.ARPA
From: Trow.pa@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Bay area electronic and ham radio flea market
Message-ID: <9026@brl-tgr.ARPA>
Date: Thu, 7-Mar-85 02:04:59 EST
Article-I.D.: brl-tgr.9026
Posted: Thu Mar 7 02:04:59 1985
Date-Received: Sun, 10-Mar-85 06:48:19 EST
Sender: news@brl-tgr.ARPA
Lines: 8

There will be an electronic and ham radio flea market in parking lot C

of Foothill College on Saturday, March 9. The official hours are 8 a.m.
to 2 p.m., but it actually starts about sunrise. There is no admission
charge for buyers. The flea market will be repeated on the second
Saturday of the month through October.

Foothill College is located in Los Altos Hills, CA, at Interstate 280
and El Monte.

From -5142364923831794621
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c126038ca0d8fe8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-07 06:23:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Fun with Weather Satelites - some US freqs
Message-ID: <500@ihu1h.UUCP>
Date: Thu, 7-Mar-85 09:23:45 EST
Article-I.D.: ihu1h.500
Posted: Thu Mar 7 09:23:45 1985
Date-Received: Fri, 8-Mar-85 04:03:12 EST
References: <43300002@extel.UUCP>
Organization: AT&T Bell Laboratories
Lines: 40

>
> I am seriously considering putting together a weather satellite receiver
> for 1691mhz .....

I've no experience at 1691 MHz, but here's a sampling of allocations
in this range.

1686.0000   call?_____US: Army, radiosonde station, 0.2F2, 0.2P2, 700P2D emiss
                           ion, 1w [USA-wide] (govt recds)
1690.0000   call?_____US: Air Force, experimental testing station, 3F9 emissio
                           n, 4w [Vandenberg AFB, CA] (govt recds)
             call?_____US: Air Force, experimental testing station, 3F9 emissio
                           n, 5w [Cape Canaveral, FL] (govt recds)
             call?_____US: Army, radiosonde station, 0.2F2, 0.2P2, 700P2D emiss
                           ion, 1w [USA-wide] (govt recds)
1694.0000   call?_____US: Commerce, meterorological satellite space station, 2
                           00F9 emission, 20w [Space Geos] (govt recds)
             call?_____US: Commerce, meterorological satellite space station, 2
                           00F9 emission, 20w [Table Mountain, CO] (govt re
                           cds)
             call?_____US: Army, radiosonde station, 200F9 emission, 20w [USA-w
                           ide] (govt recds)
1695.0000   call?_____US: Air Force, experimental testing station, 0.1A1 @ 1w
                           [Boengfld, WA] (govt recds)

```
             call?_____US: Air Force, experimental testing station, 0.1A1, 2A2
                                @ 1w [Renton, WA] (govt recds)
             call?_____US: Air Force, experimental testing station, 0.1A1, 2A2
                                @ 1w [Kent, WA] (govt recds)
1697.0000    call?_____US: Commerce, emergency, 3F9 @ 2w [Space] (govt recds)
             call?_____US: Commerce, emergency, 3F9 @ 2w [Wallops Is, VA] (govt
                                 recds)
             call?_____US: Commerce, emergency, 3F9 @ 2w [Gilmorcr, AK] (govt r
                                ecds)
1698.0000    call?_____US: Army, radiosonde station, 0.2F2, 0.2P2, 700P2D emiss
                                ion, 1w [USA-wide] (govt recds)
1711.0000    call?_____US [ FAA, link between Merill Field and Anchorage ARTCC,
                                 1w] (govt recds)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -6356725516813055058
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c4521e724dbdaeca,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-07 06:35:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!decwrl!dec-rhea!
dec-fsleng!virgona
From: virgona@fsleng.DEC
Newsgroups: net.ham-radio
Subject: ham plate want you response addressed to me
Message-ID: <994@decwrl.UUCP>
Date: Thu, 7-Mar-85 09:35:43 EST
Article-I.D.: decwrl.994
Posted: Thu Mar  7 09:35:43 1985
Date-Received: Sat, 9-Mar-85 11:27:33 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 138

[2"z[12m



Newsgroup : net.ham-radio
From : FSLENG::VIRGONA
Organization : Digital Equipment Corp.
Subj:    RE: New Hampshire hams need your Support to pass a law for us

To all New Hamshire Hams and Hams Across the Nation!

My name is Pete Virgona N1DHD ex KA2KSR/1. Over the last year
I have been trying to get the New Hampshire Legislature to get
 pass a law to get ham plates at a
```

reduce rate. the current rate is $25.00 and it is clasified as a vanity plate.
We want to have the plates clasified as special plates and reduce the fee to
$10.00 for the first year then $5.00 for the rest of the time.
 Please send your letters to gov sununu at the State house in concord n.h.
 03301
to your local state rep and to Rep Phil LaBombardi W1OMZ , at
  60 Indian Rock Rd Nashua NH

there was a bill intoduced in 1981 HR292-FN which was knocked down but
 I have gotten about 350+ petitions signed and sent to Gov Sununu and
 Richard Flyn Commisioner of Safety.

The time is getting near so your letter are a must!!

Please help our Cause !

I have the ARRL sending a letter also.

we need this.

Why should we have to pay $25.00 while national guard pay only $3.00??

thanks !

my DEC node is FSLENG::Virgona
my net node is decvax!decwrl!dec-rhea!dec-fsleng!virgona
Home # 603 659-6294
Work # 617 938-2301

As of 2/18/85 there are two bills which are coming up to have a public
hearing I will keep you posted as to when it will be we need your support
on this so come out and speak your mind!!!!!!

73's

DE

N1DHD ex KA2KSR/1

Epilog Dated 3/6/85

Below is some responses to my plea as you can see they are from states out
side the New England States so I want to hear from NH, VT, MA, CT, RI also.
Keep those letters coming.

My Home Address is:
Peter Virgona N1DHD
172 Lita Lane
Newmarket, NH 03857

Again PLEASE GIVE MY CAUSE SUPPORT!!!!!!!!!!!!!!!

Path: decwrl!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!Hardie@MIT-MULTICS.ARPA
Subject: Re: License Status in California
Posted: Mon Feb 25 09:47:55 1985

I have ham plates from Calif. I paid something like $25 for them the first time. There does not appear to be a reoccuring charge each year. Its my understanding that vanity plates have a special charage each year, but ham plates are one time only.

-- Doug WA6VVV

Path: decwrl!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!BRAD@SU-CSLI.ARPA
Subject: Re: License Status In California (what is it?)
Posted: Mon Feb 25 15:00:24 1985

Ham plates in California cost $15 initially (up from $3 before 1979), with no yearly charge. They cost $7 to transfer them to another vehicle. Vanity plates cost something like $25 (blue) or $30 (reflective white) initially with a $10 yearly charge.

--Brad N6BDE

Path: decwrl!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!ron
Subject: Re: Automobile Ham call sign plates
Posted: Mon Feb 25 11:56:47 1985

My problem is that I can't get tags for my car bearing both the fire department insignia and my call letters. I have to choose one or the other. Even though FD tags are 4 dollars cheaper a year I go for HAM TAGS. More indicative of who I am, but I am always explaining to gas station attendants what they are as they write them down on the credit slip. There are also legal reasons why I want to keep my anonymity about being a fire fighter while driving down the road.

-Ron

Path: decwrl!decvax!bellcore!allegra!ulysses!mhuxr!ihnp4!ihu1h!parnass
Subject: Re: Call-sign plates and theft?
Posted: Sun Mar 3 08:55:46 1985

In addition to call letters, Illinois ham plates have the
words HAM RADIO embossed on them. If a thief didn't see any
signficance in the plate AJ9S, this extra verbage may help
attract his attention.   :-)

> I am considering getting "call sign" license plates for my car, but I
> am concerned that doing so might more overtly advertise the fact that I
> am carrying expensive "goodies" in my vehicle -- thus making me a more
> likely target for theft.
.....
> Admittedly, however, having plates screaming "WA6SGA" for all the world
> to see could attract unwanted attention from someone who might otherwise
> overlook my rig.

==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -1030752613549216959
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7745d97402a23a3b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-07 06:51:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!hoffmann@mit-marie
From: hoffmann@mit-marie (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Chep 2m antenna
Message-ID: <9037@brl-tgr.ARPA>
Date: Thu, 7-Mar-85 09:51:51 EST
Article-I.D.: brl-tgr.9037
Posted: Thu Mar 7 09:51:51 1985
Date-Received: Sun, 10-Mar-85 07:08:34 EST
Sender: news@brl-tgr.ARPA
Lines: 15

Need a cheap and quick 2m groundplane antenna?

Recently I needed such a thing and laziness and lack of time
prevented me from 'doing it myself.' I took a walk to the
local Radio Shack and purchased a 20-176 ($14.95) "All band
base station monitor antenna." It just so happens that the
elements are the correct length for 2m fm work and the antenna,

at the end of 50 feet of good RG/8U coax shows an SWR of about
1.2 to 1.

The elements are stainless and the hardware is of fair quality.
The thing look like it could stand about 100 watts.

Ron Hoffmann, WA2EYC/1
Hoffmann@MIT-Marie@MIT-MC

From 7162837328042491970
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6d746cd01152759
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-07 07:26:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!ERWINVL.DLOS@XEROX.ARPA
From: ERWINVL.DLOS@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: FT757 and RS232
Message-ID: <9038@brl-tgr.ARPA>
Date: Thu, 7-Mar-85 10:26:11 EST
Article-I.D.: brl-tgr.9038
Posted: Thu Mar 7 10:26:11 1985
Date-Received: Sun, 10-Mar-85 05:58:09 EST
Sender: news@brl-tgr.ARPA
Lines: 21

BRUCE,

I HAVE A 757 THAT I HAVE BEEN "TALKING" TO VIA MY XEROX 820-II COMPUTER
FOR SOME TIME NOW. I DESIGNED MY OWN INTERFACE USING A MOTOROLA MC1489
AND A
RAT SHACK OPTICAL ISOLATOR. I OUTPUT FROM THE 820-II COMM PORT (RS232)
TO
THE HOME BREW INTERFACE THEN INTO THE RICE BOX. WORKS GOOD BUT I AM NOT
COMPLETELY SATISFIED WITH THE SOFTWARE I GENERATED TO HANDLE ALL THE
OPERATING FUNCTIONS OF THE 757. IT IS NOT WHAT THE AVERAGE BEAR WOULD
TERM AS BEING "USER
FRIENDLY". THEREFORE, I AM IN THE PROCESS OF REWRITING.

AS FAR AS ACTUAL PWA FROM YAESU, I HAVE NEVER INQUIRED.

REGARDS,

W5PUT--VAL L. ERWIN

From 2015966579871062622
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d148bcce923af607,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-08 14:16:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabsc.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!whuxl!whuxlm!akgua!
sdcsvax!sdcrdcf!hplabsc!labelle
From: labelle@hplabsc.UUCP (WB6YZZ La Belle)
Newsgroups: net.ham-radio
Subject: Another SCA adapter
Message-ID: <2464@hplabsc.UUCP>
Date: Fri, 8-Mar-85 17:16:23 EST
Article-I.D.: hplabsc.2464
Posted: Fri Mar 8 17:16:23 1985
Date-Received: Sun, 10-Mar-85 07:46:23 EST
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 9

     Another SCA decoder can be made using the LM3089 or 3189 "fm if
subsystem". It contains IF stages quadrature detector, afc, agc,squelch
and first audio stage. It can accept uV input level signals so low
drive from your tuner is no problem. Simply add a 67kHz tuned input
and quad det. circuit, and it's ready!

                    GEORGE   WB6YZZ

From -6717037502091786258
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6acaa79fd93dfe1d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-08 23:26:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
godot!harvard!seismo!brl-tgr!tgr!jcp@BRL-TGR.ARPA
From: jcp@BRL-TGR.ARPA (Joe Pistritto)
Newsgroups: net.ham-radio
Subject: Re: shortwave receivers for automobiles
Message-ID: <9092@brl-tgr.ARPA>
Date: Sat, 9-Mar-85 02:26:20 EST
Article-I.D.: brl-tgr.9092
Posted: Sat Mar 9 02:26:20 1985
Date-Received: Mon, 11-Mar-85 07:00:43 EST
Sender: news@brl-tgr.ARPA
Lines: 11

Well, there is the Blaupunkt Berlin receiver (about $1200), which is
a really good AM/FM/SW receiver with tape transport. The radio tuning

part is on a stalk that sticks up. I've never seen one but I've
heard its pretty awsome. Most car radios in europe have longwave,
but SW is less common. I am also looking for a car stereo type
installation, and would like shortwave capability, but thats not
in demand in the US apparently. I have an MFJ converter, but thats
really not very satisfactory (and requires an analog tuned radio
to work)

-JCP-

From -3391496233472683068
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6acaa79fd93dfe1d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-09 00:32:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!gd@sri-spam
From: gd@sri-spam
Newsgroups: net.ham-radio
Subject: Re: shortwave receivers for automobiles
Message-ID: <9093@brl-tgr.ARPA>
Date: Sat, 9-Mar-85 03:32:43 EST
Article-I.D.: brl-tgr.9093
Posted: Sat Mar 9 03:32:43 1985
Date-Received: Tue, 12-Mar-85 21:34:54 EST
Sender: news@brl-tgr.ARPA
Lines: 6

Blaupunkt makes a car-stereo/tape-player that also receives the
short-wave broadcast bands. I don't know the model number, but I saw
one once in a Porshe 928--I think it came as standard equipment (?).

Greg, WB6DEO

From 7783222785598134472
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dce797e493a2a09b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-09 19:13:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!umcp-cs!gymble!lll-crg!dual!amd!fortune!
dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: Update on 4th ARRL Networking Conference
Message-ID: <420@dsd.UUCP>
Date: Sat, 9-Mar-85 22:13:33 EST
Article-I.D.: dsd.420

Posted: Sat Mar 9 22:13:33 1985
Date-Received: Tue, 12-Mar-85 20:34:23 EST
Organization: AMPEX DSD, Redwood City, CA.
Lines: 158

To: All packet radio stations
From: Hank Magnuski, KA6M
Date: March 9th, 1985

Subject: Fourth ARRL Networking Conference - Update

The following message is an update to the information bulletin issued earlier. Please note that times and places published in the previous bulletin have been changed, and the earlier information should be discarded. The Conference promises to be an important meeting, for as of this date over 20 packeteers from major groups around the country have made reservations and nearly 50 preregistration tickets have been sold. Plan to attend the social events before and after the Conference, as you will probably find that these informal gatherings are a good source of information and contacts.

The Fourth ARRL Computer Networking Conference will be in San Francisco this year on March 30th, 1985. The conference, co-sponsored by the American Radio Relay League and the Pacific Packet Radio Society, will be held in conjunction with the Tenth West Coast Computer Faire, which runs from March 30th through April 2nd at San Francisco's new Moscone Convention Center. The tremendous growth and interest in packet radio terminals, equipment, networks and applications promises to make this conference one of the largest and best attended of the conferences given so far. Here is some information you will need to attend this conference:

Location -- The Networking Conference and all activities of the Faire will be held in Moscone Center in downtown San Francisco. To attend the Conference you will need an entrance ticket to the Faire. All Faire visitors may attend the ARRL Conference at no additional charge. All sessions are open to the public, and persons with no previous knowledge of packet radio systems and procedures are welcome to sit in and learn what they can about this new area of personal computer networking.

Dates -- The Conference will be held all day Saturday, March 30th. The Faire runs from March 30th through April 2nd.

Times -- The Faire hours for sessions and exhibits are 10:00 a.m. to 6:00 p.m. every day. The Conference sessions will run all day Saturday, from 10:00 to 6:00. An exhibit booth demonstrating packet radio equipment and operation will be sponsored by the Pacific Packet Radio Society, and will be open all four days of the Faire.

Tickets -- On-site registration for four days is $20. On-site registration for one day is $12. Pre-registration for four days is $15. Through special arrangements with the Faire and the ARRL, a special pre-registration fee of $20 will purchase a four day ticket to the Faire and a complete set of

the ARRL Conference Proceedings. Send a check for $20 and a self-addressed stamped envelope to H. Magnuski at the address listed below. Any checks received after March 16th cannot be guaranteed the special rate. Checks received after that date will be processed if possible and your tickets will be available at the Friday night event. Make the check payable to H. Magnuski and send it to 311 Stanford Avenue, Menlo Park, CA 94025.

Conference Proceedings -- The ARRL Computer Networking Conference papers have been a primary source of information on developments in amateur packet radio and digital communications between personal computers. The Proceedings will be for sale at the Faire for $10, and may be obtained from the ARRL by mail thereafter. They are included in the special pre-registration package mentioned above.

Faire Events -- The West Coast Computer Faire has been the premier trade show in the development of the microcomputer industry. This tenth anniversary session promises to be jam-packed with sessions and exhibits on personal computing. Hundreds of leading manufacturers have signed up for the Faire, and there will be sessions and seminars on almost every aspect of personal computing.

Conference Events -- Times and places for all the networking conference are listed below:

March 29th - 8:00 to Midnite - Network Management meeting at the San Francisco Pizzeria, 418 Beach Street (near Taylor), San Francisco. From the Hotel Union Square take the Bay & Taylor Cable Car to the end of the line. Walk two blocks down Taylor and you're there. (Yes, when cable cars aren't being used as amusement rides, they can be used for public transit.) Everyone is welcome. This will be a test of how late the East Coast packeteers can stay up when beers >= 2. At least one East Coast packeteer has accepted the challenge.

March 30th - 08:30 - Breakfast at Tad's Restaurant, 120 Powell St., SF.

All technical sessions for the conference will be held in Room 232. This is in the East Wing of Moscone Center near 3rd and Howard.

March 30th - 10:30 - Opening remarks and Keynote - Paul Rinaldo, W4RI
10:45 - Pete's Packet Primer by Pete Eaton, WB9FLW.
11:30 - Applications of Packet Radio - Papers
12:00 - Applications panel session by Andy Cromarty, N6JLJ.
12:30 - Lunch break. You're on your own.
13:30 - Technical Papers on packet radio and digital communications. Presentations from the Proceedings, Part I.
15:15 - Technical Papers on packet radio and digital communications. Presentations from the Proceedings, Part II.
18:00 - End of technical sessions

March 30th - 20:00 - Conference dinner at New Joe's Restaurant, 347 Geary St. (between Powell & Mason), SF. Phone: 989-6733. We will need a count of those wishing to attend by noon on Sat.

March 30th - 22:00 - A WESTNET organization and planning meeting will be held immediately following the Conference dinner. Don Simon, NI6A, is organizing this session, and the location will be announced at the Conference.

March 31st - 08:30 - Breakfast at Tad's Restaurant, 120 Powell St., SF.

March 31st - 10:00 - Meeting of the ARRL Digital Communications Committee Location to be announced.

Exhibit Booth -- We will be giving demonstrations and explaining how packet radio works at our exhibit booth (833/835) on the main exhibit floor. Representatives from visiting packet radio societies are welcome to leave copies of newsletters and membership applications at the booth. Also, if you have any specialized equipment you wish to have shown or demonstrated, please bring it along and we will try to include it at the show.

Housing -- Bill Stevens, W6ZM, has reserved a block of rooms for visiting packeteers at the Hotel Union Square, 114 Powell Street, San Francisco, CA 94102. Telephone is 415-397-3000. This hotel is three blocks from Moscone Center, and is one of the least expensive hotels suitable for conference attendees. To get to the hotel, take the Airporter Bus from SFO (approx. $6.00) to the downtown terminal. The Hotel is two blocks away, and you can walk or take a cab. A shuttle bus to the airport stops at the Hotel.

The following hotels are close to Moscone and will have many Faire visitors:

Hotel Meridien, 50 3rd Street, San Francisco, CA 94103. 415-974-6400
This is a new 700 room 36 story hotel with a French accent.

Sheraton Palace, Market & New Montgomery, SF. 415-392-8600
This is the Faire Headquarters hotel, two blocks from Moscone.

St. Francis, Powell & Geary, SF. 415-397-7000
About four blocks from Moscone.

Faire Contacts -- Any questions about the Faire itself may be directed to Computer Faire, Inc. (A Prentice-Hall Company), 611 Veterans Boulevard, Redwood City, CA 94063. Telephone is 415-364-4294.

Coordination Frequencies -- There will be packet radio activity on 145.01 and 146.58 MHz. Voice channel coordination will be on WB6FDT/R, courtesy of the Telephone Pioneers. Frequency is 146.19/.79 coupled to 443.1(out)/448.1(in).

The members of the Pacific Packet Radio Society look forward to your visit, and sincerely hope you will have a pleasant stay in San Francisco.

73, Hank

H. S. Magnuski, 311 Stanford Avenue, Menlo Park, CA 94025 415-854-1927

EIES (DRNET): KA6M,2971

Telemail: HMAGNUSKI/AMSAT
Usenet: ucbvax!decwrl!amdcad!fortune!dsd!dna

Please give this notice the widest possible distribution.

From -7948044343541844648
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,628a3fe4d150f70a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-09 08:33:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!IAIPS-DCAS@USC-ISI.ARPA
From: IAIPS-DCAS@USC-ISI.ARPA
Newsgroups: net.ham-radio
Subject: Scanner coverage
Message-ID: <9827@brl-tgr.ARPA>
Date: Tue, 9-Apr-85 11:33:31 EST
Article-I.D.: brl-tgr.9827
Posted: Tue Apr 9 11:33:31 1985
Date-Received: Fri, 12-Apr-85 04:25:48 EST
Sender: news@brl-tgr.ARPA
Lines: 11

Hi,

     I have an old Bearcat 210 scanner which I sometimes use to
monitor the 2 meter repeaters. I would also like to use it on the
lower end of the band but, unfortunately, it does not cover 2m
frequencies below 146 Mhz.

     Does anyone know how to modify this scanner to extend the
coverage down to the lower end of the band? Thank you.

                                        Dan Reigada, K4JWW

From 6128461766002765858
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,165c4514b621b3c4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-09 09:58:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!stephany.WBST@Xerox.ARPA
From: stephany.WBST@Xerox.ARPA
Newsgroups: net.ham-radio
Subject: Re: bulletin
Message-ID: <9831@brl-tgr.ARPA>
Date: Tue, 9-Apr-85 12:58:55 EST
Article-I.D.: brl-tgr.9831
Posted: Tue Apr 9 12:58:55 1985

Date-Received: Fri, 12-Apr-85 04:47:03 EST
Sender: news@brl-tgr.ARPA
Lines: 22

QST
HR DOT BULLETIN NR 23 FROM DOT HEADQUARTERS
TO ALL AMATEURS BT

IN ACCORDANCE WITH THE TREND SET BY THE FCC AND THE CRRL IN
DEREGULATION, THE DEPARTMENT OF TRANSPORTATION HAS DECIDED THAT THE RULE
REQUIRING VEHICLES ON PUBLIC ROADS TO DRIVE ON THE RIGHT SIDE WILL NO
LONGER BE ENFORCED.

IT WAS POINTED OUT BY THE DIRECTOR OF TRANSPORTATION, THAT THIS RULE
CREATES AN EXCESS AMOUNT OF FUEL CONSUPTION AND WEAR ON COMMERCIAL
VEHICLES AS WELL A NOT MAKING EFFICIENT USE OF THE ROADS. HE POINTED
OUT THAT, WITH THIS RULE NO LONGER IN FORCE, BOTH LANES OF A TWO-WAY
HIGHWAY COULD BE USED FOR TRAFFIC IN THE SAME DIRECTION WHEN THE
MAJORITY OF TRAFIC IS HEADED IN THE SAME DIRECTION. FURTHER REDUCTION
IN FUEL WOULD RESULT BY ALLOWING VEHICLES TO RUN ON THE LEFT SIDE OF THE
ROAD WHEN THE ROAD TURNS LEFT, THEREBY DECREASING THE DISTANCE THE
VEHICLE MUST TRAVEL.

A FURTHER SAVING WOULD RESULT IN LAW ENFORCEMENT, SINCE POLICE WOULD NO
LONGER HAVE TO PERSUE AND TICKET PEOPLE DRIVING VEHICLES ON THE WRONG
SIDE OF THE ROAD.

From 5690508780667856265
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,923741e2b20b7ea8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-09 10:59:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 SMI; site husky.uucp
Path: utzoo!linus!philabs!cmcl2!seismo!rochester!ritcv!husky!fab
From: fab@husky.uucp (Rick Booth)
Newsgroups: net.ham-radio
Subject: Converter for Icom R-70
Message-ID: <142@husky.uucp>
Date: Tue, 9-Apr-85 13:59:20 EST
Article-I.D.: husky.142
Posted: Tue Apr 9 13:59:20 1985
Date-Received: Fri, 12-Apr-85 04:25:30 EST
Organization: Eastman Kodak Company, Rochester, NY
Lines: 8

Subject: Converter for Icom R-70
Newsgroups: net.ham-radio
     Has anyone on the net had any experience with a VHF converter for
the Icom R-70 Communications receiver? Make - model - cost?

Rick Booth, K2SA {allerga,seismo}!rochester!ritcv!husky!fab
Eastman Kodak Company

From -3370871079607454682
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,62097def3316ba46,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-10 05:51:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!rachiele@NADC
From: rachiele@NADC
Newsgroups: net.ham-radio
Subject: Book references wanted
Message-ID: <9850@brl-tgr.ARPA>
Date: Wed, 10-Apr-85 08:51:37 EST
Article-I.D.: brl-tgr.9850
Posted: Wed Apr 10 08:51:37 1985
Date-Received: Fri, 12-Apr-85 06:15:14 EST
Sender: news@brl-tgr.ARPA
Lines: 5

I am not licenced, but am interested in getting a ham licence, and
possible building a radio. Can you point me toward any good books
which will help me? Thanks.
Jim Rachiele
RACHIELE@NADC.ARPA

From -2194502879968200486
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,466880a0ce541ac7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-10 07:57:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!mcnc!
decvax!decwrl!dec-rhea!dec-kahlua!newell
From: newell@kahlua.DEC (Area 6 network support, 225-4667)
Newsgroups: net.ham-radio
Subject: US counties list
Message-ID: <1594@decwrl.UUCP>
Date: Wed, 10-Apr-85 10:57:07 EST
Article-I.D.: decwrl.1594
Posted: Wed Apr 10 10:57:07 1985
Date-Received: Sat, 13-Apr-85 04:18:50 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 5

Does anyone have a list of US counties?

Thanks.

- Dick, ak1a

From 4598546570038688749
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,56ff6e88c41687a3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-10 08:53:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site mako.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tektronix!
orca!mako!jans
From: jans@mako.UUCP (Jan Steinman)
Newsgroups: net.ham-radio
Subject: Re: PopCom's Alice Brannigan... (Kneitel folklore)
Message-ID: <692@mako.UUCP>
Date: Wed, 10-Apr-85 11:53:58 EST
Article-I.D.: mako.692
Posted: Wed Apr 10 11:53:58 1985
Date-Received: Thu, 11-Apr-85 07:35:53 EST
References: <534@ihu1h.UUCP> <626@vortex.UUCP>
Reply-To: jans@mako.UUCP (Jan Steinman)
Organization: Tektronix, Wilsonville OR
Lines: 16

In article <626@vortex.UUCP> lauren@vortex.UUCP (Lauren Weinstein) writes:
>Is Tom Kneitel still around? I used to read his columns in Electronics
>Illustrated YEARS ago.
>
>I still remember one of the letters he answered:

And then there's one of my favorites:

Q: "Whenever I drive under an overpass FM is OK, but all AM stations suddenly
    vanish. What should I do?"

T.K: "Stay away from overpasses -- you're a menace to the AM broadcast
      industry!"
--
:::::: Jan Steinman   Box 1000, MS 61-161   (w)503/685-2843 ::::::
:::::: tektronix!tekecs!jans   Wilsonville, OR 97070   (h)503/657-7703 ::::::

From -6255709263806372001
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6ea9e7efcca3ab70,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-10 09:01:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford

From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: book references
Message-ID: <9855@brl-tgr.ARPA>
Date: Wed, 10-Apr-85 12:01:51 EST
Article-I.D.: brl-tgr.9855
Posted: Wed Apr 10 12:01:51 1985
Date-Received: Fri, 12-Apr-85 06:49:00 EST
Sender: news@brl-tgr.ARPA
Lines: 43

The American Radio Relay League, 225 Main St., Newington CT 06111 is one of the better sources of publications helpful to beginners in Amateur Radio. Also, if you can find a Heathkit store or an amateur radio supply house, they usually have a lot of things you can browse through. In particular, the League and several other publishers offer "license manuals" or "study guides" for the ham license examinations. These are worth studying to get the hang of the kind of questions you will be asked. Also, I think the League can now sell you a list of exam questions from which your own actual FCC exam will be selected.

As for general reading to get a background in radio and electronic theory to help you both pass the exam and design your own equipment, I would suggest the League's very popular Radio Amateur's Handbook and Antenna Handbook.

Two other less obvious sources: Look up the name Marcus in your local library's card catalog, author index. Marcus wrote several excellent books on radio in the 60s or so which are still among the clearest sources for beginners. His books may be "tube" oriented, but a lot of the theory is exactly (almost) the same. The second reference is the ancient but honorable RCA Tube Manual of the '60s or so. The beginning of it is an EXCELLENT "Schaum's Outline" of radio circuit technology which, though "tube-oriented", is still very true and useful as the basis for transistor circuit design. Here, you will learn about amplifiers, oscillators, discriminators and envelope detectors, rectifier circuits like half wave, full wave, bridge, etc. RCA may continue the tradition and offer some very helpful transistor and IC oriented educational material today, but I am not familiar with their current stuff so can't give a specific reference. Contact your friendly sales rep, make sure he knows who you work for, and drop some hints about how you would like to get copies of such literature! Note that Motorola, Signetics, National Semiconductor, and many others, all have such literature and also lots of "Application Notes" which you can get free and which are full of general technical information and also practical circuit design information.

Another place to find lots of information is the trade magazines like EDN, Elctronic Design, Computer Design, etc., most of which are free for the effort of filling out a subscription order card.

Good luck!

73,
John H. Sangster, W3IKG

jhs at mitre-bedford

From 3803420210182871277
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b8606ab4c0eabbd3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-11 01:31:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: Gateway Vol. 1 No. 17
Message-ID: <433@dsd.UUCP>
Date: Thu, 11-Apr-85 04:31:36 EST
Article-I.D.: dsd.433
Posted: Thu Apr 11 04:31:36 1985
Date-Received: Sun, 14-Apr-85 02:46:58 EST
Organization: AMPEX DSD, Redwood City, CA.
Lines: 397

C2977 CC5 JEFF WARD (ARRL,2977)   4/10/85   9:45 PM L:396
KEYS:/GATEWAY/VOLUME 1/ISSUE 17/APRIL 9/1985/

Gateway: The ARRL Packet-Radio Newsletter
Volume 1, Issue 17
April 9, 1985

Published by:
American Radio Relay League
225 Main Street
Newington, CT 06111

Editor:
Jeffrey W. Ward, K8KA

FOURTH ANNUAL NETWORKING CONFERENCE

The Fourth ARRL Amateur Radio Computer Networking Conference, cosponsored by the ARRL and the Pacific Packet Radio Society (PPRS), was a complete success. More than half of the twenty four papers published in the proceedings were presented at the conference, with attendance around 100 throughout the six hour meeting. The PPRS/ARRL booth at the West Coast Computer Faire, including on-the-air demonstrations of packet radio at 1200 and 9600 bauds, generated a lot of interest. Several hundred handouts were given to interested Faire-goers, and a lot of radio amateurs who didn't know about packet radio stopped by the booth to see the TNCs in action. Congratulations to Hank Magnuski, KA6M

and the PPRS for coordinating a successful conference.

The Proceedings of the Fourth ARRL Amateur Radio Computer Networking Conference are available from the ARRL for $10. See Gateway issues 14 and 15 for abstracts of the papers of the papers in this 109-page volume of proceedings. Proceedings for the first, second and third conferences are also available for $8, $9 and $10, respectively. These publications provide a valuable record of the history of packet radio, what packet-radio experimenters expect from the future and diverse points of view on many technical issues.

TRENTON COMPUTERFEST

For those on the East Coast, there will be a large packet-radio meeting at the Trenton Computerfest, on April 20th.

1000 Opening remarks - Harold Winard, KB2M.
1010 ARRL remarks - Jeff Ward, K8KA.
1020 Introduction to packet - Jon Pearce, WB2MNF.
1115 Regional summaries of packet activity.
1245 Comparisons of packet-radio TNCs.
1345 Introduction to the W0RLI MailBox - Dick Kutz, KS3Q.
1430 Packet-radio expert-panel discussion with Tom Clark, W3IWI, Phil Karn, KA9Q and Mike Bruski, AJ9X.
1600 End of forum.

The room-number for the forum is not available at this time; just ask at the Computerfest administration booth or look for posters. If you would like to make a presentation during the "regional summaries," contact Jon Pearce, WB2MNF, at 609-953-1566, or Harold Winard, KB2M, at 201-361-6478.

Via WB2MNF.

DAYTON HAMVENTION

Packet-radio will be well represented at the Dayton Hamvention, April 26, 27 and 28. The Dayton packet forum will be held on Friday, April 26th from 2:30 P.M. until 5:30 P.M., in room 1. Six speakers will make presentations and answer questions from the audience.

1430 Introduction to the packet forum - Bob Neben, K9BL
1440 Telecommunications and the Amateur in the 21st Century - Rick Whiting, W0TN.
1500 Packet Primer, 1985 - Pete Eaton, WB9FLW.
1530 Report on the ARRL and packet-radio technology - Jeff Ward, K8KA.
1600 Update on TAPR - Lyle Jonhson, WA7GXD.
1630 PACSAT update - Harold Price, NK6K.

1700 Networking, bulletin-board systems, and the Xerox 820 computer - Terry Fox, WB4JFI.

There will also be display booths for each of the major packet radio TNC manufacturers, including TAPR, GLB, Heathkit, AEA and Kantronics.

Packeteers are encouraged to use 145.01 MHz (voice) as a coordination frequency.

Via K9BL.

KANTRONICS TNC

Kantronics, makers of several RTTY and AMTOR software/hardware packages, have announced the availability of a TNC, the Kantronics Packet Communicator. An early production model of the Packet Communicator was displayed at the recent Computer Networking Conference in San Francisco. The TNC is small, housed in a 2 X 6 X 8-inch cabinet, much like the cabinet for the Kantronics UTU.

Although Kantronics "took some cues from the TAPR TNC," the Packet Communicator is a new hardware design. The internal modem uses switched-capacitor filters and can be switched by software to provide either Bell 103 or 202 tones, with or without receiver equalization. Also, the Packet Communicator can be used as a Bell 202 modem, bypassing all packet-radio functions. The TNC can send and receive packets at 300, 400, 600 and 1200 bit/s, half duplex.

The Packet Communicator serial port can provide RS-232C or TTL signals, at 300, 1200 or 9600 bauds. Special packet-radio terminal programs for many computers will be available soon from Kantronics.

We welcome the Packet Communicator to the growing list of commercially-available TNCs. The Kantronics packet-radio motto? "Packet Made Easy!"

Via Computers and Amateur Radio.

PACKET RADIO AND FIELD DAY

Due to a letter to Gateway from Thomas Clements III, W1ICH, the ARRL Contest Advisory Committee (CAC) has approved a Field Day packet-radio bonus. Field Day rules will now read: "An additional 100 points can be earned by completing at least one QSO on packet radio during the Field Day period. The repeater provision is waived for packet-radio QSOs. A packet station does not count as an additional transmitter. On the summary sheet,

show packet radio as a separate 'band.'" This new bonus is in effect this year, thanks to quick action by the CAC.

Field Day, always a day of high visibility for Amateur Radio, is now a good time to show the public and the members of your Field-Day group the advantages of packet radio, Amateur Radio's newest mode. Show them that packet radio is no longer an experimental mode, but a valuable emergency communications tool. This Field Day bonus might also encourage some investigation of low-power portable packet stations. TNC, two-meter rig and portable computer might all be run from solar, wind or human power. Mr. Clements suggests that "the annual Field Day message be sent to the section manager by packet radio if possible. Perhaps some traffic handling nets could arrange to pick up messages from packet-radio bulletin boards."

If you have any interesting ideas for using packet radio during Field Day, send them along to Gateway. Also, be sure to take some pictures of your portable packet station for the QST Field Day summary.

Ed.

TRANSCONTINENTAL PACKET

At the meeting of the Board of Directors of the Pacific Packet Radio Society (PPRS) on March 21st, 1985, the following resolution was passed:

Whereas the PPRS was one of the first societies formed specifically to encourage the growth of computer networking via radio using all digital concepts and techniques, and whereas the San Francisco area was the site of the nation's first amateur digipeater, and whereas an even greater challenge faces the amateur radio community to establish a transcontinental link, the Pacific Packet Radio Society has decided to establish a unique award to encourage the completion of the first terrestrial transcontinental network link. This one-time award shall be known as the "Golden Packet" [Like the golden spike that completed the transcontinental railroad. - Ed.] and the regulations relating to it are listed below:

1. A transcontinental link must be established, with each terminus located within 100 kilometers of either the Atlantic or Pacific Ocean.

2. The system must consist of fixed terrestrial digital store-and-forward radio links using VHF (greater than 144.1 MHz), UHF or microwave frequencies. Use of HF, satellite, tropo, meteor-scatter or moonbounce channels is prohibited.

3. A valid two-way transmission and acknowledgment of previously

unknown information (256 characters or more) must occur in less than ten minutes.

4. This competition is open to licensed North American amateurs, and no commercial links or services may be used in the path. Club stations are permitted.

5. Proof of the exchange must be submitted to the PPRS. Proof must include a list of the stations in the link, their locations, frequencies used and a copy of the text exchanged.

6. The reward shall consist of a suitably engraved plaque with the names of all participating stations listed which shall be presented to the ARRL. Each participating station shall receive either a plaque or a certificate.

7. Final decision on the award is subject to review and approval by the Board of Directors of the PPRS.

From KA6M.

WESTNET MEETING

The second "official" meeting of WESTNET was held in conjunction with the Fourth ARRL Computer Networking Conference last week. The networking plans set forth at this meeting illustrate how most amateur packet-radio networks will advance. Several groups within EASTNET are making plans similar to the WESTNET plan. The following notes on WESTNET plans and the reasoning behind them come from Harold Price, NK6K.

"The primary purpose of the first WESTNET meeting was to put in place the best network possible with the technology then available. It was hoped that linking San Diego through Los Angeles to San Francisco would help generate interest at the endpoints and in the less populous areas between, and that the increased number of users would supply the resources to build a more sophisticated network. We are now ready to proceed with the first in a series of improvements: a 9600-bit/s network backbone.

"WESTNET decisions have been based on two concepts. First, use the best technology that is available, but don't wait for the next innovation that is coming 'real soon now.' Second, don't build anything that will make transfer to the next level of technology difficult.

"What technology is there to use now? There is still no agreement on network-layer protocols. There aren't even any working prototypes of network software. There is, however, a 9600-bit/s modem design, the ARRL lab's multi-port digipeater software, hundreds of users running 1200 bauds on two meters and a chain of seven digipeaters between southern and northern

California. Unfortunately, a frequency translation from 145.01 MHz to 145.35 MHz is now necessary between north and south.

"Phase I of WESTNET's 1985 plans is to install 145.01 MHz repeaters in southern California. This will remove the need for frequency translation, reducing the maximum number of digipeater hops to five, with only three hops between L.A. and San Francisco. This will result in an immediate improvement in network service.

"Phase II is to install multi-port digipeaters, 220-MHz radios and 9600-bit/s modems at each of the digipeater sites. Each digipeater will be linked to its neighbors at the higher speed and frequency, providing user access to that link via 145.01 MHz at 1200 bauds. This will avoid collisions between local traffic around each digipeater with traffic on its way to a more distant point. While not as good as a true network protocol, this will be much better than current, single-frequency linking.

"Since the multi-port digipeater is implemented on surplus Xerox 820 boards, WESTNET can switch to a true layer-three network when one becomes available. The Xerox 820 was designated as the target hardware for the first prototype layer-three network software.

"Once in place, WESTNET will allow a user to use the network as if it were a simple chain of digipeaters. The user will transmit and receive on 145.01 MHz. If he specifys more than one digipeater, his packet will be repeater between digipeaters at 9600 bauds on 220 MHz. The packet will be transmitted on 145.01 MHz by the last digipeater in the list. Standard digipeaters can be used on 145.01 MHz as far as necessary for a user to access a multiport digipeater site.

"It is expected that by 1986 and certainly by 1987, there will be a true network-layer protocol in place, and that the backbone network will move toward 1.2 GHz at 56 kbits/s. We also suspect that 145.01 network-access and digipeater capability will always be needed to handle entry-level users, as a redundant path for network resilience in case of emergency and to handle users in extreme outlying areas.

"It was agreed that the 220-MHz link frequency is 220.950 MHz. The modem standard is the K9NG 9600-bit/s modem. The controller is the Xerox 820 running the KE3Z multiport digipeater software. WESTNET technical coordination will take place on the W6IXU mailbox."

If you are interested in schematics of the K9NG modems, they are published in the proceedings of the Fourth ARRL Computer Networking Conference. The mulitport digipeater software is available for an 8" disk to Gateway at the ARRL. I hope that Harold's report provides some insight into how packet radio is

changing in areas where the activity is overflowing a single 1200-bit/s channel.

Via DR NET.

EASTNET GROWING

The addition of several new stations to EASTNET has connected the network from Ottowa, Canada, to Washington, D.C. The "missing link" in northern New Jersey has been filled by WA2SNA-2, installed by the Ramapo Mt. Amateur Radio Club. Now, mail can be forwarded from the W3IWI MailBox in Washington, through WB2MNF in southern New Jersey, and on up the network to WA2RKN in Hyde Park, NY, W1AW in Newington, CT, or any of the W0RLI MailBoxes in the Boston, MA area. Because of high local activity at many places in the network, real-time, long-distance connections often are impossible or slow. W0RLI-type store-and-forward messages traverse the network relatively well, though.

The W0RLI MailBox and GateWay software for the Xerox 820 has is providing much of EASTNET (and beyond) with packet-radio message service. All of the following stations are linked in this store-and-forward network:
W0RLI - Westford, MA
K1BC - Lexington, MA
KE1G-1 - Goffstown, NH
N1DKF - Cranston, RI
KA1T - Harvard, MA
W1AW-4 - Newington, CT
WB1DSW - Manchester NH
WA2RKN-2 - Hyde Park, NY
WB2MNF - Medford, NJ
W3IWI - Clarksville, MD
KS3Q - Baltimore, MD
AK3P - Hummelstown, PA
K7PYK - Scottsdale, AZ
WA4SZK - Florence, SC

A message placed on any of these PBBSs for a user of any of the others will eventually be forwarded from node to node to the proper MailBox. Routing tables are maintained (by hand) at each node.

To the north, the the Plattsburgh Amateur Packet Radio Association, a division of the Champlain Valley Amateur Radio Club, has installed some stations that link the Mt. Ascutney, Vermont, digipeater to Ottowa, Ontario. This path allows EASTNET stations to access a BBS run by Wayne Bruce, VE3FXI. For those of you on EASTNET who want to try out the path to Ottowa, use WA1TLN-1, KD2AJ, W2UXC-1 and VE3PAK. All of these digipeaters are on 145.01 MHz.

Via W0RLI, Ed.

DIGITAL COMMITTEE MEETING

The ARRL Ad Hoc Committee on Amateur Radio Digital Communication met at the Networking Conference in San Francisco. The most important issues discussed by the committee were protocol standards for TNC control possible standards for message format.

Doug Lockhart, VE7APU, is investigating the use of CCITT X.3, X.28 and X.29 protocols in amateur TNCs. Doug's paper in the conference proceedings outlines the need for a standard set of commands and messages on amateur radio TNCs. If TNC programmers used standard commands and messages, a single article could describe how to operate all amateur-radio TNCs. If standards were adopted and adhered to, applications programs like the W0RLI MailBox would could use any TNC. The Committee expressed its appreciation for the research that Doug had done and requested that he deliver a draft of a proposed standard as soon as possible.

Hank Magnuski, KA6M, and several other PBBS operators discussed how difficult it is to move messages from one network to another, because there is no standard format for presenting subject, destination, source and distribution information in a message header. The committee agreed to study the X.400 series of message protocols and attempt to develop a subset of these standards that would meet the needs of amateur packet radio.

From W4RI.

PACKET FREQUENCIES

The CVRA-Southeastern Repeater Association, Inc. coordinates repeaters in North Carolina, South Carolina, Tenessee, Virginia and West Virginia. CVRA has established 145.01, 145.03, 145.05, 145.07 and 145.09 as packet-radio frequencies.

From K4ARO.

REPRODUCTION OF GATEWAY MATERIAL

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From 2129894457111890125
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6e0e973d90d42313,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-11 01:33:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: Gateway Vol. 1 No. 16
Message-ID: <434@dsd.UUCP>
Date: Thu, 11-Apr-85 04:33:18 EST
Article-I.D.: dsd.434
Posted: Thu Apr 11 04:33:18 1985
Date-Received: Sun, 14-Apr-85 02:47:19 EST
Organization: AMPEX DSD, Redwood City, CA.
Lines: 418

C2977 CC4 JEFF WARD (ARRL,2977)   4/10/85   9:14 PM L:416
KEYS:/GATEWAY/VOLUME 1/NUMBER 16/MARCH 26/1985/

Gateway: The ARRL Packet-Radio Newsletter
Volume 1, Number 16
March 26, 1985
Electronic Edition

SPECIAL ISSUE

This issue of Gateway is tailored to provide information to those attending the West Coast Computer Faire and the Fourth Amateur Radio Computer Networking Conference. We have attempted to provide an overview of packet-radio activity in the United States and a fairly complete list of U.S. packet-radio clubs.

PACKET RADIO IN 1985

The past year has seen packet radio grow from a few hundred isolated stations into a few dozen tentatively-connected local-area networks (LANs). There are now between 2,000 and 3,000 packet-radio terminal node controllers (TNCs) operating on the amateur bands. The following list of clubs gives a fair idea of where the activity is concentrated: The San Francisco Bay area and the Los Angeles basin are the hotspots of "WESTNET" activity. These two centers are linked by a string of mountaintop repeaters. In the Northwest, there are organized groups pushing packet radio from Vancouver, BC toward Northern California. There are two paths taking shape from West to East: Arizona - New Mexico - Texas - Arkansas, and Utah - Colorado - Nebraska - Iowa - Illinois. The Chicago-area has recently produced a 9600-bit/s modem (designed by Steve Good, K9NG) and promises to be a center of network development. The east coast from Washington, D.C. to Boston is tenouosly linked, and there are many areas of high activity along this "EASTNET." In the south, Florida has the largest packet-radio population, and Alabama and Georgia are beginning to come on-the-air. Terminal node controllers have

been sold in every state in the U.S. and in several overseas countries.

The U.S. is being covered by LANs, and the next leap for amateur packet radio will be to link these LANs using a "network-layer protocol." Many LANs are already linked in a store-and-forward mail network designed by Hank Oredson, W0RLI. Hank's MailBox software, running at dozens of sites throughout the world, forwards a message from one node to another, until the message reaches its destination. This taste of networking is driving several software and hardware teams in the development of real-time networking equipment.

If you are excited by the idea of an amateur data network, or if you have some use for such a network (emergency traffic, weather networking, message handling, etc.) contact a packet-radio group and join the fun.

Jeff Ward, K8KA, Editor.

NATIONAL ORGANIZATIONS

o The Amateur Radio Research and Development Corp. is a group interested in advanced amateur-radio techniques. Members of AMRAD have been responsible for many advances in packet radio.

AMRAD
P.O. Drawer 6148
McLean, VA 22106-6148

o The Amateur Radio Satellite Corp. has ongoing interest in the development of amateur packet-radio standards, and they are currently involved in the construction of PACSAT, a packet-radio satellite.

AMSAT 850 Sligo #601
Silver Spring MD 20910
301-589-6062

o The Tucson Amateur Packet Radio Corp. (TAPR) is best known for the TNC kit that it designed, tested and markets. With the TNC now being produced by two commercial companies, TAPR continues to be instrumental in packet-radio development.

Tucson Amateur Packet Radio (TAPR)
P.O. Box 22888
Tucson, AZ 85734-2888

ALABAMA

In the Huntsville area, contact:

Frank Emens, W4HFU
3714 Lakewood Circle
Huntsville, AL 35811.

Near Birmingham:

Henry Wingate, K4HAL
104 Von Dale Drive
Birmingham, AL 35215

ARKANSAS

Elmer Wingfield, W5FD
26 Belmont Drive
Little Rock, AR 72204

CALIFORNIA

o Recently, the Sacramento Packet Group (SACPAC) became a special interest group under the Sacramento Amateur Radio Club, Incorporated. This club, W6AK, is the area's oldest ham club.

While Sacramento packet stations are able to get into the San Francisco Bay Area with moderate success, plans are to install a high-level digipeater in the Sierra Nevada this year which will allow for more reliable links into the Bay area and down the Coast Range. Even better, the digipeater is planned to be a major node in the proposed Central Valley chain which will provide North-South path through the center of the state. SACPAC is also working on a W0RLI MailBox in Sacramento which should be functioning on 145.09 MHz by early summer. SACPAC is coordinating with PPRS to ensure that operating parameters remain standardized not only between these groups, but also within the rapidly expanding group of newcomers to packet radio in this area. All local operations are on 145.01 and 145.03 MHz.

The Sacramento County Office of Emergency Operations plans to have a TNC installed by the end of this summer and is coordinating with the State Office of Emergency Services to establish links and work out details for use of packet systems in emergency and disaster situations. The plan is to have packet "teams" within the County's newly-revitalized RACES program and ARES. The teams would set up communications at appropriate sites during drills and actual emergencies. A good framework should be developed over the next year to accomodate the projected growth in this emergency network.

o LAPG is the local Los Angeles packet-radio club. LAPG runs a voice net every Monday night at 8:00 PM local time on 145.36 MHz simplex. Meetings are on the last Saturday of every month near the TRW swap meet.

Los Angeles Area Packet Group (LAPG)

P.O. Box 6026
Mission Hills, CA 91345

o The Southern California Digital Coordination Council (SCDCC) is an organization formed by the packet radio operators in Southern California to serve as a central point for communications between packet users and other amateur groups. It also serves as a clearing house for information on local packet activity. Membership is open to anyone; packet radio users are encouraged to join. SCDCC has a technical committee to help track and promote the rational growth of packet radio equipment, repeaters, gateways and protocols on frequencies assigned to packet radio.

SCDCC serves all of Southern California and has members in San Diego, Los Angeles, Ventura, Santa Barbara, Lancaster, Lompoc, and other areas.

SCDCC
P.O. Box 6026
Mission Hills, CA 91345

o The Pacific Packet Radio Society was one of the first North American packet-radio clubs. PPRS serves the San Francisco Bay area, and is the co-sponsor of the Fourth Amateur Radio Computer Networking Conference.

Pacific Packet Radio Society
P. O. Box 51562
Palo Alto, CA 94303

o There is also a packet-radio club in San Diego.

San Diego Packet Group (SDPG)
c/o Mike Brock, WB6HHV
10230 Mayor Circle
San Diego, CA 92126

COLORADO

Rocky Mountain Packet Radio Association
% Andy Freeborn, N0CCZ, Secretary
5222 Borrego Drive
Colorado Springs, CO
(303) 598-8373

FLORIDA

The Florida Amateur Digital Communications Association is an organization interested in digital communication techniques such as packet radio. Since its founding in 1983, FADCA has grown to be one of the major regional packet organizations in the nation. FADCA members are from Florida, Georgia, and many other states.

FADCA provides a structure for planning orderly growth of packet networking, and has been designated as the agent of the Florida Repeater Council for administering packet frequencies and repeater sites. FADCA's newsletter, the BEACON, provides technical information and operating news to over 250 persons each month. FADCA is the coordinator of the SOUTHNET packet network which is rapidly expanding from Florida through the entire Southeast.

Florida Amateur Digital Communications Association (FADCA)
812 Childers Loop, Brandon, FL 33511
(813) 689-3355

GEORGIA

Georgia Radio Amateur Packet Enthusiast Society
GRAPES
P.O. Box 1354
Conyers, GA 30207

Southern Amateur Packet Society (SAPS)
c/o Wayne Harrell, WD4LYV
RT 1 Box 185
Sycamore, GA 31790

ILLINOIS

Chicago Amateur Packet Radio Assn. (CAPRA)
P.O. Box 8251
Rolling Meadows, IL 60008

St. Louis Area Packet Radio
9926 Lewis & Clark
St. Louis, MO 63136

IOWA

The Central Iowa Technical Society has helped build a widespread packet network throughout Iowa.
Central Iowa Technical Society
c/o Ralph Wallio, W0RPK
RR 4
Indianola, IA 50125

KANSAS

John Anderson III, WB0SKL
305 Brittany
Olathe, KS 66061

MASSACHUSETTS

New England Packet Radio Assn. (NEPRA)

P.O. Box 15
Bedford, MA 01730

MICHIGAN

Eastern Packet Radio Of Michigan (EPROM)
c/o J. Nugent, WB8TKL
307 Ross Dr.
Monroe, MI 48161

MINNESOTA

MAPR hosts a Tuesday-evening voice net on 146.04/64 MHz at 7:45 PM. Packet operation is on 145.010 MHz with additional channels on 145.3, 145.5, 145.7, and 145.9 MHz.
Minnesota Amateur Packet Radio (MAPR)
C/O Pat Snyder, WA0TTW
565 Redwood Lane
New Brighton, MN 55112

NEW HAMPSHIRE AND VERMONT

Mt. Ascutney Amateur Packet Radio Association
c/o Carl Breuning, N1CB
54 Myrtle St.
Newport, NH 03773

NEW JERSEY

o The Radio Amateur Telecommunications Society provides support to amateurs engaging in packet activities. The group's activities include a packet software library and development of a cross-state trunking system to be incorporated into EASTNET. A directory of active amateur packet stations and facilities has been compiled and is available. Standards documents are kept in club files and may be distributed upon request. RATS is developing an interface between the private teleconference DR NET and the EASTNET packet-radio network. This interface should be operating soon.

In Northern New Jersey/New York City:
The Radio Amateur Telecommunications Society (RATS-NORTH)

c/o J. Gordon Beattie, Jr. N2DSY
206 North Vivyen St.
Bergenfield, NJ 07621
(201) 387-8896

In South Jersey:
The Radio Amateur Telecommunications Society
(RATS-SOUTH)
c/o Brian B. Riley, KA2BQE
RD 2 Burnt House Rd.

Indian Mills, NJ 08088

RATS BBS Tel: 609-268-9597 (300 baud)

o The Cherryville Repeater Association is also active in packet radio in New Jersey. Their main concerns are public service and 220-MHz linking. They maintain a series of linked 220-MHz duplex repeaters that are used for voice and packet.

Cherryville Repeater Association
Box 308
Quakertown, NJ 08868

NEW YORK

Rochester Packet Group
c/o Fred Cupp, W2DUC
27 Crescent Rd.
Fairport, NY 14450

o New York City:

Packet Of New York (PONY)
c/o Bill Schimoler
42-15 172 St
Flushing, NY 11358

o Hudson Valley:

The Mount Beacon Amateur Radio Club supports an active packet-radio group. They are now turning their attention and resources to 220-MHz network links.

Mt. Beacon Amateur Radio Club
P.O. Box 841
Wappingers Falls, NY 12590

OHIO

Cincinatti Amateur Packet Radio Experimenters Society (CAPRES)
c/o John Schroer-IV, KA8GRH
984 Halesworth Dr.
Forest Park, OH 45240

Cleveland Area:
Maynard Weston, W8MW
4564 Park Edge Dr.
Fairview Park, OH 44126

TENNESEE

Tennesee packet activity is centered in Memphis, on 145.01 MHz.

Contact:

John Burningham, WB8PUF
Memphis State University
Dept. of Engineering, Technology
Memphis, TN 38152

TEXAS

Dave Cheek, WA5MWD
1510 Treavis St.
Garland, TX 75042

UTAH

UPRA has a voice net on Tuesday evenings, at 8:45 PM, on 146.02/62 MHz.

Utah Packet Radio Association (UPRA)
4382 Cherryview Drive
West Valley City, Utah 84120

WASHINGTON

Northwest Amateur Packet Radio Association (NAPRA)
c/o John Gates, N7BTI
750 Northstream Ln.
Edmonds, WA 98020

TRENTON PACKET FORUM

There will be a packet radio meeting at the Trenton (New Jersey) Computer Fest on Saturday, April 20 (note the change -- some of the earlier publicity had indicated Sunday). The Mid-Atlantic Packet Radio Council (MAPRC) is sponsoring the packet sessions and the organizers are Harold Winard, KB2M and Jon Pierce, WB2MNF. There will be a panel of experts to answer questions about packet radio and presentations by representatives of various EASTNET LANs.

INTERNATIONAL PACKET ACTIVITY

Although this report and list were biased toward U.S. packet activity, there is considerable activity in Canada and overseas. Japan, the U.K., New Zealand, Australia, Germany and Sweden all have packet radio activity. Canadian activity-centers include Hamilton, ON; Vancouver, BC; Toronto, ON; and Ottowa, ON. Back issues of Gateway provide more information on international activity.

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The American Radio Relay League
225 Main Street
Newington, CT 06111

From 6863393328946043489
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,60a79c862e36a50,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-11 09:32:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: ARRL 2 meter Sprint
Message-ID: <187@sask.UUCP>
Date: Thu, 11-Apr-85 12:32:52 EST
Article-I.D.: sask.187
Posted: Thu Apr 11 12:32:52 1985
Date-Received: Sat, 13-Apr-85 03:12:25 EST
Organization: U of Saskatchewan, Canada
Lines: 9

For those of you who will be in the ARRL 2m Sprint on Mon 15th Apr, I hope to
have some guys from around here working the contest. I started a 2m SSB
net about 5 weeks ago on Sundays at 8pm (Mon 0200Z) on 144.2Mhz and there
is now some interest in 2m SSB. We have had checkins from squares DO63,DO73,
DO62 (my QTH),DO72, DO81 and DO70. So you may hear activity from those
squares during the contest ... but not from me ... my 25 watts into a 5/8ths
ain't gonna make it unless the propagation is really tremendous.
73
Pete VE5BEL

From 8996890894394759350
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,49a99375bc725a6b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-12 09:49:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!GOPSTEIN@RUTGERS.ARPA
From: GOPSTEIN@RUTGERS.ARPA (Richard B. Gopstein)
Newsgroups: net.ham-radio
Subject: Sattelite Info wanted

Message-ID: <9920@brl-tgr.ARPA>
Date: Fri, 12-Apr-85 12:49:44 EST
Article-I.D.: brl-tgr.9920
Posted: Fri Apr 12 12:49:44 1985
Date-Received: Mon, 15-Apr-85 03:34:03 EST
Sender: news@brl-tgr.ARPA
Lines: 16

I am interested in communicating with the various amateur radio sattelites. Initially, I would just like to receive from them and work out the bugs in reception and decoding of telemetry. I have a copy of ARRL's Sattelite expreimenters handbook, but I find that I occasionally need more info (specifically, what services are available on specific sattelites - Oscar 10, 11).

Can anyone recommend a source for this info, and would anyone involved in sattelite communication be willing to answer some more detailed questions about setting up a sattelite station?

Thanks in advance.

Rich Gopstein, KD2CQ

From -374871168264144982
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,628a3fe4d150f70a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-12 16:38:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihlpm.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihlpm!parnass
From: parnass@ihlpm.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Scanner coverage
Message-ID: <223@ihlpm.UUCP>
Date: Fri, 12-Apr-85 19:38:44 EST
Article-I.D.: ihlpm.223
Posted: Fri Apr 12 19:38:44 1985
Date-Received: Sat, 13-Apr-85 06:44:16 EST
References: <9827@brl-tgr.ARPA>
Organization: AT&T Bell Laboratories
Lines: 27

Dan:

Can't reach you via mail. You've probably heard this trick before:

> To listen on a frequency f (where f is in the VHF-hi or UHF range), program the scanner to

f + 2(IF),

to hear the image.

I use this method on the BC350 and BC300 to listen in on the 400 - 420 MHz band. Bearcat has used IF's of 10.8 and 10.85 MHz in their scanners.

> I have an old Bearcat 210 scanner which I sometimes use to
> monitor the 2 meter repeaters. I would also like to use it on the
> lower end of the band but, unfortunately, it does not cover 2m
> frequencies below 146 Mhz.
>
> Does anyone know how to modify this scanner to extend the
> coverage down to the lower end of the band? Thank you.
>
> Dan Reigada, K4JWW

--

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 4476498131798302563
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15f443,f4b0669fffc76fbd,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 151e61,f4b0669fffc76fbd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-12 17:05:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihlpa.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihlpa!wolfordj
From: wolfordj@ihlpa.UUCP (wolford)
Newsgroups: net.ham-radio,net.wanted
Subject: Ham-fest dates and locations in midwest are wanted
Message-ID: <183@ihlpa.UUCP>
Date: Fri, 12-Apr-85 20:05:57 EST
Article-I.D.: ihlpa.183
Posted: Fri Apr 12 20:05:57 1985
Date-Received: Sat, 13-Apr-85 06:44:36 EST
Distribution: na
Organization: AT&T Bell Laboratories
Lines: 13
Xref: watmath net.ham-radio:2617 net.wanted:6182

Anyone knowing of a ham-fest this summer in the mid-west (Michigan, Indiana, Ohio, Illinois, Wisconsin, Iowa and Kentuky) could you please send the place, date and any additional information that you know about the ham-fest. I will compile and repost to net. (yes I already have my Dayton tickets).

Any small Chicagoland and Indianapolis area ham-fests would also be nice.

Thanks in advance.

Jeff Wolford
wd8kua
ihnp4!ihlpa!wolfordj

From 643000005229351135
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6a8860ba2c214680,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-14 09:07:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: McDonalds begins using walkie-talkies
Message-ID: <540@ihu1h.UUCP>
Date: Sun, 14-Apr-85 12:07:33 EST
Article-I.D.: ihu1h.540
Posted: Sun Apr 14 12:07:33 1985
Date-Received: Mon, 15-Apr-85 01:04:38 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 24

x
          McDonalds Using Two-Way Radios

     The local McDonalds restaurant is modernizing: counter
     workers are now using two-way radios to communicate
     with the cooks.

     Each worker wears a lightweight headset/microphone
     wired to   a small, white plastic box on the front
    of a
     belt worn on the waist. One of the two black pushbut-
     tons on the box is a   push-to-talk control. What
     appears like a large white battery pack is fastened to
     the rear of the belt.

     A worker implied that more than one frequency was being
     utilized.   I don't know what frequencies are used, but
     they could   be in the 46 or   49 MHz   range   shared
    with
     cordless telephones,   intercoms, childrens walkie-
     talkies, and "Talkmen" (tm).

     Anyone have more information?
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -4117887139640360421
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf4c9c023e73a0d3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-14 09:57:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!philabs!prls!amdimage!amdcad!decwrl!dec-rhea!dec-regina!kroth
From: kroth@regina.DEC
Newsgroups: net.ham-radio
Subject: 2m Rig Advice..
Message-ID: <1665@decwrl.UUCP>
Date: Sun, 14-Apr-85 12:57:11 EST
Article-I.D.: decwrl.1665
Posted: Sun Apr 14 12:57:11 1985
Date-Received: Tue, 16-Apr-85 04:11:01 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 15

A friend of mine just bought a new Kenwood TR7950 2m FM tranceiver. I am now thinking of getting one myself. We would appreciate any comments or suggestions (ie. modifications or things to be awhere of.)

Please mail responses to:

..!allegra!rochester!ritcv!pjk8290

TNX ES 73,

Philip, KA2QIK

From 2101535753518829233
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,49a99375bc725a6b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-14 23:44:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Re: Sattelite Info wanted
Message-ID: <324@petrus.UUCP>
Date: Mon, 15-Apr-85 02:44:09 EST
Article-I.D.: petrus.324

Posted: Mon Apr 15 02:44:09 1985
Date-Received: Tue, 16-Apr-85 00:43:05 EST
References: <9920@brl-tgr.ARPA>
Organization: Bell Communications Research, Inc
Lines: 13

Perhaps the best way to get basic info on amateur satellites is to pick
up a copy of the Satellite Experimenter's Handbook by Marty Davidoff,
K2UBC, ISBN 0-87259-004-6. It's available from AMSAT or ARRL for $10,
or you might be able to find it at your nearest bookstore. (Hint: if
you get it from AMSAT, part of the proceeds go to supporting the organization
that builds the satellites.)

AMSAT's address:

PO Box 27
Washington, DC 20044

73, Phil, KA9Q

From 1643679605568254454
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,46782e30388ca6ee,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-15 11:21:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site watrose.UUCP
Path: utzoo!watmath!watrose!jrkesselman
From: jrkesselman@watrose.UUCP (jack kesselman)
Newsgroups: net.ham-radio
Subject: An RTTY question
Message-ID: <7434@watrose.UUCP>
Date: Mon, 15-Apr-85 14:21:02 EST
Article-I.D.: watrose.7434
Posted: Mon Apr 15 14:21:02 1985
Date-Received: Mon, 15-Apr-85 23:19:02 EST
Distribution: net
Organization: U of Waterloo, Ontario
Lines: 13

I have just become interested in RTTY and have a question.

Can I use my modem (Vic modem to be specific) to receive Ascii Rtty
directly from my shortwave receiver? What would happen if I hooked up
the receiver output to the input of the modem and then just used a
terminal program? Does anybody out there have experience doing this?

Could I modify the terminal program to decode baudot also?

Jack Kesselman

University of Waterloo

From 7519440375820122957
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1f39574d442bff1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-15 15:05:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!hp-pcd!hpfcmt!ron
From: ron@hpfcmt.UUCP (ron)
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <19700002@hpfcmt.UUCP>
Date: Mon, 15-Apr-85 18:05:00 EST
Article-I.D.: hpfcmt.19700002
Posted: Mon Apr 15 18:05:00 1985
Date-Received: Sat, 20-Apr-85 03:04:22 EST
References: <-12000@hydra.UUCP>
Lines: 14
Nf-ID: #R:hydra:-12000:hpfcmt:19700002:37777777600:367
Nf-From: hpfcmt!ron   Apr 12 15:05:00 1985

Re: Navy TTY sigs and news.

I haven't tried anything like this but if your goal is to decrypt the
news from the fleetsat you'd get a better news dump from any of your local
radio stations even if you listened for only 2 minutes.

The exercise is interesting but the content isn't.

Ron Miller
(An ex-swabbie)
H-P
Ft. Collins Systems Div

at :... ihnp4!hpfcla!ron-m

From -5342611578525306435
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c49af6c44c60185,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-16 09:24:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ahuta!houxn!hou5h!jak
From: jak@hou5h.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: Drake RV7 wanted
Message-ID: <428@hou5h.UUCP>
Date: Tue, 16-Apr-85 12:24:26 EST

Article-I.D.: hou5h.428
Posted: Tue Apr 16 12:24:26 1985
Date-Received: Wed, 17-Apr-85 01:27:48 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 10

Does anyone know of a spare remote VFO (RV7) for the
Drake TR7 that is for sale?
I recently bought the TR7 and would like to work split.

Thanks in advance.

73, Jim KY2D
ATTIS Freehold, NJ
ihnp4!houxn!jak
(201) 577-5374

From 2441619951548657293
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,980a1f5561a3c7cf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-16 17:27:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 27 (new NPRM on automatic control)
Message-ID: <16492@mgweed.UUCP>
Date: Tue, 16-Apr-85 20:27:57 EST
Article-I.D.: mgweed.16492
Posted: Tue Apr 16 20:27:57 1985
Date-Received: Sat, 20-Apr-85 09:46:20 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

qst de k9eui
hr arrl bulletin nr 27 from arrl headquarters
newington ct april 12, 1985
to all radio amateurs bt

in response to the arrl petition requesting automatic control
for digital communications above 30 mhz, the fcc has released a
notice of proposed rulemaking, docket 85 105, and proposed to
allow automatic control for all amateur conmunications above
29.5 mhz. comments on the nprm are due by june 25, and full
details will appear in the arrl letter and qst ar

From 8140627262771649242

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,98e97cd3cc0196e2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-16 17:28:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 26 (shuttle relay freqs)
Message-ID: <16493@mgweed.UUCP>
Date: Tue, 16-Apr-85 20:28:27 EST
Article-I.D.: mgweed.16493
Posted: Tue Apr 16 20:28:27 1985
Date-Received: Sat, 20-Apr-85 09:46:39 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

qst de k9eui
hr arrl bulletin nr 26 from arrl headquarters
newington ct april 12, 1985
to all radio amateurs bt

the goddard amateur radio club, wa3nan, at the nasa goddard space flight center in greenbelt, maryland, retransmits live space shuttle audio. coverage begins within the hour before liftoff, and continues through the flight and until about an hour after landing. wa3nan will not be on the air during astronaut sleep periods. frequencies used are 3860, 7185, and 14295 khz ssb, and 147.45 mhz fm. wa3nan operates under a blanket waiver of section 97.113 issued by the fcc for the duration of all space shuttle flights. see happenings, november 1983 qst for detail of the waiver ar

From 1678001752279644560
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,60fd495e27d55290,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-16 17:28:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 15
Message-ID: <16494@mgweed.UUCP>
Date: Tue, 16-Apr-85 20:28:52 EST
Article-I.D.: mgweed.16494
Posted: Tue Apr 16 20:28:52 1985

Date-Received: Sat, 20-Apr-85 09:46:59 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 47

qst de k9eui
hr propagation forecast bulletin nr 15 from arrl headquarters newington ct april 14, 1985
to all radio amateurs bt

in the first two weeks of april the solar flux was never above 73, and in 9 days ending april 14, there were five 70s and four 69s. this is about as close to quiet sun conditions ay we are likely to see in the next two years. if you were active on the dx bands last week you got a fair sampling of what propagation will be like much of the time through this spring and early summer. strong signals from europe and on other high latitude circuits will be missing on 28 mhz and rare on 21 mhz.

propagation north south, and on other transequatorial circuits, will be less effected. our southern states get the best break on this, but all areas will experience it to some extent. at the writers home in florida stations in central africa and the south pacific are heard every few days on 28 mhz. the south american path works just about every day. this is quite different from our conneticut experience, though the same areas are heard now and then up there, and south americans are fairly consistent.

with the coming of the sporadic e season, peaking in june and july, the possibility of working across the atlantic on 28, even 50 mhz should not be ruled out. there will be many hours of strong signals over distances of about 500 to 1200 miles on both bands. the e layer effect will show up as very short skip on 20 and 14 mhz.

for the forecast week, some slight rise in the solar flux is expected. this will make 14 and 21 mhz sound better, but major openings are unlikely on 28 mhz. two days of good conditions, as far as absorbtion and selective fading are concerned, were coming to an end as this was being written sunday night. the disturbance will be intermittent through the 16th, and there will be more at the end of the week, but no serious (garble) is expected. the area of the sun responsible for the solar flux of 80 on march 24 will be back late this week. there should be some of its life left on this time around, so the muf will be a bit higher by next weekend.

american sunspot numbers for april 4 to 10 were between 18 and (??) with a mean of 9 ar

From 5346555815104950270

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ece64ac6cd4027f8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-19 17:04:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site infopro.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!whuxl!whuxlm!whuxcc!infopro!gary
From: gary@infopro.UUCP (Gary Huska)
Newsgroups: net.ham-radio
Subject: Need help with motorcycle communications via 2 meters
Message-ID: <708@infopro.UUCP>
Date: Fri, 19-Apr-85 20:04:40 EST
Article-I.D.: infopro.708
Posted: Fri Apr 19 20:04:40 1985
Date-Received: Sat, 20-Apr-85 08:39:29 EST
Distribution: net
Organization: InfoPro Systems, Denville, NJ
Lines: 63

Myself and two other hams who are motorcycle riders
have been trying to come up with a reliable way of
communicating with 2 meter hand helds while
riding. Restrictions: We do not use or intend to use
either windscreens or the "full" type helmets, but the more
open 3/4 type helmet with plastic faceshield.

We have tried the following:

Originally used Maxon FM two way radios modified to
fit the helmets. These operated on the 49 mhz channels,
and use a boom type electret mike element. Voice quality
very good; VOX not used.

Problems: The range of these radios reached up to
1/2 mile, but only when under ideal, ie, engines off,
conditions. With the engines on and riding on the road,
range was at best aprox. 500 feet,due to ignition noise -
difficult to eliminate. Also, wind and engine noise
reduced intelligability as road speed increased.

Next, we tried 2 meter HT's , reasoning that the higher
power would also increase the range. Electret boom
 mikes were also used again.

Problems: Only one boom mike setup was specifically designed
for the HT it was used on(IC-02AT Headset). The others were a
boom from the Maxon radio and a Radio Shack type mike.
The audio was very bad on these other units as driving speed
was increased; the previous Maxon setup had much better
voice quality. The problem seems to be in the type
of biasing and interfacing of these other mikes.
The range was increased, but speach intelligability was

much worse than the Maxon. Also, wind noise was still
a problem in the one HT which worked the best.

There are various commercial radios specifically for
motorcycle use, mostly variations on the Maxon radio
with microphones meant to be mounted inside a "full"
type helmet. I am aware of a microphone/speaker system
manufactured by Honda Motorcycle which consists of what
appears to be some type of noise cancelling mike for
faceshield mounting, meant to be used with a CB radio
mounted on their bikes. I do not know if this has
been successfully used for Ham radio applications.

We have had many suggestions ranging from using aircraft
style throat mikes to wearing full helmets and using
windscreens all the time. As stated earlier, we do
not like either the full helmet or windscreens.
The mike element will be exposed to the airstream and
road noise, so would have to be some kind of super
noise cancelling type.

I would welcome mail from anyone who has actually solved
this problem or is in the process of experimenting with it.

     73's,

Gary M. Huska KA2TQD, 242 Lake Shore Drive, Parsippany, N.J. 07054
{astrovax, clyde, harpo, whuxcc}!infopro!gary

From -3117383008119469876
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1f39574d442bff1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-20 03:53:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site omen.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!
hplabs!tektronix!reed!omen!caf
From: caf@omen.UUCP (Chuck Forsberg WA7KGX)
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <142@omen.UUCP>
Date: Sat, 20-Apr-85 06:53:06 EST
Article-I.D.: omen.142
Posted: Sat Apr 20 06:53:06 1985
Date-Received: Wed, 24-Apr-85 07:37:35 EST
References: <-12000@hydra.UUCP> <19700002@hpfcmt.UUCP>
Organization: Omen Technology, Portland
Lines: 19

)Re: Navy TTY sigs and news.

)
)I haven't tried anything like this but if your goal is to decrypt the
)news from the fleetsat you'd get a better news dump from any of your local
)radio stations even if you listened for only 2 minutes.
)
)The exercise is interesting but the content isn't.

There used to be news and WX at 170 Hz reverse shift 100 wpm on
6425 2690 8457 4334 (freqs approximate) sent by the coast guard.
Interesting copy if you want to know all about the ionosphere and
Alaska WX.

Haven't tried these freqs for several years so don't know if they are
still in use.
--
Chuck Forsberg WA7KGX ..!tektronix!reed!omen!caf
Omen Technology Inc 17505-V NW Sauvie IS RD Portland OR 97231
Voice: 503-621-3406   Modem: 503-621-3746

From -299610849183818227
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d571b61a1a5a71fb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-21 19:51:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: US pressured scanner manufacturers
Message-ID: <547@ihu1h.UUCP>
Date: Sun, 21-Apr-85 22:51:07 EST
Article-I.D.: ihu1h.547
Posted: Sun Apr 21 22:51:07 1985
Date-Received: Mon, 22-Apr-85 02:35:10 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 46

x
Scanner Manufacturers Pressured to Limit Frequency Coverage

The 406 - 420 MHz band has long been used by federal government agencies for communication of sensitive information. Until recently, this range was not receivable on programmable scanners sold by Electra (Bearcat), Regency, or Radio Shack.

Speaking at an April 20th scanner club meeting in Berkeley, Illinois, an engineer from Electra confirmed

the rumor that it was US government pressure which persuaded scanner manufacturers, eager for timely FCC Part 15 certification, to omit this band from their models.

Tradition was broken in 1982 when Radio Shack imported the 2020 scanner, made by General Research Electronics of Tokyo, which featured coverage down to 410 MHz.
Sales literature for JIL's imported SX200 even went so far as to openly tell customers that they could "Tune Military, FBI, ..., DEA, Defense Department, Justice Department, plus other restricted radio bands no other scanner is programmed to pick up."

Not to be outdone by the imports, Electra introduced its American made Bearcat 200 with coverage to 406 MHz.
Regency, whose American scanners were spec'd down to only 440 MHz, made service manuals available which revealed coverage below 440 MHz was possible on all its programmables by simply striking the "." key before entering the frequency digits.

Today, government agencies are using digital voice scrambling and spread spectrum techniques to ensure privacy of sensitive communications. Feeling less government pressure to limit coverage, and increasing consumer demand for more coverage, scanner manufacturers are introducing models whose spectrum is limited only by technology and price. The Regency MX7000, with
25 - 550 and 800 - 1300 MHz coverage is but one example.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -3688119863934963468
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,747e343fd44d2eb9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-21 20:52:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!philabs!cmcl2!seismo!brl-tgr!tgr!
AWalker@RUTGERS.ARPA
From: AWalker@RUTGERS.ARPA (*Hobbit*)
Newsgroups: net.ham-radio
Subject: Modified PLL rigs
Message-ID: <10100@brl-tgr.ARPA>
Date: Sun, 21-Apr-85 23:52:27 EST
Article-I.D.: brl-tgr.10100

Posted: Sun Apr 21 23:52:27 1985
Date-Received: Wed, 24-Apr-85 02:37:41 EST
Sender: news@brl-tgr.ARPA
Lines: 7

How easy would it be to modify the code in a modern PLL HT to enable tuning
out-of-band? It would be nice to have some additional receive range without
those kludgey band shifter antenna bolt-ons. I would think you can tell the
PLL to do whatever you want, you just have to get the software to believe this.

_H*

From -8680582950908799302
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bfdc19dceaef136a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-22 10:19:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!decwrl!
dec-rhea!dec-mred!soomre
From: soomre@mred.DEC
Newsgroups: net.ham-radio
Subject: Radio Moscow SW Skeds
Message-ID: <1755@decwrl.UUCP>
Date: Mon, 22-Apr-85 13:19:38 EST
Article-I.D.: decwrl.1755
Posted: Mon Apr 22 13:19:38 1985
Date-Received: Fri, 26-Apr-85 01:59:55 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 17

I am looking for a copy of the latest Radio Moscow SW Schedules for
the World Service (English) and English to East and West North America.

The latest skeds are for the March-May time frame with another set
comming out June-Oct.

If anyone has them, please send me a copy c/o my home address in
the ham callbook (N1BFF) or c/o my work address.

Thanks

Ed Soomre N1BFF
Digital Equipment Corp
M/S MRO2-2/D14
1 Iron Way
Marlboro, MA 01752

From 9178397967709960322
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7ea517db2a538af0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-22 11:18:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: TAPR Sale
Message-ID: <327@petrus.UUCP>
Date: Mon, 22-Apr-85 14:18:24 EST
Article-I.D.: petrus.327
Posted: Mon Apr 22 14:18:24 1985
Date-Received: Tue, 23-Apr-85 06:28:23 EST
Organization: Bell Communications Research, Inc
Lines: 60

News Flash - Tucson, Az.

The Tucson Amateur Packet Radio Corporation (TAPR) announces the greatest sale in Packet Radio History! The same TAPR TNC kit that has previously sold for $240.00 is now available in limited quantities for $160.00 !!

That's right, $160.00.

Now that outside production of the TNC is assured, we can move on to other things. TAPR is shutting down the production line on this product, and wants to clear out its parts inventory. Recent reductions of our costs, volume buying, our success in turning production over to regular industry, and the desire to clear the decks makes it possible to offer the same high quality kit at this rock bottom price. We'd like you to help us get clear of the manufacturing aspects of this product as soon possible, which is why we're making these available at a give-away cost.

Our software and other support activities for the TAPR TNC will continue unabated.

Quantities are extremely limited, so call the TAPR office immediately at (602) 746-1166 to get your order in.

TAPR is an R&D oriented organization. Our goal is to prove the packet concept and convince mainstream manufacturing organizations to produce packet equipment. Now that AEA is producing an assembled version of our design, Heath is producing an exact duplicate of our kit at high volume prices, and Kantronics is producing a unit running our software, we feel it's time to move on and push out the edges of technology again.

We're sure you can't find a comparable packet controller at this incomparable price. If you've been sitting on the fence, now is the time to join the packet radio revolution!

TAPR will have a major presence at the Dayton Hamvention again this year, with participation in several technical forums. Many of the volunteers serving as TAPR's R&D staff will be present at our booth, and we'll have lots to talk about. Be sure to stop by and help chart the future.

PS, there are less than 95 cabinets for the kit TNC left.

NO MORE WILL BE MADE!

So, if you've been waiting to order one, now is the time. There will be no reduction in the $70.00 price on this item, since our cost already exceeds your cost.

Any TNC orders processed on or after 22 April 1985 will be shipped at the new price. A shipping and handling charge of $10.00 will be added, as will the 3% credit card service charge if plastic is used. At a total cost of $175.10, delivered, you won't find a better deal anywhere!

From -7049430618554956382
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c169235f4bec1bcf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-22 17:50:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site ky2d.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!ariel!hou5f!hou5g!hou5h!ky2d!ad7i
From: ad7i@ky2d.UUCP ()
Newsgroups: net.ham-radio
Subject: Packet Radio Netnews Gateway
Message-ID: <19@ky2d.UUCP>
Date: Mon, 22-Apr-85 20:50:52 EST
Article-I.D.: ky2d.19
Posted: Mon Apr 22 20:50:52 1985
Date-Received: Tue, 23-Apr-85 06:49:49 EST
Distribution: net
Organization: KY2D Packet Radio Gateway, Little Silver, NJ
Lines: 36

From: Paul Newland, ad7i, via packet radio*
To: All Amateur Radio Stations

Announcing the KY2D Packet Radio Gateway!

The KY2D Packet Radio Gateway is a 68000 based UNIX** System operated by Jim Kutsch, KY2D, from Little Silver, New Jersey and serves as a gateway for amateur packet radio to "Usenet-netnews" and the "UUCP" computer mail network. Packet radio stations in the greater New York City area can read and post netnews articles in the "net.ham-radio" newsgroup. A local group called "general" is also available for items of interest only to users of the KY2D system. Additionally, electronic mail can be exchanged both between packet users as well as with the Usenet community.

For those not reading this on netnews, Usenet is a world-wide collection of computers sharing news articles. The articles, themselves, are called the "netnews". Many large corporations and universities have systems connected to Usenet. There are over 12,000 sites on Usenet, most in the continental US, but Hawaii, Korea, Japan, and many sites in Europe are also connected. For more details, see the article "Usenet: A Bulletin Board for UNIX Users," by Sandra L. Emerson, Byte, Oct. 1983, pp. 219-236.

If you are a packet user in Northern NJ, New York, or southern CT, try connecting to "ky2d-2" on 145.01. When you get the "login:" prompt, reply with "guest". Some preliminary instructions will be provided after login. Frequent users can request a personal login.

For more info, contact Jim Kutsch, KY2D, via the callbook address or mail to ...!ihnp4!houxn!hou5h!ky2d!jak or ...!ihnp4!houxn!jak

---

* This article was posted via amateur radio using packet communications.
** UNIX is a trade mark of AT&T Bell Laboratories.

From -8830980288609318540
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f7b688d3c62a809,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-22 18:10:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!vax135!ariel!hou5f!hou5g!hou5h!jak
From: jak@hou5h.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: TAPR TNC kits go on sale!
Message-ID: <432@hou5h.UUCP>
Date: Mon, 22-Apr-85 21:10:20 EST
Article-I.D.: hou5h.432
Posted: Mon Apr 22 21:10:20 1985
Date-Received: Tue, 23-Apr-85 06:50:12 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 66

I ran across the following article from Gradnet and thought it might be of general interest to those considering packet radio ...
I have no connection with TAPR, so do not reply to me.

73, Jim KY2D

>From Lyle Johnson, WA7GXD, via DRAGNET
News Flash - Tucson, Az.

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From 1365420294052979953
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b45a98a9a5ce3b3d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-23 14:45:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!hoffmann%marie@mit-mc.arpa
From: hoffmann%marie@mit-mc.arpa (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Amateur exams in Boston area
Message-ID: <10164@brl-tgr.ARPA>
Date: Tue, 23-Apr-85 17:45:15 EST
Article-I.D.: brl-tgr.10164
Posted: Tue Apr 23 17:45:15 1985
Date-Received: Fri, 26-Apr-85 04:16:39 EST
Sender: news@brl-tgr.ARPA
Lines: 12

The MIT Radio Society and UHF Repeater Association will conduct a volunteer exam session for all classes of amateur license. The session will take place on Thursday, May 16 at 7:00 pm. Address: 77 Massachusetts Avenue, Cambridge, MA. Please bring with you to the exam: a completed FCC form 610 (available from the FCC), the $4.00 exam fee in cash, and a copy of any amateur license you currently hold. Also required will be two forms of identification. Please contact Craig Rodgers, WA4C at either (617) 225-6616 or (617) 494-8637 no later than Tuesday, May 14 if you are planning to attend. A limited number of walk-in candidates will be accepted, space permitting. This is a W5YI-VEC session. via WA2EYC

From -6810955548827914324
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2afcaf2745073ccc,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-04-23 16:17:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: FCC NPRM on Automatic Control
Message-ID: <333@petrus.UUCP>
Date: Tue, 23-Apr-85 19:17:17 EST
Article-I.D.: petrus.333
Posted: Tue Apr 23 19:17:17 1985
Date-Received: Wed, 24-Apr-85 04:37:27 EST
Distribution: net
Organization: Bell Communications Research, Inc
Lines: 315

C2970 CC123 JEFF WARD (ARRL,2977)   4/23/85   4:56 PM L:285
KEYS:/RM-4879/FCC/AUTOMATIC CONTROL/

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

Amendment of Part 97 of the Commission's Rule to Permit automatic control of amateur radio stations	PR Docket No. 85-105 RM-4879

NOTICE OF PROPOSED RULE MAKING

Adopted: April 5, 1985 Releasted: April 11, 1985

By the Commission:

1. Notice of proposed Rule Making in the above-captioned matter is hereby given.

2. The Commission has received a petition (RM-4879) from the Americal Radio Relay League, Inc., (ARRL) seeking to amend the Amateur Radio Service Rules to permit automatic control of digital communications on all amateur frequencies above 30 MHz.1/ The ARRL notes that Part 97 currently contains provisions for automatic control of stations in repearter, auxiliary and beacon operation but makes no provision for automatic control of routine digital communications. In support of it's petition, the ARRL states that a variety of digital codes, such as rediotelepriner, transfer of computer programs, direct computer-to-computer communications and "packet switching" systems lend themselves to a mode of amateur radio transmission where a control operator need not be present. According to the ARRL, present

microprocessor and computer technology now routinely present at amateur stations can automatically transmit and receive digital communications, verify receipt of messages and respond to inquiries. The ARRL notes that the use of the Computer Based Message Systems (CBMS) are something new in amateur communications and should be encourage by more experimentation, including automatic control which is both feasible and necessary to facilitate further development in the art of amateur radio. Two timely comments were filed. Both supported the petition for rule making.

3. Automatic control in the Amateur Radio Service has previously been approved for repeater, auxiliary links and beacon operations. 2/ With an ever-growing list of amateur operations where automatic control is permitted, we believe that now may be the appropriate time to expand automatic control to all amateur operations, prohibiting its use only in those situations where there is a justifiable reason why automatic control should not be allowed. Therefore, we invite amateur radio operators in general, and amateurs experienced in automatic control in particular, to submit comments calling to our attention any problems that may arise by expanding automatic control to encompass all amateur radio operations. Our goal is to keep the amateur service abreast of technological developments and to utilize new technology, such as CBMS, where appropriate. On the other hand, we do not want to introduce any innovations into the service which would be disruptive of amateur communications or which would essentially change the character of the service.

4. We propose that any amateur radio station may be under automatic control, except when transmitting on frequencies below 29.5 MHz. As noted earlier, the petitioner did not request automatic control below 30 MHz. However, since automatic control is already permitted for repeater operation between 29.5-29.7 MHz, it is reasonable to make the lower limit for automatic control 29.5 MHz, rather than 30 MHz.

5. These proposed rule amendments would still prohibit automatic control operations in any instance where the station is transmitting third-party traffic. This is in accord with Section 97.79 (d) of the amateur rules which specifies that a control operator must always be present when a third party is participating in amateur radio communications. 3/

6. For purposes of this non-restricted notice and comment rule making proceeding, members of the public are advised that ex parte contacts are permitted from the time the Commission adopts a Notice of Proposed Rule Mking until the time a public notice is issued stating that a substantive disposition of the matter is to be considered at a forthcoming meeting. In general, an ex parte presentation is any written or oral communication (other than formal written comments/pleadings and formal oral arguments) between a person outside the Commission and a Commissioner or a

member of the Commission's staff which addresses the merits of the proceeding. Any person who submits a written ex parte presentattion must serve a copy of that presentation on the Commission's Secretary for inclusion in the public file. Any person who makes an oral ex parte presentation, addressing matters not fully covered in any previously-files comments in the proceeding, must prepare a written summary of that presentation; on the day of the oral presentation, that written summary of that must be served on the Commission's Secretary for inclusion in the public file, with a copy to the Commission official receiving the oral presentation. Each ex parte representation must also state by docket number the proceeding to which it relates. A summary of the Commitssion's procedures governing ex parte contacts in informal rule makings is available from the Commission's Consumer Assistance Office, FCC, Washington, D.C. 20554, (202) 632-7000.

7. Authority for issuance of this Notice is contained in Sections 49(i) and (303)(g) and (r) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i) and (303)(g) and (r). Pursuant to the applicable procedures set forth in Section 1.415, 47 CFR 1.415, of the Commission's Rules, interested persons may file comments on or before June 25, 1985, and reply comments on or before July 25, 1985. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. In reaching its decision, the Commission may take into consideration information and ideas not contained in the comments, provided that such information or a writing indicating the nature and source of such information is placed in the public file, and provided further that the fact of the Commission's reliance on such information is noted in the Report and Order.

8. In accordance with Section 1.419 of the Commision's Rules, 47 CFR 1.419, formal participants must file an original and five copies of their comments and other materials. Participants who wish each Commissioner to have a personal copy of their comments should file an original and eleven copies. Members of the general public who wish to express their interest by participating informally may do so by submitting one copy. All comments are given the same consideration, regardless of the number of copies submitted. Each set of comments must state on its face the proceeding to which it relates (PR Docket Number) and should be submitted to: The Secretary, Federal Communications Commission, Washington, D.C. 20554. All documents will be available for public inspection during regular business hours in the Commission's Public Reference Room at its headquarters in Washington, D.C.

9. In accordance with Section 605 of the Regulatory Flexibility Act of 1980 (5 U.S.C. 605), the Commission certifies that these rules would not, if promulgated, have a significant economic impact on a substantial number of small entities because these entities may not use the Amateur Radio Service for

commercial radiocommunication (see 47 CFR 97.3 (b)). In addition, the proposed rules concerning expansion of the automatic control in the Amateur Radio Service would not significantly impact on the manufacturers of amateur radio equipment since devices installed to secure the radio equipment from unauthorized use or to detect transmitter malfunction are not usually purchased from such manufacturers.

10. In view of the foregoing, rule making petition RM-4879 filed by the ARRL IS GRANTED.

11. IT IS ORDERED, That the Secretary shall cause a copy of this Notice to be served upon the Chief Counsel for Advocacy of the Small Business Administration and the Secretary shall also cause a copy of this Notice to be published in the Federal Register.

12. For information concerning this proceeding, contact Maurice J. DePont, Federal Communications Commission, Private Radio Bureau, Washington, D.C. 20554 (202) 632-4964.

FEDERAL COMMUNICATIONS COMMISION

William J. Tricarico
Secretary

Attachment: Appendix

APPENDIX

Part 97 of Chapter I of Title 47 of the Code of Federal Regulations would be amended, as follows:

1. Section 97.3 (m) (3) would be amended to read:

97.3 Definitions

* * * * *

(m) * * *

(1) * * *

(2) * * *

(3) Automatic Control means the use of devices and procedures for control of an amateur station without the control operator being present at the control point.

1. Section 97.79 (b) would be amended to read:

97.79 Control operator requirements.

* * * * *

(b) Every amateur radio station, when transmitting, must have a control operator. The control operator must be present at the control point of the station, except when the station is transmitting under automatic control. The control operator must be a licensed amateur radio operator or permittee designated by the station licensee. The control operator and the station licensee are both responsible for the proper operation of the station. For purposes of enforcement of the rules of this part, the FCC will presume that the station licensee is the control operator of the station, unless documentation exists to the contrary.

3. A new section 97.80 would be added, as follows:

97.80 Operation under automatic control.

(a) An amateur radio station may be operated under automatic control:

(1) When in beacon operation on frequencies 28.20-28.30 MHz; and

(2) When transmitting on frequencies above 29.5 MHz, except when in beacon operation on:

(b) When under automatic control, devices must be installed and procedures must be implemented which will ensure compliance with the rules when the control operator is not present at the control point of the station.

(c) No amateur radio station may be operated under automatic control while transmitting third-party traffic.

(d) Automatic control of a station must cease upon notification by the Engineer-in-Charge of a Commission field office that the station is transmitting improperly or causing harmful interference to other stations. Automatic operation must not be resumed without prior approval of the Engineer-in-Charge.

4. Section 97.85 (e) would be deleted. Paragraphs (f), (g) and (h) would be redesignated as paragraphs (e), (f) and (g), respectively.

5. Section 97.86 (a) would be deleted. Paragraphs (b), (c) and (d) would be redesignated as paragraphs (a), (b) and (c), respectively.

6. Section 97.87 (b) and (c) would be deleted. Paragraph (d) would be redesignated as paragraph (b) and paragraph (e) would be redesignated as paragraph (c). In redesignated paragraph (b), the last sentence would be amended to read: "In such cases, the rules of 97.85 (e) (1) (2) and (3) apply." A new paragraph (d) would be added to Section 97.87 to read, as follows:

(d) Beacons under automatic control transmitting below 432.08 MHz are restricted to the following emissions: NON, A1A, F1B and J2A.

7. Section 97.114 would be amended by adding a new paragraph (d) as follows:

97.114 Limitations on third-party traffic.

* * * * *

(d) Third-party traffic from any amateur radio station under automatic control.

FOOTNOTES

1. The ARRL said that it was not requesting automatic control for frequencies below 30 MHz (HF frequencies) because heavy frequency usage below 30 MHz made manual control of digital communications on those frequencies more appropriate.

2. For automatic control of stations in repeater and auxiliary operation, see Report and Order in Docket No. 20012, adopted June 11, 1975; FCC 75-706; 40 FR 26524, June 24, 1975. For automatic control of beacon operations, see Report and Order in PR Docket No. 81-823, adopted October 21, 1982; FCC 82-455; 47 FR 50702, November 9, 1982.

3. See also News Release, Report No. 2028, Mimeo No. 8832, October 25, 1978.

C2970 CC124 JEFF WARD (ARRL,2977) 4/23/85 4:58 PM L:24
KEYS:/RM-4879/AUTOMATIC CONTROL/ARRL/

Subject: PR Docket No. 85-105, RM-4879

Some concern has been expressed about the above docket which is to permit automatic control, particularly the wording that would prohibit automatic control when transmitting third-party traffic. We have been asked how to interpret this as well as what the Commission intended by these words. Offering an opinion at this time would not be productive. It would be better for you to take the wording at face value and react to the FCC accordingly. If you plan to comment to the FCC on this docket, please let us know

if you need any information on preparing comments. Also, when
you file comments with the FCC, please send a copy to the ARRL.

Another question has been "When will the ARRL act on this?" The
usual procedure is for the ARRL Executive Committee to determine
the policy position, then the Hq staff and legal counsel in
Washington prepare the specific wording of the comments. The next
meeting of the Executive Committee will be May 18, in Rochester.
So, if you wish to have the Executive Committee hear your point
of view, your comments should reach ARRL Hq (Attn: Dave Sumner) a
few days before the 18th.

73, Paul, W4RI

From 2339431273542248671
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2069fb82f894b041,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-23 18:50:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!think!mit-eddie!genrad!decvax!
bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 16
Message-ID: <16710@mgweed.UUCP>
Date: Tue, 23-Apr-85 21:50:50 EST
Article-I.D.: mgweed.16710
Posted: Tue Apr 23 21:50:50 1985
Date-Received: Sat, 27-Apr-85 00:32:08 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 42

qst de k9eui
hr propagation forecast bulletin nr 16 from arrl headquarters
newington ct   april 21, 1985
to all radio amateurs bt

the area of the sun responsible for the march solar flux peak
of 80 is back with us again. the flux had been down to its
cycle 21 low of 69 on april 16, but was back up to 72 on the
20th.   a sizable spot group about 3 days in from the east limb
of the sun showed marked eruptive activity intermittently on
saturday and continuously through sunday afternoon. the solar
flux jumped five points to 77 on the 21st, as propagation went
from bad to worse until it began to stabilize again late that
day. with the wwv k index peaking at an almost unheard of 8,
reception   of   their   propagation   bulletins was all but
impossible, for the first time in our 7 years of part time
florida living.

such near or total blackouts in the 5 to 20 mhz range are likely when the solar flux rises suddenly. more communications difficulty is likely when charged particles from the eruptions enter the earths atmosphere, some 18 to 36 hours after the event itself. this is likely to bring auroral conditions in the higher latitudes on monday or tuesday, and generally poorer propagation on all but transequatorial circuits. there may even be an enhancement on north south paths on 50 and 28 mhz at such times. if we are to have any good te work on 50 mhz this spring it should come this week.

there is ordinarily a period of exceptional propagation on all dx frequencies, as a major disturbance clears up. no accurate prediction can be made for this event. the best indication is a drop in the wwv k index, given as part of their bulletin transmitted at 18 minutes past each hour. a downward trend is the thing to watch for, particularly when the k index gets down to 2 or lower.

the period april 28 to may 2 is likely to bring at least one medium level disturbance. this could be followed by our first sporadic e skip of the season, on 50 mhz ar

From -560335138270708968
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,180ddce9f3af8eb7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-23 23:33:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
mauseth%vax.runit.unit.uninett%ubc.csnet@csnet-relay.arpa
From: mauseth%vax.runit.unit.uninett%ubc.csnet@csnet-rela (Kai Mauseth)
Newsgroups: net.ham-radio
Subject: tubes for linear amplifier wanted
Message-ID: <10174@brl-tgr.ARPA>
Date: Wed, 24-Apr-85 02:33:42 EST
Article-I.D.: brl-tgr.10174
Posted: Wed Apr 24 02:33:42 1985
Date-Received: Fri, 26-Apr-85 06:23:32 EST
Sender: news@brl-tgr.ARPA
Lines: 10

I'm looking for a pair of 813 tubes for my linear amplifier. They seems
hard to get here in Norway. If anyone of you have a couple that are in
good condition and if the price is reasonable, please contact me.
My address if you want to write is:
Kai Mauseth LA2TO
Heggelia 2
N-7500 Stjordal
Norway

73 de Kai

From 3656135097451099064
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e433583f4b28a37a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-24 10:54:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!BRAD@SU-CSLI.ARPA
From: BRAD@SU-CSLI.ARPA (Brad Horak)
Newsgroups: net.ham-radio
Subject: TAPR Sale Update
Message-ID: <10189@brl-tgr.ARPA>
Date: Wed, 24-Apr-85 13:54:35 EST
Article-I.D.: brl-tgr.10189
Posted: Wed Apr 24 13:54:35 1985
Date-Received: Fri, 26-Apr-85 22:21:12 EST
Sender: news@brl-tgr.ARPA
Lines: 6

According to a friend who spoke with TAPR at 3pm PST yesterday, they had 50
(fifty) TNC kits left at the $160.00 price. They had sold 120 units up to
that point yesterday.

--Brad N6BDE

From -1887066416504701791
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cd807b86df45e916,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-25 04:55:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!decwrl!
dec-rhea!dec-mred!soomre
From: soomre@mred.DEC
Newsgroups: net.ham-radio
Subject: Realistic DX400 Sale
Message-ID: <1824@decwrl.UUCP>
Date: Thu, 25-Apr-85 08:55:14 EDT
Article-I.D.: decwrl.1824
Posted: Thu Apr 25 08:55:14 1985
Date-Received: Sun, 28-Apr-85 04:05:53 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 22

The Realistic DX400 (brother of the Uniden CR-2021) is on sale according

to a 64th Aniversary Sale Flyer from Radio Shack for $179.95. The regular price is $299.95. The sale ends May 20, 1985.

These are portable synthesized digital readout receivers covering 150 khz to 30 MHZ continuously AM/SSB/CW and 87.4-108 MHZ FM. Last year they were "dropped" from the Uniden product line and sold on closeout (as the Uniden CR-2021) for around $100. However Radio Shack kept their prce at $299.95.

I was fortunate to pick up a Undien CR-2021 and am quite impressed, for the money it works great as a take-along portable.

I think the $179.95 price for the DX400 is within reasonable limits (I still feel $299.95 was outrageous) for this type of receiver. So for those of you who missed to Uniden CR-2021, here is another chance.

73's
Ed Soomre (N1BFF)
Digital Equipment Corp
1 Iron Way
Marlboro, MA 01752

From 6558097359710200727
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9072c4b3ea32b759,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-25 10:22:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ucbvax.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ucbvax!cmplres
From: cmplres@ucbvax.ARPA (Andrew Purshottam)
Newsgroups: net.ham-radio
Subject: help wanted for quick and dirty CB antenna
Message-ID: <6505@ucbvax.ARPA>
Date: Thu, 25-Apr-85 13:22:08 EST
Article-I.D.: ucbvax.6505
Posted: Thu Apr 25 13:22:08 1985
Date-Received: Fri, 26-Apr-85 09:03:58 EST
Distribution: net
Organization: University of California at Berkeley
Lines: 22

I needed to set up a temporary CB base station in an office on the 6th floor of a building, so remembering that my 2M HT uses a 1/4 wave vertical antenna which doesn't require any loading or tuning, I ran some RG58 coax from the CB tranceiver over to the window, grounded the coax braid to the radiator (heat radiator, that is; not RF), and soldered the center conductor to a 1/4 wavelength long piece of wire which was dropped out the window with a rock tied to the other end.

It works better than the mobile magmount that we'd been using on top of the desk but not much, and seems to have a lousy SWR.

Can anyone suggest a better way to make a wire antenna? Did I cut
the wire to the wrong length? We have no test equipment to speak
of, cannot nail things to the side of the building or bring stuff
up to the roof, etc. etc.

Please reply by mail, not to the net. If interest warrants I'll
post a summary. Thanks much!

     Paul Rubin (WA2QYN/6 but that license exam was sooo long ago...)
     Please reply to phr@ucbernie if possible.

From 7157342782252085580
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cd807b86df45e916
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-28 09:59:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site tekcbi.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!vax135!cornell!uw-
beaver!tektronix!tekig!tekcbi!jeffg
From: jeffg@tekcbi.UUCP (Jeff Glover)
Newsgroups: net.ham-radio
Subject: Re: Realistic DX400 Sale
Message-ID: <217@tekcbi.UUCP>
Date: Sun, 28-Apr-85 12:59:29 EDT
Article-I.D.: tekcbi.217
Posted: Sun Apr 28 12:59:29 1985
Date-Received: Tue, 30-Apr-85 07:11:36 EDT
References: <1824@decwrl.UUCP>
Reply-To: jeffg@tekcbi.UUCP (Jeff Glover)
Organization: Tektronix, Beaverton OR
Lines: 27

In article <1824@decwrl.UUCP> soomre@mred.DEC writes:
>The Realistic DX400 (brother of the Uniden CR-2021) is on sale according
>to a 64th Aniversary Sale Flyer from Radio Shack for $179.95. The regular
>price is $299.95. The sale ends May 20, 1985.
>...
>
>73's
>Ed Soomre (N1BFF)
>Digital Equipment Corp
>1 Iron Way
>Marlboro, MA 01752

I went out and did just that. However, I find a peculiar type of
interference that is local to my apartment building , and was wondering
if somebody out there could help me find a way to find it. The
interference appears as a pulsing sound, approximately one cycle per
second, covers a wide range of frequencies (from about 5MHz to 15MHz),
and does not go away at any time of day. I turned off all power to my

apartment with the circuit breakers, and yet the signal persists,
indicating a neighbor is at fault. I also brought the unit to a remote
area to see that it was not the radio itself.

Can somebody give me a reasonable way to find the neighbor that is causing the
interference? Should I bring the FCC in if I can't resolve the problem?
--
Jeff C. Glover, Tektronix, Inc. PO Box 500, MS Y6-546, Beaverton, OR 97077
{ decvax, allegra, hplabs, ihnp4 } tektronix!tekcbi!jeffg

From 3061201673505879554
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2770d4f1f19f074a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-28 22:05:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site umd5.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!umcp-cs!cvl!umd5!louie
From: louie@umd5.UUCP
Newsgroups: net.ham-radio
Subject: IC-22S operation below 146MHz
Message-ID: <477@umd5.UUCP>
Date: Mon, 29-Apr-85 01:05:07 EDT
Article-I.D.: umd5.477
Posted: Mon Apr 29 01:05:07 1985
Date-Received: Tue, 30-Apr-85 03:40:15 EDT
Reply-To: louie@umd5.UUCP (Louis Mamakos)
Organization: U of Md, CSC, College Park, Md
Lines: 23
Keywords: IC22S

I've just picked up a used ICOM IC-22S 2m rig at the Dayton Hamvention (it
was good this year too) for use in my packet radio station. The packet
activity here is on 145.01 MHz. Here are the two problems:

    1 - the rig is only specifie to operate from 146 to 148 MHz. Will
        it work below 146? If not, what do I have to do to make it
        work?

    2 - the 145.01 frequency does not fall on its 15kHz channel
        spaceing. I assume that I can diddle the VCO reference
        oscilator to correct this. Note that I'm not interested in
        operating this rig on any other frequencies. At least not
        now.

Just to jog your memory, the IC-22S is the 22 channel diode progammable
mobile rig that ICOM marketed about 4 or 5 years ago. About 10 watts,
146-148MHz on 15KHz channels.

--
Louis A. Mamakos WA3YMH   University of Maryland, Computer Science Center

Internet: louie@umd5.arpa
UUCP: {seismo!umcp-cs, ihnp4!rlgvax}!cvl!umd5!louie

From -4910583719470511158
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e433583f4b28a37a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-29 08:33:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site sdcsvax.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!ittvax!
dcdwest!sdcsvax!brian
From: brian@sdcsvax.UUCP (Brian Kantor)
Newsgroups: net.ham-radio
Subject: Re: TAPR Sale Update
Message-ID: <830@sdcsvax.UUCP>
Date: Mon, 29-Apr-85 11:33:44 EDT
Article-I.D.: sdcsvax.830
Posted: Mon Apr 29 11:33:44 1985
Date-Received: Wed, 1-May-85 07:18:42 EDT
References: <10189@brl-tgr.ARPA>
Reply-To: brian@sdcsvax.UUCP (Brian Kantor)
Distribution: net
Organization: UCSD beer & pizza society
Lines: 55

I bought one of the TAPR ``fire-sale'' TNC kits, and one of the cabinets
during this sale. But I'm not happy.

Let me explain: I own one of the original TAPR Beta-test boards, and I
like it. I had been planning to buy another TNC for some time, and was
just waiting until my finances would permit me to do so without some
strain. Then TAPR announced that they would no longer be producing the
TNC, and were selling off the remaining stock at a lower price.

So, to make sure that I had one, I bought one. It was really nice to
get it at a lower price, but it was the pressure to get one before they
were all gone that moved me to buy it.

Sure, I could have bought the same thing from Heathkit, or AEA, or GLB,
or one of the other manufacturers now making TNCs, but out of some sort
of loyalty to TAPR (after all, they were the ones who went out on a limb
to develop these wonderful things!), I bought a TAPR one. That was
Tuesday.

Saturday morning, I find out that TAPR is not going out of the TNC
business. What they ARE doing is introducing a new nice little TNC that
should be on the market in a while (I'd guess 3 months or so, but what
do I know?), and were dumping the older TNCs so they could get started
on the new ones. Not a word of this in the advertisement - just a sort
of veiled hint that they were going to move on to ``other things''.

Now understand: I'm not pissed that they are coming out with a new TNC, nor with the fact that I bought one of the older kits. I think I'd rather have the kit that's been on the market for a while, rather than buy a new unit that isn't debugged yet (look, NOTHING is fully debugged until its been out a while - and six months frequently isn't long enough for some things I've seen. TAPR does amazingly well in this regard).

No, what annoys me is the feeling of having been used. I resent the ``cleverly worded'' message, and the feeling that I this was my last chance to buy a TNC from TAPR. Perhaps its my imagination, but I somehow see some people at TAPR smirking at how clever they were.

I'm still glad I bought the TNC. I'll put it to use as soon as it gets here. I know its a good product, and will work well for me.

But I don't trust TAPR anymore. I can no longer think of them as fellow hams, trying to advance the state of art on a shoestring. No, now I have to regard them as just another bunch of ``clever'' businessmen. And that makes me sad.

I don't think I'll buy my next TNC from TAPR, no matter how nice it may be. Somehow I feel betrayed, and ``once burned is twice shy''.

Brian Kantor, WB6CYT UC San Diego

decvax\ brian@ucsd.arpa
akgua >--- sdcsvax --- brian
ucbvax/ Kantor@Nosc

From 3803275977060033893
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,885197dd61550bcc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-30 05:26:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!ABN.ACOS-CE@USC-ISID.ARPA
From: ABN.ACOS-CE@USC-ISID.ARPA (Paul Ramey)
Newsgroups: net.ham-radio
Subject: NET MAIL
Message-ID: <10292@brl-tgr.ARPA>
Date: Tue, 30-Apr-85 08:26:32 EDT
Article-I.D.: brl-tgr.10292
Posted: Tue Apr 30 08:26:32 1985
Date-Received: Wed, 1-May-85 06:31:54 EDT
Sender: news@brl-tgr.ARPA
Lines: 9

PLEASE DROP MY NAME FROM THE INFO-HAMS NET. I WILL BE MOVING AND WILL NOT HAVE ACESS TO THE NET. GREAT NET KEEP IT GOING, BETTER THAN A LOT OF MAGS ON THE MARKET.

73 KA4VUB

From -1684625775031273892
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e6e90c30be514400,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-30 05:39:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!umcp-cs!gymble!lll-crg!dual!decwrl!dec-rhea!dec-mred!soomre
From: soomre@mred.DEC
Newsgroups: net.ham-radio
Subject: Radio Moscow Skeds
Message-ID: <1917@decwrl.UUCP>
Date: Tue, 30-Apr-85 08:39:46 EDT
Article-I.D.: decwrl.1917
Posted: Tue Apr 30 08:39:46 1985
Date-Received: Thu, 2-May-85 04:53:00 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 22

I want to thank everyone who sent me mail (good and bad) about the
Radio Moscow skeds. I received the World Service and North American
skeds in the mail a few days ago from the station.

The reason I needed these are to coordinate Radio Moscow transmitter
sites for DXing. Radio Moscow transmits from about 100 sites all
over the Soviet Union. Yes I know they are everywhere (especially
40 meters, they own the band). I am trying to receive Asian sites
such as Yuzhno-Sakhalinsk and European sites such as Leningrad. Its
not that I need to hear them on any frequency, the skeds just coordinate
the information I have to narrow down the sites.

Why ? Just a crazy way of DXing I guess, as I am trying to verify 50
Radio Moscow sites. By the way I'm also now working on DXing a Soviet
Ham in each Soviet Republic. Hopefully when I upgrade my license and
get a station set up, a few QSO's will be possible.

Thanks for the help guys, the response has been great.

73's

Ed Soomre N1BFF

From -5129729562126293120
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,abe6ef7888aa9f12,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-30 07:53:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!W8SDZ@SIMTEL20.ARPA
From: W8SDZ@SIMTEL20.ARPA (Keith Petersen)
Newsgroups: net.ham-radio
Subject: Realistic DX400 interference problem
Message-ID: <10294@brl-tgr.ARPA>
Date: Tue, 30-Apr-85 10:53:23 EDT
Article-I.D.: brl-tgr.10294
Posted: Tue Apr 30 10:53:23 1985
Date-Received: Wed, 1-May-85 06:37:17 EDT
Sender: news@brl-tgr.ARPA
Lines: 25

> ...The interference appears as a pulsing sound, approximately
> one cycle per second, covers a wide range of frequencies (from
> about 5MHz to 15MHz), and does not go away at any time of day. I
> turned off all power to my apartment with the circuit breakers,
> and yet the signal persists, indicating a neighbor is at fault.
> I also brought the unit to a remote area to see that it was not
> the radio itself.
>
> Can somebody give me a reasonable way to find the neighbor that
> is causing the interference? Should I bring the FCC in if I
> can't resolve the problem?

Jeff, as you pointed out, this interference isn't within the DX400. I doubt if it's any neighbor either. It sounds to me like interference from Cable TV. There are some special signals on many cable systems that have a 1 second pulse of some kind (you can hear it at the top of the FM band and on some unused cable channels). A good outdoor antenna should solve the problem. If not, get your cable TV people to check for leakage.

--Keith <W8SDZ@SIMTEL20.ARPA>
Usenet: ...!decvax!brl-bmd!w8sdz
  or   ...!unc!brl-bmd!w8sdz
  or   ...!seismo!brl-tgr!w8sdz

From -1793747299441437474
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e433583f4b28a37a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-30 11:54:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!jcp@BRL.ARPA
From: jcp@BRL.ARPA (Joe Pistritto)
Newsgroups: net.ham-radio
Subject: Re: TAPR Sale Update
Message-ID: <10302@brl-tgr.ARPA>
Date: Tue, 30-Apr-85 14:54:21 EDT
Article-I.D.: brl-tgr.10302
Posted: Tue Apr 30 14:54:21 1985
Date-Received: Wed, 1-May-85 06:42:40 EDT
Sender: news@brl-tgr.ARPA
Lines: 18

Actually, I don't feel upset about it at all. I bought one of the fire sale kits as well (although it hasn't arrived yet).

Personally, I'd MUCH rather have the kit version of the old reliable board at a good price (which is probably lower than what the new one will be, I bet). Their note said exactly what they meant, that they were not going to be producing the old one, and wanted to clear stock for other things. Considering their past history of being heavily involved with packet, I ASSUMED that the other things would include packet equipment...

What they did was convey a large amount of useful material to a large group of hams at what probably amounts to cost or only a little more. My high opinion of TAPR stands. They're not out to rip anyone off, they just don't want to get stuck with a lot of parts when everyone starts buying Heathkit TNC or some such.

-JCP-

From 138201843138082902
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ae2ce2b5ce72c244,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-30 14:48:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!Morton Jim@LLL-MFE.ARPA
From: Morton Jim@LLL-MFE.ARPA
Newsgroups: net.ham-radio
Subject: HEATH TNC
Message-ID: <10309@brl-tgr.ARPA>
Date: Tue, 30-Apr-85 17:48:55 EDT
Article-I.D.: brl-tgr.10309
Posted: Tue Apr 30 17:48:55 1985
Date-Received: Thu, 2-May-85 05:11:56 EDT
Sender: news@brl-tgr.ARPA
Lines: 36

I ordered a Heath TNC as soon as the catalog came out and it was an

"official" product. Recieved my kit Thurs the 25th. (i picked mine up at my local store)

The kit is nice. Uses a taped roll of resistors, diodes and caps to speed assembly. I took about six hours to glue the thing together and make cables for my terminal and radio. The kit comes with a connector and cable for the connection to the radio but none for the terminal.

I had some bad parts - most were locally replaceable. The first was a bad 7912 -12V regulator that liked 18 volts better than 12 . The second was a
MC1458 op amp in the output to my transmitter. This was pretty easy to find as the last step in calibration (audio level and tone null) would not work right. the idea of this cal step was to hook a scope onto the audio output and adjust the level with ptt on. then turn off ptt and adjust a null control for minimum level. then set the proper audio level key down to make sure. Well my op-amp was a better oscilator than amplifier so no matter how i adjusted things, the level stayed the same. Being curious, i looked at the input of the op-amp and saw evrything o.k. so i swapped the chip and viola ! i am on the air.

My last problem regards the Non - volatle ram. I can not seem to program it. I will consult heath and probably get a new chip or some such.

anyway... i have had a contact with the thing... seems to work although i need a better antenna and more power (i am running a whopping 3 W) I can hear a lot of stations that can not hear me.

Heath did provide good instructions for hooking the unit to various radios including my ICOM IC02AT which required a transformer on the XMIT side of things.

All in all i am happy and satisfied with what i got.
Jim Morton WA6FWW
415-423-2374 days

From 8646395442397542069
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4b3334023fb51b03,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-30 15:50:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxa.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!bellcore!sabre!zeta!epsilon!gamma!ulysses!mhuxr!mhuxt!houxm!houxa!pmbs
From: pmbs@houxa.UUCP (P.BILODEAU)
Newsgroups: net.ham-radio
Subject: Wanted TS520 Digital Display
Message-ID: <662@houxa.UUCP>
Date: Tue, 30-Apr-85 18:50:43 EDT
Article-I.D.: houxa.662
Posted: Tue Apr 30 18:50:43 1985
Date-Received: Sat, 4-May-85 05:53:08 EDT

Organization: Bell Communications Research, Inc.
Lines: 15

My father has purchased a TS520 and wants a Digital Display
to use with it. If you have one for sale, know where there is
one for sale or know where I can get a manual for the display,
please respond by email or phone.

Thanks.

paul
WA1VGC
(201-949-3293)

From 6487606903570510634
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e433583f4b28a37a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-30 16:33:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site asgb.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!zeta!sabre!bellcore!decvax!
ittvax!dcdwest!sdcsvax!bmcg!asgb!hageman
From: hageman@asgb.UUCP (George W. Hageman)
Newsgroups: net.ham-radio
Subject: Re: TAPR Sale Update
Message-ID: <666@asgb.UUCP>
Date: Tue, 30-Apr-85 19:33:08 EDT
Article-I.D.: asgb.666
Posted: Tue Apr 30 19:33:08 1985
Date-Received: Fri, 3-May-85 03:31:32 EDT
References: <10189@brl-tgr.ARPA>
Organization: Burroughs Corp. ASG, Boulder Colo.
Lines: 15

> According to a friend who spoke with TAPR at 3pm PST yesterday, they had 50
> (fifty) TNC kits left at the $160.00 price. They had sold 120 units up to
> that point yesterday.
>
> --Brad N6BDE
> -------

I called TAPR yesterday 4/29/85 at about noon and all of the
sale boards are gone. However there are about 200 manuals which
will probably be cleap to get. ($10.00?) The person I talked to
said that they are planing to sell a new kit which has more features
for approximatly the same price soon.

George Hageman (...bmcb!asgb!hageman)

From 3550266249148753243
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e433583f4b28a37a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-04-30 18:56:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site umd5.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!umcp-cs!cvl!umd5!louie
From: louie@umd5.UUCP
Newsgroups: net.ham-radio
Subject: Re: TAPR Sale Update
Message-ID: <484@umd5.UUCP>
Date: Tue, 30-Apr-85 21:56:48 EDT
Article-I.D.: umd5.484
Posted: Tue Apr 30 21:56:48 1985
Date-Received: Thu, 2-May-85 06:36:34 EDT
References: <10189@brl-tgr.ARPA> <830@sdcsvax.UUCP>
Reply-To: louie@umd5.UUCP (Louis Mamakos)
Distribution: net
Organization: U of Md, CSC, College Park, Md
Lines: 10

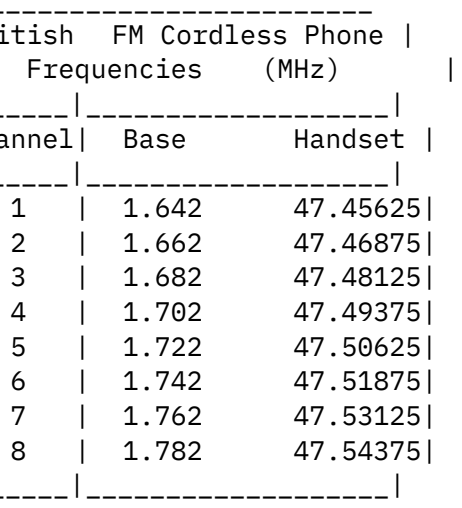
At least you got your TAPR TNC at a discounted price. I ordered on many
moons ago, waited for about 6 or 7 weeks, saw the announcement of the
new, reduced price and then received the one that I ordered at full price
a few days later. I could have canceled and reordered and saved about $100.
Oh well...

--
Louis A. Mamakos WA3YMH   University of Maryland, Computer Science Center
 Internet: louie@umd5.arpa
 UUCP: {seismo!umcp-cs, ihnp4!rlgvax}!cvl!umd5!louie

From 5118820083667721800
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aab2bb0b8eba53c5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-01 12:50:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: British cordless phone freqs
Message-ID: <555@ihu1h.UUCP>
Date: Wed, 1-May-85 15:50:49 EDT
Article-I.D.: ihu1h.555
Posted: Wed May 1 15:50:49 1985
Date-Received: Thu, 2-May-85 02:40:36 EDT
Distribution: net

Organization: AT&T Bell Laboratories
Lines: 21

x



--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 750951313932335763
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8322f94a862b325a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-05-01 12:55:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Modified PLL rigs
Message-ID: <558@ihu1h.UUCP>
Date: Wed, 1-May-85 15:55:24 EDT
Article-I.D.: ihu1h.558
Posted: Wed May 1 15:55:24 1985
Date-Received: Thu, 2-May-85 02:41:25 EDT
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 39

x
Out of Band Coverage for 2 Meter Portables

> How easy would it be to modify the code in a modern PLL HT to enable tuning
> out-of-band? It would be nice to have some additional receive range without

> those kludgey band shifter antenna bolt-ons. I would think you can tell the
> PLL to do whatever you want, you just have to get the software to believe
> this.

Changing the firmware in a 2m ht is not for the faint
of heart.

The older ICOM IC2's range may be extended to 140 - 150
MHz by cutting and soldering, no new components needed.
73 magazine detailed two ways to extend the coverage on
the older Kenwood TR2400. One method used the injec-
tion signal from the transmit PLL on receive, although
the frequency display wouldn't track the true receive
frequency. This resembles the old trick of placing the
receive crystals into the transmit crystal sockets of
older crystal controlled CB radios so they could
transmit on 10 meters.

Nowadays, 2 meter portables are used for non
ham
activities, particularly for warfare in the Middle East
and Central America. Not wanting to miss a major
market segment, Japanese manufacturers have started
adding additional frequency coverage capabilities into
their 2m rigs.

The ICOM IC02AT's coverage can be modified by the addi-
tion of a few diodes. The Kenwood TR2600A already
cov-
ers 140 - 160 MHz on receive right out of the box
and
can transmit the same wide range by cutting a two com-
ponent leads.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -1418804165608438185
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15f443,bbe300c130ca796f,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 151e61,bbe300c130ca796f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-09 20:47:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!godot!mit-eddie!cybvax0!frog!hydra!
admin
From: admin@hydra.UUCP (admin)
Newsgroups: net.ham-radio,net.wanted
Subject: UPI news via spread spectrum on TVRO

Message-ID: <115@hydra.UUCP>
Date: Sat, 9-Mar-85 23:47:20 EST
Article-I.D.: hydra.115
Posted: Sat Mar 9 23:47:20 1985
Date-Received: Tue, 12-Mar-85 20:29:08 EST
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 90
Xref: linus net.ham-radio:1841 net.wanted:5066

I have recently learned that the UPI is using spread spectrum transmissions from one of the Westar or Galaxy satellites to feed news to small earth stations (2-3 feet in diameter).

I understand that the technology used was developed by a company called Equatorial Communications. I further undertand that the spreading is done by diphase modulating a carrier with a pseudo random sequence at a much greater rate than the actual data stream being transmitted so as to convert it into a 2-mhz wide noise like signal which is uplinked to occupy part of the bandwidth (and power) of some transponder.

It seems to me that it might be a challenging and fun task (with the understanding of course that the recovered data would not be used for other than my incidental amusement and definately not for benefit or gain) to demodulate the signal and recover the news. In order to do this I need some more details of how the system works. Specifically :

1. Which transponder of which bird carries the UPI feed ? What is the exact carrier frequency of the signal ? How powerful is it ?

2. What is the chip rate (PRN sequence bit rate) used ?

3. What is the actual data bit rate (IE how many chips to a bit) ?

4. What is the PRN sequence used ? How is synchronism with the local correlator sequence generator obtained ? I have been told that there is some sort of reset pattern, is this true ? Is the sequence ROM based or generated by a feedback shift register circuit ? If I recover the chip sequence with a large enough dish and a PSK demod could I figure out how to generate it (given that some parts of the sequence I recovered were inverted by data) ? Does anybody know a good method of figuring out the generating polynomial for a P/N sequence given a sample of that sequence EXOR'd with random data ?

4. Does the data modulate the sequence by simply EXORing with it or does it select entirely different patterns (one pattern for a 1 a different one entirely for a zero). (The later scheme

seems slightly unusual to say the least but some literature
on the system described it that way.) Is NRZI coding used
for the data or straight NRZ ?

5. Am I correct in assuming that the underlying data is sent
in a bit synchronous format (with fixed length characters)
with synchronism established by some mechanism similar to
that used in BSC protocols (a SYN character) ? That information
is packetized with headers and some sort of CRC (a fire code ?)
that can be used to correct errors in the data (same sort of
thing that a disk controller does when it gets an ECC error).
(The company advertises forward error correction, but they
don't say what rate or mechanism is used).

6. Is the actual data (the news) encrypted in any way or should
I expect to see sequences of characters (once I acquire character
framing) that seem to resemble ASCII or Baudot or TTS news stories?
If the data is lightly encrypted could I break the cipher
given lots of plaintext in the form of stories from the same
wires acquired from other sources (such as SCPC carriers) ?
[I might say I very much doubt I would have the time or talent to
to break such a cipher, but I can always hope to find
someone who likes such challenges to help me]

7. Is there a publiclly available filing with the FCC or
any other public record description of the details of
the modulation and coding scheme used ? (I am told that
most such things - even TV scrambling schemes - are available
as public documents if you know where to look)

8. Does anybody know of any features of the system that would
make it impractical for a hacker who is a hardware/software
design engineer by trade to receive news with reasonable
effort ? I assume that one can cheat by using a somewhat bigger
dish and better LNA (there are some 60 K ones now) and not
do quite as optimal a correlator. I assume also that determining
all the details of the packet protocol is something one can do
over time (and only to the extent that one needs to to recover
the "wires" one is interested in). The real idea is to
see a 3 foot dish pointed out the picture window receive
some mostly intelligable news when connected to a breadboard
   full of cicuitry one designed and built controlled by a program
one wrote.

Any help would be greatly appreciated.

From 2943978478920227717
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bbe300c130ca796f
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,bbe300c130ca796f

X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1985-03-09 21:19:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!godot!mit-eddie!cybvax0!frog!hydra!
die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio,net.wanted
Subject: Re: UPI news via spread spectrum on TVRO (correction)
Message-ID: <117@hydra.UUCP>
Date: Sun, 10-Mar-85 00:19:07 EST
Article-I.D.: hydra.117
Posted: Sun Mar 10 00:19:07 1985
Date-Received: Tue, 12-Mar-85 20:29:56 EST
References: <115@hydra.UUCP>
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 12
Xref: linus net.ham-radio:1842 net.wanted:5067

Due to an anomaly in the mail system at CRDS (and the fact I had superuser on) my posting requesting information on UPI spread spectrum signals on satellites wasn't properly signed.

What follows is my address ...

--
David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.uucp: decvax!frog!die

From 2909525322303236487
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,34a73988abfacef0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-11 05:13:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!whuxl!whuxlm!akgua!mcnc!
decvax!decwrl!dec-rhea!dec-pisces!partain
From: partain@pisces.DEC (Chuck Partain, SHR3/E-8, DTN 237-3157 LOCATION
G-23)
Newsgroups: net.ham-radio
Subject: info needed
Message-ID: <1039@decwrl.UUCP>
Date: Mon, 11-Mar-85 08:13:10 EST
Article-I.D.: decwrl.1039
Posted: Mon Mar 11 08:13:10 1985
Date-Received: Thu, 14-Mar-85 05:03:17 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network

Lines: 16

Has anyone used or had the opportunity to get involved with building
anything from kits or boards supplied from circuit board specialists in
Pueblo, Co. The company is called out exclusively in the radio amatures
handbook. I am interestedin building some equipment they carry.

Any inputs??

all information would be appreciated.

CHUCK PARTAIN
DIGITAL EQ. CO.
SHREWSBURY, MA.
617-841-3157

From -6616185265025579630
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e94f3402a00bf951
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-11 09:37:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site terak.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!hao!noao!terak!doug
From: doug@terak.UUCP (Doug Pardee)
Newsgroups: net.ham-radio
Subject: Re: Automobile Ham call sign plates
Message-ID: <440@terak.UUCP>
Date: Mon, 11-Mar-85 12:37:41 EST
Article-I.D.: terak.440
Posted: Mon Mar 11 12:37:41 1985
Date-Received: Sun, 17-Mar-85 01:54:16 EST
References: <8484@brl-tgr.ARPA>, <397@terak.UUCP> <795@ecsvax.UUCP>
Organization: Terak Corporation, Scottsdale, AZ, USA
Lines: 33

> "No more right than CBers" ?
>
> "Hams no longer perform public service" ?
>
> Where does this guy come from? Speaking for the local
> Amateur ops that have been the ONLY communications links
> in local disasters (and we get our share!)-

Gosh, did the police, fire, ambulance, power company, and phone company
radio systems all go out at once? Did the REACT people all hide? Or
(more likely) were the hams so "full of themselves" that they didn't
notice that almost everyone was communicating fine without their help?

>   YOU'RE FULL OF IT!

My apologies if I offended you. Unfortunately, it is indeed the few hams who *are* still involved in public service that would be offended. But even then, only if they refuse to acknowledge the reality -- that the times have changed, that hams have abandoned public service activity, and that other services have stepped in. These services can do a better job (because of sheer number of units) than hams could ever hope to do.

I speak from the position of one who spent many years in ham radio public service, including a few years as regular NCS on WESCARS, and many years regular participation in NTS, including PAN NCS and a brief stint on TCC (including an all-nighter during a major East-coast disaster).

I mourn the passing of an era, one that gave me considerable enjoyment and fulfillment. But I cannot deny its passing.   de n7fb
--
Doug Pardee -- Terak Corp. -- !{hao,ihnp4,decvax}!noao!terak!doug

From -5660526468341854766
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,88036e3000951a0c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-11 10:08:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!
F33PAP%DHHDESY3.BITNET@WISCVM.ARPA
From: F33PAP%DHHDESY3.BITNET@WISCVM.ARPA
Newsgroups: net.ham-radio
Subject: ANY NEW OSCAR INFO?
Message-ID: <9122@brl-tgr.ARPA>
Date: Mon, 11-Mar-85 13:08:30 EST
Article-I.D.: brl-tgr.9122
Posted: Mon Mar 11 13:08:30 1985
Date-Received: Tue, 12-Mar-85 21:42:59 EST
Sender: news@brl-tgr.ARPA
Lines: 3

Is there any new info about the OSCAR's? The last thing I heard was dated 18th of Jan. Has petrus.uucp gone off the net?
Karl-Heinz DK8HI

From 4431792401926719033
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,52aa3a4d4d7e6bb1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-11 10:22:11 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
godot!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Followup on mounting a rig in a Honda Accord
Message-ID: <9123@brl-tgr.ARPA>
Date: Mon, 11-Mar-85 13:22:11 EST
Article-I.D.: brl-tgr.9123
Posted: Mon Mar 11 13:22:11 1985
Date-Received: Thu, 14-Mar-85 04:05:31 EST
Sender: news@brl-tgr.ARPA
Lines: 12

Re: the squeaky "wheels" (Honder Accawhd -- I'm from Bahstun).

In my experience, black "electrical tape" is not good for long term
installations as it tends to dry out and come loose after several years of
heat, humidity etc.

I have had much better luck with "ducting tape" which is available from most
hardware stores. The only time I have seen it fall apart is when exposed to
direct sunlight for a couple of years (as on an antenna).

-John S., W3IKG

From 5449845528251456708
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f6d91904276cc44,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-11 11:15:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
godot!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: update: listening to SCA (subcarrier) transmissions
Message-ID: <9125@brl-tgr.ARPA>
Date: Mon, 11-Mar-85 14:15:41 EST
Article-I.D.: brl-tgr.9125
Posted: Mon Mar 11 14:15:41 1985
Date-Received: Thu, 14-Mar-85 04:37:16 EST
Sender: news@brl-tgr.ARPA
Lines: 216

Who, me?

I will be happy to try to answer the question, although I didn't think I had
anything to do with it except maybe to make a wise comment or two...

"   I keep feeling that this is something that I should understand-- at least qualitatively-- but I don't!

     I assume that one receiver is acting as a converter for the other. Please enlighten!

     I wonder if something similar cfeeling that this is something that I should understand-- at
least qualitatively-- but I don't!

     I assume that one receiver is acting as a converter for the other. Please enlighten!

     I wonder if something similar could be done to use an F.M. receiver to receive the cordless telephones in the range 1.6 to 1.8 mhz.?

          TNX!

               Jim (W2OZH) "

As I recall, the setup described by Bob Parnass (I think that was who it was) was to hook a VLF receiver to the output of an ordinary FM receiver to pick up SCCA (sic - I always call it that, Sports Car Club of America, when it should really be SCA - Subsidiary Communications Authorization or something!) transmissions multiplexed on ordinary FM broadcasts.

To understand what is going on, you need to know what the FM station actually transmits.

Let's do it in "top down" fashion. All you computer jocks out there should relate nicely to that.

First of all, the FM station has a "composite audio" input - this is just the input on which SOMETHING (consider it a stub subroutine to be written later) is fed in to the modulator.

>From the FM modulator's point of view, what you put on this input is just the MODULATING SIGNAL which you want to Frequency Modulate (FM) the station's carrier. Intuitively, you can think of the station as putting out a "pure" carrier at frequency F when this modulating signal is zero. When it is NONZERO, however, the instantaneous frequency of the transmitter is changed. Say the modulating signal value, in volts, or whatever, is M. Then the transmitter output frequency is set to F + K*M, where K is a sensitivity constant which is unimportant except that whatever maximum value of M is applied to the FM modulator input should result in a maximum "frequency deviation" K*M which is just about the maximum that the FCC allows.

If this station were a plain old-fashioned monaural FM station, all you would

have to do is feed in the audio signal -- voice, music or funny sound effects -- which you want the listeners out there in Radio-Landt to hear.

The signal would modulate the carrier, be amplified, fed to the antenna, and radiated. It would come swooping down into your ordinary, Monaural FM receiver. The receiver would say, hmm... The frequency is F + K*M. I therefore have to subtract F and divide by K to give my loyal owner the instantaneous value of the signal waveform, which is M. Voila! Out of the FM demodulator comes M in livid high fidelity.

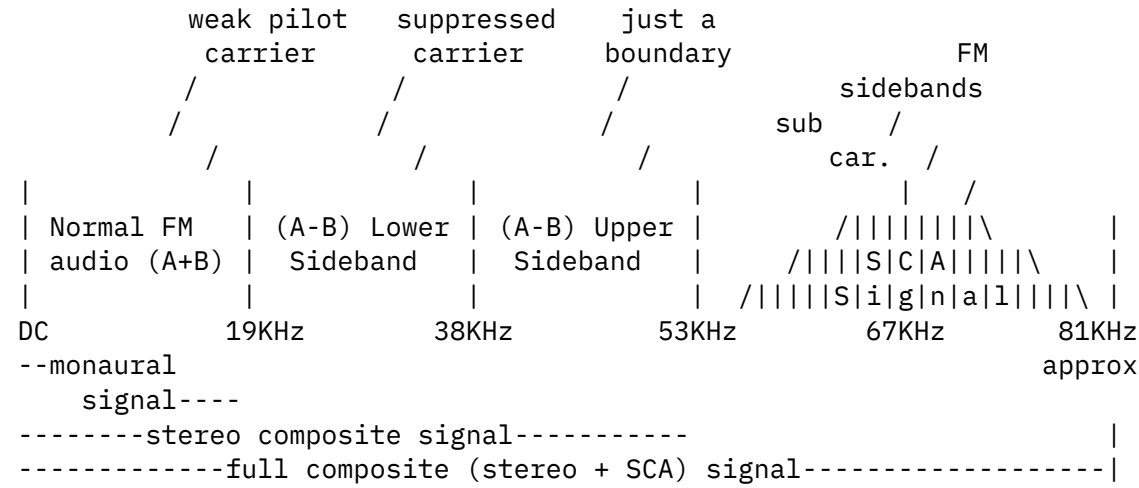
(I don't think the following information is needed for present purposes, but I include it so somebody won't say I am oversimplifying things!!!) Now, even in simple monaural FM there is one trick that we haven't mentioned. This is called pre-emphasis and de-emphasis. Very early in the game, it was noticed that in FM systems if you fed in no modulation at all and listened to the receiver's reconstructed value of M (after it did the arithmetic noted above), there was a NOISE output from the receiver, even at fairly strong signal levels. The noise was particularly noticeable because its amplitude increased with frequency. Thus a quite noticeable high-frequency hiss was present on even fairly good signals. Somebody then had the bright idea that they should effectively "turn down the treble control" at the receiver. A fixed frequency compensating network called a "de-emphasis" network was designed and standardized to do that. But then the music had its highs "de-emphasized", so an "inverse" network called a pre-emphasis network was added at the transmitter.

Next, along came stereo. In order to avoid the wrath of all the owners of monaural FM sets, the FCC in its wisdom decreed that a "compatible" system would be necessary before they would approve FM stereo. The engineers quickly noted that the A+B signal from two microphones gives a passable monaural signal (especially if "one-point" miking is used). So now the problem was how to get A and B out of A+B. Well, as your high school algebra teacher probably taught your, (A+B)+(A-B)=A and (A+B)-(A-B)=B. So all they had to do is send (A-B) in some clever way and the receiver could reconstruct A and B by "matrixing". The method adopted was to "multiplex" this (A-B) signal onto the main carrier by using it to modulate a SUBcarrier located at 38 KHz. Double-Sideband Suppressed Carrier (DSBSC) modulation was chosen. This gave a "lower sideband" extending downward from 38KHz (less 20Hz or so) to 23KHz (because the highs were cut off at 15 KHz.) A "pilot carrier" was put in at 19 KHz which allows the receiver to recover the precise frequency and phase of the 38 KHz carrier so that recovery of the (A-B) signal could proceed. In fact it turns out that this carrier can be used in an even more clever way to recover A and B signals directly from the "composite" signal (A+B plus pilot carrier plus A-B).

Note that all the new junk -- pilot at 19KHz and A-B from 23 to 38 KHz -- are so high in frequency that most people wouldn't hear them, and most older monaural FM sets and loudspeakers won't reproduce them audibly anyway.

Well, as if this wasn't bad enough, then along came the SCCA (I warned you about my warped sense of humor) and asked for authorization to put MUZAK on the air. The obvious thing to do was to put on yet another subcarrier, this time at a frequency far enough above the audio so that it wouldn't

interfere with stereo broadcasting. 67 KHz was chosen as the magic frequency. But this time, FM modulation was chosen. Remember, all of this stuff is being stacked up in frequency above the normal monaural FM broadcast audio in such a way that a normal FM receiver won't be affected (much) by it. So before we even go into the "composite audio" input of our simple FM transmitter, we have a VERY "composite" signal indeed. One might diagram it like this:



Now to the main point. The FM transmitter takes this composite audio signal as input and FM MODULATES its carrier with it. When this is received by an FM receiver, what comes out of the discriminator is this composite signal. In a normal monaural FM receiver, this is fed to the volume control and thence to the audio amplifier stages, where "de-emphasis" is applied as noted above, and finally out to the speaker or headphones.

The de-emphasis circuit tends to reduce the amplitude of the SCA signal since it is at a high frequency (53 to 81 KHz, with carrier at 67 KHz. However, enough gets through that it can still probably be used even at the speaker jack, since it is an FM signal and the absolute amplitude isnt too important. The best way to recover the SCA audio, however, would be to go in to the FM receiver and tap off at the "top" of the volume control -- the hot side where the discriminator signal is brought in. Bring this signal out to a jack which you can install on the set for all such nefarious purposes. In fact, make sure that the de-emphasis network is not installed ahead of this point, although in my experience it usually is not.

Anyway, once you have brought out the full composite signal, the SCA signal is STILL AN FM SIGNAL that needs an FM discriminator to turn it back into normal audio. It happens to have a carrier frequency of 67 KHZ because that is what was used as the carrier at the studio when the composite audio signal was made up.

So if you have a VLF receiver capable of covering 67 KHz, you can feed the composite audio signal into its input, which happens to be the antenna connection. You can then tune it to 67 KHz and switch it to FM mode and

you should get perfect SCA audio out.

If it doesn't have FM demodulation available at this frequency, then you can still use a trick called "slope detection". Tune it above 67 KHz so that the 67 KHz carrier falls on the lower slope if the IF selectivity curve. I.e. the signal has fallen off about halfway from its peak value on the meter. Select AM demodulation, and then tune for the best sound. You should get acceptable recovery of the audio. If there is a bandwidth switch, experiment with it. Probably the widest bandwidth available will work best.

If you don't have a suitable VLF receiver covering 67 KHz, the simple trick with the Phase-Locked Loop device will work just fine. After all, the monaural FM receiver has done most of the work of picking up the weak signal at VHF (88 to 108 MHz) and amplifying it and FM demodulating it so you have the baseband composite signal available to fool around with. What is going on here is that the PLL locks to the 67 KHz signal, but since that is being FM modulated, it has to work a bit to stay locked. The Voltage-Controlled Oscillator has to be pushed above or below 67 KHz, its natural frequency, by applying a control voltage to the VCO input. All of this is done "automatically" by the design of the phase-locking circuitry, but YOU can benefit by all this work it is doing: the control voltage is precisely a measurement of the instantaneous modulation value, M, that YOU want to hear! So you pick it off, amplify it, and listen to MUZAK (yuk) to your heart's content.

>From the above rather long-winded description, you can see that there is a lot of other junk floating around on the composite signal, namely all the stereo stuff below 53 KHz. To make the SCA demodulator work well and be free of interference from the main channel, it would be well to put a little selectivity ahead of the SCA demodulation if you are using the PLL trick. I haven't experimented with this, but I would think a simple high-pass filter to attenuate everything below 53 KHz would do fairly well. Of course with the VLF receiver you have all kinds of selectivity, so there should be no problem.

I hope this helps you understand what is going on with SCA. If you followed all the details, it should be clear that there is no black magic going on, but that once the composite signal has been received, a VLF FM receiver (a rather rare beastie) is logically what is needed to recover the SCA signal. That's why it happens to be possible to string together such a seemingly unlikely pair of receivers and get SCA broadcasts.

In the case of cordless telephones in the 1.8 MHz region, there is no such composite modulation going on. So far as I know, it's just ordinary AM on the base-to-portable link which is at that frequency. So stringing together receivers wouldn't do much for you. It IS possible, however, to MODIFY an ordinary AM broadcast receiver by retuning its local oscillator and RF stages slightly so that they tune higher and cover the cordless telephone frequencies. Just remove some capacitance and diddle the trimmer capacitors... Then if I'm right about its being AM, you should be in business.

-John Sangster, W3IKG

From 9220039165245137047
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15f443,bbe300c130ca796f
X-Google-Attributes: gid15f443,public
X-Google-Thread: 151e61,bbe300c130ca796f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-11 13:17:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!whuxl!whuxlm!akgua!mcnc!
decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio,net.wanted
Subject: Re: UPI news via spread spectrum on TVRO
Message-ID: <595@vortex.UUCP>
Date: Mon, 11-Mar-85 16:17:05 EST
Article-I.D.: vortex.595
Posted: Mon Mar 11 16:17:05 1985
Date-Received: Thu, 14-Mar-85 05:12:03 EST
References: <115@hydra.UUCP>
Organization: Vortex Technology, Los Angeles
Lines: 6
Xref: watmath net.ham-radio:2520 net.wanted:6021

Equatorial considers their spread-spectrum encoding details to
be very highly proprietary. They have not been published.
They also currently scramble much of the data and will probably
be scrambling it all (most likely via DES) rather shortly.

--Lauren--

From -9095030315311074965
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,92a867e3be80b23,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-11 15:58:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!bedford!mintaka!Gor#f@mit-
eddie.ARPA
From: Gor#f@mit-eddie.ARPA
Newsgroups: net.ham-radio
Subject: SCA
Message-ID: <9130@brl-tgr.ARPA>
Date: Mon, 11-Mar-85 18:58:47 EST
Article-I.D.: brl-tgr.9130
Posted: Mon Mar 11 18:58:47 1985
Date-Received: Sat, 16-Mar-85 09:58:51 EST
Sender: news@brl-tgr.ARPA

Lines: 8

I have never done any SCA work, but in my dimmer memories is the idea
that most FM broadcast receivers have an "SCA trap" in or just after
the detector. If you can find and non-destructively disable such a
trap (or perhalps take signal from across it, assuming it's parallel
tuned, or magneticly couple to the L in the tank), then you may have
enough signal for the 565 circuit.

73's -Bill

From 3551866361913138197
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bbe300c130ca796f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-12 01:54:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!jcp@BRL-TGR.ARPA
From: jcp@BRL-TGR.ARPA (Joe Pistritto)
Newsgroups: net.ham-radio
Subject: Re: UPI news via spread spectrum on TVRO
Message-ID: <9141@brl-tgr.ARPA>
Date: Tue, 12-Mar-85 04:54:08 EST
Article-I.D.: brl-tgr.9141
Posted: Tue Mar 12 04:54:08 1985
Date-Received: Fri, 15-Mar-85 01:23:27 EST
Sender: news@brl-tgr.ARPA
Lines: 15

     Speaking of Equatorial, there is an article in the current
issue of Business Week about the company. Apparently it has been
selling 2-3 foot dishes (receive only) for a couple years now, using
this encoding scheme mentioned. UPI was one of the customers mentioned
in the article. They also have a 4 foot transmit/receive terminal product,
which has somewhat lower bandwith than the conventional satellite uplink
(probably 56Kbps or some such). No specifics were given, but apparently
the receive-only service is quite popular. There is a picture of the
President of the company standing atop a disply of 15 or so of the
small dishes, with a large (15 meter) dish in the background (probably
what Equatorial uses to feed the data onto the transponder for the
receive only system). Really quite neat...

-JCP-

From -7021837274052666024
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d148bcce923af607
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-03-12 07:54:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!Taylor.Wbst@XEROX.ARPA
From: Taylor.Wbst@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Another SCA adapter
Message-ID: <9147@brl-tgr.ARPA>
Date: Tue, 12-Mar-85 10:54:45 EST
Article-I.D.: brl-tgr.9147
Posted: Tue Mar 12 10:54:45 1985
Date-Received: Fri, 15-Mar-85 01:29:44 EST
Sender: news@brl-tgr.ARPA
Lines: 10

I KEEP WONDERING IF ANY OF THIS NEAT TECHNOLOGY COULD BE USED FOR THE CORDLESS TELEPHONE LISTENING THAT SOME PEOPLE TALK ABOUT. I GUESS THIS IS FM IN THE RANGE 1.6 MHZ TO 1.3 MHZ.

I HAVE THE UNIDEN 2021.

TNX!

JIM

From -9111363230202387124
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9d79ea1db2c7437,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-12 08:53:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!ABN.ACOS-CE@USC-ISID.ARPA
From: ABN.ACOS-CE@USC-ISID.ARPA (Paul Ramey)
Newsgroups: net.ham-radio
Subject: FOR SALE
Message-ID: <9151@brl-tgr.ARPA>
Date: Tue, 12-Mar-85 11:53:10 EST
Article-I.D.: brl-tgr.9151
Posted: Tue Mar 12 11:53:10 1985
Date-Received: Fri, 15-Mar-85 01:31:08 EST
Sender: news@brl-tgr.ARPA
Lines: 5

SB-200 VGC $300 NEG.
CAN BE REACHED AT 919-396-6000/919-425-8791 OR ON THE NET
KA4VUB
PAUL

From -2045500232364415052
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e5e7057c2596a68d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-12 16:39:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: nifty peripheral for your home computer...
Message-ID: <9161@brl-tgr.ARPA>
Date: Tue, 12-Mar-85 19:39:17 EST
Article-I.D.: brl-tgr.9161
Posted: Tue Mar 12 19:39:17 1985
Date-Received: Fri, 15-Mar-85 02:39:15 EST
Sender: news@brl-tgr.ARPA
Lines: 40

(I wish I could collect the value of this free advertising to the vendor...!)

Rapid System, Inc., 5415 136th Place, Vellevue, WA 98006 is offering a
"Digital Oscilloscope Peripheral" for several popular Personal Computers.

The device boasts 500 KHz bandwidth (2 MHz sampling rate) and sensitivity
down to 100 mV per division (which is 8 pixels vertically). It has FOUR
separate inputs for vertical channels, plus a separate TRIGGER input with
polarity and sensitivity controls. It provides also for internal triggering,
apparently only when looking at a single channel. (Why don't they gate it so
you can look at all four but trigger off only channel A? Oh, well...)

The peripheral sells for $399 for the Commodore and $499 for Apple and IBM
iterfaced models. (What the traffic will bear is the name of the pricing
strategy they used, I guess!)

So far, so good. However, they ALSO offer a nifty software package
called a Spectrum Analyzer! So if you are too dumb or lazy, or both, to
write your own, you can have not only a 'scope but also an audio (500 KHz)
spectrum analyzer for around $600 if you already have the computer and the
display. (The spectrum analyzer package sells for $149.)

It's not exactly realtime -- they quote 15 minutes worst case to do a
spectrum plot, including data collection, FFT and plotting -- but it sure
is cheap compared to Hewlett Packard!

Rapid Systems evidently isn't big on phone numbers. Possibly they don't have
a phone in the garage. Anyway, it looks like a very nice product for either
hobbyists or low-budget industrial labs who need a not very wideband but
VERY cheap scope and spectrum analyzer.

If anybody has used the system or has bought one, a "road test report" would be very much of interest to the Net.

Congrats to Rapid Systems on a VERY interesting new product for the ham / hobbyist / industrial / academic community. I wish them success with it!

73,
de W3IKG

From 5652245751802374216
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d148bcce923af607
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-13 08:27:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!Taylor.Wbst@XEROX.ARPA
From: Taylor.Wbst@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Another SCA adapter
Message-ID: <9182@brl-tgr.ARPA>
Date: Wed, 13-Mar-85 11:27:00 EST
Article-I.D.: brl-tgr.9182
Posted: Wed Mar 13 11:27:00 1985
Date-Received: Sat, 16-Mar-85 03:27:22 EST
Sender: news@brl-tgr.ARPA
Lines: 8

I HEAR A LOT OF NBFM IN THAT SERVICE. SOME CAN BE (INEFFICIENTLY) RECEIVED USING SLOPE DETECTION ON AN AM RECEIVER BUT MANY ARE NG. I THOUGHT THAT THERE MIGHT BE A SIMPLE WAY TO RECEIVE THESE PHONES.

TNX!

JIM

From 4832395463248627519
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c126038ca0d8fe8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-13 12:45:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2.fluke 9/24/84; site vax3.fluke.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!fluke!rad
From: rad@fluke.UUCP (Randy Davison)
Newsgroups: net.ham-radio
Subject: Re: Fun with Weather Satelites ??
Message-ID: <1344@vax3.fluke.UUCP>

Date: Wed, 13-Mar-85 15:45:58 EST
Article-I.D.: vax3.1344
Posted: Wed Mar 13 15:45:58 1985
Date-Received: Thu, 14-Mar-85 06:17:49 EST
References: <43300002@extel.UUCP>
Organization: John Fluke Mfg. Co., Inc., Everett, WA
Lines: 126

> I am seriously considering putting together a weather satellite receiver
> for 1691mhz and have 2 questions which perhaps some individuals in
> net-land could help on. I will summarize any mail received though I
> hope most reply will be to this group so everyone can share.
>
> First question: Is there anything of interest transmitted other than
> cloud pictures and service information? Weather maps and radar
> summaries would be very nice.
>
> Second question: Where can I get info on other services offered by NOAA
> such as: weather maps maybe via HF fax, video from local radar sites
> (somehow the TV stations get it I suspect via a dial up line), and any
> other public domain weather information.
>
> With the TVRO signals due to be scrambled maybe this info might be
> useful someday to others on the net. Also my display device will be
> a PC so there could be some fun software to share.
>
> Lastly should there be enough interest I would be willing to serve as
> a clearing house for a mailing list on the subject provided I can get
> to the users of interest from my network (usenet) connection.
>
> 73
>
> Larry Pajakowski
> UUCP: ihnp4!tellab1!extel!larry
> TELCO: 312-291-4991

Here are some answers to your questions as well as some general info
I think you and others might find useful.

First, satellites only transmit cloud pictures. Polar satellites
transmit a continuous strip of alternating visible and IR lines. Geo-
synchronous satellites transmit direct quarter-earth photos as well as
gridded polar shots reformatted and processed on the ground.

HF fax provides a varied menu of retransmitted satellite photes, weather
maps and news items. I have enjoyed watching hf wx maps come in from all
parts of the world. the USSR and PRC especially transmit maps that are
easy to receive and fun to watch.

Finally, Radar summaries are available by phone. I haven't tried that personally yet.

Here is some general info that might spark interest in FAX and WX satellite reception:

Satellites- There are two types of satellites available for use- polar and geosynchronous. The polar satellites are in high inclination orbits so that they cover all parts of the earth twice a day as the earth rotates under them. US satellites are on 137.62 and 137.5 Mhz and can be easily heard using a scanner with whip or ground plane antenna.
Russian satellites are on 137.15 and 137.3 Mhz and run even higher power than US types.

The geosyncronous satellites are in place above each country that put them up so basically only the US satellites can be heard. The Japanese, Russians and Europeans all have geosynchronous satellites in place. The US GOES types transmsmit on 1691 Mhz with FM modulation in the same format as the polar types. Output power is quite low so receiving stations must be elaborate. Dishes as small as 4 feet can be made to work with low noise preamps but 6 to 9 foot diameters provide more margin for losses etc.
It's customary to get a polar receiving and display capability up and running first and then to use the vhf receiver as the IF for the S band receiver.

Receivers- All satellite transmissions are in FM with various deviations.
The best compromise bandwith for all types is +- 15 khz. (30 khz total)
You can receive the satellites just to hear them on a standard narrow band scanner but a picture displayed would be badly distorted. It's easy to put a wide band filter in a scanner if that is the receiver chosen. There are a number of receive options available. See references that follow.

Display- Up untill recently it was difficult to display FAX. The choices were converted surplus

From 8825731992266653741
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,34a73988abfacef0
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-13 15:24:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!CHERRY.ES@XEROX.ARPA
From: CHERRY.ES@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: info needed
Message-ID: <9196@brl-tgr.ARPA>
Date: Wed, 13-Mar-85 18:24:49 EST
Article-I.D.: brl-tgr.9196
Posted: Wed Mar 13 18:24:49 1985
Date-Received: Sat, 16-Mar-85 03:35:17 EST

Sender: news@brl-tgr.ARPA
Lines: 10

Circuit board specialists is run by Robert Shriner (w0uzo ?) and his
wife Ollie (wa0wad). Their products are excellent and the quality of
the boards are very good! I went to college in Pu-Town and I know the
family well. There are others working with them and they do all the
work themselves. All products are throughly tested and require little
debugging. Their amateur radio boards are their main area of expertise
and they range from complete RTTY and Repeater controllers to simple
keyers.

Highly Recommended!

From 5001764707345564374
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,4cb9721f77f0bdc2,start
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,4cb9721f77f0bdc2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-13 17:59:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
cybvax0!frog!hydra!die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio,net.video
Subject: FM SCA subcarriers and TV audio subcarriers (retransmission)
Message-ID: <119@hydra.UUCP>
Date: Wed, 13-Mar-85 20:59:42 EST
Article-I.D.: hydra.119
Posted: Wed Mar 13 20:59:42 1985
Date-Received: Sat, 16-Mar-85 03:48:44 EST
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 266
Xref: watmath net.ham-radio:2531 net.video:1059

--- Following is retransmission of an item sent a few weeks ago that may
___ not have be posted correctly to the net due to system problem.

     Some comments on SCA monitoring.

     Equipment

     First, I have had good luck with a SCA adapter made by
a company called Communications Poly Services, Box 3251, Westford
Mass, 01886. Their model is a SCA-3.

        By the way, FM stations also use 91 khz
subcarriers (the FCC currently allows anything between about 60 and
100 khz, I forget the exact limits), so a tunable means of looking at

subcarriers with some selectivity so it can handle multiple subcarriers on the same main carrier is very desirable.

Main Channel Audio Bleed into SCA channel

Unless the tuner any SCA adapter is used with has very good IF filters with nearly constant group delay across their bandpass, the main carrier modulation will cause phase modulation of the subcarrier to some degree. (This is in fact the principle behind many group delay measuring systems). This causes some unaviodable bleed of main channel audio into the SCA audio. The only cure for the problem is better IF filters (or better alignment of the ones you have)

I am told that the professional SCA tuners built for Muzak and other audio services use special ceramic IF filters that have almost an order of magnitude flatter group delay characteristic than the cheap Japanese filters that almost all (even high end) FM tuners seem to use.

I suppose that someone who is good at designing filters could design a phase compensating network given measured characteristics of an IF system, but for demodulating data it isn't really necessary to suppress main channel audio that many db. (I, for one, cannot stand Muzak so being able to listen to it completely free of main channel bleed is not a priority).

I have heard that many Muzak services use compressor/expandor systems a la Dolby or DBX which have the effect of suppressing perceived main audio bleed much further. (If you intend to actually listen to SCA programming you might try to find out if it is companded and if so re-expand it's dynamic range at your end - it will probably sound much better)

Actual SCA signals.

I have observed the following in the Boston area:

More or less standard Audio:

1. Muzak (some 10-15 channels of supermarket, store, and restaurant music, some almost listenable, some obnoxious)
   At least two stations carry the same exact feed (I think of real MUZAK) in very close time synchronism, I suspect that they get it from a satellite feed.

2. Readings for the blind of daily newpapers and magazines. (Three different stations carry this)

3. Audio of sister AM stations (a technique used to piggyback audio over a studio-transmitter link to a common transmitter site).

4. Physician's Radio Network (Will Martin's comments apply, I can't even interest my medical student wife).

5. NBC radio network feed (seen some years ago) right off the wire cue beeps and all.

6. Educational programing from local community colleges.

7. Audio of carrier current college AM station being distributed to power lines in dorms (seen some years ago) on sister FM station.

Non Audio signals:

1. Transmitter remote control and monitoring (in use for many years) Older systems transmit continuous .5-3 khz tone as FM on 67 khz subcarrier, tone's exact frequency represents meter reading. Newer systems transmit sequences of ASCII characters using start stop transmission on an FSK'd tone FM modulated on a 67 or 91 khz subcarrier (103 modem tones are sometimes used I believe since the chips are so widely available). What one sees on the FM transmitter output is usually telemetry reporting transmitter parameters (plate current, VSWR etc) back to the studio, by using the FM signal to do this the station can aviod having to pay for a telephone line. The command link to the transmitter is completed through a subcarrier on the studio transmitter link (which usually gets filtered out before the signal is fed to the transmitter)

2. Dow Jones Pocket Quote stock qoutes. This signal is 4800 baud asynchronous (start stop) transmission direct keyed (FSK) onto a 67 khz subcarrier with a shift of about 10 khz from mark to space. Mark is low and space high in frequency, the signal uses 8 information bits and a parity bit, and a stop bit. The qoute data is in a binary format that can be deciphered with a little effort, a variant of standard ticker symbols are used with prices in packed binary. I understand this service is or was offered in more than 100 cities. I am not sure whether the prices are delayed 15 minutes as is the standard for broadcast tickers or are live.

3. A direct 67 khz FSK keyed 9600 baud data stream carried by a local university radio station, that I am told contains a dial up bulletin board. Students can call the radio station and post notices which get broadcast every so often on the 9600 baud feed.

4. Paging services. I have been told that there are at least a couple of SCA subcarriers used for paging. I do not know what exact format the paging is in (whether it's start stop transmission of characters (using a UART or equivalent) or long strings of bits (using dedicated LSI)).

5. Remote control of electric utility loads. The local power companies are experimenting with controlling their off-peak

loads (such as cheap-rate water heaters) with SCA subcarriers. Currently two stations carry the 1070/1270 hz FSK 300 baud control commands as audio tones on a 67 khz subcarrier.

So far unidentified (I'm lazy)

6. FSK audio signal (known to be such from spectrum plot) carried as fm modulation on 67 khz subcarrier. Apparently frequency shifted from about 3khz to about 5.5 khz this carries 1 to 5 second bursts of what seems to be 1200 baud keying. I don't know what format the data is in or what information is carried.

Signals which I have heard or read are transmitted on SCA (but haven't actually seen or yet demodulated)

1. Commodity news service (CNS) frequency division multiplexed multi-channel low speed baudot commodity wires. This signal, which is in a format similar to that used to transmit low speed newswires to radio stations and newspapers for many years (since the mid 60's) consists of about 24 subcarriers at 120 hz intervals starting at a c.f. of 420 hz. Each subcarrier is FSK'd with a frequency shift of 60 hz from mark to space. Most of the CNS wires (there are different ones for different products) are transmitted at 56.88 baud in 5 unit baudot code. There are both 45.45 baud baudot and 74.2 baud baudot circuits on the CNS mux however.

2. Commodity pocket quote system. This is a similar system to the stock pocket qoute. A calculator size device picks up a SCA subcarrier and displays selected qoutes on a LCD display. I do not know if the format is similar to the stock qoute system (4800 baud direct FSK of a SCA subcarrier).

3. Dow Jones news stories. Some years back I saw ads for a Dow Jones service that would supply your home computer with late breaking financial news in various catagories (you could select). I was never able to actually see the SCA transmission for this service in the Boston area, but from the text of the ad it was fairly obvious that they were using SCA. More recently this kind of service has been supplied on a dial up basis by Dow Jones, and by Rueters through a spread spectrum transmission on a satellite that allows use of 2-3 foot dishes.

4. UPI and other wire services. A recent story about UPI's data communications said that they were having trouble with their satellite (they also use spread spectrum) distribution system in certain large cities where there are many 3.7-4.2 ghz terrestrial systems in use, and that they were going to use SCA to distribute wire services. I do not know what format they are using (could be similar to CNS) and would greatly appreciate hearing from anyone who knows of any actual wire service

SCA transmission anywhere (I'm writing a usenet story on picking up wire services). [I know of a local FM station which has been thinking about using a 91 khz subcarrier to relay their AP service from their transmitter and studio site to a remote news studio to save money on telephone lines.]

5. Nationwide paging. There has been much talk of setting up a nationwide paging system that would use SCA subcarriers fed from a satellite downlink to simultaniously page people over very wide areas. Paging receivers would look through their local FM spectrum to find the station carrying the paging. At one time PBS was going to rescue themselves from Reagan's financial oblivion by selling this service through all the National Public Radio outlets. I believe I have read that while this fell through, someone else has tried to set this network up.

6. Software distribution. There has been talk on and off about broadcasting home computer software over SCA subcarriers. I have read about experiments involving transmission of programs on telephone request (you call up and ask for a copy of Zorc or whatever and they send it - possibly encrypted - over the subcarrier.) I think the idea is that it is a lot more efficiant to send a program at 4800 or even 9600 baud through cheap SCA hardware than 300 baud over phone lines.

7. Electronic mail. It has also been suggested (and supposedly tested) that SCA subcarriers could be used as a distribution medium for electronic mail. I would hope that encryption would be used .

8. 32 Kb data. The FCC has just recently authorized transmission of data on SCA subcarriers at 32 kb (the old maximum rate was 9600). I do not know if FSK or QPSK modulation is to be used. I have heard that the new digital satellite terminals used for distribution of most of the major radio network feeds explicitly support several 32 kb data channels, and that there is talk of a common carrier like data transission service (with all sorts of things multiplexed together a la SSS on WTBS) which would carry a variety of feeds for different nationwide user communities.

Some Audio services heard of but not heard ...

1. Traffic reports broadcast to commuters in their cars.

2. Commodity prices for farmers.

3. Financial news and commentary.

4. A dentist's office background music and information service

And if you thought this was enough, has anybody looked at the subcarriers on the sound carriers of their local TV stations ? TV stations are allowed, just as FM stations can, to transmit various narrowcast services on subcarriers on their sound carriers. Much of the available spectrum will go to the new stereo sound signal and the secondary audio (bilingual signal), but there is space reserved for other uses.

The principle use for TV subcarriers I have observed is cue channel audio for Electronic News Gathering (ENG) teams. The director in the studio talka to the "talent" over this link since most of the microwave systems used to relay the video are one way only and there is therefore no backchannel (except VHF/UHF radio). Many of these ENG subcarriers are at 40 khz or 55-60 khz (pre stereo).

Another use of TV station subcarriers is transmitter telemetry. For years some of the Boston area stations transmitted a 40 khz FM subcarrier carrying a FSK modem signal modulated by a repeating pattern of bits (similar to satellite PCM telemetry formats). Yet another use of such subcarriers is paging of station employees, I beleive that both analog and digital transmission has been used for this purpose on TV sound subcarriers.

Tapping directly off the discriminator on the FM audio chip in a VCR might be good way to pick off TV sound subcarriers - TV's have all that horizontal sweep energy floating around waiting to get coupled into your receiver so it might be difficult to get enough signal to sweep harmonic ratio to reliably receive the transmission. (Purists may note that getting a good SNR on any intercarrier sound system requires care - the new stereo TV's use various tricks to solve the problem but a random tv or vcr may not supress harmonics of 15734 hz very far on it's discriminator output)

--

David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.uucp: decvax!frog!die

From -3594555407547971714
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b0af1c9dc4b57856,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-13 20:19:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site hydra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!cybvax0!frog!hydra!die
From: die@hydra.UUCP (Dave Emery)
Newsgroups: net.ham-radio
Subject: Navy UHF Satellite RTTY Transmissions (possible repeat)

Message-ID: <120@hydra.UUCP>
Date: Wed, 13-Mar-85 23:19:59 EST
Article-I.D.: hydra.120
Posted: Wed Mar 13 23:19:59 1985
Date-Received: Sat, 16-Mar-85 03:49:50 EST
Distribution: net
Organization: Charles River Data Systems, Framingham MA
Lines: 87

___ The following item was posted some months ago at a time
--- our network interface system was acting up - it may not have gone out ..
--- bear with me if you've already read it ...

Does anybody know if any of the 1200 baud diphase psk Navy fleet broadcasts from the geosynchronous UHF fltsatcom spacecraft carry UPI, AP or weather channels in some format that an ordinary mortal (very far from NSA level as a cryptanalyst) can recover with a suitable computer program ?

In the old days (late 60's to mid 70's) the Navy fleet broadcasts on hf (and lf) 85 hz shift 16 channel fsk fdm ssb used to carry 100 wpm weather circuits; sometimes special fdm transmissions to particular fleet units could be found with AP or UPI broadcast wires (from either Baltimore Md. or Norfolk Va.) on at least one tone. From time to time the UPI low speed A newspaper wire would be included also. In all cases these channels would be 7.42 (or 7.50 for AP) unit baudot code start stop at the same baud rate as they are on the wire services themselves. More recently it has been reported that certain hf fdm mux tty transmissions carry a 100 wpm AFRTS circuit which retransmits national news from both the AP and UPI radio wires slightly delayed.

It is presumably true that the signals were transmitted on hf just as they came off the wire so as not to compromise crypto security by broadcasting an encipherment of a known text. Perhaps if the Navy supplies the same stuff to it's (larger) fleet of ships these days it also sends it in the clear on the fleetsatcom psk broadcasts that are now the primary method of transmitting to ships at sea ?

I've always assumed that nothing else on the Navy fleet transmissions including the most routine UNCLAS stuff was breakable by an amateur (or even most governments), as I suppose it is enciphered by more or less the same crypto as used for high security stuff but set up from another key list. It is true, however that US low speed tty crypto systems use a start-stop to synchronous transceiver (more properly isochronous as no separate clock is transmitted) and it is at least remotely possible that certain very routine unclassified traffic is transmitted in synchronous format without benefit of a real key from the key generator (perhaps some simple sequence is used simply to keep transition density high for the clock pll). (If anyone knows, and can say anything about low security modes for unclassified traffic I would appreciate hearing from them.)

The uhf satellite transmissions are relatively high power (nearly whole transponder) signals on various frequencies between 249 and 261 mhz,

they carry a 24 hour a day 15 channel time division multiplexed stream of mostly crypto circuits. The multiplexing is straight tdm with a 16 bit wide frame, each frame consists of a framing bit and one sample (bit) of each channel sent sequentially starting with channel 1. Frame sync is obtained by detecting and locking onto a continuously repeating pattern in the 16th bit position of each frame. 1200 baud divided by 16 yeilds a channel bit rate of 75.0 baud which is the standard rate for 100 wpm enciphered baudot tty traffic. It appears that the 1200 baud rate is exactly that (out to several places) so no bit stuffing is being done (understandably enough).

The modulation is differential diphase mark (phase shift of 180 degrees for every mark (one bit) and 0 degrees (no shift) for every space (zero bit)). Recovery of the data requires little more than a simple Costas loop to recover the bit stream, and a bit clock recovery circuit to regenerate the 1200 baud clock. TDM frame and bit clock recovery could be easily implemented using a Zilog 8530 SCC chip which incorperates a transition tracking digital phase lock loop. The 8530 SCC chip could be fed data directly (after a schmitt trigger) from an in-phase phase detector on the Costas loop, as it has a NRZI mode which will allow it to recover data as it would appear at that point. Obviously the 8 bit data coming out of the SCC would represent alternate halves of the 16 bit frame, and would not necessarily be in frame sync.

The signals are powerful enough so a modified scanner (or one of the new scanners which cover the military uhf band) ought to suffice as a receiver, although the best reception might be had with a down converter and a hf receiver with medium (say 4 or 8 khz) if bandwidth. The Costas loop would connect to the receiver at it's low IF (455 khz for most receivers and scanners) after the selectivity to reduce the noise bandwidth. Antenna requirements are pretty minimal, but a small crossed yagi or helix aimed at the right point in the sky for the particular satellite of interest would be ideal.

Has anyone explored these signals ? Are there any other military satcoms (say the X-band DSCS spacecraft) which carry readable traffic ?

--

David I. Emery Charles River Data Systems 617-626-1102
983 Concord St., Framingham, MA 01701.uucp: decvax!frog!die

From -2757100549783970944
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c63464ea42b7c0bc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-14 05:39:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxm.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!tmsmp
From: tmsmp@houxm.UUCP (T.SWIFT)

Newsgroups: net.ham-radio
Subject: Need rig recommendation
Message-ID: <1176@houxm.UUCP>
Date: Thu, 14-Mar-85 08:39:52 EST
Article-I.D.: houxm.1176
Posted: Thu Mar 14 08:39:52 1985
Date-Received: Fri, 15-Mar-85 01:12:26 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 21

Having been off the air for several years, I have the urge to set up a shack again. The new generation of synthesized rigs look very attractive for several reasons. The inclusion of a general coverage receiver is nice because the XYL is interested in listening to shortwave broadcasts (I hope the first step toward a ham ticket). The ICOM 751 looks good on paper, but I've heard it is prone to reliability problems. Any feedback on the new ICOM, Kenwood, and Yaseau rigs would be most appreciated.

Futhermore, if anyone has any recommendations as to a dealer within a several hour driving radius of NY who is competent and has low prices, that would also be most helpful. Any comments about Barry in NYC or Harrison on Long Island?

Many thanks

Tom Swift
WA2JEH
Colts Neck, NJ

From -51020951952992827
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3a54f2828f7b7cd8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-14 08:20:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!GAUTHIER@JPL-VLSI.ARPA
From: GAUTHIER@JPL-VLSI.ARPA (Michael K. Gauthier)
Newsgroups: net.ham-radio
Subject: CORDLESS TELEPHONES
Message-ID: <9216@brl-tgr.ARPA>
Date: Thu, 14-Mar-85 11:20:32 EST
Article-I.D.: brl-tgr.9216
Posted: Thu Mar 14 11:20:32 1985
Date-Received: Sat, 16-Mar-85 04:21:41 EST
Sender: news@brl-tgr.ARPA
Lines: 42

From: MAILER 13-MAR-1985 23:11
To: GAUTHIER
Subj: [Netmail From: Postmaster@seismo.ARPA] Returned mail: Host unknown

Mail-From: ARPAnet host SEISMO.ARPA rcvd at Wed Mar 13 23:11-PST
Return-Path: <Postmaster@seismo.ARPA>
Received: from BRL-TGR (brl-tgr.ARPA) by seismo.ARPA with SMTP; Thu, 14 Mar 85
02:11:46 EST
Date: 13 Mar 1985 2136 PST
From: Mail Delivery Subsystem <Postmaster@seismo.ARPA>
Subject: Returned mail: Host unknown
Message-Id: <8503140711.AA28744@seismo.ARPA>
To: <GAUTHIER@JPL-VLSI.ARPA>

   ----- Transcript of session follows -----
bad system name: hplabsc
uux failed. code 68
550 <@SEISMO.ARPA:LABELLE@hplabsc.uucp>... Host unknown

   ----- Unsent message follows -----
Received: from BRL-TGR (brl-tgr.ARPA) by seismo.ARPA with SMTP; Thu, 14 Mar 85
02:11:46 EST
Message-Id: <8503140711.AA28742@seismo.ARPA>
Received: from jpl-vlsi.arpa by BRL-TGR.ARPA id a000558; 14 Mar 85 0:53 EST
Date: 13 Mar 1985 2136 PST
From: "Michael K. Gauthier" <GAUTHIER@JPL-VLSI.ARPA>
Subject: CORDLESS TELEPHONES
To: LABELLE%HPLABSC.UUCP@BRL-TGR.ARPA
Reply-To: GAUTHIER@JPL-VLSI.ARPA

JIM,

YES YOU CAN HEAR THE PHONES ON YOUR UNIDEN 2021 (I HAVE ONE AND
HEAR THEM). FROM ABOUT 1.65 MHZ TO 1.85 MHZ I HAVE HEARD THEM. YES
THEY ARE ON FM, BUTBY SLOPE DETECTION, TUNING SLIGHTLY OFF THE
CENTER OF THE SIGNAL, YOU CAN COPY THEM. I HAVE HEARD ABOUT 8-10
DIFFERENT PHONES AROUND MY AREA ON MY 2021.

GOOD LUCK,

MIKE, K6ICS
GAUTHIER@JPL-VLSI.ARPA

From -4379966373716167186
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bbe300c130ca796f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-14 11:25:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: UPI news via spread spectrum on TVRO (Dow Jones)
Message-ID: <508@ihu1h.UUCP>
Date: Thu, 14-Mar-85 14:25:02 EST
Article-I.D.: ihu1h.508
Posted: Thu Mar 14 14:25:02 1985
Date-Received: Fri, 15-Mar-85 04:20:55 EST
References: <9141@brl-tgr.ARPA>
Organization: AT&T Bell Laboratories
Lines: 12

x

I was curious about the large dish on the lawn of the Dow Jones
New Service building in my town. I still don't know what it's used for,
but a search of the FCC records revealed:

  MHz   call   licensee
3700.0000   KRO60_____Dow Jones [Naperville] (govt recds)
3925.0000   KRO60_____Dow Jones [Naperville] (govt recds)
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 479519895188608825
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bbe300c130ca796f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-14 14:51:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: UPI news via spread spectrum on TVRO
Message-ID: <605@vortex.UUCP>
Date: Thu, 14-Mar-85 17:51:07 EST
Article-I.D.: vortex.605
Posted: Thu Mar 14 17:51:07 1985
Date-Received: Sat, 16-Mar-85 04:21:17 EST
References: <9141@brl-tgr.ARPA>
Organization: Vortex Technology, Los Angeles
Lines: 8

I looked into Equatorial quite completely some time ago. Their
big problem is that they are very expensive. The RO dishes cost
about 4X as much as for conventional TVRO, and their channel
time costs are very high. Their equipment is only usable for their
service, and they consider all their encoding techniques to be
proprietary.

--Lauren--

From -2348044793993087617
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36e93511514761b7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-14 18:44:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Spread Spectrum Emission in the 160-170 MHz Band
Message-ID: <509@ihu1h.UUCP>
Date: Thu, 14-Mar-85 21:44:35 EST
Article-I.D.: ihu1h.509
Posted: Thu Mar 14 21:44:35 1985
Date-Received: Sat, 16-Mar-85 00:58:56 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 16

x
      SPREAD SPECTRUM FOUND IN THE 160 -170 MHz BAND

     Who is using frequency hopping, spread spectrum emis-
     sion in the 10 MHz between 160 - 170 MHz?

     I've monitored daylight transmissions of this type
     using an   HP8558B spectrum analyzer and outdoor ground
     plane. The signal strength on each discrete frequency
     is   constant, about 10 db stronger than the Chicago's
     NOAA Weather Radio station on 162.55 MHz (35 miles east
     of me, atop Sears Tower).
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 374034431413664195
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7ebb4c89f5ede0fb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-15 01:01:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!gd@sri-spam
From: gd@sri-spam
Newsgroups: net.ham-radio

Subject: Re: Fun with Weather Satelites ??
Message-ID: <9238@brl-tgr.ARPA>
Date: Fri, 15-Mar-85 04:01:12 EST
Article-I.D.: brl-tgr.9238
Posted: Fri Mar 15 04:01:12 1985
Date-Received: Sun, 17-Mar-85 01:53:01 EST
Sender: news@brl-tgr.ARPA
Lines: 12

Randy,

Weather satellite and HF weather FAX reception is something I've been
curious about lately, so I was especially interested to read what you
had to say about it, but the last half of your message was missing from
the copy I received. Would you please transmit another one?

Thanks,

Greg, WB6DEO

From 2789788581445738657
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7745d97402a23a3b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-15 06:58:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site sdcc3.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcc3!brian
From: brian@sdcc3.UUCP (Brian Kantor)
Newsgroups: net.ham-radio
Subject: Re: Chep 2m antenna
Message-ID: <2760@sdcc3.UUCP>
Date: Fri, 15-Mar-85 09:58:36 EST
Article-I.D.: sdcc3.2760
Posted: Fri Mar 15 09:58:36 1985
Date-Received: Sun, 17-Mar-85 02:24:05 EST
References: <9037@brl-tgr.ARPA>
Organization: UCSD wombat breeding society
Lines: 31

> Need a cheap and quick 2m groundplane antenna?
>
> Recently I needed such a thing and laziness and lack of time
> prevented me from 'doing it myself.' I took a walk to the
> local Radio Shack and purchased a 20-176 ($14.95) "All band
> base station monitor antenna." It just so happens that the
> elements are the correct length for 2m fm work and the antenna,
> at the end of 50 feet of good RG/8U coax shows an SWR of about
> 1.2 to 1.

Of course, you could just solder 5 pieces of 1/8" brazing rod into an SO-239 connector and get the same thing for about $1.50. Trim the rods to about 19" and bend the radials down at about a 30 degree angle, and voila! Screw the coax on it, and drop it into the end of the antenna mast. Or use a dual pipe clamp from the hardware store. (Another 75 cents).

Bend the radial up and down if the SWR isn't right.

If you're going to run over 250 watts, maybe a teflon connector is worth it. So now the whole thing costs $3.00.

I'm cheap.

Brian Kantor, WB6CYT UC San Diego

decvax\ brian@ucsd.arpa
akgua >--- sdcsvax --- brian
ucbvax/ Kantor@Nosc

``You unlock this door with the key of imagination...''

From 1915960992854646330
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d7956060420edb70,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-15 12:46:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Automobile Ham call sign plates
Message-ID: <9258@brl-tgr.ARPA>
Date: Fri, 15-Mar-85 15:46:44 EST
Article-I.D.: brl-tgr.9258
Posted: Fri Mar 15 15:46:44 1985
Date-Received: Sun, 17-Mar-85 20:54:48 EST
Sender: news@brl-tgr.ARPA
Lines: 8

Re: The passing of amateur radio importance in emergency communictions.

The DoD and the National Communications System, among others, disagree with you vehemently. See recent, current and future ARRL bulletings and news items for further details.

73,
John S, W3IKG

From 1248114352959893707

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2b152fcf65450c3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-15 13:14:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: trick for FM reception using SWL receiver
Message-ID: <510@ihu1h.UUCP>
Date: Fri, 15-Mar-85 16:14:31 EST
Article-I.D.: ihu1h.510
Posted: Fri Mar 15 16:14:31 1985
Date-Received: Sat, 16-Mar-85 05:19:03 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 38

x

LISTENING TO FM USING A SHORTWAVE RECEIVER

AJ9S

> I HEAR A LOT OF NBFM IN THAT SERVICE. SOME CAN BE (INEFFICIENTLY)
> RECEIVED USING SLOPE DETECTION ON AN AM RECEIVER BUT MANY ARE NG. I
> THOUGHT THAT THERE MIGHT BE A SIMPLE WAY TO RECEIVE THESE PHONES.
>
> TNX!
> JIM

I grafted an old Hammarlund SP600 ("Super Pro") general coverage receiver to an old Motorola land mobile FM receiver strip (A Series) by joining both of them at the 455 kHz IF stage.

This allowed 2 new capabilities:

1. allowed FM reception of HF by using SP600 front end, Motorola detector/audio/squelch.

2. allowed AM, CW, SSB reception on VHF using the Motorola front end and SP600 IF/BFO/amplifier

Most scanners are double conversion, with IF's of 455 kHz and 10.7 or 10.8 MHz. Most swl radios have a 455 kHz IF stage somewhere. You can crossbreed the two radios to get more capabilities out of the equipment you have.

Have fun.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -7590362644326152746
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d6ae11e056bfdb9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-15 13:19:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!bedford!mintaka!Gor#f@mit-eddie.ARPA
From: Gor#f@mit-eddie.ARPA
Newsgroups: net.ham-radio
Subject: Spread spectrum
Message-ID: <9260@brl-tgr.ARPA>
Date: Fri, 15-Mar-85 16:19:47 EST
Article-I.D.: brl-tgr.9260
Posted: Fri Mar 15 16:19:47 1985
Date-Received: Sun, 17-Mar-85 20:55:06 EST
Sender: news@brl-tgr.ARPA
Lines: 21

I have no specific knowledge of the scheme used for UPI, but the NAVSTAR (GPS) satalite navagation system uses that form of spread spectrum. One of their modes used 10 Mega "chips" per second, and a PRS with a repeat period, at that clock rate, of 287 days. (They actually only use one week long subsets of it, asigning a different subset to each bird, and they reset the sequence once a week.) The badwidth they claim to use is 20MHz, so I would guess that if the UPI system claims to use 2MHz that their clock rate is about 1MHz. An interesting feature of the NAVSTAR system is that the spread signal is below the noise as received by the typical earth station. If I had to guess, I'd say that the UPI system tries for that too, and considers it a feature. When you unspread the spectrum at the receiver, the signal comes back up, but the noise stays down. However, with a decent FIRE code, corelation drops to zero by the time you are 1 "chip" timeout of phase with your unscrambling PRS. Even with a reasonably short PRS, if you don't know what is, and they are running below the noise, you don't have much of a chance of finding it, even if you know the carrier frequency. (You could camp next to the uplink transmitting antenna, it should be well above the noise there on the uplink frequency.) As to encryption, you might get lucky. If I were using such a system for secure purposes I wouldn't use any. I'd just make the PRS longer and/or change it frequently. FIRE codes are a dime a dozen.

From -2592803761936025561
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,a6423a6d7e6b3cb2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-15 15:27:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <309@petrus.UUCP>
Date: Fri, 15-Mar-85 18:27:01 EST
Article-I.D.: petrus.309
Posted: Fri Mar 15 18:27:01 1985
Date-Received: Sat, 16-Mar-85 05:29:58 EST
Organization: Bell Communications Research, Inc
Lines: 224

Satellite: oscar-9
Catalog number: 12888
Epoch time: 85067.42221784
   Fri Mar 8 10:08:31.621 1985 UTC
Element set: 737
Inclination: 97.6229 deg
RA of node: 52.8434 deg
Eccentricity: 0.0000890
Arg of perigee: 254.2029 deg
Mean anomaly: 105.9138 deg
Mean motion: 15.27039719 rev/day
Decay rate: 1.497e-05 rev/day^2
Epoch rev: 18985
Semi major axis: 6859.770 km
Anom period: 94.300101 min
Apogee: 501.706 km
Perigee: 500.485 km
Ref perigee: 2623.40332185
   Fri Mar 8 09:40:47.8   1985 UTC
Beacon: 145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 85068.44296679
   Sat Mar 9 10:37:52.330 1985 UTC
Element set: 164
Inclination: 26.1408 deg
RA of node: 149.3526 deg
Eccentricity: 0.5988192
Arg of perigee: 354.4281 deg
Mean anomaly: 1.2336 deg
Mean motion: 2.05857202 rev/day
Decay rate: -7.5e-07 rev/day^2
Epoch rev: 1307
Semi major axis: 26105.387 km
Anom period: 699.514025 min

```
Apogee:          35359.688 km
Perigee:          4094.874 km
Ref perigee:      2624.44130221
   Sat Mar  9 10:35:28.510 1985 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      85068.20038481
   Sat Mar  9 04:48:33.247 1985 UTC
Element set:     60
Inclination:       98.2047 deg
RA of node:       135.0996 deg
Eccentricity:    0.0013367
Arg of perigee:   173.7458 deg
Mean anomaly:     186.3891 deg
Mean motion:   14.61950874 rev/day
Decay rate:        9.8e-07 rev/day^2
Epoch rev:            5442
Semi major axis:  7062.097 km
Anom period:     98.498522 min
Apogee:            693.641 km
Perigee:           674.761 km
Ref perigee:      2624.23337173
   Sat Mar  9 05:36:03.317 1985 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:      85067.31420377
   Fri Mar  8 07:32:27.205 1985 UTC
Element set:     115
Inclination:       82.9668 deg
RA of node:       346.6174 deg
Eccentricity:    0.0058510
Arg of perigee:   153.7064 deg
Mean anomaly:     206.6991 deg
Mean motion:   12.15589058 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           14299
Semi major axis:  7987.322 km
Anom period:    118.461086 min
Apogee:           1660.044 km
Perigee:          1566.577 km
Ref perigee:      2623.34923500
   Fri Mar  8 08:22:53.904 1985 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      85065.22834023
   Wed Mar  6 05:28:48.595 1985 UTC
Element set:     254
Inclination:       82.9626 deg
```

```
RA of node:       359.0360 deg
Eccentricity:    0.0016932
Arg of perigee:   256.2857 deg
Mean anomaly:     103.6304 deg
Mean motion:   12.06671596 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           14169
Semi major axis:  8026.651 km
Anom period:    119.339826 min
Apogee:           1681.977 km
Perigee:          1654.796 km
Ref perigee:      2621.20448434
   Wed Mar  6 04:54:27.447 1985 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      85067.21976321
   Fri Mar  8 05:16:27.541 1985 UTC
Element set:     223
Inclination:       82.9657 deg
RA of node:       359.8029 deg
Eccentricity:    0.0009328
Arg of perigee:   282.5848 deg
Mean anomaly:      77.4164 deg
Mean motion:   12.05056679 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           14174
Semi major axis:  8033.825 km
Anom period:    119.496454 min
Apogee:           1683.238 km
Perigee:          1668.251 km
Ref perigee:      2623.20191795
   Fri Mar  8 04:50:45.710 1985 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      85034.40460086
   Sun Feb  3 09:42:37.514 1985 UTC
Element set:     96
Inclination:       82.9585 deg
RA of node:         7.3413 deg
Eccentricity:    0.0048852
Arg of perigee:   244.4287 deg
Mean anomaly:     115.1724 deg
Mean motion:   12.13564026 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13876
Semi major axis:  7996.242 km
Anom period:    118.658758 min
Apogee:           1674.300 km
Perigee:          1596.174 km
Ref perigee:      2590.37823856
   Sun Feb  3 09:04:39.811 1985 UTC
```

```
Satellite: rs-7
Catalog number: 13001
Epoch time:      85064.76256761
   Tue Mar  5 18:18:05.841 1985 UTC
Element set:     194
Inclination:       82.9573 deg
RA of node:       356.5754 deg
Eccentricity:    0.0020649
Arg of perigee:   210.1985 deg
Mean anomaly:     149.7873 deg
Mean motion:   12.08691074 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           14187
Semi major axis:  8017.734 km
Anom period:    119.137154 min
Apogee:           1661.474 km
Perigee:          1628.363 km
Ref perigee:      2620.72814394
   Tue Mar  5 17:28:31.636 1985 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      85058.38551902
   Wed Feb 27 09:15:08.843 1985 UTC
Element set:     311
Inclination:       82.9580 deg
RA of node:         7.0811 deg
Eccentricity:    0.0020309
Arg of perigee:   353.1509 deg
Mean anomaly:       6.9262 deg
Mean motion:   12.02952874 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           14043
Semi major axis:  8043.195 km
Anom period:    119.705437 min
Apogee:           1681.684 km
Perigee:          1649.015 km
Ref perigee:      2614.38391967
   Wed Feb 27 09:12:50.659 1985 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:      85065.42737497
   Wed Mar  6 10:15:25.197 1985 UTC
Element set:     314
Inclination:       99.0837 deg
RA of node:        46.1129 deg
Eccentricity:    0.0014076
Arg of perigee:    78.5239 deg
Mean anomaly:     281.7512 deg
Mean motion:   14.13144255 rev/day
Decay rate:        2.2e-06 rev/day^2
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Epoch rev:           19089
Semi major axis:  7223.955 km
Anom period:    101.900425 min
Apogee:            876.005 km
Perigee:           855.668 km
Ref perigee:      2621.44275612
   Wed Mar  6 10:37:34.128 1985 UTC
Beacon:           137.6200 MHz

Satellite: noaa-9
Catalog number: 15427
Epoch time:      85048.20204098
   Sun Feb 17 04:50:56.340 1985 UTC
Element set:     16
Inclination:       98.9314 deg
RA of node:         2.4861 deg
Eccentricity:    0.0016461
Arg of perigee:    80.3535 deg
Mean anomaly:     279.9498 deg
Mean motion:   14.11358595 rev/day
Decay rate:      4.100001e-07 rev/day^2
Epoch rev:             941
Semi major axis:  7230.044 km
Anom period:    102.029350 min
Apogee:            884.084 km
Perigee:           860.281 km
Ref perigee:      2604.21779613
   Sun Feb 17 05:13:37.585 1985 UTC
Beacon:           137.5000 MHz


From -1149620352630212277
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e10ff42a1b9e1957,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-16 23:18:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: TIS stations on 1610 kHz
Message-ID: <511@ihu1h.UUCP>
Date: Sun, 17-Mar-85 02:18:06 EST
Article-I.D.: ihu1h.511
Posted: Sun Mar 17 02:18:06 1985
Date-Received: Mon, 18-Mar-85 01:35:23 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 91

x
               TIS Radio Stations
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Traveller's Information Service (TIS) stations transmit road and parking information to the public. Most TIS stations use AM, less than 10 watts, and are allocated either 530 or 1610 kHz.

Here's a list of all the TIS stations licensed by the FCC on 1610 kHz as of about 1 year ago. I've tried to include exact transmitter locations, rather than control points. A list of 530 kHz TIS stations is in the works.

Cleveland: TIS, Cleveland Hopkins International Apt
[Cleveland, OH]_____ 1.6100____KNEB723 (B. Parnass)
Cook County (IL): TIS, near south gate of Brookfield Zoo
[Brookfield, IL]_____ 1.6100____KNCC957 (B. Parnass)
Custer State Park, TIS, 15 miles SW of...
[Hermosa, SD]_____ 1.6100____KNDG614 (govt recds)
Gatlinburg: TIS, 300 feet NW Fed Interstate 40 & Rt 66
[Gatlinburg, TN]_____ 1.6100____WYZ275 (govt recds)
Hillsborough County Aviation Authority: TIS, Tampa International Airport
[Tampa, FL]_____ 1.6100____WYZ235 (govt recds)
IA: TIS, 5 miles w of Middle Road, Area-op: within .5 mile of Daven...
[Davenport, IA]_____ 1.6100____KJJ386 (govt recds)
IA: TIS_____[Walnut, IA]_____ 1.6100____WYR522 (govt recds)
ID: Bureau of Comm: TIS, Raft River Interchange I-86
[Raft River, ID]_____ 1.6100____KNAV733 (govt recds)
ID: Bureau of Comm: TIS, Register Rock State Park I-86
[American Falls, ID]_ 1.6100____KNAV734 (govt recds)
IL: TIS, I-94, median at Kil..
[Chicago]_____ 1.6100____KMB824 (B. Parnass)
IL: TIS, SW corner Van Buren St & Des Plaines, 6A3 @ 1w
[Chicago]_____ 1.6100____KNAP828 (B. Parnass)
IL: TIS, West Frontage Rd I-94 .3 miles south of Winnetka Ave
[Northfield, IL]_____ 1.6100____KMH441 (B. Parnass)
Independence: TIS, US hwy 24 and Spring St
[Independence, MO]___ 1.6100____KNFA366 (govt recds)
Kansas City: TIS, Bern St & Cookingham
[Kansas City, MO]____ 1.6100____KQI284 (govt recds)
Kenton County Airport Board, TIS, Terminal A Greater Cincinnati Apt Room 228
[Cincinnati, OH]_____ 1.6100____WXT613 (govt recds)
MN: TIS, along hwy I-35W
[Richfield, MN]_____ 1.6100____WZM832 (govt recds)
MO: TIS, adjacent to hwy 76, 6.75 miles nw of...
[Branson, MO]_____ 1.6100____KNEM463 (govt recds)
OK: Dept of Transportation, TIS, 1.4 miles NW of town of ..., area-op:Tulsa
[Turley, OK]_____ 1.6100____WSQ964 (govt recds)
Phoenix AZ: TIS, 3400 Sky Harbor Blvd
[Phoenix, AZ]_____ 1.6100____WXK790 (govt recds)
San Antonio: TIS, San Antonio International Apt
[San Antonio, TX]____ 1.6100____KNDX476 (govt recds)
St Petersburg, FL: TIS, 551 19th St N

```
                      [St Petersburg, FL]__   1.6100____KNFH965   (govt recds)
The Dalles OR, Port of, TIS, West end of Port of The Dalles
                      [The Dalles, OR]_____   1.6100____KNAX787   (govt recds)
Twining Water & Sanitation Dist, TIS, Taos Ski Valley
                      [New Mexico]_________   1.6100____KCR538    (govt recds)
Union County Apt Authority, TIS, 1225 Industrial Pkwy
                      [Marysville, OH]_____   1.6100____KNCK692   (govt recds)
VA: TIS, Fed Intr 95 & Rt 637 near Stafford
                      [Quantico Marine Ba]_   1.6100____KKG654    (govt recds)
WA: TIS, 108 Highway Adm Bldg
                      [Snoqualmi Pass, WA]_   1.6100____WQX206    (govt recds)
WA: TIS, 15th Ave & Cherry St
                      [Olympia, WA]________   1.6100____KNHD261   (govt recds)
WA: TIS, Jct 1-5 & 93rd Ave SW Lathrop Rd
                      [Tumwater, WA]_______   1.6100____KNHD261   (govt recds)
WA: TIS, Jct 1-5 S SR510 Marvin Rd
                      [Lacey, WA]__________   1.6100____KNHD261   (govt recds)
WA: TIS, Jct SR101 & W Uncas Rd 1.3 miles S of ....
                      [Uncas, WA]__________   1.6100____KNHD262   (govt recds)
WA: TIS, Jct SR510 & Evergreen College Pky
                      [Olympia, WA]________   1.6100____KNHD261   (govt recds)
WA: TIS, on I-90 1.5 miles W of ...
                      [Ellensburg, WA]_____   1.6100____KNEF687   (govt recds)
WA: TIS, Park & Ride Parking Lot Jct SR 504 & SR 505, control pt at Sequest Pa
                      rk Ranger Office
                      [Toutle, WA]_________   1.6100____KNFG751   (govt recds)
Winter Park, CO: TIS, 78846 US Hwy 40
                      [Winter Park, CO]____   1.6100____KNHB622   (govt recds)
Yakima WA: TIS, mobile fleet service roof 2003 E Viola
                      [Yakima, WA]_________   1.6100____KNHE983   (govt recds)


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================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -5581298857094662347
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b69f20c452509f5b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-17 10:29:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!
seismo!brl-tgr!tgr!jberets@bbn-vax
From: jberets@bbn-vax (Jim Berets)
Newsgroups: net.ham-radio
Subject: SW receivers for cars
Message-ID: <9285@brl-tgr.ARPA>
Date: Sun, 17-Mar-85 13:29:10 EST
Article-I.D.: brl-tgr.9285
```

Posted: Sun Mar 17 13:29:10 1985
Date-Received: Wed, 20-Mar-85 03:26:06 EST
Sender: news@brl-tgr.ARPA
Lines: 18

One of the more unlikely spots for obtaining gear that I have
found is Radio World, located in the terminal building of
Oneida County Airport in Oriskany, New York (near Utica).
As part of a trip last week to that part of the woods, I
wandered in.

I seem to remember a posting to this list recently about SW receivers
for the car. At Radio World, I noticed that MFJ makes a four-band
SW converter about the size of two packs of cigarettes and costing $79.
I needed to catch a plane, so I didn't have the time to get any further
info.

Also, from the Radio Nederland shopping list: SW auto receivers
by Grundig, Becker, and Philips and SW converters by Becker and
Grundig.

Jim
wa1uou

From -83507823421501183
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2a9d049252349516,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-17 12:35:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: TIS stations on 530 kHz
Message-ID: <512@ihu1h.UUCP>
Date: Sun, 17-Mar-85 15:35:20 EST
Article-I.D.: ihu1h.512
Posted: Sun Mar 17 15:35:20 1985
Date-Received: Mon, 18-Mar-85 07:47:15 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 127

x
Here are all the FCC licenses for Travellers' Information Service
stations as of about 1 year ago. In most cases, I have tried to show
the actual transmitter location, rather than that of the control points.

Atlanta: Dept of Aviation, TIS, Fed Intst 85 & off ramp to Sylvan Rd, Atlanta
                        Intl Apt

[Atlanta, GA]_____ 0.5300____WRD955 (govt recds)
CA: TIS, Area-op: Los Angeles Orange Cts, temporary base
[California]_____ 0.5300____KNEC996 (govt recds)
CA: TIS, DOT Maintenance Station, Nevada City, CA
[Truckee, CA]_____ 0.5300____KNEU564 (govt recds)
Columbus (OH): TIS, 4600 E 17th Ave
[Columbus, OH]_____ 0.5300____KQP833 (govt recds)
Denver, City and County of: TIS, Stapleton Intl Apt
[Denver, CO]_____ 0.5300____KNID798 (govt recds)
Dillard (GA): TIS, Int US441 & Bettys Creek immediately S of Dillard City limi
t
[Dillard, GA]_____ 0.5300____KNGG752 (govt recds)
GA: TIS, 2000 feet east I-20 / SR70 Interchange
[Atlanta, GA]_____ 0.5300____WYG263 (govt recds)
GA: TIS, Farmers Market on Old 41 Hwy
[Forest Park, GA]____ 0.5300____WRD948 (govt recds)
GA: TIS, I-20 I-285 Interchange
[Decatur, GA]_____ 0.5300____WRD947 (govt recds)
GA: TIS, I-95 .4 miles S of US 84 at State Wel...
[Brunswick, GA]_____ 0.5300____WRD945 (govt recds)
GA: TIS, I-95 GA 99 Interchange
[Brunswick, GA]_____ 0.5300____WRD946 (govt recds)
GA: TIS, I75 I285 Interchange
[Smyrna, GA]_____ 0.5300____WRD944 (govt recds)
GA: TIS, in rest area of Welcome Ctr on Hwy I95 near Kingsland
[Kingsland, GA]_____ 0.5300____KNGU520 (govt recds)
GA: TIS, on Hwy 16 eastbound at last overpass before I95
[Garden City, GA]____ 0.5300____KNGU519 (govt recds)
GA: TIS, Stone Mountain Park
[Stone Mountain, GA]_ 0.5300____WXB219 (govt recds)
GA: TIS, W Welcome Ctr off Hwy 95
[Montieth, GA]_____ 0.5300____KNGU518 (govt recds)
Gatlinburg (TN): TIS, 1400 feet NE Rt 441 on Gatlinburg Go...
[Gatlinburg, TN]_____ 0.5300____WYZ272 (govt recds)
Gatlinburg (TN): TIS, 300 feet NW intersection Fed Inst 40 & Rt6
[Gatlinburg, TN]_____ 0.5300____WYZ274 (govt recds)
Gatlinburg (TN): TIS, approx 200 feet W of Bridge Crossing....
[Gatlinburg, TN]_____ 0.5300____WYZ273 (govt recds)
Gatlinburg (TN): TIS, approx 250 feet SE intersection of US 4
[Gatlinburg, TN]_____ 0.5300____WYZ271 (govt recds)
KY: TIS, NE intersection US 264 IN NE on/off ramp
[Louisville, KY]_____ 0.5300____KRD772 (govt recds)
KY: TIS, SE Federal Int 65 Kennedy Bridge
[Louisville, KY]_____ 0.5300____KRD785 (govt recds)
KY: TIS_____[Clark County, IN]___ 0.5300____KRD779 (govt recds)
Los Angeles: TIS, control pt: 1 World Way, Los Angeles, 6A3 @ 20w
[Los Angeles, CA]____ 0.5300____WYZ301 (govt recds)
Los Angeles: TIS, El Marino Park Berryman Ave & Patom
[Culver City, CA]____ 0.5300____KRN984 (govt recds)
Minneapolis Saint Paul Metro Apts Commission: TIS, Wold Chamberlain Field, con
trol pt: Blue Concourse Public Passenger Terminal
[Minneapolis, MN]____ 0.5300____KNHW885 (govt recds)
MN: TIS, Lowry Hill Tunnel

[Minneapolis, MN]____ 0.5300____WQH716 (govt recds)
MN: TIS, Washington Ave Bridge
[Minneapolis, MN]____ 0.5300____WQH716 (govt recds)
NC: TIS, intersection of I40 & US 421
[Winston-Salem, NC]__ 0.5300____WQX207 (govt recds)
NC: TIS, intersection of I40 US 158-421 & SR 2494
[Winston-Salem, NC]__ 0.5300____WQX207 (govt recds)
NJ: TIS, I80 milepost 28.97 westbound
[Roxbury, NJ]________ 0.5300____KNIE436 (govt recds)
NY and NJ Port Authority: TIS, Port Authority Adm Bldg (141), JF Kennedy Intl Apt
[New York, NY]_______ 0.5270____KNAA585 (govt recds)
Ohio State University: TIS, Howlett Hall 2001 Fyffe Court
[Columbus, OH]_______ 0.5300____WQF465 (govt recds)
Peoria Park District, TIS, Wildlife Prairie Park
[Peoria, IL]_________ 0.5300____KTM232 (govt recds)
Port Authority of NY & NJ: TIS, lower level mid river turnaround George Washington Bridge
[New York, NY]_______ 0.5300____WSB887 (govt recds)
Seattle, Port of: TIS, intersection of Macadam Rd I405 exit
[Seattle, WA]________ 0.5300____KNCL518 (govt recds)
TN: Dept of Transportation, TIS, Callahan exit of I-75N
[Knoxville, TN]______ 0.5300____WQI249 (govt recds)
TN: Dept of Transportation, TIS, Westhills exit of I-75/40
[Knoxville, TN]______ 0.5300____WQI250 (govt recds)
TN: TIS, 5th Avenue exit of I-75
[Knoxville, TN]______ 0.5300____WQI248 (govt recds)
TN: TIS, Andrew Johnson Hwy exit I-40
[Knoxville, TN]______ 0.5300____WQI246 (govt recds)
TN: TIS, Cherokee Trail exit of 129/73
[Knoxville, TN]______ 0.5300____WQI245 (govt recds)
TN: TIS, Pelissippi exit of I-75/40
[Knoxville, TN]______ 0.5300____WQI247 (govt recds)
Tucson Airport Authority: TIS, Tucson Intl Apt Terminal
[Tucson, AZ]_________ 0.5300____KNDL647 (govt recds)
VA: TIS, 372832N 0772548W
[Richmond, VA]_______ 0.5300____WYR507 (govt recds)
VA: TIS, 373232N 0772657W
[Richmond, VA]_______ 0.5300____WYR509 (govt recds)
VA: TIS, 373319N 0772649W
[Richmond, VA]_______ 0.5300____WYR508 (govt recds)
VA: TIS, 373329N 0772455W
[Richmond, VA]_______ 0.5300____WYR510 (govt recds)
Vail: TIS, 1 East Bale Mt & Frontage Rd, Control pt: Vail Resort Assn, 241E Meadow Dr
[Vail, CO]__________ 0.5300____KNDC749 (govt recds)
Vail: TIS, 2 Middle Ford Park Tennis Shack, Control pt: Vail Resort Assn, 241E Meadow Dr
[Vail, CO]__________ 0.5300____KNDC750 (govt recds)
Vail: TIS, 3 West 2077 North Frontage Rd, Control pt: Vail Resort Assn, 241E Meadow Dr
[Vail, CO]__________ 0.5300____KNDC748 (govt recds)
WA: TIS, NE 150th St interchange (Eastgate) on I-90

                        [Bellevue, VA]_______   0.5300____KNEZ393   (govt recds)
WA: TIS, NE 45th St interchange on I-5
                        [Seattle, WA]________   0.5300____KNEZ390   (govt recds)
WA: TIS, Spokane St interchange on I-5
                        [Seattle, WA]________   0.5300____KNEZ391   (govt recds)
WA: TIS, SR 520 interchange (Northrup) on I-405
                        [Bellevue, VA]_______   0.5300____KNEZ392   (govt recds)

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 2244628859227775252
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fcf95d952076099,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-17 18:11:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site solar.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!ariel!hou5f!orion!odin!solar!
rmz
From: rmz@solar.UUCP
Newsgroups: net.ham-radio
Subject: HT FOR SALE
Message-ID: <346@solar.UUCP>
Date: Sun, 17-Mar-85 21:11:08 EST
Article-I.D.: solar.346
Posted: Sun Mar 17 21:11:08 1985
Date-Received: Tue, 19-Mar-85 06:06:31 EST
Sender: rmz@solar.UUCP
Organization: AT&T Information Systems, Holmdel NJ
Lines: 9

For Sale Wilson 1402SM 2 meter HT
6 channel, 2 watts, with charger, new battery pack, speaker-mike,
leather case, and rubber duck.

PRICE $125

              Mark WA2ILB
              201-834-3707

From -7022524250192094055
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1d17e12e594c4972,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-17 18:36:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10 5/3/83; site solar.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!ariel!hou5f!orion!odin!solar!
rmz
From: rmz@solar.UUCP
Newsgroups: net.ham-radio
Subject: HT FOR SALE ADDRESS UPDATE
Message-ID: <349@solar.UUCP>
Date: Sun, 17-Mar-85 21:36:54 EST
Article-I.D.: solar.349
Posted: Sun Mar 17 21:36:54 1985
Date-Received: Tue, 19-Mar-85 06:06:43 EST
Sender: rmz@solar.UUCP
Organization: AT&T Information Systems, Holmdel NJ
Lines: 8

     For the Wilson 1402SM HT contact:

          Mark WA2ILB
          AT&T-IS Holmdel, N.J>
          201-834-3707
          solar!rmz
w

From 1149591382843491466
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aac3d7724d2cb4ad,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-18 09:10:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!
sdcsvax!dcdwest!ittvax!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: cheap 2m antenna
Message-ID: <9305@brl-tgr.ARPA>
Date: Mon, 18-Mar-85 12:10:24 EST
Article-I.D.: brl-tgr.9305
Posted: Mon Mar 18 12:10:24 1985
Date-Received: Fri, 22-Mar-85 23:41:32 EST
Sender: news@brl-tgr.ARPA
Lines: 130

------- Forwarded Message

> Need a cheap and quick 2m groundplane antenna?
>
> Recently I needed such a thing and laziness and lack of time

> prevented me from 'doing it myself.' I took a walk to the
> local Radio Shack and purchased a 20-176 ($14.95) "All band
> base station monitor antenna." It just so happens that the
> elements are the correct length for 2m fm work and the antenna,
> at the end of 50 feet of good RG/8U coax shows an SWR of about
> 1.2 to 1.

> Of course, you could just solder 5 pieces of 1/8" brazing rod into an
> SO-239 connector and get the same thing for about $1.50. Trim the rods
> to about 19" and bend the radials down at about a 30 degree angle, and
> voila! Screw the coax on it, and drop it into the end of the antenna
> mast. Or use a dual pipe clamp from the hardware store. (Another 75
> cents).
>
> Bend the radial up and down if the SWR isn't right.
>
> If you're going to run over 250 watts, maybe a teflon connector is worth
> it. So now the whole thing costs $3.00.
>
> I'm cheap.

>   Brian Kantor, WB6CYT   UC San Diego
>
>   decvax\   brian@ucsd.arpa
>   akgua >--- sdcsvax --- brian
>   ucbvax/   Kantor@Nosc

---end, forwarded message

Unfortunately, these nifty ground planes often end up "sort of" working, but not nearly as well as they theoretically could. The pattern tends to spray upward, leaving a null at the horizon where you really want to radiate.

Another configuration which tends to work much better, is cheaper and easier to build, and is MUCH more portable if you want to take it on vacations, etc., is the COAXIAL DIPOLE.

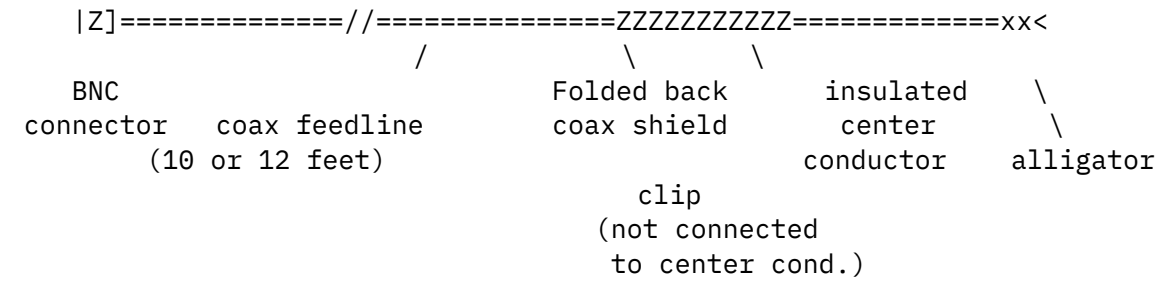
Take a piece of RG-58/U or RG-59/U and strip off the outer insulating jacket from about 30 inches of it. Then work the shield braid back along the coax until it loosens up and then fold it back over the outer jacket that remains. This is a little tricky until you get the hang of it, but eventually you will find it not hard at all. The trick, as I recall, is to let the shield bulge out at the point where it is held by the jacket, and it will start folding back over the jacket quite easily.

Anyway, when you get it folded back, pull it up tight over the jacket, stretching it out in the reverse of its original direction. Trim it off to about 18 inches. You may eventually trim it down to more like 16 or 17, but it is easier to shorten than to lengthen it. You can adjust the effective length somewhat by adjusting how tightly it is stretched. You can tape or glue the end in the final position that you like best. I have found the cyanoacrylate "crazy glue" products to work well for this purpose.

Note that in stretching the 25 or 30 inches of shield over the jacket, it loses a lot of length, and there isn't as much to trim as you would think given the above instructions.

As for the center conductor, you will want to cut it off at about 19 inches. I have done this in several ways, but the best was to work the conductor and insulation back and forth until the conductor broke off and could be pulled out of the insulator leaving a few inches of extra insulation. Then I attached an alligator clip to the free end of the INSULATION ONLY, far from the end of the center conductor. The alligator clip then serves as a convenient fastener for hanging the antenna on a curtain rod or whatever. Another method I have used is to clip off the whole thing at 19 inches, pull the conductor out of the clipped-off piece, fasten the clipped-off piece of insulation back to the end of the antenna with a crimp-type "butt connector" and then crimp on the alligator clip as before.

Put a BNC connector on the other end of the coax and you have a very effective 2m antenna. The whole assembly looks as shown below:



The folded back shield must be somewhat shorter than 19 inches to resonate properly. I would guess about 16 inches, but by experimenting you may find a better length. The free end of the center conductor should be about 19 inches, maybe slightly less because of the increased dielectric constant of the insulator as compared to air. I have had no trouble getting a VSWR of around 1.5 to 1 with RG-58/U coax. This is about par for the course, since the antenna feedpoint impedance is around 72 ohms theoretically.

For 2-meter FM operation, of course you want to hang the thing vertically. The clip on the end makes this convenient. You will want the overall length of coax to be about 10 to 15 feet to permit accessing the antenna from a convenient spot in the room when it is hung near a window or something.

This is a mighty handy accessory for your 2m Handie-talkie if you spend much time on trips -- it coils up compactly and fits easily in your suitcase or briefcase.

==========

Now, if you want to get SERIOUS about 2m antennas, get one of Dick Austin's

Model 264 "DFQer" units for about $60.00 list, and I guarantee you that you will notice a dramatic improvement over the kind of antennas discussed above. Dick's phone number is (603) 887-2926 (Sandown NH).

==========

73,
John S., W3IKG

ZZZ

gridded polar shots reformatted and processed on the ground.

HF fax provides a varied menu of retransmitted satellite photes, weather maps and news items. I have enjoyed watching hf wx maps come in from all parts of the world. the USSR and PRC especially transmit maps that are easy to receive and fun to watch.

Finally, Radar summaries are available by phone. I haven't tried that personally yet.

Here is some general info that might spark interest in FAX and WX satellite reception:

Satellites- There are two types of satellites available for use- polar and geosynchronous. The polar satellites are in high inclination orbits so that they cover all parts of the earth twice a day as the earth rotates under them. US satellites are on 137.62 and 137.5 Mhz and can be easily heard using a scanner with whip or ground plane antenna.
Russian satellites are on 137.15 and 137.3 Mhz and run even higher power than US types.

The geosyncronous satellites are in place above each country that put them up so basically only the US satellites can be heard. The Japanese, Russians and Europeans all have geosynchronous satellites in place. The US GOES types transmsmit on 1691 Mhz with FM modulation in the same format as the polar types. Output power is quite low so receiving stations must be elaborate. Dishes as small as 4 feet can be made to work with low noise preamps but 6 to 9 foot diameters provide more margin for losses etc.
It's customary to get a polar receiving and display capability up and running first and then to use the vhf receiver as the IF for the S band receiver.

Receivers- All satellite transmissions are in FM with various deviations. The best compromise bandwith for all types is +- 15 khz. (30 khz total) You can receive the satellites just to hear them on a standard narrow band scanner but a picture displayed would be badly distorted. It's easy to put a wide band filter in a scanner if that is the receiver chosen. There are a number of receive options available. See references that follow.

Display- Up untill recently it was difficult to display FAX. The choices were converted surplus mechanical machines or homebrew crt systems. Now the display of choice is a pc driven scan converter. This software intensive approach provides much improved flexibility to receive the wide array of differrent formats and line speeds used by the various FAX services. Apparently for reasons of processor speed the Radio Shack Color Computer has been the computer of choice for much of the software development done to date. Certainly this software can be converted to other machines. See reference that follow for more info.

References-

1. There is a journal called "Journal of the Environmental Satellite Amateur Users Group". Quarterly @ $14.00 per year (cost may not be exact)

by Raul Alverez (WD4MRJ) 2512 Arch Street Tampa FL. 33607. A must have item.
Contains recent news and articles about all phases of WX satellite reception.

2. 73 Magazine Nov and Dec '84. Gives a complete description of a pc
driven scan converter including discription of hf(same as SSTV) and WEFAX
front ends. Includes sources of boards, parts and software. I'm assembling
one of these systems now. Back issues may still be available at a well stocked
ham store.

3. "New Weather Satellite handbook" by Dr. Ralph Taggart. Available at well
stocked ham stores. The bible on all phases of WX satellite activity. A
little out of date in that it doesn't include new scan converter material.
Taggart is one of the co-authors of the 73 articles above.

4. NOAA has a coordinator for users of US WX sats. Also publish a
newletter quarterly with schedules, formants and other info.
Contact is Robert Popham. Try reaching him to request newletter at:

Dept. of Commerce
National Oceanographic and Atmospheric Association
National Environmental Satellite Data and Information Services
Washington D.C. 20233
attn: Robert Popham

5. There will be a broad spectrum users conference in the Wash DC are
the week of April 15 to 19. Get ahold of Popham for details. Includes
papers, equipment demos, amateur displays, tours etc.

I hope the above is useful info for those interested in this little known
but fascinating amateur/swl activity.

Regards,
Randy Davison
K7VOE

From 4199508724612166388
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8f1c4d23e9c9571b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-18 12:42:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabsc.UUCP
Path: utzoo!utcs!lsuc!pesnta!hplabsc!labelle
From: labelle@hplabsc.UUCP (WB6YZZ La Belle)
Newsgroups: net.ham-radio
Subject: Circuit Board Specialists- pc boards
Message-ID: <2477@hplabsc.UUCP>
Date: Mon, 18-Mar-85 15:42:17 EST
Article-I.D.: hplabsc.2477
Posted: Mon Mar 18 15:42:17 1985
Date-Received: Tue, 19-Mar-85 20:22:11 EST

Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 13

I ordered several boards from Circuit Board Specialists with no problems. The only complaint I have is that (as stated in their catalog) they DO NOT provide a layout for their boards- you're supposed to get them from QST etc. Or you can figured it out for yourself.

GEORGE WB6YZZ

p.s. Their boards were excellent quality!

From 8176707412348618609
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e50c1957e1d8be0e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-18 14:04:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site druut.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!ahuta!drutx!druut!rss
From: rss@druut.UUCP (SklarRS)
Newsgroups: net.ham-radio
Subject: Colorado Hamfest List (Partial)
Message-ID: <1096@druut.UUCP>
Date: Mon, 18-Mar-85 17:04:37 EST
Article-I.D.: druut.1096
Posted: Mon Mar 18 17:04:37 1985
Date-Received: Tue, 19-Mar-85 05:23:26 EST
Lines: 51

One of the things that I have missed since moving to Colorado is attending hamfests. Even though I am not a ham (radio ham, that is), I find hamfests a lot of fun and the source of some great bargains. In the last few days I found out about the following hamfests, which I am posting.

I would be grateful for the posting of information about other hamfests. I have not seen this type of information on the net before.

Robert Sklar
AT&T ISL, Denver
(303) 538-3726

Pikes Peak Radio Amateur Association

S W A P F E S T

March 31, 1985 8AM to 4PM
4011 Sinton Road
Colorado Springs, Colorado
Admission $1.00 Tables #10.00
Talk In on 146.52

Bigger and Better Than Last Year!

Grand Mesa Repeater Society

6 T H A N N U A L H A M F E S T

Saturday April 20, 1985 10AM - 4PM
Colorado Naational Guard Armory
482 28 Road
Grand Junction, Colorado
(1 block South off North Avenue on 28 Road)

B O U L D E R S P R I N G H A M F E S T

Sunday May 5, 1985 9AM - 2PM
Colorado National Guard Armory
4750 North Broadway
Boulder, Colorado

From 3296427981626357106
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4b3594d38774cacd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-19 06:32:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site aluxz.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!aluxz!mrh
From: mrh@aluxz.UUCP (HUDOCK)
Newsgroups: net.ham-radio
Subject: Open wire feedline
Message-ID: <234@aluxz.UUCP>
Date: Tue, 19-Mar-85 09:32:58 EST
Article-I.D.: aluxz.234
Posted: Tue Mar 19 09:32:58 1985
Date-Received: Wed, 20-Mar-85 04:51:10 EST
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 9

I need help in locating a manufacture of
open wire feedline.

Any help in locating some would be appreciated.

thanks
mike hudock
aluxz!mrh

From -1975680838758143929
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a6423a6d7e6b3cb2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-19 08:17:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site tekcbi.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!tektronix!tekig!
tekcbi!jeffg
From: jeffg@tekcbi.UUCP (Jeff Glover)
Newsgroups: net.ham-radio
Subject: Re: Keplerian Orbital Elements
Message-ID: <200@tekcbi.UUCP>
Date: Tue, 19-Mar-85 11:17:48 EST
Article-I.D.: tekcbi.200
Posted: Tue Mar 19 11:17:48 1985
Date-Received: Sat, 23-Mar-85 02:35:47 EST
References: <309@petrus.UUCP>
Reply-To: jeffg@tekcbi.UUCP (Jeff Glover)
Organization: Tektronix, Beaverton OR
Lines: 25

In article <309@petrus.UUCP> karn@petrus.UUCP writes:
>Satellite: oscar-9
>Catalog number: 12888
>Epoch time: 85067.42221784
>   Fri Mar 8 10:08:31.621 1985 UTC
>Element set: 737
>Inclination: 97.6229 deg
>RA of node: 52.8434 deg
>Eccentricity: 0.0000890
>Arg of perigee: 254.2029 deg
>Mean anomaly: 105.9138 deg
>Mean motion: 15.27039719 rev/day
>Decay rate: 1.497e-05 rev/day^2
>Epoch rev: 18985
>Semi major axis: 6859.770 km
>Anom period: 94.300101 min
>Apogee: 501.706 km
>Perigee: 500.485 km
>Ref perigee: 2623.40332185
>   Fri Mar 8 09:40:47.8   1985 UTC

>Beacon: 145.8250 MHz
>

Does anyone have a set of programs for UNIX that use these tables? Perhaps
even with a graphics style output?

From 7874954861346124721
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b4ff1c67f1933e5e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-19 11:30:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 8/7/84; site ucbvax.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!luria
From: luria@ucbvax.ARPA (Marc Luria)
Newsgroups: net.ham-radio
Subject: Accessories for SWL
Message-ID: <5610@ucbvax.ARPA>
Date: Tue, 19-Mar-85 14:30:32 EST
Article-I.D.: ucbvax.5610
Posted: Tue Mar 19 14:30:32 1985
Date-Received: Wed, 20-Mar-85 06:26:41 EST
Reply-To: luria@ucbvax.UUCP (Marc Luria)
Organization: University of California at Berkeley
Lines: 10
Summary:

I bought a Uniden 2021 a couple months ago and have been relatively happy
with it. Strong stations like BBC, HCJB, etc. I pull in with no problem
and I have listened to Kol Israel's programs regularly though the reception
on that has been considerably weaker. I have not been able to pull in Israel's
Home service at all. The question I have is what things I could do to make
reception better. I now have a piece of Radio Shack 18 gauge copper wire
strung uup along the side of our apartment building. Should I try to put
an antenna on the roof of our two story building, an active antenna, add a
preamplifier or something like the Grove minituner? What would be most
helpful? And what brand of product? Any other suggestions?

From -4024641462784912552
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e50c1957e1d8be0e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-19 12:59:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!houxm!whuxl!whuxlm!akgua!
sdcsvax!dcdwest!ittvax!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Colorado Hamfest List (Partial)

Message-ID: <9341@brl-tgr.ARPA>
Date: Tue, 19-Mar-85 15:59:46 EST
Article-I.D.: brl-tgr.9341
Posted: Tue Mar 19 15:59:46 1985
Date-Received: Sat, 23-Mar-85 00:50:00 EST
Sender: news@brl-tgr.ARPA
Lines: 5

Now y'see, if you got yerself a ham license and a 2m transceiver, you could ask on the Squaw Peak repeater and get info on hamfests in most surrounding states as well as Colorado!

-JS, W3IKG

From 6200395779985018935
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4b8e0fa1d7be5efe,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-19 16:00:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 24 (section mgrs)
Message-ID: <15937@mgweed.UUCP>
Date: Tue, 19-Mar-85 19:00:22 EST
Article-I.D.: mgweed.15937
Posted: Tue Mar 19 19:00:22 1985
Date-Received: Wed, 20-Mar-85 05:24:26 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui

hr arrl bulletin nr 24 from arrl headquarters

newington ct march 18, 1985

to all radio amateurs bt

the following have been elected without balloting as section managers for their respective sections, new hampshire wb1bre and rhode island wb1fdy. those elected begin their term of office july 1, 1985 ar

From 4698518215034694745
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d9ab2e7b416ee62,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-03-19 16:00:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 23 (vucc microwave awards)
Message-ID: <15938@mgweed.UUCP>
Date: Tue, 19-Mar-85 19:00:50 EST
Article-I.D.: mgweed.15938
Posted: Tue Mar 19 19:00:50 1985
Date-Received: Wed, 20-Mar-85 05:24:43 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 21

qst de k9eui

hr arrl bulletin nr 23 from arrl headquarters

newington ct march 15, 1985

to all radio amateurs bt

effective immediately, arrl will accept applications for the vucc award for the microwave frequencies. individual band awards are now available with the minimum number of grid squares to qualify as follows. 2.3 ghz, 10 squares. 3.4 ghz, 5 squares. 5.7 ghz, 5 squares. 10 ghz, 5 squares. contacts are good retroactively to january 1, 1983. endorsements are in increments of 5. contacts must be made from a single location, defined as within a 300 meter diameter circle. the first three qualifiers on each band will receive their certificates mounted on walnut plaques. application information, and the name of the closest awards manager, is available from hq for an sase ar

From 8114880688398136831
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,64687c0c1d7c0017,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-19 16:01:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 8/9
Message-ID: <15939@mgweed.UUCP>
Date: Tue, 19-Mar-85 19:01:14 EST
Article-I.D.: mgweed.15939
Posted: Tue Mar 19 19:01:14 1985
Date-Received: Wed, 20-Mar-85 05:24:58 EST

Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 23

qst de k9eui

hr crrl bulletin nr 9/8 from crrl headquarters

london, ont march 15, 1985

to all radio amateurs bt

for information on how to obtain an amateur licence or operating permit in a foreign country, write to foreign licensing information, naralon thorne, ve3lru, at crrl hq.

congratulations to ve3idw, who succeeds ve3fvo as president of carf.

doc is planning to phase in some multiple choice questions in the technical portions of the amateur and advanced amateur examinations.

the jso crrl 85 convention will be held in london, ontario, on september 27 through 29 ar

From 4857988787271465201
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3087423abbdf7aae,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-19 16:01:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 11
Message-ID: <15940@mgweed.UUCP>
Date: Tue, 19-Mar-85 19:01:41 EST
Article-I.D.: mgweed.15940
Posted: Tue Mar 19 19:01:41 1985
Date-Received: Wed, 20-Mar-85 05:59:28 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 46

qst de k9eui

hr propagation forecast bulletin nr 11 from arrl headquarters

newington ct march 17, 1985

to all radio amateurs bt

in 18 days ending march 16, the solar flux averaged 69.9, and was never above 71. the rise predicted last week began march 12 with the flux at 69. it was 73 on the 17th, its highest value since february 21, and is expected to rise for another two days or so. this could make a noticeable improvement in the 21 and 14 mhz bands, and wake up the 28 mhz band, at least on transequatorial circuits.

with wwv a indices below 10 most of the time, propagation on the active frequencies was fairly good in the past week. geomagnetic activity is expected to rise this week, which will hamper propagation in the higher latitudes. the vernal equinox this week marks this period as the best of the year for propagation on north south and other transequatorial paths on all amateur dx frequencies. the authors florida log for last year at this time shows our first 50 mhz te qso, with lu8yyo, on march 18. work with south and central america was done almost daily thereafter, from the southernmost states, and intermittently from most other areas, for several weeks. the much lower solar activity currently may keep the te mode from working on 50 mhz this year, but now is the time to be trying.

propagation is expected to be generally fair to good most of the forecast week, with the muf running a bit higher than it has been recently. conditions will be less favorable toward the end of the week in the higher latitudes, as geomagnetic activity rises, but no serious disturbances are likely until about march 26.

correspondence regarding these bulletins should be addressed to the author, ed tilton, w1hdq, po box 5529, spring hill, fl 33526, until early may, and to the callbook address thereafter, until further notice.

american sunspot numbers for march 7 to 13 were between 11 and 0 with a mean of 5.6 ar

From -7195974560390417737
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b4ff1c67f1933e5e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-19 17:13:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Accessories for SWL
Message-ID: <516@ihu1h.UUCP>
Date: Tue, 19-Mar-85 20:13:45 EST

Article-I.D.: ihu1h.516
Posted: Tue Mar 19 20:13:45 1985
Date-Received: Wed, 20-Mar-85 06:38:54 EST
References: <5610@ucbvax.ARPA>
Organization: AT&T Bell Laboratories
Lines: 36

Outdoor Antenna vs. Indoor Active Antenna, etc.

Without a doubt, putting an antenna on the roof will yield the biggest improvement, and at a lower cost per db. I have an MFJ 1020 active antenna and an Ameco preamp. They are ok, but not as good as a mediocre wire antenna on the roof would be.

My choices for a simple SWL antenna, in priority order, are:

1. A coax fed trap dipole for multiple shortwave bands

2. an end fed long wire and a simple SWL antenna tuner to match unbalanced lines (MFJ or Grove Minituner III [$39]).

3. Center fed Zepp, of length = 468/[lowest freq you want to cover in MHz], parallel feed line (good grade of jacketed twin lead), and antenna tuner to feed balanced line

> I bought a Uniden 2021 a couple months ago and have been relatively happy
> with it. Strong stations like BBC, HCJB, etc. I pull in with no problem
> and I have listened to Kol Israel's programs regularly though the reception
> on that has been considerably weaker. I have not been able to pull in Israel's
> Home service at all. The question I have is what things I could do to make
> reception better. I now have a piece of Radio Shack 18 gauge copper wire
> strung uup along the side of our apartment building. Should I try to put
> an antenna on the roof of our two story building, an active antenna, add a
> preamplifier or something like the Grove minituner? What would be most
> helpful? And what brand of product? Any other suggestions?

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 868936219867205820
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de7f852474a715b7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-20 04:55:10 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!DINGMAN@RADC-TOPS20.ARPA
From: DINGMAN@RADC-TOPS20.ARPA
Newsgroups: net.ham-radio
Subject: FM Intercom/TV Interference
Message-ID: <9359@brl-tgr.ARPA>
Date: Wed, 20-Mar-85 07:55:10 EST
Article-I.D.: brl-tgr.9359
Posted: Wed Mar 20 07:55:10 1985
Date-Received: Sat, 23-Mar-85 01:20:01 EST
Sender: news@brl-tgr.ARPA
Lines: 15

I'm a non-ham, so I've come here to ask the experts for help. I recently
bought a wireless FM intercom for my house (two-station). It works fine
until I turn the TV on, then buzzes like mad. I tried a Radio Shack AC
line filter, but that didn't have any effect at all. It also makes the
noise no matter how far from the TV either station is.
So, what is causing the buzz? Is my TV xmitting through my wiring, or
might it be some other kind of interference? And how do I quiet the little
bugger down?
Any suggestions or info would be appreciated. Please send direct to me,
or post to this BB if easier.

   Thanks in advance,
      John (DINGMAN@RADC-20.ARPA)

From 6844329524129414301
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,52f2f18682451b39,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-20 05:54:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!umcp-cs!gymble!lll-crg!dual!decwrl!dec-
rhea!dec-fsleng!virgona
From: virgona@fsleng.DEC
Newsgroups: net.ham-radio
Subject: HT want to by maybe?
Message-ID: <1182@decwrl.UUCP>
Date: Wed, 20-Mar-85 08:54:15 EST
Article-I.D.: decwrl.1182
Posted: Wed Mar 20 08:54:15 1985
Date-Received: Sun, 24-Mar-85 04:11:03 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 49

Newsgroups: net.ham-radio
Path: decwrl!decvax!bellcore!allegra!ulysses!mhuxr!mhuxt!houxm!vax135!ariel!hou5f!
orion!odin!solar!rmz
Subject: HT FOR SALE

For Sale Wilson 1402SM 2 meter HT
6 channel, 2 watts, with charger, new battery pack, speaker-mike,
leather case, and rubber duck.

PRICE $125

Mark WA2ILB
201-834-3707

For the Wilson 1402SM HT contact:

Mark WA2ILB
AT&T-IS Holmdel, N.J>
201-834-3707

[2"z[12m

Newsgroup : net.ham-radio
From : FSLENG::VIRGONA
Organization : Digital Equipment Corp.
Subj: RE: Wilson 1402sm

Mark,

i would like to get more info on the HT, size, how old etc. I can not call out
of the 617 area code from work to talk to you about it.
so please give my a call or drop a line or what ever ok!
I get home on Mon Wed Fri at approx 6:00PM on Tues and Thur at Approx 9:30 PM
i go to school on those nites

73's

Pete Virgona N1DHD ex KA2KSR/1

my DEC node is FSLENG::Virgona
my net node is decvax!decwrl!dec-rhea!dec-fsleng!virgona
Home # 603 659-6294
Work # 617 938-2301

From -957733600920375916
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b4ff1c67f1933e5e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-03-20 06:58:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
godot!harvard!seismo!brl-tgr!tgr!Taylor.Wbst@XEROX.ARPA
From: Taylor.Wbst@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Accessories for SWL
Message-ID: <9363@brl-tgr.ARPA>
Date: Wed, 20-Mar-85 09:58:47 EST
Article-I.D.: brl-tgr.9363
Posted: Wed Mar 20 09:58:47 1985
Date-Received: Sat, 23-Mar-85 02:26:44 EST
Sender: news@brl-tgr.ARPA
Lines: 12

I HAVE INCREASED THE SENSITIVITY OF THE 2021 BY AT LEAST 10 DECIBELS AT ~4 MHZ BY SIMPLY USING A RESONANT LOOP ANTENNA. ALL THAT IS NECESSARY IS TO USE THE ANTENNA WIRE THAT CAME WITH THE RCVR AND PLACE A 100 PF VARIABLE CAPACITOR BETWEEN THE "FAR" END AND THE GROUND TERMINAL OF THE RCVR. (AN AUDIO TAPE REEL, ~5 IN OD, MAKES A NEAT WAY TO STORE THE UNUSED SLACK IN THE WIRE.) I JUST LOOPED THE WIRE AROUND A WINDOW BEHIND THE DRAPERIES.

GOOD LUCK!

JIM (W2OZH)

From -474992272284950297
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69d87daaf14245c3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-21 13:26:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site ee.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!talcott!panda!genrad!decvax!
bellcore!allegra!ulysses!mhuxr!ihnp4!inuxc!pur-ee!ee!wn9nbt
From: wn9nbt@ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: New Hampshire hams need your Support
Message-ID: <57600001@ee.UUCP>
Date: Thu, 21-Feb-85 16:26:00 EST
Article-I.D.: ee.57600001
Posted: Thu Feb 21 16:26:00 1985
Date-Received: Sun, 24-Feb-85 02:43:01 EST
References: <633@decwrl.UUCP>

Lines: 6
Nf-ID: #R:decwrl:-63300:ee:57600001:000:187
Nf-From: ee!wn9nbt   Feb 21 16:26:00 1985

FYI, Indiana charges $40.00 (above & beyond the other fees) for the
vanity plates, but only $2.00 for ham plates......Just thought that
info might help with another example......Dave

From 7822351676523561297
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bbf9d606649c9764
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-21 13:49:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: MOV transient protectors
Message-ID: <8427@brl-tgr.ARPA>
Date: Thu, 21-Feb-85 16:49:23 EST
Article-I.D.: brl-tgr.8427
Posted: Thu Feb 21 16:49:23 1985
Date-Received: Tue, 26-Feb-85 20:03:58 EST
Sender: news@brl-tgr.ARPA
Lines: 74

*** Correction to text - discard previous version.

" What is the proper configuration for hooking up an MOV to a power
  line? (i.e. in series or in parallel?).

  If it hooks up in parallel to the power line, why wouldn't one MOV
  work for your entire house? It seems that it would, because all the
  lines in the house are connected to together in parallel.
                                    Joe   "

The MOV is a shunt device: it has a high impedance until a transient causes
a large voltage to appear across it, at which point its resistance becomes
small, or more precisely, it prevents the voltage from getting much bigger
by shunting a large current through the MOV.

To protect equipment with MOVs connected to the AC line, you would want to
choose an MOV rated for a voltage which would not NORMALLY appear across the
line. Be sure to find out (does anybody know?) whether the MOV is rated in
terms of instantaneous peak voltage or RMS line voltage. The peak voltage
is sqrt(2) times the RMS value of 115 or 120, thus about 170 volts. To allow

for manufacturing tolerances, an MOV which limits peaks to about 190 or 200 volts would probably be about right.

Another parameter you need to choose is the maximum shunt current you need to handle in the MOV. The right choice depends on the application. For EMP protection, FEMA recommends a rule of thumb of 25 to 120 Amps per FOOT of exposed conductor if the conductor is vertical and 5 to 10 Amps per foot if it is horizontal. In either case, a practical limit would occur at about 2000 Amps because more than that will arc over around even your MOV. So probably a 2000 Amp peak current rating would handle most transients in the real world. I'm not sure just how LIGHTNING transients would differ from EMP, but it is generally claimed that the risetime is longer (slower) for lightning. I suspect that the above rules of thumb for EMP would result in a conservative design that would handle lightning nicely also.

**** correction to following paragraph: ****

The MOV would be connected across the line (in parallel, in your terms). A single MOV at the power entrance point would be very useful if all wiring beyond that point is in metal conduit. MOVs have a reputation of being fairly reliable, provided that they are adequately rated to handle the shunt currents they experience. However, the use of two or more MOVs in parallel might be a good idea for added protection in case a failure should occur.

Bear in mind that both EMP and lightning are fairly wideband phenomena, EMP particularly extending well into the VHF region. Because they are so wideband, they act like (they in fact ARE) radio waves and can get picked up by even a few FEET of conductor betwee the "central" MOV and the device in question. MOVs at various other points in the system would provide better protection to specific (expensive) equipment especially if the entrance-point MOV(s) failed or if the distribution wiring in the building is not shielded.

The LEAD LENGTH and inductance in series with the MOV will greatly reduce its effectiveness in limiting voltage peaks. It is best to use techniques similar to those used in building VHF/UHF amplifiers: very short leads, wide "straps" rather than ordinary wire, or else large diameter conductor, avoid bending the conductor (because bends introduce inductance) etc.

Additional protection can be provided more locally by using Zener diodes on low-voltage lines and gas gap devices on antenna feedlines. NOTE THAT AIR GAPS ARE NOT EFFECTIVE against EMP transients because the risetime is much faster than the time required to ionize air. Buy a gas discharge device specifically designed for EMP or lightning protection, and then check it periodically (after every major electrical storm, for example).

I hope the above is helpful. Please note that I am only an "instant" expert on this subject rather than a "real" expert, so I may not be able to give you much more detail than the above. However, I would be glad to try to answer any further questions or point you at someone who can do so.

73,
John Sangster, W3IKG
jhs at mitre-bedford.arpa

From -3142868321571625518
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e94f3402a00bf951,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-21 15:22:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!bedford!mintaka!Gor#f@mit-eddie.ARPA
From: Gor#f@mit-eddie.ARPA
Newsgroups: net.ham-radio
Subject: Automobile Ham call sign plates
Message-ID: <8432@brl-tgr.ARPA>
Date: Thu, 21-Feb-85 18:22:48 EST
Article-I.D.: brl-tgr.8432
Posted: Thu Feb 21 18:22:48 1985
Date-Received: Tue, 26-Feb-85 20:30:34 EST
Sender: news@brl-tgr.ARPA
Lines: 34

To New Hampshire Hams:

Ham call plates ARE vanity plates. They serve no purpose but to boost the ego of their owner. There is nothing wrong with that. I have call plates. They are one of my toys. I pay for my toys, but I don't want to pay for other peoples toys. Don't ask the taxpayers to subsidize your toys.

If the reasons that you choose to live in New Hampshire include the fact that our government costs are so low that we have a budget surplus with no state income tax and no state sales tax, then you cannot, in good conscience, support the moves to make ham call plates "special"(==cheap==subsidized). If you want special interest groups to dictate your tax rate, you aren't likely to be happy in this state anyway.

If National Guard plates serve no useful purpose either, then you thrust should be to have their special status eliminated, not to put your own hand in the til. If they do serve a purpose (I don't know that), then whether they should be given a reduced rate or should be reimbursed directly by the Guard is a separate debate.

If ARRL really is supporting this foolishness, then shame on them!

I urge you to write the governor and your state representatives and register your opposition, as a ham, to casting ham radio in the roll of another special interest group with its hand out. All that we should ask of out governments is the continued use of our frequencies. That is plenty to be grateful for already.

Sincerely,

Bill Freeman, KE1G

From -6327081084330897663
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5873cdd1dc4a5ea4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-21 18:10:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
godot!harvard!seismo!brl-tgr!tgr!hoffmann@mit-marie
From: hoffmann@mit-marie (Ron M. Hoffmann)
Newsgroups: net.ham-radio
Subject: Callsign plates
Message-ID: <8440@brl-tgr.ARPA>
Date: Thu, 21-Feb-85 21:10:07 EST
Article-I.D.: brl-tgr.8440
Posted: Thu Feb 21 21:10:07 1985
Date-Received: Tue, 26-Feb-85 20:33:56 EST
Sender: news@brl-tgr.ARPA
Lines: 32

The rationale behind reduced rate license plates for hams and National Guard members and doctors... is that if not explicitly (and hams do explicitly) than at least implicitly these groups exist in part to perform public service.

In having these distinctive license plates, they are easily identifiable by law enforcement and civil defense and could be put to use in emergency situations.

Some states, in fact, require that a vehicle with call sign plates be equipped with a two-way rig. This can be as little as an HT. This only makes sense.

When the Registry of Motor Vehicles in Massachusetts restructured the registrations rates, ham plates were classified with MD's, not with vanity plates.

I don't think that hams are looking for a free ride, but rather recognition of their contributions, and the opportunity to provide a service to their communities and to the public at large.

One last comment. I grant that many hams don't view their hobby as I have portrayed it. That's too bad. For those of us who perform even the occaisional public service deed through the use of amateur radio, being identifiable by callsign plates is an important thing.

Ron Hoffmann, WA2EYC
hoffmann@mit-marie@mit-mc.arpa
hoffmann@mitlns (bitnet)

From -5439486396531136536
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bbf9d606649c9764
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-21 19:10:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
godot!harvard!seismo!brl-tgr!tgr!jshaver@APG-3
From: jshaver@APG-3 (John Shaver STEEP-TM-AC 879-7602)
Newsgroups: net.ham-radio
Subject: MOV transient protectors
Message-ID: <8446@brl-tgr.ARPA>
Date: Thu, 21-Feb-85 22:10:29 EST
Article-I.D.: brl-tgr.8446
Posted: Thu Feb 21 22:10:29 1985
Date-Received: Tue, 26-Feb-85 20:34:25 EST
Sender: news@brl-tgr.ARPA
Lines: 7

That is not true. You have three wires in most power receptacles
today. At the frequencies represented by the rise-time of spikes, the
two ground-wires (or neutral) may not be zero impedance from one
another. Thus three MOVs is a good plan. You need also to have
indicating fuses in series with each of the MOVs to know when they
have been wiped out and need replacing by a particular heavy lightning
stroke.

From -316180602784134786
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,28827f270ce577ae,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-21 22:05:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!Schauble@MIT-MULTICS.ARPA
From: Schauble@MIT-MULTICS.ARPA (Paul Schauble)
Newsgroups: net.ham-radio
Subject: FAA on 283.0 Terrahertz
Message-ID: <8448@brl-tgr.ARPA>
Date: Fri, 22-Feb-85 01:05:29 EST
Article-I.D.: brl-tgr.8448
Posted: Fri Feb 22 01:05:29 1985
Date-Received: Tue, 26-Feb-85 20:36:22 EST
Sender: news@brl-tgr.ARPA

Lines: 6

Hey! I know what that is. It's an infra-red laser used for tracking
aircraft while testing navigation equipment.

Wonder if they'll start registering communications lasers next??

Paul

From -8838212450125367558
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e94f3402a00bf951
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-22 06:20:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!rturner@amc-hq.arpa
From: rturner@amc-hq.arpa (Richard G. Turner //CCTO USARI//)
Newsgroups: net.ham-radio
Subject: Re: Automobile Ham call sign plates
Message-ID: <8459@brl-tgr.ARPA>
Date: Fri, 22-Feb-85 09:20:20 EST
Article-I.D.: brl-tgr.8459
Posted: Fri Feb 22 09:20:20 1985
Date-Received: Tue, 26-Feb-85 20:42:46 EST
Sender: news@brl-tgr.ARPA
Lines: 24

The situation you describe, where Amateur Plates are considered public
service plates, is true for Virginia. Virginia requires (or still did the
last time I checked) that a vehicle carrying an Amateur Radio plate have
working communications gear. You were also required to turn in your plates
if you were without such gear for longer than 90 days. The law wouldn't
allow holders of Novice licenses to obtain Amateur plates because of their
perceived inability to provide mobile communications... even though I have
run into at least one Ham who did mobile CW.

The Virginia State Police WILL use you in an emergency situation if they
see Amateur Plates on your car. One of our club members, coming upon a
traffic accident, was signaled to the side of the road by one of Virginia's
finest. He expected to be asked for communications help, but was asked to
help push one of the vehicles out of the roadway.

That's public service!

-rick

ps. I wasn't able to convince my mailer to send directly to the MIT-*
addressees that posted the original messages concerning amateur plates
as vanity plates.

-rt

From 5068548605978214927
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,86286c4781fcefa3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-22 09:33:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!
seismo!brl-tgr!tgr!jstarr@anad
From: jstarr@anad (J. Starr USAISC ANAD)
Newsgroups: net.ham-radio
Subject: \"HAM CALL LETTER PLATES\"
Message-ID: <8480@brl-tgr.ARPA>
Date: Fri, 22-Feb-85 12:33:16 EST
Article-I.D.: brl-tgr.8480
Posted: Fri Feb 22 12:33:16 1985
Date-Received: Wed, 27-Feb-85 04:42:57 EST
Sender: news@brl-tgr.ARPA
Lines: 37

Ham tags = vanity plates ?? Bah Humbug!!

Now wait. Yes they are. To some extent they are. I have been a "HAM" for 23 years and I am proud of it. But as someone else said, they are mainly to assist the proper authorities to identify the owner in times of emergency.

Alabama has been in the middle of "TORNADO ALLEY" for the past several years. Many many hams in Alabama actively work with the National Weather Service during periods of severe weather watches and warnings. These same hams then work closely with Civil Defense, the Red Cross and local law enforcement officials if a storm does strike. And they do, several times a year in this state.

I have taken part in too many severe weather watches and warnings to count. Three times I have also actively assisted after a tornado touched down and did much damage. Each time I was admitted to the area on the basis of my call letter plates while all other folks were being turned back.

Being a "HAM" in this state means something to the State Troopers and to local law enforcement agencies. We have rightfully earned their respect. More than once a State Trooper or other lawman has passed me on the highway, and waved just because of my ham tags.

"HAM TAGS" are vanity plates??

I say hell no!! Come on down to this here Red Neck state and see!!

Jim Starr

WA4QLB

Oxford Alabama

...

.

From -8511297542684326951
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6480a9ce4b1fe9a8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-22 11:16:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: call plate info
Message-ID: <15627@mgweed.UUCP>
Date: Fri, 22-Feb-85 14:16:40 EST
Article-I.D.: mgweed.15627
Posted: Fri Feb 22 14:16:40 1985
Date-Received: Tue, 26-Feb-85 07:41:37 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 7

FYI, I heard that hams in Alaska get their call plates FREE if they
have a mobile rig, as an incentive for emergency preparedness!
This came about after the last earthquake up there.

K9EUI

From -2881936271069730926
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e0902be6e7cd68fb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-22 11:25:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: HELP on rtty code needed
Message-ID: <15628@mgweed.UUCP>
Date: Fri, 22-Feb-85 14:25:39 EST
Article-I.D.: mgweed.15628
Posted: Fri Feb 22 14:25:39 1985
Date-Received: Tue, 26-Feb-85 07:42:04 EST
Organization: AT&T Consumer Products - Montgomery Illinois

Lines: 14

I have logged a couple dozen of what I believe to be MOORE RTTY stations
on HF. They are usually sending what sounds like 2 alternating "idle"
characters most of the time. Also, the transmission is definetly
synchronous and about 50 baud.

I have asked before if anyone really knows who these stations are,
and exactly what format is used (I heard that every other character
is reversed, ie; one character has a 4/3 mark to space ratio and the
next has 3/4). I would like to build a converter to eavesdrop on these
guys so any info would be helpful.

Bob K9EUI

From -7701214753541377149
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e94f3402a00bf951
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-22 12:26:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!
seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Automobile Ham call sign plates
Message-ID: <8484@brl-tgr.ARPA>
Date: Fri, 22-Feb-85 15:26:51 EST
Article-I.D.: brl-tgr.8484
Posted: Fri Feb 22 15:26:51 1985
Date-Received: Wed, 27-Feb-85 04:46:04 EST
Sender: news@brl-tgr.ARPA
Lines: 16

Oboy, another HOT CONTROVERSY !!!

Ham plates are NOT just vanity plates !! What if some constable finds that
his radio just went out and he needs a HAM to patch him through to his home
precinct? What T H E N ? ? ? If the next passing ham doesn't have his
callsign plates on because he is too destitute to pay "vanity" rates for them,
the public interest will be poorly served indeed!

Or what if some little old lady gets run down by a car and wants to flag down
the next passing ham to call for help for her? Wouldn't HER interests be
better served by allowing Joe Ham to have callsign plates at discount rates?

C'mon, guys (and gals!) -- let's get another barrage of flame-type messages
(known in the good old daze as diatribes) going!

-de W3IKG

From -7941017643311162272
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,28827f270ce577ae
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-22 12:39:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!
seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: FAA on 283.0 Terrahertz
Message-ID: <8486@brl-tgr.ARPA>
Date: Fri, 22-Feb-85 15:39:00 EST
Article-I.D.: brl-tgr.8486
Posted: Fri Feb 22 15:39:00 1985
Date-Received: Wed, 27-Feb-85 04:46:42 EST
Sender: news@brl-tgr.ARPA
Lines: 7

Re: Infrared laser...

Is that what caused the cloud of steam over the ocean off Japan a couple of
weeks back? Hmm...

-de W3IKG

From 3819525010650461811
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f6238af112b8e726,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-22 20:03:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!bedford!mintaka!Gor#f@mit-
eddie.ARPA
From: Gor#f@mit-eddie.ARPA
Newsgroups: net.ham-radio
Subject: Callsign plates
Message-ID: <8506@brl-tgr.ARPA>
Date: Fri, 22-Feb-85 23:03:34 EST
Article-I.D.: brl-tgr.8506
Posted: Fri Feb 22 23:03:34 1985
Date-Received: Sun, 24-Feb-85 01:24:38 EST
Sender: news@brl-tgr.ARPA
Lines: 17

It is my personal experience that most law enforcement officials
don't know what callsign plates mean. Also, we are not prevented from

marking our vechicles with the fact that we are hams by means other
than callsign plates. Means that would be clearer to the non-ham, in
fact. Means that don't involve dipping into the taxpayer's pocket.

The requiring a car with callsign plates to be radio equipped sounds like
something between useless and a bad idea. If Joe (Jill) Ham's non-ham spouse
needs the car for the day does he have to send his only HT with her (him)?
If so, is she of any use to someone who needs radio communication? Or
perhalps he (she) has to go along for the ride?

(Ron, are you on packet yet? I'm running a W0RLI BBS here in Goffstown.
You should be able to digipeat to me via W0RLI or K1BC or K1UGM, amongst
others.   Happy dancing.)

              73's   -Bill, KE1G

From 7914269672358733124
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1cc0d7b35d77e4e5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-22 20:20:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!bedford!mintaka!Gor#f@mit-
eddie.ARPA
From: Gor#f@mit-eddie.ARPA
Newsgroups: net.ham-radio
Subject: more call plates
Message-ID: <8507@brl-tgr.ARPA>
Date: Fri, 22-Feb-85 23:20:12 EST
Article-I.D.: brl-tgr.8507
Posted: Fri Feb 22 23:20:12 1985
Date-Received: Sun, 24-Feb-85 01:24:51 EST
Sender: news@brl-tgr.ARPA
Lines: 14

But suppose a ham is walking down the street, and a Trooper whose
just broken his mike cord trying to draw his gun passes by. How's
he going to know that the ham is a ham with his HT in the grocery
bag that he's carrying? Shouldn't we all be required to wear
sandwich signs with our calls when we're not in the car, and get
our employers to put neon signs on the side of their buildings that
can be turned on when we're there?

I don't need to rationalize my desire to have call plates. The forms
of recognition that I get when I help out with a public service event
mean more to me than my call plates, though, and they're something
I can't just go buy on account of having passed my FCC exam, as I can
with call plates.
              73 -Bill KE1G

From 3022924792175235990
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,130dfa6e11b746a2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-23 07:16:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!
seismo!brl-tgr!tgr!carpenter@NBS-VMS
From: carpenter@NBS-VMS
Newsgroups: net.ham-radio
Subject: PCnet Vieweed With Alarm
Message-ID: <8513@brl-tgr.ARPA>
Date: Sat, 23-Feb-85 10:16:49 EST
Article-I.D.: brl-tgr.8513
Posted: Sat Feb 23 10:16:49 1985
Date-Received: Wed, 27-Feb-85 05:18:54 EST
Sender: news@brl-tgr.ARPA
Lines: 15

This past week I got a short look at the IBM PCnet documentation. I find,
as you doubtless know, that this is a "broadband" (ie. cable TV based)
local network. Why I View With Alarmh Alarm is that it is in the six meter band,
my favorite. The PCnet carrier frequency is apparently 50.75 MHz. Since
the bit rate is 2 Mb/s, it will spread out quite a way. The thing doubtless
meets the FCC radiation specs, but they aren't very strict in terms of
an in-house PC along with weak-signal six meter reception. It would
likely wreak havoc with meteor burst reception. The saving grace could
be that a lightly loaded packet net doesn't transmit much of the time.

Has anyone had any experience with interference from PCnet? I should get
back on six packets some time soon - worked Florida that way last fall.

Bob Carpenter, W3OTC

From -7004632245007658823
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4649dff90411457d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-23 07:23:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!
seismo!brl-tgr!tgr!carpenter@NBS-VMS
From: carpenter@NBS-VMS
Newsgroups: net.ham-radio
Subject: Correctioneed With Alarm
Message-ID: <8514@brl-tgr.ARPA>
Date: Sat, 23-Feb-85 10:23:29 EST
Article-I.D.: brl-tgr.8514
Posted: Sat Feb 23 10:23:29 1985

Date-Received: Wed, 27-Feb-85 05:19:19 EST
Sender: news@brl-tgr.ARPA
Lines: 4

It was IOWA, not Florida that I worked on six meteor packet meteor burst.

Bob Carpenter, W3OTC

From -261314718180306180
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,90e0b994df047de2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-23 08:26:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!
seismo!brl-tgr!tgr!jshaver@APG-3
From: jshaver@APG-3 (John Shaver STEEP-TM-AC 879-7602)
Newsgroups: net.ham-radio
Subject: MOV transient protectors - correction
Message-ID: <8531@brl-tgr.ARPA>
Date: Sat, 23-Feb-85 11:26:24 EST
Article-I.D.: brl-tgr.8531
Posted: Sat Feb 23 11:26:24 1985
Date-Received: Wed, 27-Feb-85 05:31:34 EST
Sender: news@brl-tgr.ARPA
Lines: 3

There are commercially available large scale MOVs for use at power
entry points on houses, underground cable systems etc. Talk to your
local power company.

From 589678174849757088
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,60b68e69a733bb7a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-23 08:32:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!
seismo!brl-tgr!tgr!carpenter@NBS-VMS
From: carpenter@NBS-VMS
Newsgroups: net.ham-radio
Subject: Mailer trouble
Message-ID: <8532@brl-tgr.ARPA>
Date: Sat, 23-Feb-85 11:32:33 EST
Article-I.D.: brl-tgr.8532
Posted: Sat Feb 23 11:32:33 1985
Date-Received: Wed, 27-Feb-85 05:44:08 EST
Sender: news@brl-tgr.ARPA

Lines: 7

Don't blame me for ALL of the "subject" field errors, our mailer seems
to have carried over a bunch of characters from the "subject" field in
the previous message I sent. Do blame me for the content/typing errors
in the message proper.

W3OTC

From -650623443518744225
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8113ba1033dc6167,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-23 09:14:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (the Born Again Programmer)
Newsgroups: net.ham-radio
Subject: Special VE Prefixes
Message-ID: <175@sask.UUCP>
Date: Sat, 23-Feb-85 12:14:42 EST
Article-I.D.: sask.175
Posted: Sat Feb 23 12:14:42 1985
Date-Received: Wed, 27-Feb-85 02:56:05 EST
Organization: U of Saskatchewan, Canada
Lines: 16

Heard a U.S. ham on the air yesterday claim that VEs can use the prefix
CG so I checked with the local DOC office and gathered this info for
those of you out there that hunt prefixes.
CG is a valid prefix from Feb 17th to Apr 17th in honour of 75 years of
     Girl Guides (!!!)
XJ is valid from June 29th to Aug 29th (I think it is Canada wide but is
     definitely valid for VE5)
CH5 is valid for VE5s ONLY from July 28th to Aug 10th to celebrate
     Saskatchewan Heritage '85.
It's not easy to find out about these things as there is no official
announcement mechanism. I'll try to keep you posted.
I don't hunt prefixes myself but if anyone really needs a special prefix
from VE5 land, mail me and we'll try a sched.
73
Pete VE5BEL
MAIL to ...!ihnp4!sask!hardie

From -4711703544429753913
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,96afd030b472c31,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-23 11:39:16 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!
seismo!brl-tgr!tgr!godot!ima!pbear!peterb%harvard.uucp@Seismo
From: peterb%harvard.uucp%Seismo@pbear.UUCP
Newsgroups: net.ham-radio
Subject: MOV transient protectors
Message-ID: <8552@brl-tgr.ARPA>
Date: Sat, 23-Feb-85 14:39:16 EST
Article-I.D.: brl-tgr.8552
Posted: Sat Feb 23 14:39:16 1985
Date-Received: Wed, 27-Feb-85 05:49:20 EST
Sender: news@brl-tgr.ARPA
Lines: 45

Actually one MOV would not work at all. You would need three,

MOV from :
     Hot to Neutral
     Neutral to Ground
     Ground to Hot

This protects the circuit from transients on any or any two of the
three legs of the feed. The real trouble is that the entire load of a
house can tax the MOVs unless you get the more expensive rated MOVs,
and besides most of the devices in the house are insensitive to
transients.

Second, the MOVs on the feed box would protect sensitive equipment
from the outside transients, but would not filter out the transients
that originate within a house. Yes the MOVs would trip and suppress
the transient, but also the power suppies of TV's, computers, etc
would also see the transient since they are on the short side of the
transient, so these devices would not have adequate protection.

The best advice is to install the MOVs as close to sensitive equipment
as possible and if you put MOVs in a outlet box, only plug in
compatible equipment into that box so that you can reduce possibility
of transients defeating the MOVs.

In my parents house, every spring the thundershowers knock out the
rectifiers in the TV. after two years and progressing through voltage
ratings up to the highest (~4Kv), I installed MOVs across the line AND
across the transformer output AND across the rectifier AND across the
output side of the logic supply. (Not across the tube supply of
course!) The cost was only about 15$, but after having the rectifier
replaced twice, and an entire main board replaced because the
transient took out most if not ALL of the IC's, I think the overkill
will save the boards. And for the last four years, there has not been
a single problem due to transients in the TV. (But transients did blow
the radio that was plugged into the SAME outlet).

This is why it is recommended that MOVs be placed in EACH item that

you wish to protect.

Peter Barada
ima!pbear!peterb

20$ of MOVs are worth more than the agrevation of blowing delicate
electrical equipment.

From -7864355563721579362
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,96afd030b472c31
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-23 11:50:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!
seismo!brl-tgr!tgr!godot!ima!pbear!peterb%harvard.uucp@Seismo
From: peterb%harvard.uucp%Seismo@pbear.UUCP
Newsgroups: net.ham-radio
Subject: MOV transient protectors
Message-ID: <8553@brl-tgr.ARPA>
Date: Sat, 23-Feb-85 14:50:38 EST
Article-I.D.: brl-tgr.8553
Posted: Sat Feb 23 14:50:38 1985
Date-Received: Wed, 27-Feb-85 05:49:38 EST
Sender: news@brl-tgr.ARPA
Lines: 51

Most MOVs are designated both by peak current and NOMINAL voltage
These devices work for both AC and DC. (AC devices will last longer
though).

If you hooked up MOVs at the feed box for the house, it would protect
from the outside disturbances, but not inside transients.

If you want to protect logic, I recommend tranzorb devices by GS
(general semiconductor), specifically the

    1N5908

This devices charecteristics are:

    1.5Kw Peak Pulse Power dissipation @ 25 deg c
    Tclamp (0 V to BVmin) < 1 pecoseconds! (theoretical)
        (can not measure it if < 3 picoseconds)
    Forward Surge rating (1/2 cycle):
        200amps, 1/120 second @ 25 deg c
    Steady State power dissipation:
        5W @ 75 deg c, lead length 3/8 inch
    Repitition rate (duty cycle):
        .05%

It comes in a molded case, (9.4mm X 5.08mm)

Clamping voltage is 7.2 volts, and rises only slightly to ~ 8 volts @ 100v and rises slightly beyond. This is unlike MOVs that may rise to quite higher than the nominal voltage indicated.

10Kpf capacitance, reducable to 200pf by schottky diode in series, 1KA @ 7.2 V

This is only one of the devices GS makes, and this is intended for logic protection. Originally designed for MIL work to protect from nuke EMP, these devices work quite well.

for more info, write GS for a catalog:

General Semiconductor Industries, Inc.
2001 West Tenth Place
Tempe, Arizona 85281
(602) 968-3101

This is not an endorsment of mine, however, a friend does endorse them.

Peter Barada
ima!pbear!peterb

PS cost of that little gem is about 75 cents!

From -613695978189790571
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d4c19598945131f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-23 14:13:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Update: eavesdropping on SCA transmissions
Message-ID: <487@ihu1h.UUCP>
Date: Sat, 23-Feb-85 17:13:03 EST
Article-I.D.: ihu1h.487
Posted: Sat Feb 23 17:13:03 1985
Date-Received: Wed, 27-Feb-85 04:17:40 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 37

x

Update: Eavesdropping on SCA Transmissions

A few weeks ago, I posed a question about listening to

SCA transmissions on the FM commercial broadcast band. An article in _M_o_n_i_t_o_r_i_n_g__T_i_m_e_s claimed that connecting a vlf receiver to an FM broadcast receiver would permit SCA detection.

Necessity being the mother of invention, a way was found to confuse the ICOM R71A into tuning below 100 kHz1, and after receiving substantial inspiration from Will Martin, Phil Karn, and others I now can report success!

With the R71A in the FM mode, tuned to 67 kHz, I connected the ICOM's vlf antenna input through a 0.1 ufd capacitor2 to the earphone jack of a $16 General Electric AM/FM portable radio, and can now listen in on the world of SCA!

In the first few minutes of tuning around, I've heard the Physicians' Network, Muzak, commodity reports, and several data transmissions.

Thanks again for the help!

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1. Parnass, Bob, "Trick the ICOM R71A below 100 kHz", to be published in _M_o_n_i_t_o_r_i_n_g__T_i_m_e_s_.

2. The capacitor is needed with the GE radio I used to block DC.

--

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -5955689788627448028
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ee4761ecf5047aca,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-23 19:35:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!WBD.TYM@OFFICE-2.ARPA
From: WBD.TYM@OFFICE-2.A (William Daul - Augmentation Systems - McDnD)
Newsgroups: net.ham-radio
Subject: License Status In California (what is it?)
Message-ID: <8559@brl-tgr.ARPA>
Date: Sat, 23-Feb-85 22:35:36 EST
Article-I.D.: brl-tgr.8559
Posted: Sat Feb 23 22:35:36 1985
Date-Received: Wed, 27-Feb-85 05:52:46 EST

Sender: news@brl-tgr.ARPA
Lines: 1

Does California have any special treatment for HAMs here? --Bi\\

From -6352092666120582893
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a49d51d1b4a63d9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-23 21:49:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!genrad!panda!talcott!harvard!
seismo!brl-tgr!tgr!jcp@BRL-TGR.ARPA
From: jcp@BRL-TGR.ARPA (Joe Pistritto)
Newsgroups: net.ham-radio
Subject: Re: HELP on rtty code needed
Message-ID: <8562@brl-tgr.ARPA>
Date: Sun, 24-Feb-85 00:49:41 EST
Article-I.D.: brl-tgr.8562
Posted: Sun Feb 24 00:49:41 1985
Date-Received: Wed, 27-Feb-85 06:12:27 EST
Sender: news@brl-tgr.ARPA
Lines: 9

I suspect that the two characters you are hearing are 'RY' repeated
over and over. This is a standard test pattern idle character combination,
used by lots of wire services.

On the subject of RTTY, I'm looking for good deals on converters, and
software for a TI99 (which I have just laying around the house), if
anyone knows anything good.

                              -JCP-

From -5536068172788438999
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cbc1d08ff9608db9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-24 12:53:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site idis.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!idis!trio
From: trio@idis.UUCP
Newsgroups: net.ham-radio
Subject: Need help servicing my Tempo S1 HT
Message-ID: <340@idis.UUCP>
Date: Sun, 24-Feb-85 15:53:44 EST
Article-I.D.: idis.340
Posted: Sun Feb 24 15:53:44 1985
Date-Received: Wed, 27-Feb-85 20:54:32 EST

Organization: University of Pittsburgh
Lines: 19

Does anyone out there have a lot of experience servicing the Tempo S1 2m HT? I'm having problems with mine and, of course, the schematic in Tempo's tech manual does not give all the voltages. The symptom is that I am getting almost no audio level (intermittently it will come on).

Also, is there any mod I can make to keep the CD4059ae CMOS synthesizer chip from being blasted by static (besides being EXTRA careful?

If you can help, please e-mail to me.

Thanks in advance,
Nick WB3COR
--
----- ----- ----- ----- ----- ----- ----- -----
Nick Trio -If you don't like the answer,
Grad Student - Sociology don't ask the question-
U. of Pittsburgh
...decvax!mcnc!idis!trio
---All of these views are mine and no one else's. So What?---

From -2201380950127210536
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,96afd030b472c31
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-24 18:42:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!wmb%sun.uucp@BRL-TGR
From: wmb%sun.uucp@BRL-TGR (Mitch Bradley)
Newsgroups: net.ham-radio
Subject: MOV transient protectors
Message-ID: <8582@brl-tgr.ARPA>
Date: Sun, 24-Feb-85 21:42:07 EST
Article-I.D.: brl-tgr.8582
Posted: Sun Feb 24 21:42:07 1985
Date-Received: Thu, 28-Feb-85 01:14:43 EST
Sender: news@brl-tgr.ARPA
Lines: 31

> What is the proper configuration for hooking up an MOV to a power
> line? (i.e. in series or in parallel?).

Parallel.

> If it hooks up in parallel to the power line, why wouldn't one MOV
> work for your entire house? It seems that it would, because all the
> lines in the house are connected to together in parallel.

That would work if you expect all the transients to be developed on the wiring outside of your house. This may be a reasonable expectation in some instances. However, if you are interested in protecting againt lightning strikes nearby, there could be significant spikes induced in the wiring inside the house.

The other problem with using one MOV for the whole house is protecting the MOV's. MOV's are sort of like big zener diodes, in that above a certain voltage, they start conducting heavily, but below that voltage they don't conduct very much. Notice I said "sort of", because they don't work on the same principle as zener diodes, nor are their breakdown characteristics as sharp or as well-defined as for zeners. Anyway, the problem is this: when the voltage across the MOV reaches the breakdown voltage and it starts conducting, something has to limit the current flow or the MOV will be itself destroyed. Typically, the current is limited by the resistance and inductance in the wiring. Since the wiring coming into a house is typically much heavier than the internal wiring, it is not as effective at limiting the current into the MOV as the smaller gauge internal wiring. This means you need a bigger MOV.

Mitch Bradley

From 2785216544564644810
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cc576c981f7d624c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 01:05:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!utcs!lsuc!pesnta!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: Info request on packet and emergency communications
Message-ID: <407@dsd.UUCP>
Date: Mon, 25-Feb-85 04:05:52 EST
Article-I.D.: dsd.407
Posted: Mon Feb 25 04:05:52 1985
Date-Received: Wed, 27-Feb-85 09:33:06 EST
Organization: AMPEX DSD, Redwood City, CA.
Lines: 22

To: All packet stations
From: Hank Magnuski, KA6M
Date: 24-Feb-85

Subject: Packet radio and emergency communications

Patti Winter, N6BIS, will be writing a major article for QST on the topic of the use of packet radio in emergency communications, and she is seeking information from anyone who has had experience in this area.

If you have written an article on this subject or done emergency planning
which incorporates the use of packet radio technology, please contact
Patti at the address below or send her a copy of your article.

She would like to meet/interview anyone with such experience at the
ARRL Networking conference in San Francisco at the end of March.

Patti Winter, N6BIS
P. O. Box 537
Menlo Park, CA 94026

408-973-2814 (days)

From -418105635994158026
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e1fdda49a7ecb235,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 01:06:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!utcs!lsuc!pesnta!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: Packet Activity in Alabama
Message-ID: <408@dsd.UUCP>
Date: Mon, 25-Feb-85 04:06:48 EST
Article-I.D.: dsd.408
Posted: Mon Feb 25 04:06:48 1985
Date-Received: Wed, 27-Feb-85 09:33:27 EST
Organization: AMPEX DSD, Redwood City, CA.
Lines: 14

M 14935 Lyle Johnson (WA7GXD,2973)   2/25/85 12:46 AM L:10
KEYS:/PACKET IS ALIVE AND WELL IN ALABAMA/
A: 14913   TO: (Group 95)

Hank,

There is a hotbed of packet activity in Birmingham Alabama, led by
Jim Grifith, WA5RAX. I thinkWA4YCM might find it fruitful to
contact Jim, Jim is the head of the Navy Marine Corps MARS Hi Tech
program, and the local VHF MARS network in Birmingham is packet.
This is used as a gateway switch for the long haul MARS traffic
that uses Birmingham as a hub.

Lyle

From -5389611857927531993
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: f9532,40c4e7b360227e5d
X-Google-Attributes: gidf9532,public

X-Google-Thread: 151e61,8ab73b431f7ae579,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 04:17:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 16 (FCC lifts rptr moratorium)
Message-ID: <15631@mgweed.UUCP>
Date: Mon, 25-Feb-85 22:43:15 EST
Article-I.D.: mgweed.15631
Posted: Mon Feb 25 22:43:15 1985
Date-Received: Wed, 27-Feb-85 20:31:27 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 11

qst de k9eui
hr arrl bulletin nr 16 from arrl headquarters
newington ct february 21, 1985
to all radio amateurs bt

in response to a petition filed by arrl, fcc has issued an
order lifting the moratorium on new repeater operation imposed
in nprm 85 22, the order dates that fcc will instead seek
permanent solutions to repeater problems in this proceeding ar

From 759338952022963851
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d438e50c5d2f557b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 06:00:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!utcs!lsuc!pesnta!amdcad!decwrl!dec-rhea!dec-mred!soomre
From: soomre@mred.DEC
Newsgroups: net.ham-radio
Subject: Kenwood R2000 timer function
Message-ID: <707@decwrl.UUCP>
Date: Mon, 25-Feb-85 09:00:09 EST
Article-I.D.: decwrl.707
Posted: Mon Feb 25 09:00:09 1985
Date-Received: Wed, 27-Feb-85 09:39:37 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 16

Has anyone had experiences (good or bad) in recording off the
Kenwood R2000 (or other hf receivers) using the built in timer ?

It would be nice to set the timer and record any traffic for a

specified amount of time while you are away.

The R2000 has a provision to do this, but I am not sure how
(or I should say if) it works with a regular cassette recorder.

Thanks for all the mail about my request on ACSB, it helped
clarify my understanding of it.

....
73's

Ed   N1BFF

From -7703257388716021293
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b63ab088119f0640,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,b63ab088119f0640,start
X-Google-Attributes: gid15c702,public
X-Google-ArrivalTime: 1985-02-25 09:31:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.audio
Subject: update: listening to SCA (subcarrier) transmissions
Message-ID: <488@ihu1h.UUCP>
Date: Mon, 25-Feb-85 12:31:34 EST
Article-I.D.: ihu1h.488
Posted: Mon Feb 25 12:31:34 1985
Date-Received: Wed, 27-Feb-85 08:42:21 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 82
Xref: watmath net.ham-radio:2435 net.audio:4196

Pardon me if you've seen this already, but article posting
here has been buggy:
======

         EAVESDROPPING ON SUBCARRIER TRANSMISSIONS

     A few weeks ago, I posed a question about listening to
     SCA transmissions on the FM commercial broadcast band.
     An article in _M_o_n_i_t_o_r_i_n_g__T_i_m_e_s claimed that connecting
     a vlf receiver to an FM broadcast receiver   would permit
     SCA detection.

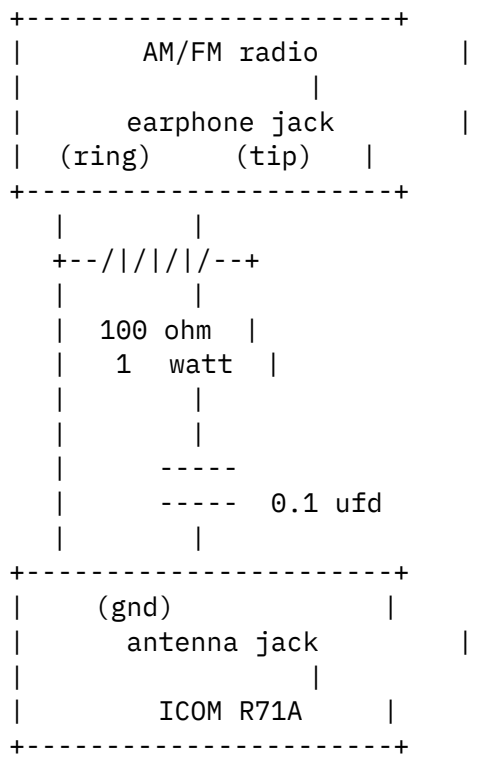
     Necessity being the mother of invention,   a way
      was
     found to   confuse   the ICOM R71A into tuning below 100

kHz1, and after receiving substantial inspiration from Will Martin, Phil Karn, and others I now can report success!

With the R71A in the FM mode, tuned to 67 kHz, I connected the ICOM's vlf antenna input through a 0.1 ufd capacitor2 to the earphone jack of a $16 General Electric AM/FM portable radio, and can now listen in on the world of SCA!

In the first few minutes of tuning around, I've heard the Physicians' Network, Muzak, commodity reports, and several data transmissions.

I built a simple SCA interface, consisting of a capacitor and resistor, into a plastic film canister.



Most activity is heard with AM/FM radio tuned to the FM broadcast band, and the R71A set to 67 kHz FM. Aside from the Muzak, commodity reporting, and the Physicians' Network, I also heard an announcer reading from _P_o_p_u_l_a_r__C_o_m_m_u_n_i_c_a_t_i_o_n_s on CRIS, the Chicago Radioland Information Service. This service carries programming of interest to the handicapped.

With the AM/FM radio tuned to the AM broadcast band, and the R71A set to 60 kHz AM, I can hear what seems to be stereo subcarriers on AM broadcast stations claiming

to transmit in AM stereo.

---

1. Parnass, Bob, "Trick the ICOM R71A below 100 kHz", to be published in _M_o_n_i_t_o_r_i_n_g__T_i_m_e_s_.

2. The capacitor is needed with the GE radio I used to block DC.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -2802667927358259192
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7fbd0fd0a959a2b8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 09:47:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!Hardie@MIT-MULTICS.ARPA
From: Hardie@MIT-MULTICS.ARPA (Maj. Douglas Hardie)
Newsgroups: net.ham-radio
Subject: Re: License Status in California
Message-ID: <8607@brl-tgr.ARPA>
Date: Mon, 25-Feb-85 12:47:55 EST
Article-I.D.: brl-tgr.8607
Posted: Mon Feb 25 12:47:55 1985
Date-Received: Thu, 28-Feb-85 12:29:52 EST
Sender: news@brl-tgr.ARPA
Lines: 6

I have ham plates from Calif. I paid something like $25 for them the
first time. There does not appear to be a reoccuring charge each year.
Its my understanding that vanity plates have a special charage each
year, but ham plates are one time only.

-- Doug WA6VVV

From 8617227741145557052
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6a8fecfe7e0533bb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 11:46:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: nyu notesfiles V1.1 4/1/84; site rocksvax.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!hoxna!houxm!mhuxj!mhuxr!
ulysses!allegra!bellcore!decvax!genrad!panda!talcott!harvard!seismo!rochester!

rocksvax!dave
From: dave@rocksvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: ACSB Transmissions
Message-ID: <2300001@rocksvax.UUCP>
Date: Mon, 25-Feb-85 14:46:00 EST
Article-I.D.: rocksvax.2300001
Posted: Mon Feb 25 14:46:00 1985
Date-Received: Fri, 1-Mar-85 06:25:59 EST
References: <625@dec-mred.UUCP>
Lines: 25
Nf-ID: #R:dec-mred:-62500:rocksvax:2300001:000:1163
Nf-From: rocksvax!dave   Feb 25 14:46:00 1985

In ACSB a few percent of the channel power is dedicated to sending a pilot carrier that is related to the actual carrier in some fashion out of the normal "audio" band. The receiver phase locks to this pilot tone and adjusts the BFO of the receiver to the exact frequency, eliminating the normal "Donald Duck" effect of SSB mis-tuning.

From what my roommate who owns a two-way shop says, the stuff is great in strong signal areas, but when you get into the fringes the signal deteriorates very rapidly, especially in fluttery conditions prevail.

My partner in my new company was the marketing VP for Sideband Technology who perfected the technology told me of the gawking that the Motorola folks did at the trade show they demonstrated their radio at, seems that they where playing Barbara Striesdan(sp?) through their box and it didn't sound half bad.

Motorola is like the IBM of the radio industry, whatever they invent is "real". No one belieese anything can be done 'til they commercialize it. Kinda like the recent IBM development of 'full-duplex' terminals.

Dave N2GH

arpa: Sewhuk.HENR@Xerox.ARPA
uucp: {allegra,rochester,amd,sunybcs}!rocksvax!dave

From -9182990232102957152
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e94f3402a00bf951
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 11:56:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!utcs!lsuc!pesnta!hplabs!hao!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Automobile Ham call sign plates
Message-ID: <8620@brl-tgr.ARPA>

Date: Mon, 25-Feb-85 14:56:47 EST
Article-I.D.: brl-tgr.8620
Posted: Mon Feb 25 14:56:47 1985
Date-Received: Wed, 27-Feb-85 10:29:04 EST
References: <8484@brl-tgr.ARPA>
Organization: Ballistic Research Lab
Lines: 10

My problem is that I can't get tags for my car bearing both the
fire department insignia and my call letters. I have to choose
one or the other. Even though FD tags are 4 dollars cheaper a
year I go for HAM TAGS. More indicative of who I am, but I am
always explaining to gas station attendants what they are as they
write them down on the credit slip. There are also legal reasons
why I want to keep my anonymity about being a fire fighter while
driving down the road.

-Ron

From 8210052481102427299
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ee4761ecf5047aca
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 15:00:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!hoxna!houxm!mhuxj!mhuxr!
ulysses!allegra!bellcore!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
BRAD@SU-CSLI.ARPA
From: BRAD@SU-CSLI.ARPA (Brad Horak)
Newsgroups: net.ham-radio
Subject: Re: License Status In California (what is it?)
Message-ID: <8638@brl-tgr.ARPA>
Date: Mon, 25-Feb-85 18:00:24 EST
Article-I.D.: brl-tgr.8638
Posted: Mon Feb 25 18:00:24 1985
Date-Received: Fri, 1-Mar-85 06:23:18 EST
Sender: news@brl-tgr.ARPA
Lines: 8

Ham plates in California cost $15 initially (up from $3 before 1979), with
no yearly charge. They cost $7 to transfer them to another vehicle.
Vanity plates cost something like $25 (blue) or $30 (reflective white)
initially with a $10 yearly charge.

--Brad N6BDE

From 5141824428909011260
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,268d9bfe208f4ad,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 15:29:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2e.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!houxm!hou2e!rs173
From: rs173@hou2e.UUCP (R.SILVER)
Newsgroups: net.ham-radio
Subject: No Single Sideband on some Sony ICF 7600d
Message-ID: <482@hou2e.UUCP>
Date: Mon, 25-Feb-85 18:29:30 EST
Article-I.D.: hou2e.482
Posted: Mon Feb 25 18:29:30 1985
Date-Received: Wed, 27-Feb-85 08:33:13 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 13

My friend recently purchased a 7600d (2002) identical in every way
to mine, EXCEPT that its 'normal-fine tune-ssb' 3-position switch has
only 2-POSITIONS. The SSB function is not there !! The switch appears
to be mechanically restricted to 2 positions, and does not say 'ssb'
like mine does. This set appears (by its english-arabic handbook) to
have been made for the arabs.
Why would the ssb function be left-out of their version??
Is it there electrically if the mechanical restraint is removed??

I would greatly appreciate help on this.
thanks Ron Silver ...hou2e!rs173

From 6686165774893063659
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,96afd030b472c31
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 18:25:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!edens@ALMSA-1
From: edens@ALMSA-1 (Crede Edens)
Newsgroups: net.ham-radio
Subject: MOV transient protectors
Message-ID: <8646@brl-tgr.ARPA>
Date: Mon, 25-Feb-85 21:25:10 EST
Article-I.D.: brl-tgr.8646
Posted: Mon Feb 25 21:25:10 1985
Date-Received: Fri, 1-Mar-85 07:40:33 EST
Sender: news@brl-tgr.ARPA
Lines: 6

There is a very good article in the December 1983 BYTE magazine on
MOVs plus pictures and diagrams showing how to connect them.

I found it very helpful.

Crede Edens EDENS@ALMSA-1.ARPA

From 9120389213783974766
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1b96bcf1277caffd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 19:42:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 8
Message-ID: <15630@mgweed.UUCP>
Date: Mon, 25-Feb-85 22:42:14 EST
Article-I.D.: mgweed.15630
Posted: Mon Feb 25 22:42:14 1985
Date-Received: Wed, 27-Feb-85 20:31:00 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 33

qst de k9eui
hr propagation forecast bulletin nr 8 from arrl headquarters
newington ct february 24, 1985
to all radio amateurs bt

the solar flux reached its february high, 78, on the 19th. it then dropped back steadily, to the months low, 72, on the 24th. the flux is expected to drop to about 70 by the end of february. a mild rise is likely in the first few days of march.

qst prediction charts covering late february and early march continue to be on the optimistic side as to maximum usable frequencies. the february qst charts are based on a solar flux of 89. those in the march issue are based on a flux of 88. experience this winter has confirmed that solar flux numbers in the high seventies or higher are needed if the 21 mhz band is to be useful for dx work on anything but the most favorable north south paths. flux values consistently in the eighties or higher are needed to do the same for 28 mhz. with the current flux readings even 14 mhz is mainly a daytime band.

low ionization density generated by such low solar activity will continue to turn our lower frequencies into long skip territory, often hampering their use for reliable communication over distances under a few hundred miles. this is bad for traffic handlers but it helps to spur interest in working for

multiband dx awards.

american sunspot numbers for february 14 to 20 were between 25
and 0 with a mean of 10.1   ar

From 1895348301457049044
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2931249188c6c005,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-25 21:01:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!WANCHO@SIMTEL20.ARPA
From: WANCHO@SIMTEL20.ARPA (Frank J. Wancho)
Newsgroups: net.ham-radio
Subject: SWL receiver in $100 range purchase
Message-ID: <8649@brl-tgr.ARPA>
Date: Tue, 26-Feb-85 00:01:18 EST
Article-I.D.: brl-tgr.8649
Posted: Tue Feb 26 00:01:18 1985
Date-Received: Fri, 1-Mar-85 07:45:53 EST
Sender: news@brl-tgr.ARPA
Lines: 9

I'm trying to interest my 10-yr old in SWL and get not just another
radio. The ones we've been looking at that have any kind of SW bands
run around $120 or so. Do you know of or have any pointers to
anything more reasonable in about the $100 range or so. (It's his
money, and I don't really want him to drain all $135 he has on
something that may turn out less than interesting to him due to lack
of features, etc.)

--Frank

From -7707284201122574783
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2332cef676b4e5f6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-26 01:28:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!utcs!lsuc!pesnta!amdcad!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: ARRL Networking Conference - Visit booth 833/835
Message-ID: <410@dsd.UUCP>
Date: Tue, 26-Feb-85 04:28:01 EST
Article-I.D.: dsd.410
Posted: Tue Feb 26 04:28:01 1985
Date-Received: Wed, 27-Feb-85 10:26:23 EST

Organization: AMPEX DSD, Redwood City, CA.
Lines: 33

To: All packet radio stations
From: Hank Magnuski, KA6M
Date: February 25th, 1985

Subject: ARRL Networking Conference - See us at Faire Booth 833/835

The management of the 10th West Coast Computer Faire conference confirmed today that the ARRL & Pacific Packet Radio Society will have a very large 20' x 10' booth near the center of the exhibit area. We plan to have an ongoing demonstration of packet radio equipment and technology at the booth, and hope that this exhibit will be of interest to the many computer oriented hams who will be in attendance at the show.

This message is a formal request for members of the various packet radio associations to participate in the exhibition by bringing with you stacks of your newsletters, membership applications and any other material which would be appropriate. We will have this literature on display and would be pleased to help promote packet in your area.

In other developments, I have been informed that Steve Goode, K9NG, will bring his 9600 bps radio modems to the conference. This, for sure, will be the year that amateur packet radio moves to 9600.

If you haven't made your travel plans yet, do it today! The special 30-day advanced purchase discount airline tickets will expire in a few days.

73, Hank

H. S. Magnuski, 311 Stanford Avenue, Menlo Park, CA 94025 415-854-1927

EIES (DRNET): KA6M,2971
Telemail: HMAGNUSKI/AMSAT
Usenet: ucbvax!decwrl!amdcad!fortune!dsd!dna

From 2733379413295425905
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,96afd030b472c31
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-26 06:36:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ecsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!mcnc!ecsvax!hes
From: hes@ecsvax.UUCP (Henry Schaffer)
Newsgroups: net.ham-radio
Subject: Re: MOV transient protectors
Message-ID: <764@ecsvax.UUCP>
Date: Tue, 26-Feb-85 09:36:41 EST
Article-I.D.: ecsvax.764
Posted: Tue Feb 26 09:36:41 1985

Date-Received: Fri, 1-Mar-85 07:33:54 EST
References: <8582@brl-tgr.ARPA>
Organization: NC State Univ.
Lines: 17

Re: protecting your house from lightning carried on the
incoming power lines.
1)Most homes around here have 3 line, single phase 120/240
service. All three lines should be protected- taking 3 MOVs
or ONE three-electrode gas tube. When the gas tube is fired
(due to voltage on any pair of lines) it "shorts" all three
lines together.
2)At the entrance to the house wiring the power lines can
indeed supply lots of power and so the protection device must
be able to pass lots of current and dissipate lots of power.
Once again a gas tube fits the description.
  A company I've dealt with (through a distributor) which makes
a variety of gas tube surge protectors is TII (I don't remember
what it stands for, and I can't find my catalog.) An example of
a home lightening surge protector (from a 6 year old spec sheet):
Three wire, maximum discharge voltage: 450V@500AMP, 800V@1,000AMP
2 1/2" x 2 1/2" x 1 3/8" + 1/2" threaded nipple $21.54.

From -7355410852948590551
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d4c19598945131f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-26 10:06:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!ERWINVL.DLOS@XEROX.ARPA
From: ERWINVL.DLOS@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Update: eavesdropping on SCA transmissions
Message-ID: <8666@brl-tgr.ARPA>
Date: Tue, 26-Feb-85 13:06:26 EST
Article-I.D.: brl-tgr.8666
Posted: Tue Feb 26 13:06:26 1985
Date-Received: Fri, 1-Mar-85 09:15:55 EST
Sender: news@brl-tgr.ARPA
Lines: 13

BOB,

SOUNDS LIKE A LOT OF TROUBLE JUST TO LISTEN TO SCA. I HAVE BEEN
LISTENING TO SCA FOR AROUND 8 YRS NOW. LOOK AT ONE OF THE OLDER
SIGNETICS APPLICATIONS BOOKS AND THERE IS A SLICK LITTLE CIRCUIT THAT
WILL ALLOW YOU TO DO IT WITH A 565 PHASE LOCK LOOP CHIP. THE 565 DOES
THE DETECTION AT 67 KHZ WHICH MEANS THAT YOU DON'T NEED TWO RECEIVERS!!.
JUST TUNE THE FM RECEIVER AND THE PLL DOES ITS THING!!

REGARDS,

VAL L. ERWIN
W5PUT

From -7662559808006184233
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2931249188c6c005
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-26 12:34:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!cord!ihnp1!ihnp4!houxm!whuxl!
whuxlm!akgua!sdcsvax!dcdwest!ittvax!decvax!genrad!panda!talcott!harvard!seismo!
brl-tgr!tgr!wmartin@ALMSA-1.ARPA
From: wmartin@ALMSA-1.ARPA (Will Martin -- AMXAL-RI)
Newsgroups: net.ham-radio
Subject: Re: SWL receiver in $100 range purchase
Message-ID: <8677@brl-tgr.ARPA>
Date: Tue, 26-Feb-85 15:34:14 EST
Article-I.D.: brl-tgr.8677
Posted: Tue Feb 26 15:34:14 1985
Date-Received: Sun, 3-Mar-85 03:22:13 EST
Sender: news@brl-tgr.ARPA
Lines: 73

Hi, Frank!

Here's a few thoughts on the SWL-radio-for-$100 idea:

a) Unfortunately, you just missed the pre-Christmas deal on the closeout
of the Uniden CR-2021 portable digital-keypad receiver, one of the biggest
bargains in the SW world for some time. There is a ghost of a chance that
you could find one, or maybe someone who got one for a gift and doesn't
want it would let it go for the sale price, which was $90-$110, depending
on the dealer. Ther were 4000 of these, I understand, and they went all
over the country, so chances of locating one are slim...

b) Pick up a library or newsstand copy of the latest ham radio magazines
(QST, 73, CQ, ham radio) and check for local hamfests coming in your
area. You can often find good general-coverage tube receivers there for
well under $100; you are expected to haggle, but you have no guarantee
or assurance the thing will work when you get it home and plug it in.
If you do any electronic repair work, this is the most economic route.
If you have to pay a local shop to fix a flea-market deal, it won't pay.

c) Check if any local ham-equipment or two-way radio dealer(s) have
bulletin boards in their stores. You will often see "for-sale" ads
from people with receivers for sale, and you can post your own "wanted"
ads. At least in this case, you can usually go to the seller's house
and try out the receiver before buying it.

d) Those same dealers might have trade-in or consignment used gear to sell. You can sometimes get a warranty via this route, but you'll pay more than flea-market or individual-seller prices.

e) Mail-order discount houses -- Check the ads in Popular Communications for SWL-emphasis; the same firms advertise in the ham magazines but list few receivers. Also check the Sunday New York Times (I think mainly the "Arts & Entertainment" section) for the New York discount electronics & photo gear houses. The prices advertised there are lower than in their catalogs or magazine ads, usually. There are some Sony & Panasonic models you'll find at all these sources, and some Kenwood, Toshiba, & other brand portables that will be in the Popular Communications ads but not in the discounters' ads. The main problem with the items you'll find for $100 and under is that most of them make performance compromises for the sake of small size, and technology compromises to get down to under $100. For $160 or so, you can get high technology portables like the Sony 7600D/2002, so the $80-range portables tend to be rather mediocre slide-rule-dial-type machines with little to recommend them.

What would I do? I'd try to get a good old tube-type communications receiver. I used to have a Hallicrafters SX-96, which I regret ever letting go (traded it in on a fancier receiver I never liked as well). If you can find a working model, you should be able to get it for less than $100. (They do tend to hold their value -- I paid $100 for my used SX-96 and traded it in for $100 credit a decade later! -- at least in dollar amounts as inflation cheapens the dollar, so I would think $100 is still a fair price, even now, 15 years farther down the line.)

These older tube receivers still have good reputations; many DXers prefer older Hammarlunds or Collins models to the newer, fancier, and more expensive models. Only recently have some specifications, like dynamic range, on the newer solid-state receivers been improved to equal the specs of the better older receivers. They are physically large and steady, and have a better tuning "feel" than most newer smaller types. If you get one, I recommend that you stock up on spare tubes from some of the low-cost surplus or mail-order dealers, since many types of tubes are no longer in production.

If you get one, be careful to make sure that it is a general-coverage receiver; many came in ham-band-only models, the difference being mainly one digit of the model number. Most of the general-coverage models had ham-band-calibrated bandspreads, which can confuse the casual glance.

Regards,
Will

ARPA/MILNET: wmartin@almsa-1.ARPA USENET: seismo!brl-bmd!wmartin

From -7629056531609605194
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e94f3402a00bf951
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-02-26 13:59:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site terak.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!whuxl!whuxlm!akgua!
sdcsvax!dcdwest!ittvax!decvax!genrad!panda!talcott!harvard!seismo!hao!noao!terak!
doug
From: doug@terak.UUCP (Doug Pardee)
Newsgroups: net.ham-radio
Subject: Re: Automobile Ham call sign plates
Message-ID: <397@terak.UUCP>
Date: Tue, 26-Feb-85 16:59:56 EST
Article-I.D.: terak.397
Posted: Tue Feb 26 16:59:56 1985
Date-Received: Sun, 3-Mar-85 03:28:37 EST
References: <8484@brl-tgr.ARPA>
Organization: Terak Corporation, Scottsdale, AZ, USA
Lines: 27

> Ham plates are NOT just vanity plates !! What if some constable finds that
> his radio just went out and he needs a HAM to patch him through to his home
> precinct? What T H E N ? ? ? If the next passing ham doesn't have his
> callsign plates on because he is too destitute to pay "vanity" rates for them,
> the public interest will be poorly served indeed!

C'mon, let's get serious. If we really want to claim that we should
have cut-rate vanity plates because "we can perform a communications
service", then CB'ers are even more entitled.

While it is only a minority of hams who actually have mobile equipment,
the vast majority of CB'ers are mobile-only.

In addition you'll find a great number of radio-dispatched business
vehicles on the road. Should they get cut-rate plates too?

And how about cars equipped with mobile telephones? Especially the
new cellular phones which provide a much more flexible and convenient
communications service than ham radio? Should you get a cut-rate
vanity plate if you have a mobile phone?

The days of hams having a monopoly on civilian mobile radio equipment
are long gone. The days of hams regularly "serving the public interest"
never existed to begin with. Let's face reality, and behave like the
"responsible citizens" that we like to think we are. ----- Doug, N7FB
--
Doug Pardee -- Terak Corp. -- !{hao,ihnp4,decvax}!noao!terak!doug

From -6075096979390844207
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab470f5ff4bd7612,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-26 14:29:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: notesfiles - hp 1.2 08/01/83; site hp-pcd.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!crsp!pesnta!hplabs!hp-pcd!dirk
From: dirk@hp-pcd.UUCP (dirk)
Newsgroups: net.ham-radio
Subject: info on TH-21AT wanted
Message-ID: <5200001@hp-pcd.UUCP>
Date: Tue, 26-Feb-85 17:29:00 EST
Article-I.D.: hp-pcd.5200001
Posted: Tue Feb 26 17:29:00 1985
Date-Received: Fri, 1-Mar-85 10:15:16 EST
Organization: Hewlett-Packard - Corvallis, OR
Lines: 5
Nf-ID: #N:hpcvmb:5200001:000:187
Nf-From: hpcvmb!dirk   Feb 26 14:29:00 1985

Does anyone out there know anything about the new Kennwood TH-21AT?
I am interested in buying one and would like to know if you think
it is worth the money.

     Dirk Bodily   hp-pcd!dirk

From -1996897785160447988
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dcb21c906a2645ac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-26 20:02:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: dead backup battery in ICOM => reprogram the RAM
Message-ID: <491@ihu1h.UUCP>
Date: Tue, 26-Feb-85 23:02:47 EST
Article-I.D.: ihu1h.491
Posted: Tue Feb 26 23:02:47 1985
Date-Received: Thu, 28-Feb-85 20:25:31 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 42

x
            LOSS OF ICOM BACKUP BATTERY FORCES
                REPROGRAMMING OF RAM

     A friend from Wheaton (MD) asked me to post this war-
     ning:

            If you own an ICOM R71,   751, 271, or   471,
            don't disconnect the lithium battery on the
            memory board!

All these models use a common $17 memory plug-in board which contains 2 IC's (one a Japanese 2114 RAM) and a lithium battery.

This fellow wanted to experiment with the memory circuit, so he disconnected the battery in order to install a socket for the RAM.

His radio didn't work when he reconnected everything, and a call to ICOM confirmed that the RAM contains the microcode which gives each model radio its own personality. His board is on its way back to ICOM for reprogramming, which can't be done at the dealer's.

For ICOM owners, this means that when the lithium battery runs down (7 year life), the memory board must be sent in for reprogramming.

For those interested in the R71A service manual, a disappointing note: the manual does not contain schematics for the speech synthesizer or IR remote control.

This fellow is contemplating using his home computer, which uses 2114s to determine the contents of the ICOM
RAM, and is looking for other suggestions. It would be useful to modify the contents of the RAM to permit out of band reception.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -5241949205331487181
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5fb0920716e165ab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-26 20:25:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!whuxl!whuxlm!akgua!
sdcsvax!dcdwest!ittvax!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
chazf@BRL-TBD
From: chazf@BRL-TBD (Chaz Fisher)
Newsgroups: net.ham-radio
Subject: The demise of Ziff-Davis
Message-ID: <8696@brl-tgr.ARPA>
Date: Tue, 26-Feb-85 23:25:44 EST
Article-I.D.: brl-tgr.8696
Posted: Tue Feb 26 23:25:44 1985
Date-Received: Sun, 3-Mar-85 02:47:18 EST
Sender: news@brl-tgr.ARPA

Lines: 11

According to the editor of Car and Driver - a rare beast among Z-D
magazines: they make a profit - what is really going on here is that
Ziff-Davis itself is going under. They have sold a number of
magazines, C/D included, to CBS, and are in the process of
selling/closing nearly everything else. So if you want a refund from
a defunct magazine, I suggest you move quickly.

More info on this is included in editor David E. Davis's Driver's Seat
column, February 1985 issue of Car and Driver.

Chaz Fisher (chazf@brl-tbd.arpa)

From -6387813920516606847
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,30b6568dacafb6d1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-26 20:33:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!whuxl!whuxlm!akgua!
sdcsvax!dcdwest!ittvax!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
sdyer%bbnccv.uucp@BRL-TGR
From: sdyer%bbnccv.uucp@BRL-TGR (Steve Dyer)
Newsgroups: net.ham-radio
Subject: Computers and Electronics magazine bites the dust
Message-ID: <8697@brl-tgr.ARPA>
Date: Tue, 26-Feb-85 23:33:32 EST
Article-I.D.: brl-tgr.8697
Posted: Tue Feb 26 23:33:32 1985
Date-Received: Sun, 3-Mar-85 02:47:32 EST
Sender: news@brl-tgr.ARPA
Lines: 10

Last week the staff of Computers and Electronics (nee Popular Electronics)
was called together to announce its closing. Thus, another Ziff-Davis
magazine, like Microsystems, PC Jr., has folded. Can Creative Computing
be far behind?

This information was given to me by a former Z-D employee, now with CBS.
--
/Steve Dyer
{decvax,linus,ima,ihnp4}!bbncca!sdyer
sdyer@bbnccv.ARPA

From 2714205829171446628
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab8b9a43c3a9072c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-26 20:42:11 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!whuxl!whuxlm!akgua!
sdcsvax!dcdwest!ittvax!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
GUBBINS@RADC-TOPS20
From: GUBBINS@RADC-TOPS20 (Gern)
Newsgroups: net.ham-radio
Subject: The Passing of Computers and Electronics...
Message-ID: <8698@brl-tgr.ARPA>
Date: Tue, 26-Feb-85 23:42:11 EST
Article-I.D.: brl-tgr.8698
Posted: Tue Feb 26 23:42:11 1985
Date-Received: Sun, 3-Mar-85 02:52:53 EST
Sender: news@brl-tgr.ARPA
Lines: 16

This is a bit sad. Popular Electronics had its first issue in
October 1954. Its competition was and still is Radio Electronics.
Together, but separately, these two magazines started the micro
computer revolution with the introduction of build it yourself kits.
Radio Electronics came out with a micro based on the Intel 8008
and Popular Electronics was soon to follow with a microcomputer
based on the new Intel 8080 called the Altair. The Altair used
what is now called the S-100 bus (the Zenith Z-100 is a direct
descendant). In November 1982 Popular Electronics was renamed
Computers & Electronics. The magazine, in my opinion, currently
has degraded down to the trash level (the level of Popular Computing)
from what was once a great magazine - this is the sad part. A message
on INFO-MICRO states that the publisher announced that it will bite
the dust soon. 31 years....

Gern

From -7961649236727137788
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82a08a9c647425ac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-26 20:50:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!whuxl!whuxlm!akgua!
sdcsvax!dcdwest!ittvax!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
munck@MITRE-BEDFORD
From: munck@MITRE-BEDFORD
Newsgroups: net.ham-radio
Subject: The Real Death of Popular Electronics
Message-ID: <8699@brl-tgr.ARPA>
Date: Tue, 26-Feb-85 23:50:14 EST
Article-I.D.: brl-tgr.8699
Posted: Tue Feb 26 23:50:14 1985
Date-Received: Sun, 3-Mar-85 02:53:20 EST
Sender: news@brl-tgr.ARPA

Lines: 14

It is indeed sad. Popular Electronics led me and many of my friends toward technology before Sputnik made it a national obsession, and for many years helped me keep a scratching toehold on the advancing state-of-the-art in hardware as an important part of earning my living in software. The name change to Computers and Electronics, and the content changes that accompanied it, were an obvious step off the cliff, and it's now hit bottom. At 30 years, my PE subscription was second only to ASF.

This Ziff person is really building up a debt; in addition to the mags, he zapped a number of friends of mine who'd worked very hard to put together a large, highly-accessable data base system for him.
-- Bob Munck

From -8403030652520812462
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,42506fe45aa8decf
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-28 09:30:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site watcgl.UUCP
Path: utzoo!watmath!watcgl!dmmartindale
From: dmmartindale@watcgl.UUCP (Dave Martindale)
Newsgroups: net.ham-radio
Subject: Re: Noisy dimmers and fluorescent lights?
Message-ID: <1080@watcgl.UUCP>
Date: Mon, 28-Jan-85 12:30:30 EST
Article-I.D.: watcgl.1080
Posted: Mon Jan 28 12:30:30 1985
Date-Received: Tue, 29-Jan-85 05:42:45 EST
References: <942@vax135.UUCP> <143@redwood.UUCP>
Reply-To: dmmartindale@watcgl.UUCP (Dave Martindale)
Organization: U of Waterloo, Ontario
Lines: 17

Another (expensive) alternative to triac dimmers: use an autotransformer. They're physically too large to install in an outlet box, and require ventilation air in the higher current ratings, but they do work.

I have one controlling the reading lamp over my bed, and the computer graphics lab here uses incandescent lamps on autotransformers as dimmers. In both these cases, the reason was avoiding audio noise, not RFI. Incandescent lamps driven by the waveform put out by a triac dimmer "buzz" audibly; with the autotransformer the only sound is the (very quiet) hum of the transformer itself.

As a side benefit, the lamp can be taken smoothly right down to zero light output, something that just doesn't work with the triac dimmers.

When picking an appropriate size of autotransformer dimmer, remember
that incandescent lamps are not constant-impedance devices - use
the transformer ratings intended for constant-current loads.

From -7400347834609985114
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e2f37927521f88d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-29 06:23:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site lcuxc.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!pyuxww!lcuxc!wjm
From: wjm@lcuxc.UUCP (B. Mitchell)
Newsgroups: net.ham-radio
Subject: Re: light dimmers
Message-ID: <192@lcuxc.UUCP>
Date: Tue, 29-Jan-85 09:23:32 EST
Article-I.D.: lcuxc.192
Posted: Tue Jan 29 09:23:32 1985
Date-Received: Wed, 30-Jan-85 07:39:13 EST
Organization: Bell Communications Research, Inc.
Lines: 33

<gulp>
Agreed, RFI from el-cheapo solid state light dimmers can be a serious problem.
I had one in my living room, but took it out when it started spitting QRM into
my hi-fi system.
The problem is that the SCR or triac does the dimming by "chopping" the AC
sine wave part way through the cycle. Since incandescent lamps have a
fairly long time lag - chopping a 60Hz wave reduces the RMS voltage level
causing the bulb to dim without *too* much flicker. But this chopped wave
has a rather high harmonic content and that's what's causing the RFI.
You can try the standard RFI suppression tricks. Make sure the light dimmer
is in a metal box (even if your local electrical code allows nonmetallic
outlet boxes) and that the box is solidly grounded (again, the National
Electrical Code requires metallic outlet boxes to be grounded). Also try
ferrite beads on all the dimmer leads.
However, I'd suggest getting away from the solid state dimmer altogether and
using one of the following alternatives:
1) Wire the lights on several switches - this is probably the least expensive
approach, although it only gives you a few levels of light - you can get three
levels of light from two switches by putting 1/3 of the lamps on one and 2/3 on
the other.
2) Use an autotransformer for dimming the lights. Admittedly, autotransformers
aren't cheap, and they are too large to fit in a standard box, but their output
is a sine wave and they don't produce RFI. Also, autotransformers can be used
to dim fluorescent lamps as well as incandescent ones. (You do need special
dimmer ballasts in the fluorescent fixtures and the temperature should stay
above 55-60 degrees F when the lamps are dimmed). Keep in mind the National
Electrical Code requirements that autotransformers be grounded and that the
grounded circuit conductor (the neutral or white wire) be common to both
input and output circuits). Also, an autotransformer is NOT an isolating

device, so consider the secondary circuit to be part of the AC line.
73's
Bill Mitchell, WB2IAU, (ihnp4!lcuxc!wjm)

From 2857066888873072936
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9de88f5e715279aa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-29 08:12:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site zeus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!vax135!
cornell!uw-beaver!tektronix!teklds!zeus!jhb
From: jhb@zeus.UUCP (John H. Burgess)
Newsgroups: net.ham-radio
Subject: Re: My request for help with novice tests
Message-ID: <453@zeus.UUCP>
Date: Tue, 29-Jan-85 11:12:47 EST
Article-I.D.: zeus.453
Posted: Tue Jan 29 11:12:47 1985
Date-Received: Thu, 31-Jan-85 01:26:45 EST
Organization: Tektronix, Beaverton OR
Lines: 33

First of all, thanks to those of you who took the time to respond to my query.
Lots of good information came out of it, which I will forward to the net:

1) The Sept. 1983 QST has an article on page 56 that describes the (then new)
    Novice test procedure. It lists the FCC's novice test bank of 200 ques-
    tions from PR Bulletin 1035-A. It also invites people to send an s.a.s.e.
    to ARRL and ask for their "ARRL Novice Test". It is a "multiple-choice
    version of the question pool along with complete instructions to examiners
    and applicants". I sent for that yesterday.

2) Apparently, some time ago, some hard-working person typed in the entire
    question pool, with correct answers only (not mult choice) and sent it to
    the net. This was forwarded to me. Its handy being machine-readable.

3) A single multiple-choice test, with an answer key was provided. This solved
    my immediate need of giving the test to an applicant.

One of the questions prompted a fair amount of controversy and friendly rivalry
among the people I showed it to. Let's see how the net votes:

        2D-7.7 If an SWR bridge reading is higher at 3700 kHz than it is
                at 3750 kHz, what does this indicate about the antenna?

              A. The antenna is too long
              B. The antenna is too short
              C. The antenna is too high
              D. The antenna is too low

Again, my thanks to those who provided responses.

John Burgess, N7DCQ

From -1139456127928441218
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,86d951d4437c6936
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-29 14:27:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: NJ exempts hams from mobile scanner law
Message-ID: <7828@brl-tgr.ARPA>
Date: Tue, 29-Jan-85 17:27:03 EST
Article-I.D.: brl-tgr.7828
Posted: Tue Jan 29 17:27:03 1985
Date-Received: Sat, 2-Feb-85 23:55:03 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 14
Xref: seismo net.ham-radio:2346

AMEN, BROTHER!!!

Maybe it's time to start pushing the ARRL to do something about the various local laws which try to restrict radio reception. As I understand it, all it would take is for the Feds to officially claim pre-emption in this area. Is there a lawyer in the house who could comment on this?

>From earlier conversations I have had with FCC personnel, it is the FCC's 'feeling' that the burden of privacy rests with the sender of information -- they should scramble if they don't want it overheard. (I know a lot of vendors of scrambling equipment who agree, too!)

-John Sangster, W3IKG
jhs at mitre-bedford

From -1055981120662457099
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,582ce4a9fcd94899,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-29 14:42:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!hplabs!hp-pcd!john@Ucb-Vax

From: john%Ucb-Vax@hp-pcd.UUCP
Newsgroups: net.ham-radio
Subject: NJ exempts hams from mobile scan
Message-ID: <7831@brl-tgr.ARPA>
Date: Tue, 29-Jan-85 17:42:04 EST
Article-I.D.: brl-tgr.7831
Posted: Tue Jan 29 17:42:04 1985
Date-Received: Sat, 2-Feb-85 13:37:26 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 22

Having a monitor that receives the local police freqs would certainly make life easier for the professional thief. I suspect that this law was passed mainly to give the police reasonable cause to stop and question suspicious cars that have antennas on them. If they happen to notice some crowbars and assorted loot in the back seat then so much the better. Then even having a permit won't help them.

The exclusion of hams makes life a lot easier for both the hams and the local police who don't have to deal with all that paperwork. It will be interesting to see how this law is enforced because if the police can stop anyone with an antenna (But officer! Its only a AM radio antenna) then the concept of no searches without reasonable cause goes out the window.

I suppose that this law could be used to harrass innocent people if they managed to irritate the local police, but then so could most other laws. Thats why we have judges and they can throw things out of court.Lets find out first what you need to do to get a permit. Does this law attempt to prevent people from having radios or simply try and keep track of who does?

John Eaton !hplabs!hp-pcd!john

From -2902682916474021646
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,61995f46da36790,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-29 15:59:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 4 (arrl board mtg summary)
Message-ID: <15203@mgweed.UUCP>
Date: Tue, 29-Jan-85 18:59:25 EST
Article-I.D.: mgweed.15203
Posted: Tue Jan 29 18:59:25 1985
Date-Received: Wed, 30-Jan-85 07:27:38 EST
Organization: AT&T Consumer Products - Montgomery Illinois

Lines: 67

qst de k9eui
hr arrl bulletin nr 4 from arrl headquarters
newington, ct january 26, 1975
to all radio amateurs

the arrl board of directors met in hartford, ct on january 24 and 25. highlights of the actions taken follow.

one of the first orders of business was the approval of the arrl budget for 1985. there were several amendments made to the articles of association and bylaws of the league. among them were a change in the title of general manager to executive vice president. the committee structure of the board of directors was also changed so that the standing committees are now the administration of finance, membership services, publications, and volunteer resources committees. there will also continue to be an executive committee.

the following arrl directors were elected to one year terms on the executive committee, w0fir, w3abc, ve3cdm, and w6zm. k1zz resigned from the office of secretary, and w1ued was elected in his place.

k1zz was elected to the office of executive vice president. the following directors were elected to new terms as directors of the arrl foundation, k1ki and n2yl. the following were also elected to new terms as foundation directors, wa1svy and w6gc.

the arrl president announced the membership of the administration and finance committee, w9prn as chairman, k0to as alternate chairman, w5ch and k1llu, and w8rc as secretary. the membership services committee, w7qgp as chairman, w5edz as alternate chairman, k1ki as secretary, and w6ejj. publications committee, w4rh as chairman, w4ug as alternate chairman, wa6wzo, and k0ga as secretary. volunteer resources committee, w4oyi as chairman, k0pgm as alternate chairman, n2yl and n5tc as secretary.

the board approved a revised 23 cm band plan submitted to the board by the vuac and vrac. adjustments were made in the arrl 33 cm band plan with respect to canadian amateurs. a policy was adopted to pursue acquiring authority for arrl to assist fcc in area of call sign issuance. advisory committee structure will be studied, and in the interim each will be budgeted up to 500 dollars. changes were made with regard to the field organization appointment dealing with rfi. all resources available are to be mobilized to release the 24 mhz band to u.s. amateur use. the board will share the results of the 40 meter phone band survey as of the count on april 1, 1985. membership input will be sought regarding the possible

modification of the arrl band plan for 160 meters.

qsl bureaus were commended. the vuac is tasked to reexamine the arrl band plan for 420 to 450 mhz. the study of dxcc country status criteria is to continue. the dxac was directed to reconsider the possible dxcc country status of 4u1vic taking into account recent u.s. state department communication that the u.s. is about to enter into a thigd party agreement with the vienna international centre. there is to be a study of whether to adopt a policy to pay authors of articles printed in league publications, particularly qst. there will be a study of the feasibility of a station appointment for the purpose of administering some arrl awards. a nominal fee for dxcc membership pins has been authorized. the complete minutes will appear in qst ar

From 8063925640591439222
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: f604a,36f85f2a21cc6edc
X-Google-Attributes: gidf604a,public
X-Google-Thread: 151e61,249fc6d16edb7e40,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-29 15:59:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 5 (FCC actions)
Message-ID: <15204@mgweed.UUCP>
Date: Tue, 29-Jan-85 18:59:50 EST
Article-I.D.: mgweed.15204
Posted: Tue Jan 29 18:59:50 1985
Date-Received: Wed, 30-Jan-85 07:28:06 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 22

qst de k9eui
hr arrl bulletin nr 5 from arrl headquarters
newington, ct january 28, 1985
to all radio amateurs

the fcc issued several notices of proposed rulemaking last friday. subjects addressed include new uhf frequencies and mode l satellite operation for the amateur service, repeater coordination, and the waiting period for retaking vec administered amateur exams.

the commission also issued two orders which affect the vec program. one order deletes the requirement for volunteer examiners to list their mailing address, license class, and

license expiration date in section 2 of the form 610. the other order deletes the requirement that the fcc be notified 30 days in advance of volunteer examiner test sessions.

further details of these rulemaking actions will be made available as they are received ar

From 4056441084924635624
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e9585804e2eb6d5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-29 16:00:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 4
Message-ID: <15205@mgweed.UUCP>
Date: Tue, 29-Jan-85 19:00:25 EST
Article-I.D.: mgweed.15205
Posted: Tue Jan 29 19:00:25 1985
Date-Received: Wed, 30-Jan-85 07:28:26 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 30

qst de k9eui
hr propagation forecast bulletin nr 4 from arrl headquarters newington ct january 28, 1985
to all radio amateurs bt

after almost no significant movement in more than 4 months, the solar flux rose from 70 on january 11 to 91 on the 20th. the biggest surprise was a single day jump from 76 to 91, but there was also a single day peak, and the flux was back to 72 by the 27th. effects of the higher flux were most pronounced on 21 mhz. this band had been marginal or worse through much of the fall and winter, but almost worldwide dx came back for a few days. there were minor dx flurries on 28 mhz, with only north south paths working, and those only briefly.

by the 27th the flux was back down to 72. the game was over, at least for the present. as predicted last week, geomagnetic activity was erratically high, making for unstable prohagation in the higher latitudes. things improved after the 25th, but by then solar activity was back down to near quiet sun levels. for this week, propagation will be mildly unstable, improving to fair to good on january 31, and through about february 4. several fair to poor days will follow, the worst coming around february 6 and 7. generally more stable conditions, but with low muf, are due february 10 through 17.

american sunspot numbers for january 17 to 23 were between 16
and 43 with a mean of 28.3 ar

From 545289588680774420
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,42506fe45aa8decf
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-29 20:18:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!SCARTER@RUTGERS.ARPA
From: Stephen Carter <SCARTER@RUTGERS.ARPA>
Newsgroups: net.ham-radio
Subject: Re: Noisy dimmers and fluorescent lights?
Message-ID: <7838@brl-tgr.ARPA>
Date: Tue, 29-Jan-85 23:18:47 EST
Article-I.D.: brl-tgr.7838
Posted: Tue Jan 29 23:18:47 1985
Date-Received: Sun, 3-Feb-85 00:18:15 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 18
Xref: seismo net.ham-radio:2349

>I am planning to finish my basement. I would like to use a combination
>of fluorescent lights and incandescent lights ....

When I worked for an electrician installing lighting systems awhile back,
almost every book and most experts agreed that mixing the two types in
one room produced ill effects. I guess you could play games with choosing
complimentary bulb types, but if you ever have been in a room where both
types are used, you would see what I mean....they just don't work well with
each other..

You might want to consider track lighting instead of the tubes. It's a
bit more expensive (ok, ALOT more expensive), but I think it would give
your room a better atmosphere.

SCarter

From -512388110266996403
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9de88f5e715279aa
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-30 09:58:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site mako.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!vax135!
cornell!uw-beaver!tektronix!orca!mako!jans
From: jans@mako.UUCP (Jan Steinman)
Newsgroups: net.ham-radio
Subject: Re: My request for help with novice tests
Message-ID: <558@mako.UUCP>
Date: Wed, 30-Jan-85 12:58:32 EST
Article-I.D.: mako.558
Posted: Wed Jan 30 12:58:32 1985
Date-Received: Fri, 1-Feb-85 01:09:41 EST
References: <453@zeus.UUCP>
Reply-To: jans@mako.UUCP (Jan Steinman)
Distribution: net
Organization: Tektronix, Wilsonville OR
Lines: 18

In article <453@zeus.UUCP> jhb@zeus.UUCP (John H. Burgess) writes:
>One of the questions prompted a fair amount of controversy and friendly
>rivalry among the people I showed it to. Let's see how the net votes:
>
>   2D-7.7 If an SWR bridge reading is higher at 3700 kHz than it is
>   at 3750 kHz, what does this indicate about the antenna?
>
>   A. The antenna is too long
>   B. The antenna is too short
>   C. The antenna is too high
>   D. The antenna is too low
>
Poor question, not enough information! Which frequency is the operating
frequency? Without making assumptions, either A or B could be right. (By
making MAJOR assumptions, D could be right. Could C ever be correct?)
--
:::::: Jan Steinman   Box 1000, MS 61-161   (w)503/685-2843 ::::::
:::::: tektronix!tekecs!jans   Wilsonville, OR 97070 (h)503/657-7703 ::::::

From -4109272316858226199
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d57cea2b0be89f6b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-31 06:23:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!vax135!cornell!uw-
beaver!tektronix!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!
sidb@Ardc.ARPA
From: Sid B. Bernstein (LCWSL) <sidb@Ardc.ARPA>
Newsgroups: net.ham-radio
Subject: New name for info-hams
Message-ID: <7879@brl-tgr.ARPA>
Date: Thu, 31-Jan-85 09:23:37 EST
Article-I.D.: brl-tgr.7879
Posted: Thu Jan 31 09:23:37 1985

Date-Received: Thu, 7-Feb-85 02:11:33 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 9

Good Morning Keith,

This is another new name for the info-hams list; hrand@office-8. He is Hank Rand, K2RF, also here at ARDC. Can you please add him to the good guys.

Thanx,
Sid

From -1602572301857654443
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9de88f5e715279aa
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-31 12:33:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: My request for help with novice tests
Message-ID: <7896@brl-tgr.ARPA>
Date: Thu, 31-Jan-85 15:33:54 EST
Article-I.D.: brl-tgr.7896
Posted: Thu Jan 31 15:33:54 1985
Date-Received: Sun, 3-Feb-85 07:46:29 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 65

Re: Novice test question 2D-7.7:

"One of the questions prompted a fair amount of controversy and friendly rivalry among the people I showed it to. Let's see how the net votes:

2D-7.7 If an SWR bridge reading is higher at 3700 kHz than it is at 3750 kHz, what does this indicate about the antenna?

A. The antenna is too long
B. The antenna is too short
C. The antenna is too high
D. The antenna is too low"

Technical questions normally should not be settled by voting. There should be a correct answer. However, in this case, there seems to be no way to decide, nor is there any assurance that ANY of the above answers is correct.

There is not enough information given. What is the desired operating frequency? Is it 3750 KHz, for example? And what is the VSWR at the desired operating frequency? Is it 1.000000 to 1 at 3750? If the answers to these two questions are "Yes!" then I would say that none of the above answers is correct.

However, since the question is addressed to presumably-aspiring Novices, who may be presumed to want to operate over the entire Novice band of 3700 to 3750 KHz, maybe we can adduce some "common sense" facts and circumscribe the problem enough to get a practical answer. Let's assume that coverage of the Novice band is desired, and that the antenna is a half-wave center-fed type with a feed line whose characteristic impedance closely matches the feedpoint impedance of the antenna at resonance. Then the SWR should be close to 1 to 1 at resonance. As one tunes away from resonance, it should increase as a function of the ratio of actual measurement frequency to resonant frequency.

It would be desirable to put resonance somewhere near 3725 KHz and have nearly equal VSWR at 3700 and 3750. Now the question begins to make more sense. If the VSWR is higher at 3700 than at 3750, then the resonant point must be higher than the midpoint, 3725. It might be close to 3750, in which case the VSWR would be very good at the high end of the Novice band but poorer at the low end. Or, resonance might even be above the Novice band, in which case the VSWR might be very poor over the whole Novice band, and not get down to a reasonable value for operating without a tuner until we get up to 3900 or 4000 KHz.

In either case, we can see that the resonance point is at too high a frequency. Using the standard formula, length = 468 / f(res), for a half-wave resonant antenna, we can see that if f(res) is too high, then length is too short. We can even calculate the correct length. It is about 125' 7". So the antenna must have been cut to less than this length by mistake. With regard to answers C. and D. above, note that this formula assumes that the antenna is far away from objects which might detune it by stray capacitance to ground. In particular, if one were to cut an antenna to 125' 7" and string it up only a few feet above ground, it might exhibit a resonance well below 3725 Hz because the stray capacitance to ground would be too high. But this would make the VSWR higher at 3750, not 3700. This is the usual case that one runs into with practical antenna installations, so probably the antenna will end up this way unless cut for a theoretical resonance higher than 3725. So answer D. can be ruled out. Stringing the antenna up too high would only tend to bring it closer to the theoretical resonant frequency. So answer C. can also be ruled out.

In summary, answer B. seems to be the correct answer, taking these practical considerations into account.

73,
John Sangster, W3IKG

From 3298588955744543558
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,7c362db236efc3c2,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,7c362db236efc3c2,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1985-01-31 13:03:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dartvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!dartvax!cmi
From: cmi@dartvax.UUCP (Theo Pozzy/R. Green)
Newsgroups: net.wanted,net.ham-radio
Subject: Need Tek 547 scope manual
Message-ID: <2728@dartvax.UUCP>
Date: Thu, 31-Jan-85 16:03:13 EST
Article-I.D.: dartvax.2728
Posted: Thu Jan 31 16:03:13 1985
Date-Received: Sun, 3-Feb-85 07:44:10 EST
Distribution: net
Organization: Dartmouth College, Hanover, NH
Lines: 19
Xref: watmath net.wanted:5691 net.ham-radio:2316

*** REPLACE THIS LINE WITH YOUR MESSAGE ***
I have just picked up a Tektronix 547 scope for nothing (yes,
that's a tube device!). I am looking for an operation/maintenance
manual for it. Does anyone know where I can get a copy? I would
be grateful if you could send any info to:

     Dick Green
     P.O. Box 277
     Etna, NH 03750

Or send me electronic mail at:

     cmi@dartmouth (CSNET)
     ...!decvax!dartvax!cmi (USENET)

Thanks in advance,

Dick Green

From 3473722867391340081
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9de88f5e715279aa
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-31 16:14:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!clements@bbncd1.arpa
From: Bob Clements <clements@bbncd1.arpa>
Newsgroups: net.ham-radio
Subject: Re: My request for help with novice tests

Message-ID: <7912@brl-tgr.ARPA>
Date: Thu, 31-Jan-85 19:14:04 EST
Article-I.D.: brl-tgr.7912
Posted: Thu Jan 31 19:14:04 1985
Date-Received: Sun, 3-Feb-85 07:49:56 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 21

Re the posted question:

        2D-7.7 If an SWR bridge reading is higher at 3700 kHz than it is
                at 3750 kHz, what does this indicate about the antenna?

              A. The antenna is too long
              B. The antenna is too short
              C. The antenna is too high
              D. The antenna is too low

None of these answers are right. The correct answer is: The antenna is
exactly right.

The reason is that this Novice intends to use his Novice license long
enough to get to 13 WPM and get his General. He then intends to retire
to 75 Meter phone and ragchew forever. Therefore, he has cut the antenna
for 75 Meters and is just using it in the Novice band until he upgrades.

73,
/Rcc
(K1BC)

From -7637259031366192390
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e2f37927521f88d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-01 10:14:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site mako.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!zehntel!tektronix!orca!mako!
jans
From: jans@mako.UUCP (Jan Steinman)
Newsgroups: net.ham-radio
Subject: Re: light dimmers (and RFI, a solution for HW types)
Message-ID: <568@mako.UUCP>
Date: Fri, 1-Feb-85 13:14:40 EST
Article-I.D.: mako.568
Posted: Fri Feb 1 13:14:40 1985
Date-Received: Sun, 3-Feb-85 11:09:51 EST
References: <192@lcuxc.UUCP>
Reply-To: jans@mako.UUCP (Jan Steinman)
Distribution: na
Organization: Tektronix, Wilsonville OR

Lines: 19

In article <192@lcuxc.UUCP> wjm@lcuxc.UUCP (B. Mitchell) writes:
>The problem is that the SCR or triac does the dimming by "chopping" the AC
>sine wave part way through the cycle.

I once designed a dimmer based upon zero-switching and digital cycle-counting.
To dim the light to 40%, only allow 40 out of 100 half-cycles to pass. This
method is easier on the triac and lamp, but takes more hardware and won't
really fit in an outlet box. A side advantage is that it is more easily
interfaced to a computer than the phase-control technique. A more serious
problem is that there is excessive flicker at very low duty cycles -- at 2%
light, a cycle is passed about once a second! Practical experience showed
levels as low as 10% (6 Hz flicker rate) were tolerable, (due to filiment,
not visual, persistance) with the typical useage range of 30% - 70% working
quite well.

Best of all, absolutely no RFI!
--
:::::: Jan Steinman   Box 1000, MS 61-161   (w)503/685-2843 ::::::
:::::: tektronix!tekecs!jans   Wilsonville, OR 97070   (h)503/657-7703 ::::::

From 6143445541674752741
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1363ce,569ca903fcd710df,start
X-Google-Attributes: gid1363ce,public
X-Google-Thread: 151e61,569ca903fcd710df,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-01 11:34:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site sdcc7.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!hoxna!houxm!vax135!cornell!
uw-beaver!tektronix!hplabs!sdcrdcf!sdcsvax!sdcc3!sdcc7!ee177xal
From: ee177xal@sdcc7.UUCP (WA6FEC)
Newsgroups: net.auto,net.ham-radio
Subject: HELP: need Becker radio information
Message-ID: <1361@sdcc7.UUCP>
Date: Fri, 1-Feb-85 14:34:15 EST
Article-I.D.: sdcc7.1361
Posted: Fri Feb 1 14:34:15 1985
Date-Received: Tue, 5-Feb-85 04:53:29 EST
Organization: UCSD Academic Confusing Center
Lines: 29
Xref: watmath net.auto:5629 net.ham-radio:2325

I am trying to restore some old (tube type) Becker Mexico
automobile radios. But, I am having trouble finding
service information. I understand there might be a
Sams Photofact for them; I just can't find what number
it is though. I did manage to get a schematic for a
Mexico B (from s/n 95000) which is correct for one

of the ones I have but, gives no information on the power
supply (power supply == umrichter) or alignment of the
unit.

```
              s/n      power supply
I have the following:
              805301        umrichter E (or F?)
                       vibrator type

              867979        ??
                       transistor supply

              956049        umrichter E
                       vibrator supply
```

If anyone can help me with any information about these units
I would be very appreciative. Or where to get parts. Or
if you have one you'd like to give away or sell that would be
nice too. I guess anything would help!

thanks,
Walt.

```
From 6639042073786829546
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dbd178c020c4836f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-01 13:07:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!vax135!cornell!uw-
beaver!tektronix!hplabs!hao!seismo!brl-tgr!tgr!schmalz@yuma
From: Rich Schmalzbach [USAISC Appl. Engr.] <schmalz@yuma>
Newsgroups: net.ham-radio
Subject: Emergency Power
Message-ID: <7947@brl-tgr.ARPA>
Date: Fri, 1-Feb-85 16:07:54 EST
Article-I.D.: brl-tgr.7947
Posted: Fri Feb  1 16:07:54 1985
Date-Received: Wed, 6-Feb-85 03:23:14 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 15
```

Other than the normal ideas of batteries, generators, and / or solar panels
which may not work to efficiently in your area, I normally end up back to old
fashioned batteries. Gell-cell or lead-acid when used in parallel fed by a
small current sensing battery charger has worked time and time again.

Basically, the batteries are always supplying power to your rig. However, a
charger working off normal house power is left connected. The batteries acting
as a filter (the AC 60Hz hum), as the charge is diminished the charger senses

it and kicks on, thereby keeping the batteries at a constant charge. Should house power fail you continue to run off the batteries without any break in service.

Other than that Good Luck....

Rich Schmalzbach WA6PEZ

From -4400353339803106846
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5ff4092d46b31d65,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-01 14:41:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site zeus.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!vax135!cornell!uw-beaver!tektronix!teklds!zeus!jhb
From: jhb@zeus.UUCP (John H. Burgess)
Newsgroups: net.ham-radio
Subject: Novice test questions
Message-ID: <454@zeus.UUCP>
Date: Fri, 1-Feb-85 17:41:46 EST
Article-I.D.: zeus.454
Posted: Fri Feb 1 17:41:46 1985
Date-Received: Mon, 4-Feb-85 04:38:56 EST
Organization: Tektronix, Beaverton OR
Lines: 2676

Several people have requested the machine-readable copy of the novice test bank; rather thatn reply individually, I'll post to the net. Get ready to cool your phone lines:

P.S. Yes, it really does begin with page 2.
P.P.S. Don't ask me why; that's the way I got it.

--

Rules and Regulations

2A-1.1 What is the Amateur Radio Service?

A: A radio communication service of self-training, intercommunication, and technical investigation carried on by amateur radio operators.

2A-2.1 Who is an amateur radio operator?

A: A person holding a valid license to operate an amateur radio station issued by the Federal Communications Commission.

2A-3.1 What is an amateur radio station?

A: A station licensed in the amateur radio service embracing necessary apparatus at a particular location used for amateur radio communication.

2A-4.1 What is amateur radio-communications?

A: Non-commercial radio communication by or among amateur radio stations solely with a personal aim and without pecuniary or business interest.

2A-5.1 What is that portion of an amateur radio license that conveys operator privileges called?

A: Operator's license.

2A-6.1 What authority is derived from an amateur radio station license?

A: Authorization for a radio station in the Amateur Radio Service.

2A-7.1 What is a control operator?

A: An amateur radio operator designated by the licensee of an amateur radio station to also be responsible for the emissions from that station.

2A-7.2 What is the term used in Part 97 of the FCC Rules to define the amateur radio operator designated by the licensee of an amateur radio station to also be responsible for the emissions from that station?

A: Control operator.

2A-8.1 What is third-party traffic?

A: Amateur radio communication by or under the supervision of the control operator at an amateur radio station to another amateur radio station on behalf of anyone other than the control operator.

2A-8.2 Who is a third-party in amateur radio communications?

A: Anyone other than the control operator.

2A-9.1 What are the Novice class operator transmitting frequency privileges in

the 80 meter band?

A: 3700 to 3750 KHz

2A-9.2 What are the Novice class operator transmitting frequency privileges in the 40 meter band?

A: 7100 to 7150 KHz

2A-9.3 What are the Novice class operator transmitting frequency privileges in the 15 meter band?

A: 21100 to 21200 KHz

2A-9.4 What are the Novice class operator transmitting frequency privileges in the 10 meter band?

A: 28100 to 28200 KHz

2A-9.5 What, if any, transmitting frequency privileges are authorized to the Novice class operator besides those in the 80, 40, 15 and 10 meter bands?

A: None.

2A-9.6 In what frequency bands is a Novice class operator authorized to be the control operator of an amateur radio station?

A: 80, 40, 15, and 10 meter bands.

2A-9.7 What does the term frequency band

mean?

A: All frequencies that fall between and upper and lower frequency limit.

2A-9.8 What does the term frequency privilege mean?

A: Frequencies where operation of an amateur radio station is permitted.

2A-9.9 In what frequency band is the Novice class operator transmitting frequency privileges 3700-3750 KHz?

A: 80 meter band.

2A-9.10 In what frequency band is the Novice class operator transmitting frequency

privileges 7100-7150 KHz?

A: 40 meter band.

2A-10.1 What is the only emission authorized for use by Novice class operators?

A: A1, C.W., international morse code.

2A-10.2 What does the term A1 emission mean?

A: Sending signals by turning a transmitter on and off. Also known as on-off keying.

2A-10.3 What is the symbol for a transmission of telegraphy by on-off keying?

A: A1

2A-10.4 What does the term CW mean?

A: Continuous wave. Transmission of signals by letting a transmitter send a continuous wave or turning it off. This might be accomplished by connecting a telegraph key to the "send" control of a transmitter.

2A-10.5 What, if any, emission privileges are

authorized to the Novice class beside A1?

A: None

2A-10.6 What is the only telegraphy code a Novice class operator may use?

A: international Morse code.

2A-10.7 Which, if any, telegraphy codes may a Novice class operator use beside the international Morse code?

A: None

2A-10.8 What does the term emission mean?

A: emission refers to the type or nature of a transmitted signal.

2A-10.9 What is the term for a transmission from a radio station, as used in the FCC Rules?

A: emission

2A-10.10 What does the term emission privileges mean?

A: This refers to what emissions a station is allowed to use.

2A-11.1 Under what circumstances, if any, may the control operator cause unidentified radio-communications or signals to be transmitted from an amateur radio station?

A: None

2A-11.2 What is the meaning of the term unidentified radio-communications or signals?

A: Signals that do not use FCC approved call signs.

2A-11.3 What is the term for transmissions from an amateur radio station without the required station identification?

A: Unidentified radio-communications or signals.

2A-12.1 Under what circumstances, if any, may the control operator of an amateur radio station willfully or maliciously interfere with or cause interference to a radio-communication or signal?

A: None

2A-12.2 What is the term for transmissions from an amateur radio station which are intended by the control operator to disrupt other communications in

progress?

A: Malicious interference

2A-13.1 Under what circumstances, if any, may the control operator cause false or deceptive signals or communications to be transmitted?

A: None

2A-13.2 What is the term for a transmission from an amateur radio station of the word MAYDAY when no actual emergency has occurred?

A: False or deceptive

2A14.1 Under what circumstances, if any, may an amateur radio station be used to transmit messages for hire?

A: None

2A-14.2 Under what circumstances, if any, may the control operator be paid to transmit messages from an amateur radio station?

A: None

2A-15.1 What is one of the five principles which express the fundamental purpose for which the Rules for the Amateur Radio Service are designed?

A: Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.

2A-20.1 Call sings of amateur radio stations licensed to Novice class operators are from which call sign group?

A: Group D

2A-20.2 What is the format of a group D call sing?

A: two letters a number and three letters

2A-20.3 What are the call sign prefixes for amateur radio stations licensed by the FCC

A: AA to AM, K, N, and W

2A-20.4 In what call sign district will your amateur radio call sing be assigned?

A: That depends on your mailing address. For those in New York and New Jersey the district is number 2.

2A-21.1 With which amateur radio stations may an FCC-licensed amateur radio station communicate?

A: Only with other amateur radio stations.

2A-21.2 With which non-amateur radio stations may an FCC-licensed amateur radio station communicate?

A: None, except in an emergency.

2A-21.3 Under what circumstances may an FCC-licensed amateur radio station communicate with another amateur radio station in a foreign country?

A: Only when the each country's government permits international communications by their respective amateur operators. (this is usually the case)

2A-21.4 Under what circumstances (other than RACES operation) may an FCC-licensed amateur radio station communicate with a non-amateur radio station?

A: None, except in an emergency.

2A-21.5 What is the term used in FCC Rules to describe transmitting signals to receiving apparatus while in beacon or radio control operation?

A: One way communications.

2A-23.1 How often must an amateur radio station be identified?

A: At the beginning and end of every transmission or exchange of transmissions. Also, every 10 minutes for transmission longer than 10 minutes.

2A-23.2 How do I identify my amateur radio station communications?

A: send the letters "DE" followed by your FCC assigned call letters.

2A-23.3 Do the FCC Rules require an amateur radio station to identify at the beginning of a transmission?

A: Yes

2A-23.4 duplicate question of 2A23.1

2A-23.5 What is the FCC Rule for amateur radio station identification?

A: identification is required at the beginning and end of each transmission or exchange of transmissions. Plus, for transmissions longer than 10 minutes, identification must be given every 10 minutes.

2A-23.6 What is the least number of times an amateur radio station must transmit its station identification during a 15 minute communication?

A: 3 times: When starting, 10 minutes into the transmission, and at the end.

2A-23.7 What is the least number of times an amateur radio station must transmit its station identification during a 25 minute communication?

A: 4 times: When starting, 10 minutes into the transmission, 20 minutes into the transmission, and at the end.

2A-23.8 What is the least number of times an amateur radio station must transmit its station identification during a

35 minute communication?

A: 5 times: When starting, 10 minutes into the transmission, 20 minutes into the transmission, 30 minutes into the transmission, and at the end.

2A-23.9 What is the longest period of time during a communication that an amateur radio station does not need to transmit its station identification?

A: 10 minutes

2A-23.10 What is the least number of times an amateur radio station must identify itself during a 5 minute communication.

A: twice: at the beginning and at the end.

2A-24.1 What amount of transmitter power may an amateur radio station use?

A: The rule here has recently changed. The correct answer is 1500 Watts peak output power.

2A-24.2 What is the maximum transmitter power

input permitted to be used at an amateur radio station transmitting on frequencies available to the Novice class operator?

A: 250 Watts input. 200 Watts output.

2A-24.3 In what circuit stage in an amateur radio station transmitter is power input determined?

A: Final amplifying radio frequency stage.

2A-24.4 Which individual circuit power inputs must be included in determining the total power input to the final amplifying radio frequency stage to the antenna?

A: all radio frequency inputs

2A-25.1 Should an amateur radio operator receive an Official Notice of Violation from the FCC, how promptly should he/she respond.

A: 10 days.

2A-25.2 Should an amateur radio operator receive an Official Notice of Violation from the FCC, to whom does he/she respond?

A: To the office that originated the Notice.

2A-25.3 Should an amateur radio operator receive an Official Notice of Violation from the FCC relating to some violation that may be due to the physical or electrical characteristic of the transmitting apparatus, what information must be included in the response?

A: It should indicate what steps have or will be taken to correct the problem. If the correction will take place in the future, a scheduled date of the

correction must be included.

2A-26.1 Whom does the FCC hold responsible for the proper operation of an amateur radio station?

A: Station licensee.

2A-26.2 When must an amateur radio station have a control operator?

A: Always, unless the station is operated under automatic control.

2A-26.3 Who may be the control operator of an amateur radio station?

A: The control operator may be the station licensee, if a licensed amateur radio operator, or may be another amateur radio operator with the required class of licensee.

2B-1.1 What does the R in the RST signal report mean?

A: Readability

2B-1.2 What does the S in the RST signal report mean?

A: Strength

2B-1.3 What does the T in the RST signal report mean?

A: Tone

2B-2.1 At what telegraphy speed should a CQ message be transmitted?

A: At a speed you would like to receive a response.

2B-3.2 Why should amateur radio stations in communication with each other zero beat?

A: So that they will both transmit on the same frequency.

2B-4.1 How can on-the-air transmitter tune-up be kept as short as possible.

A: By using a dummy load antenna for initial adjustments

2B-5.1 What is the difference between the telegraphy abbreviation CQ and QRZ?

A: CQ means "anyone please reply." QRZ means "who is calling me?"

2B-5.2 What is the difference between the telegraphy abbreviation K and SK?

A: K means "go ahead." SK means "I have finished, no reply is expected."

2B-5.3.1 What is the meaning of the telegraphy abbreviation DE.

A: DE means "from."

2B-5.3.2 What is the meaning of the telegraphy abbreviation R.

A: R means "I acknowledge receipt of your message."

2B-5.3.3 What is the meaning of the telegraphy abbreviation AR.

A: AR means "end of message."

2B-5.3.4 What is the meaning of the telegraphy abbreviation 73.

A: 73 means "best regards."

2B-5.3.5 What is the meaning of the telegraphy abbreviation QRS.

A: QRS means "please send more slowly."

2B-5.3.6 What is the meaning of the telegraphy

abbreviation QTH.

A: QTH means "my location is."

2B-5.3.7 What is the meaning of the telegraphy abbreviation QSL.

A: QSL means "I acknowledge receipt of your message."

2B-5.3.8 What is the meaning of the telegraphy abbreviation QRM.

A: QRM means "I am being interfered with".

2B-5.3.9 What is the meaning of the telegraphy abbreviation QRN.

A: QRN means "I am troubled by static."

Radio Wave Propagation

2C-1.1 What type of propagation uses radio signals refracted back to earth by the ionosphere?

A: Skip propagation.

2C-1.2 What is the meaning of the term skip propagation?

A: radio waves that are refracted (or skipped) back to earth by the ionosphere.

2C-1.3 What is the area of weak signals between the ranges of ground waves and the first-hop called?

A: skip zone.

2C-1.4 What is the meaning of the term skip zone?

A: It is the area of weak signals between the ranges of ground waves and the first-hop.

2C-1.5 What does the term skip mean?

A: signals that are bounced off the ionosphere back to earth

2C-1.6 What type of radio wave propagation makes it possible for amateur radio stations to communicate long

distances?

A: skip propagation

2C-2.1 What type of propagation involves radio signals that travel along the ground?

A: ground wave

2C-2.2 What is the meaning of the term ground wave propagation?

A: radio signals that travel along the ground

2C-2.3 When two amateur radio station located a few miles apart are separated by a low hill blocking their line-of-sight path, daytime communications between them on 3.725 MHz is probably via what kind of propagation?

A: ground wave

2C-2.4 When compared to skip propagation, what is the usual effective range of ground wave propagation.

A: much shorter

Amateur Radio Practice

2D-1.1 How can an amateur radio station be protected against being operated by unauthorized persons?

A: Lock the room that contains the equipment.

2D-2.1 Why should all antenna and rotor cables be grounded when an amateur radio station is not in use?

A: to reduce shock hazard from lightning.

2D-2.2 How can an antenna system be protected from damage due a to nearby lightning strike?

A: By grounding the antenna system when not in use.

2D-2.3 How can an amateur radio station equipment be protected from damage due to lightning striking the electrical wiring in the building?

A: by unplugging it from the electrical outlet when not in use

2D-3.1 For proper protection from lightning strikes, what pieces of equipment should be grounded in an amateur radio station?

A: anything that can conduct electricity.

2D-3.2 What is a convenient indoor grounding point for an amateur radio station?

A: a cold water pipe.

2D-3.3 To protect against electrical shock hazards, the chassis of each equipment in an amateur radio station should be connected to what?

A: ground

2D-4.1 When working on an antenna mounted on a tower, a person doing the climbing should always wear what type of safety equipment?

A: a safety belt.

2D-4.2 For safety purposes, how high should all portions of a horizontal wire antenna be located?

A: high enough so that it won't pose a hazard to people or vehicles.

2D-4.3 What type of safety equipment should a person on the ground wear while assisting another person on an antenna tower?

A: a hard-hat.

2D-5.1 What is a likely indication that radio frequency interference to a receiver is caused by front-end overload?

A: interference is present regardless of the frequency that the receiver is tuned to.

2D-5.2 When radio frequency interference occurs to a receiver regardless of frequency, while an amateur radio station is transmitting, what is likely the problem?

A: front-end overload

2D-5.3 What type of filter should be installed on a television receiver's tuner input as the first step in preventing overload from an amateur radio station's signal?

A: a high pass filter

2D-5.4 What is meant by receiver overload?

A: the receiver hears signals that are too strong for it (these signals may be on frequencies other that what the receiver is tuned to).

2D-6.1 What is meant by harmonic radiation?

A: radiation (or transmission) of energy on frequencies that are integer multiples of the intended signal.

2D-6.2 Why is harmonic radiation by an amateur radio station undesirable?

A: causes interference

2D-6.3 A multi-band antenna connected to an improperly tuned transmitter may radiate what type of interference?

A: harmonic radiation

2D-6.4 What is the purpose of properly shielding a transmitter?

A: to prevent spurious radiation

2D-6.5 When interference is observed on only one or two channels of a TV receiver while an amateur radio station is transmitting, what is the likely problem.

A: harmonic radiation

2D-6.6 What type of filter should be installed on an amateur radio transmitter as the first step in reducing harmonic radiation?

A: low pass

2D-7.1 Why is it important to have the impedance of a transmitter final amplifier circuit match the impedance of the antenna or feedline?

A: so that SWR will be minimum

2D-7.2 What is the term for the measurement of the impedance match between a transmitter final amplifier circuit and the antenna or feedline?

A: One measurement would be standing wave ratio or SWR.

2D-7.3 What station accessory is used to measure RF power being reflected back down the feedline from the antenna to

the transmitter.

A: directional watt meter or SWR meter

2D-7.4 What station accessory is often used to measure voltage standing wave ratio?

A: SWR bridge

2D-7.5 Where should an SWR bridge be connected to indicate the impedance match of a transmitter and an antenna.

A: Either between the transmitter and the feedline or between the feedline and the antenna (latter is best).

2D-7.6 Coaxial feedlines are designed to be operated with what kind of standing wave radio?

A: low or 1:1

2D-7.7 If the SWR bridge reading is higher at 3700 KHz than at 3750 KHz, what does this indicate about the antenna?

A: It provides a better match at 3750 KHz than at 3700 KHz.

2D-7.8 If the SWR bridge reading is lower at

3700 KHz than at 3750 kHz, what does this indicate about the antenna?

A: It provides a better match at 3700 KHz than at 3750 KHz.

2D-8.1 What kind of SWR meter reading may indicate poor electrical contact between parts of an antenna system?

A: unusually high (more than 4:1)

2D-8.2 High SWR readings measured from a half-wave dipole antenna being fed by coaxial cable can be lowered by doing what to the antenna?

A: changing its length

Electrical Principles

2E-1.1 Electrons will flow in a copper wire when its two ends are connected to the poles of what kind of source?

A: a current or voltage source

2E-1.2 The pressure in a water pipe is comparable to what force in an electrical circuit?

A: voltage

2E-2.1 What are the two polarities of a voltage?

A: positive and negative

2E-2.2 What type of current changes direction over and over again in a cyclical manner?

A: alternating current

2E-2.3 What is a type of electrical current called that does not periodically reverse direction?

A: direct current

2E-3.1 List at least four good electrical insulating materials.

A: glass, plastic, rubber, mica

2E-3.2 List at least three good electrical conductors.

A: silver, gold, aluminum

2E-3.3 What is the term for the lowest voltage which will cause current in an insulator?

A: break-down voltage

2E-4.1 What is the term for a failure in an electrical circuit that causes excessively high current?

A: a short circuit

2E-4.2 What is the term for an electrical circuit in which there can be no current flow?

A: an open circuit

2E-5.1 When a voltage is applied to a circuit causing an electrical current to flow, what is consumed?

A: Power or Energy

2E-6.1 What is the approximate length, in meters, of a radio wave having a frequency of 3.725 MHz?

A: 300/3.725 = 80.5 meters

2E-6.2 What is the relationship between

frequency and wavelength?

A: inversely proportional OR speed = wavelength times frequency.

2E-6.3 What is the approximate length, in meters, of a radio wave having a frequency of 21.120 MHz?

A: 300/21.120 = 14.2 meters

2E-7.1 Which are higher: radio frequencies or audio frequencies?

A: radio

2E-7.2 Is 3,500,000 Hertz a radio frequency or an audio frequency?

A: radio

2E-7.3 Radio frequencies are considered to be those above what frequency?

A: 30 KHz

2E-8.1 Are audio frequencies higher or lower than radio frequencies?

A: lower

2E-8.2 Audio frequencies are considered to

be those below what frequency?

A: 30 KHz

2E-8.3 what frequency range is 2500 Hertz: audio or radio?

A: audio

2E-9.1 What is the unit of electromotive force?

A: Volt

2E-10.1 What is the unit of electrical current?

A: Ampere

2E-11.1 What is the unit of electrical power?

A: Watt

2E-12.1 What is Hertz the unit measurement of?

A: frequency

2E-12.2 What is another popular term for Hertz?

A: cycles-per-second

2E-13.1 A frequency of 40,000 Hertz is equal to how many kilohertz?

A: 40 KHz

2E-13.2 A current of 20 millionths of an ampere is equal to how many

microamperes.

A: 20 microamperes

2E-13.3 A current of 2000 milliamperes is equivalent to how many amperes?

A: 2 amperes

2E-13.4 What do the prefixes mega and centi mean?

A: Mega is million and Centi is hundredth.

2E-13.5 What do the prefixes micro and pico mean?

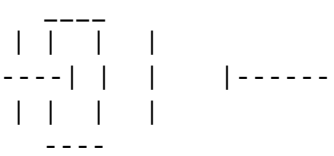
A: Micro is millionths and pico is million-millionths.

2F-1.1 What is the general relationship between the thickness of a quartz crystal and its fundamental operating frequency?

A: As the crystal becomes thinner and thinner, the frequency becomes higher and higher.

2F-1.2 What is the schematic symbol for a quartz crystal?

A:



2F-1.3 What chief advantage does a crystal controlled transmitter have over one controlled by a variable frequency oscillator?

A: Crystal controlled will be much more stable in frequency

2F-2.1 What two internal components of a D'Arsonval meter interact to cause the indicating needle to move when current flow through the meter?

A: A permanent magnet and an electro-magnet

2F-2.2 What does a voltmeter measure?

A: voltage

2F-3.1 Draw the schematic diagram of a triode vacuum tube and label the elements.

A:

2F-3.2 Draw the schematic symbol for a tetrode vacuum tube and label the elements.

A:

2F-3.3 What was one of the earliest uses of a two-element vacuum tube?

A: rectifier or diode to convert AC to DC

2F-4.1 What device should be included in electronic equipment to protect it from damage resulting from a short

circuit?

A: a fuse

Practical Circuits

2G-1.1 Draw a block diagram for a simple crystal controlled transmitter.

A:

2G-1.2 Draw a block diagram for a simple transmitter having a variable frequency oscillator.

A:

2G-2.1 Draw a block diagram for a simple superheterodyne receiver capable of receiving A1 telegraphy radio signals.

A:

2G-3.1 Draw a block diagram for a portion of an amateur radio station including a transmitter, an antenna feedline, an antenna and an SWR bridge.

A:

2G-3.2 Draw a block diagram for a portion of an amateur radio station including a transmitter, a receiver, a T-R switch, an

antenna feedline and an antenna.

A:

2G-3.3 Draw a block diagram for a portion of an amateur radio station including a transmitter, an antenna tuner, an antenna feedline and an antenna.

A:

2G-3.4 Draw a block diagram for a portion of an amateur radio station including a transmitter, telegraphy key, antenna

feedline and antenna.

A:

2G-3.5 Draw a block diagram for a portion of an amateur radio station showing how two different antennas and a dummy antenna can be switched to the same transmitter.

A:

2G-3.6 Draw a block diagram for a portion of amateur radio station including a transmitter, an SWR meter, an antenna tuner, an antenna feedline and an antenna.

A:

2G-3.7 Draw a block diagram for a typical Novice station including a transmitter, a receiver, an antenna feedline, an antenna, a T-R switch, grounding provisions and a telegraph

key.

A:

Signals and Emissions

2H-1.1 An interrupted carrier wave is considered to be which type of emission?

A: Continuous wave or CW

2H-2.1 What does the term backwave mean?

A: backwave is a signal heard in a receiver after a transmitter is de-energized. This is caused when a transmitter continues to output energy when the receiver becomes activated

2H-2.2 What is a possible cause of backwave.

A: improper transmit-receive switching circuitry operation.

2H-3.1 What does the term key clicks mean?

A: clicks generated by a transmitter when the key is opened or closed.

2H-3.2 How can key clicks be eliminated?

A: With a key click filter

2H-4.1 What does the term chirp mean?

A: Frequency shift of a transmitter when the key is closed.

2H-4.2 What can be done to a telegraph transmitter's power supply to avoid chirp.

A: ensure that it has good voltage regulation

2H-5.1 What is a common cause of superimposed hum?

A: poor transmitter power supply filtering.

2H-6.1 A signal received on 28.160 MHz is the 4th harmonic of what fundamental frequency?

A: 28.160/4 = 7.040 MHz

2H-7. Spurious emissions from a transmitter may be caused by what problem in the power amplifier stage?

A: over-drive or improper neutralization.

Antennas and Feedlines

2I-1.1 What is the approximate total length in feet of a half-wave dipole antenna

cut for 3725 KHz?

A: (300/3.725) * 3.28 *(1/2) = 132 ft.

2I-1.2 What is the approximate total length in feet of a half-wave dipole antenna cut for 7125 KHz?

A: (300/7.125) * 3.28 *(1/2) = 61.9 ft.

2I-1.3 What is the approximate total length in feet of a half-wave dipole antenna cut for 21125 KHz?

A: (300/21.125) * 3.28 * (1/2) = 23.3 ft.

2I-1.4 What is the approximate total length in feet of a half-wave dipole antenna cut for 28150 KHz?

A: (300/28.150) * 3.28 * (1/2) = 17.5 ft.

2I-1.5 How is the approximate total length in feet of a half-wave dipole antenna calculated?

A: determine the total length of a one wave and divide by 2.

2I-2.1 What is the approximate total length in feet of a quarter-wave vertical antenna adjusted to resonate at 3725

KHz?

A: (300/3.725) * 3.28 *(1/4) = 66 ft.

2I-2.2 What is the approximate total length in feet of a quarter-wave vertical antenna adjusted to resonate at 7125 KHz?

A: (300/7.125) * 3.28 *(1/4) = 34.5 ft.

2I-2.3 What is the approximate total length in feet of a quarter-wave vertical antenna adjusted to resonate at 21125 KHz?

A: (300/21.125) * 3.28 * (1/4) = 11.6 ft.

2I-2.4 What is the approximate total length in feet of a quarter-wave vertical antenna adjusted to resonate at 28250 KHz?

A: (300/28.250) * 3.28 * (1/4) = 8.7 ft.

2I-2.5 When a vertical antenna is lengthened, what happens to its resonant frequency?

A: As with most common antennas, when they are lengthened, the resonant frequency decreases.

2I-3.1 What is coaxial cable.

A: cable constructed of a center

conductor encased in insulation, which is then covered by an outer conducting shield and weatherproof jacket.

2I-3.2 What kind of antenna feedline is constructed of a center conductor encased in insulation, which is then covered by an outer conducting shield and weatherproof jacket?

A: coaxial cable.

2I-3.3 What are some advantages in using coaxial cable as an antenna feedline?

A: can be located near other metal objects, can be buried.

2I-3.4 What commonly available antenna feedline can be buried directly in the ground for some distance without adverse effects?

A: coaxial cable

2I-3.5 When an antenna feedline must be located near grounded metal objects, which commonly available feedline should be used?

A: coaxial cable

2I-4.1 What is parallel conductor feedline?

A: feedline constructed of two conductors maintained a uniform distance apart by insulated spreaders.

2I-4.2 Can an amateur radio station use TV antenna "twin lead" as a feedline?

A: Yes

2I-4.3 What are some advantages in using a parallel conductor feedline?

A: very low loss, can be home-made.

2I-4.4 What are some disadvantages in using a parallel conductor feedline?

A: can't be buried or used near grounded metal objects.

2I-4.5 What kind of antenna feedline is constructed of two conductors maintained a uniform distance apart by insulated spreaders?

A: parallel conductor feedline

From -1854197196366440435
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ff3d496f07f73c37,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-02 12:35:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: listen to 850 MHz on a 400 MHz receiver
Message-ID: <464@ihu1h.UUCP>
Date: Sat, 2-Feb-85 15:35:08 EST
Article-I.D.: ihu1h.464
Posted: Sat Feb 2 15:35:08 1985
Date-Received: Tue, 5-Feb-85 04:22:52 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 118

x

LISTEN TO 850 MHZ ON A 400 MHZ RECEIVER

Bob Parnass, AJ9S

A recent article1 described the technique of using "multiple injection frequencies," and introduced an equation which permits listening in the 512 - 657 MHz range (UHF television channels 21 through 44) using radios designed to receive 402 - 512 MHz.

This article introduces another equation, permitting 851 - 1158 MHz reception using a Radio Shack PRO30 scanner designed to receive 380 - 512 MHz. The equation may be applicable to other scanners.

Using this equation, my Radio Shack PRO30 scanner receives the Illinois State Police District 15 (855.4875) when the radio is programmed for 381.9250 MHz. Mr. James Cavanagh, of Palatine, Illinois, reports that his PRO30 receives the Palatine Police (856.7125 MHz) when programmed for 382.4500 MHz.

The Method

In the equations that follow, all frequencies are in units

of Megahertz. To listen on a frequency Y between 851 and 1158 MHz, tune your radio to:

$$\frac{3(Y) + 10(IF)}{7}$$

where IF is the intermediate frequency of the receiver.

Conversely, if you hear a strange signal when your UHF radio is tuned to X MHz, you may be simultaneously listening to the frequency of:

$$\frac{7(X) - 10(IF)}{3}$$

When using this technique to receive microwave signals on a scanner, the signal may be very weak, because a typical scanner radio is not nearly as sensitive in the 851 - 1158 MHz range as it is on the frequencies for which it was designed.

Technical Explanation

What's happening is that an injection signal with multiple constituent frequencies is being being fed to the mixer stage.

To hear the Palatine Police signal (856.7125 MHz), the PRO30 is set to 382.45 MHz. At this setting, the local oscillator/tripler chain is injecting a signal into the mixer stage at:

$$382.450 - 10.7 = 371.750 \text{ MHz.}$$

This 371.750 MHz signal is the output of a frequency tripler, whose input frequency is:

$$371.750 / 3 = 123.9167 \text{ MHz.}$$

But, in addition to this 3rd harmonic, there is a 7th harmonic component present:

$$7\ (123.9167) = 867.4167 \text{ MHz,}$$

which when mixed with the police signal on 856.7125 MHz, produces a 10.7 MHz IF:

867.4167 - 856.7125
= 10.7042 MHz

One may think of this 7th harmonic as being the sum of the 3rd harmonic, the signal the circuit was designed to produce, and the unexpected 4th harmonic, described in the previous article.

Poor Sensitivity

During reception of both police transmitters described above, the signal came directly into the mixer stage through the PRO30 case, bypassing the antenna and RF amplifier stages! Tests were made using the supplied flexible antenna and an external 146 MHz antenna. The connection of either antenna made no difference in signal strength. Disconnecting the antenna altogether made no difference either. Apparently, the RF amplifier/antenna combination attenuated the microwave signals more than the plastic case, which is painted with a conductive substance.

Don't expect very good range on these frequencies. In both cases, the microwave transmitters were within a few blocks of the scanner and line of sight.

A Regency HX1000 scanner (IF of 21.6 MHz), was tested for microwave reception using this equation, but proved unsuccessful. Once again, readers are urged to experiment to find other frequencies to which their scanners may be receptive.

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1. Parnass, Bob, "512 - 657 MHz Reception on Your Scanner", Monitoring Times. February 1984, page 19.

--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -394363654741725008
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e87da5c284bf8ace,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-02 18:26:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: wanted: FT209RH modification info for 150+ MHz coverage
Message-ID: <466@ihu1h.UUCP>
Date: Sat, 2-Feb-85 21:26:44 EST
Article-I.D.: ihu1h.466
Posted: Sat Feb 2 21:26:44 1985
Date-Received: Thu, 7-Feb-85 02:56:37 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 10

x
       I've heard rumors that a simple modification to the Yaesu
       FT209RH   2 meter portable will permit extended receive
       coverage   into the VHF public service band, above
    150 MHz.

       How does   one make this modification?
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -5358346185445878166
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1841fb7f64fc2ce3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-02 20:09:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: TSARC Repeater Coordination Suspension
Message-ID: <273@petrus.UUCP>
Date: Sat, 2-Feb-85 23:09:24 EST
Article-I.D.: petrus.273
Posted: Sat Feb 2 23:09:24 1985
Date-Received: Sun, 3-Feb-85 11:12:04 EST
Organization: Bell Communications Research, Inc
Lines: 38

The following message relayed via HamNet:

 #: 26740   Sub-topic 4 - TRN & Freq Coord.
Sb: TSARC SUSPENDS...
    01-Feb-85 20:25:54

Fm: NORM W2JUP 74055,140
To: ALL

At 12:01 AM this morning, February 1st, TSARC (Tri-State Amateur Repeater Council) temporarily suspended their repeater frequency coordinating activities for the next nine months....

At an emergency meeting called by TSARC president Steve Mendlesohn, WA2DHF, TSARC executive board directors heard excerpts from the contents of a new FCC NPRM (Notice of Proposed Rulemaking) that hits the streets and becomes effective today.

The FCC's NPRM addresses the subject of repeater frequency coordination, and calls for comments and opinions on proposed rulemaking that seeks to create a volunteer national "umbrella-type" coordination agency, similar to the NARTB, NABR, and other industry-based organizations of class. The "umbrella" agency would assist the activities of regional coordination councils on a nationwide basis, and hold a national database of all amateur repeaters. The same agency would establish and publish rules of procedures and technical standards for the coordination of new amateur repeaters.

As part of the NPRM, the FCC's Enforcement Bureau requested a nation-wide nine-month suspension of repeater coordination, as a measure needed to gain the time required for gathering comment, acquiring an updated and validated national repeater coordination database, and setting up the mechanisms for accomplishing the tasks.

In addition to the establishment of a national coordination scheme, the NPRM would change the wording of the Commission's Rules in Part 97.85(h) to codify and assign responsibility for the solution of repeater interference problems.

What this means in plain English: no new repeaters will be coordinated in the 25 CMSAs (Consolidated Metropolitan Statistical Areas) for at least nine months. The local frequency coordination councils will have to suspend coordinations pending the new rulemaking.

From 5397637635052426560
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3f67c47b745c0f33
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-03 21:58:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site tekig.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!vax135!cornell!uw-beaver!tektronix!tekig!jimla
From: jimla@tekig.UUCP (James G. Larsen)
Newsgroups: net.ham-radio
Subject: Re: Table-top shortwave receivers
Message-ID: <2478@tekig.UUCP>
Date: Mon, 4-Feb-85 00:58:33 EST
Article-I.D.: tekig.2478
Posted: Mon Feb 4 00:58:33 1985
Date-Received: Thu, 7-Feb-85 02:06:07 EST
References: <2712@umcp-cs.UUCP>

Distribution: net
Organization: Tektronix, Beaverton OR
Lines: 24

>
> <>
>
> With all the recent talk on recommendations on portable shortwave receivers, I
> would like to hear some recommendations on good table top (non-portable)
> shortwave receivers. I am looking for a good general-coverage (~100Khz-30Mhz)
> receiver around the $500 range. I would like to stick pretty close to $500 as
> the top figure, but I would be willing to spend a little more if I find a
> receiver that is worth the extra money.

I bought a Kenwood R-600 for my 12 year old son and I for some SWL'ing
while we are studying for our novice licenses. I'm pleased with the
performance of the unit for the price of $350. It is selective enough
on SSB to separate strong adjacent signals on the 20M ham bands, and the
it has a narrow and wide selection on AM. The digital readout is great
for cruising through the ham and SW bands. There is a 30 position band
switch and each range covers 1 MHz. I only have two minor
complaints: there are a few "birdies" in some obscure places,
and the tuning is a little fast for accurate adjustment on SSB
stations. The selectivity is probably inadequate for serious CW work.
I think it's a great little receiver to start with and will probably
keep it when we graduate to a ham transceiver.

Jim Larsen

From -7452761911411540234
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9de88f5e715279aa
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-04 06:34:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 Apollo 1/28/85; site apollo.uucp
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tektronix!
decvax!wanginst!apollo!rees
From: rees@apollo.uucp (Jim Rees)
Newsgroups: net.ham-radio
Subject: Re: My request for help with novice tests
Message-ID: <249248b6.1de6@apollo.uucp>
Date: Mon, 4-Feb-85 09:34:55 EST
Article-I.D.: apollo.249248b6.1de6
Posted: Mon Feb 4 09:34:55 1985
Date-Received: Fri, 8-Feb-85 02:19:43 EST
References: <7912@brl-tgr.ARPA>
Organization: Apollo Computer, Chelmsford, Mass.
Lines: 13

2D-7.7 If an SWR bridge reading is higher at 3700 kHz than it is

at 3750 kHz, what does this indicate about the antenna?

A. The antenna is too long
B. The antenna is too short
C. The antenna is too high
D. The antenna is too low

The correct answer is certainly D. There is not enough information here to decide whether the antenna is too long or too short, and unless the antenna blew down in the last storm, it is never high enough off the ground.

From 4309443728493220758
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b53945fb03b5f743,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-04 08:47:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site lcuxc.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxb!mhuxr!ulysses!gamma!pyuxww!lcuxc!wjm
From: wjm@lcuxc.UUCP (B. Mitchell)
Newsgroups: net.ham-radio
Subject: RE: Wall Outlets
Message-ID: <218@lcuxc.UUCP>
Date: Mon, 4-Feb-85 11:47:34 EST
Article-I.D.: lcuxc.218
Posted: Mon Feb 4 11:47:34 1985
Date-Received: Wed, 6-Feb-85 03:08:13 EST
Organization: Bell Communications Research, Inc.
Lines: 41

<gulp>
In most cases, the metal ears on a grounded receptacle (wall outlet) are NOT adequate to provide an equipment grounding conductor between the receptacle and the box.
The National Electrical Code (and most local codes) specifically forbids using the screws that hold a receptacle to the box for grounding purposes, unless UL (or other recognized testing laboratory) has specifically listed (approved) the receptacle for this purpose. Approved receptacles will have the letters 'FS' stamped on them, next to the UL logo, and they have a metallic springlike strip that "bites into" the threads on the screw, insuring a good electrical connection. Otherwise, it is likely that the support screws may provide a good support but a poor electrical contact for the grounding conductor.
If the receptacle is not of the 'FS' type, the Code requires a bonding jumper (a short piece of bare or green insulated wire - at least #14 for most residential general purpose 15 or 20 amp circuits) to bond the receptacle to a metallic box.
The Code requires that metallic boxes be grounded. This is accomplished by connecting them to the conduit (if conduit is used for wiring), the armor of armored (BX) cable, or to the ground wire of non-metallic cable (including type UF). Non-metallic boxes (which can only be used with non-metallic cable)

(and are not permitted by some local codes) need not be grounded, so you connect the ground terminal of the receptacle to the ground wire of the non-metallic cable.
The Code also requires that metal cover plates be grounded, and this is accomplished by the screw that connects the plate to the receptacle.
The reason receptacles are furnished with plaster ears is that in some places, the box is set back from the wall surface (which I regard as bad practice and would raise %^*%^ with any electrician who worked for me that I caught doing it) and the ears allow the receptacle to be set flush with the wall.
They are detachable, and often have to be detached (you break them off with a pair of pliers) to fit in some places, including some surface-mount cover plates.
By the way, the same grounding rules apply to surface mount boxes as well as the flush ones we've been talking about. The cover can only be used to ground the receptacle to the box IF it is specifically approved for the purpose (this is a new provision in the 1984 version of the National Electrical Code). Otherwise, a bonding jumper must be used.
73's
Bill Mitchell, WB2IAU, PE
(ihnp4!lcuxc!wjm)

From 6015615783286143365
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,582ce4a9fcd94899
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-04 17:14:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site vax135.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxm!mhuxj!houxm!vax135!hpk
From: hpk@vax135.UUCP (Howard Katseff)
Newsgroups: net.ham-radio
Subject: Re: NJ exempts hams from mobile scan
Message-ID: <951@vax135.UUCP>
Date: Mon, 4-Feb-85 20:14:57 EST
Article-I.D.: vax135.951
Posted: Mon Feb 4 20:14:57 1985
Date-Received: Wed, 6-Feb-85 03:04:12 EST
References: <7831@brl-tgr.ARPA>
Organization: AT&T Bell Labs, Holmdel, NJ
Lines: 10

I went to the local police station and asked for a permit for a mobile scanner. The lieutenant I spoke to said that their policy was to NOT issue a permit unless I was affiliated with the local first aid squad or fire company. I guess that its easier to get a hand gun permit than one for a mobile scanner!

Howard Katseff
vax135!hpk
AT&T Bell Labs,
Holmdel, NJ

From 1286287261952457399
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8aa0c128035cbe2a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-04 17:32:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: differences between SWLs and Hams
Message-ID: <468@ihu1h.UUCP>
Date: Mon, 4-Feb-85 20:32:03 EST
Article-I.D.: ihu1h.468
Posted: Mon Feb 4 20:32:03 1985
Date-Received: Wed, 6-Feb-85 02:56:27 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 60

x

Differences Between SWLs and Hams

Here is an interesting passage from Bennett and Helms' "The Complete Shortwave Listener's Handbook - 2nd Edition":

> "The average person nowadays,though, seems to have a built-in bit of knowledge that, to him, means that anyone with a shortwave radio of any kind is automatically a ham radio operator. This is one of the most erroneous impressions that I have ever run up against....."
>
> "Oftentimes the average person, when encountering an SWL, will ask the SWL why he doesn't get a license and actually get on the air for two-way contacts. For the SWL to reply that he doesn't want to might give the impression that he's too good for that sort of thing; for the SWL to say that he can't would leave a strong impression with the average person that he (the SWL) is too dumb to get a license. Both impressions are totally incorrect. In my own 30 years of being a ham radio operator, I have had the opportunity of meeting large numbers of SWLs, and I know for a positive fact that the great majority of them prefer to simply listen, rather than engage in on-the-air communications. Like the baseball fan who'd rather watch than play, radio is a spectator sport to the SWL."
>
> "Admittedly, there are many SWLs who cannot get a

license, but it usually is not due to any lack of ability...."

"...the average SWL is perfectly content to be a listener, and believe me, some of them are real addicts! The SWL, more often than not, continues to be actively engaged in the hobby and many of them eventually go on to the ham radio portion of the hobby. Conversely, I know of a number of ham radio operators who, for various reasons of their own, have elected to let their ham radio licenses lapse, after which they once again become active SWLs. In most cases, it was learned that they found a preference for the one-way aspect of the hobby. Experience has also proven that many ham radio operators continue to be active SWLs. This fact is confirmed by the considerable number of ham radio operators who, through the years, have reported on shortwave station reception to my columns and to the shortwave stations themselves in the form of reception reports."

Hank Bennett is well known in SWL circles. He was has been licensed as W2PNA since 1939. For over 30 years, he has been editor of the shortwave department of the Newark News Radio Club. If you don't remember reading his monthly SWL column in the old Popular Electronics (RIP - ed.), you can read his columns in Monitoring Times.

--

==========

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 1091707819475953818
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3dd0e02062aa8452,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 01:13:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!dciem!nrcaero!pesnta!amd!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: Fourth ARRL Networking Conference in SFO March 30th
Message-ID: <398@dsd.UUCP>
Date: Tue, 5-Feb-85 04:13:24 EST
Article-I.D.: dsd.398
Posted: Tue Feb 5 04:13:24 1985
Date-Received: Thu, 7-Feb-85 07:32:53 EST
Organization: AMPEX DSD, Redwood City, CA.
Lines: 146

To: All packet radio stations
From: Hank Magnuski, KA6M
Date: February 4th, 1985

Subject: Fourth ARRL Networking Conference - Preliminary Information

The Fourth ARRL Computer Networking Conference will be in San Francisco this year on March 30th, 1985. The conference, co-sponsored by the American Radio Relay League and the Pacific Packet Radio Society, will be held in conjunction with the Tenth West Coast Computer Faire, which runs from March 30th through April 2nd at San Francisco's new Moscone Convention Center. The tremendous growth and interest in packet radio terminals, equipment, networks and applications promises to make this conference one of the largest and best attended of the conferences given so far. Here is some preliminary information you will need to have to attend this conference:

Location -- The Networking Conference and all activities of the Faire will be held in Moscone Center in downtown San Francisco. To attend the Conference you will need an entrance ticket to the Faire. All Faire visitors may attend the ARRL Conference at no additional charge. All sessions are open to the public, and persons with no previous knowledge of packet radio systems and procedures are welcome to sit in and learn what they can about this new area of personal computer networking.

Dates -- The Conference will be held all day Saturday, March 30th. The Faire runs from March 30th through April 2nd.

Times -- The Faire hours for sessions and exhibits are 10:00 a.m. to 6:00 p.m. every day. The Conference sessions will run all day Saturday, from 10:00 to 6:00. An exhibit booth demonstrating packet radio equipment and operation will be sponsored by the Pacific Packet Radio Society, and will be open all four days of the Faire.

Tickets -- On-site registration for four days is $20. On-site registration for one day is $12. Pre-registration for four days is $15. Through special arrangements with the Faire and the ARRL, a special pre-registration fee of $20 will purchase a four day ticket to the Faire and a complete set of the ARRL Conference Proceedings. Send a check for $20 and a self-addressed stamped envelope to H. Magnuski at the address listed below. Any checks received after March 16th cannot be guaranteed the special rate. Make the check payable to H. Magnuski.

Conference Proceedings -- The ARRL Computer Networking Conference papers have been a primary source of information on developments in amateur packet radio and digital communications between personal computers. The Proceedings will be for sale at the Faire for $10, and may be obtained from the ARRL by mail thereafter. They are included in the special pre-registration package mentioned above. The deadline for submitting papers to the Proceedings is March 1st, 1985. Contact Paul Rinaldo, ARRL, 225 Main Street, Newington, CT 06111 (203-666-1541) for author's kits or other questions on submitting a presentation.

Faire Events -- The West Coast Computer Faire has been the premier trade show in the development of the microcomputer industry. This tenth anniversary session promises to be jam-packed with sessions and exhibits on personal computing. Hundreds of leading manufacturers have signed up for the Faire, and there will be sessions and seminars on almost every aspect of personal computing.

Conference Events -- Times and places for all the networking conference events have not been finalized. Here is a preliminary outline of activities:

March 29th - 9:00 to Midnite - Network Management meeting at the Front Page Bar, 20 Anne Street, SF. Everyone is welcome. This will be a test of how late the East Coast packeteers can stay up when beers >= 2.

March 30th - 10:00 - A Packet Radio Primer Session by Pete Eaton, WB9FLW.
11:00 - Applications of Packet Radio Panel Session
Sponsored by Andy Cromarty, N6JLJ.
12:00 - Lunch break. Location to be announced later.
1:00 - Technical Papers on packet radio and digital communications. Presentations from the Proceedings.
6:00 - End of technical sessions
8:00 - Conference dinner. Location and price to be announced.

March 31st - 10:00 - Meeting of the ARRL Digital Communications Committee
Location to be announced.

Housing -- Bill Stevens has reserved a block of rooms for visiting packeteers at the Hotel Union Square, 114 Powell Street, San Francisco, CA 94102. Telephone is 415-397-3000. This hotel is three blocks from Moscone Center, and is one of the least expensive hotels suitable for conference attendees. Contact me immediately if you know you are coming and wish to reserve a room through Bill. Rates start at $60 for one double bed in a small room (the hotel management said this room is so small they only rent it to Europeans.) $65 will get you a small room with two twins. $70 rents a larger room with one double bed. To get to the hotel, take the Airporter Bus from SFO (approx. $6.00) to the downtown terminal. The Hotel is two blocks away, and you can walk or take a cab. A shuttle bus to the airport stops at the Hotel. Bill has arranged for rates somewhat less than those listed above.

For those of you with more money, the Faire has made special arrangements with four hotels in SF during the conference:

Hotel Meridien, 50 3rd Street, San Francisco, CA 94103. 415-974-6400
This is a new 700 room 36 story hotel with a French accent. Only two blocks from Moscone, the special rates start at $75 for a single, and $95 for a double. Parking is $11 per night.

Sheraton Palace, Market & New Montgomery, SF. 415-392-8600
This is the Faire Headquarters hotel, two blocks from Moscone. Rates are $95 single, $110 double.

St. Francis, Powell & Geary, SF. 415-397-7000

About four blocks from Moscone, the special rates range from $95 for a single and $105 for a double.

Holiday Inn - Civic Center, 50 8th Street, SF. 415-626-6103
This hotel is quite far from the convention, and is in a crummy neighborhood. Rates are $68 for a single, $78 for a double.

To obtain these special rates, you must request space in writing and your request must be received NO LATER THAN FEBRUARY 28th. The room blocks are released on that date! No phone reservations accepted. Indicate your first, second and third choices, names of all occupants, arrival and departure dates. Final confirmations will be sent to you by the hotel. Cancellations until March 14th to the address below, thereafter to the hotel. Contact the hotel for any other changes. Mail your reservation letter to

C.F. Housing Bureau
P.O. Box 5612
San Francisco, CA 94101

Faire Contacts -- Any questions about the Faire itself may be directed to Computer Faire, Inc. (A Prentice-Hall Company), 611 Veterans Boulevard, Redwood City, CA 94063. Telephone is 415-364-4294.

Coordination Frequencies -- There will be packet radio activity on 145.01 and 146.58 MHz. Voice channel coordination frequencies have not yet been assigned.

Expect in about one month a revised and hopefully more final version of this information bulletin. Please give this letter the widest possible distribution.

The members of the Pacific Packet Radio Society look forward to your visit, and sincerely hope you will have a pleasant stay in San Francisco.

73, Hank

H. S. Magnuski, 311 Stanford Avenue, Menlo Park, CA 94025 415-854-1927

EIES (DRNET): KA6M,2971
Telemail: HMAGNUSKI/AMSAT
Arpa: JOSE@PARC-MAX
Usenet: ucbvax!decwrl!amdcad!fortune!dsd!dna

From 5925579343668560257
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1841fb7f64fc2ce3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 05:51:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!vax135!cornell!uw-beaver!tektronix!
decvax!genrad!panda!talcott!harvard!seismo!brl-tgr!tgr!robert@Brl-Vld.ARPA
From: Robert Shnidman (VLD/VMB) <robert@Brl-Vld.ARPA>

Newsgroups: net.ham-radio
Subject: Re: TSARC Repeater Coordination Suspension
Message-ID: <8026@brl-tgr.ARPA>
Date: Tue, 5-Feb-85 08:51:28 EST
Article-I.D.: brl-tgr.8026
Posted: Tue Feb 5 08:51:28 1985
Date-Received: Sat, 9-Feb-85 04:47:59 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 5

Be careful!! If repeater coordintation is suspended, then 220 and maybe
even parts of other bands could become sitting ducks for attacks by
other requesters for spectrum. I suggest that at least some "unofficial
coordination" continue to show continued growth of amateur use of our
frequencies.

From 7383371476290954310
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1c915afca78656f0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 07:15:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxb!mhuxr!ulysses!allegra!bellcore!
decvax!genrad!mit-eddie!godot!harvard!seismo!brl-tgr!tgr!DSDC-SDT2@GUNTER-
ADAM.ARPA
From: DSDC-SDT2@GUNTER-ADAM.ARPA
Newsgroups: net.ham-radio
Subject: Information Please !!
Message-ID: <8027@brl-tgr.ARPA>
Date: Tue, 5-Feb-85 10:15:34 EST
Article-I.D.: brl-tgr.8027
Posted: Tue Feb 5 10:15:34 1985
Date-Received: Fri, 8-Feb-85 02:02:03 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 10

While doing some unofficial "hacking" in the INFO-MODEM7 directory
(I am a registered participant), I came across the file hams.archiv.txt
and being a ham myself, I FTPed it out of curiosity. Lo and behold,
ham did mean amateur radio. I am a new user to ARPANET, not new to data
processing
 and have been a ham (WA4YCM) since 1976. What are the requirements
to join the info-hams network ? Need instructions on it's use, etc.
73's   WA4YCM
       Walt Livingston
       Montgomery, Alabama

From 6499160405513619357
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1841fb7f64fc2ce3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 07:27:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxb!mhuxr!ulysses!allegra!bellcore!
decvax!genrad!mit-eddie!godot!harvard!seismo!brl-tgr!tgr!ptb@Mitre-Bedford
From: ptb@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: TSARC Repeater Coordination Suspension
Message-ID: <8028@brl-tgr.ARPA>
Date: Tue, 5-Feb-85 10:27:47 EST
Article-I.D.: brl-tgr.8028
Posted: Tue Feb 5 10:27:47 1985
Date-Received: Fri, 8-Feb-85 02:02:21 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 24

I am also concerned about just holding off on ANY new repeaters for 9
whole months, in light of the recent attacks on 220 mhz by the land
mobile industry and others.

I guess one question is, Are the repeater coordinators formally
handling this band as well as 2 meters?

In the long run (if 220 lasts that long), though, I think the national
level planning will help us out by taking measures to prevent the
repeater interference problems on a more global basis that the
regional councils have been able to do.

Even if this will suspend NEW 220 mhz repeaters for now, we can take
more positive measures than sitting here and complaining. How about
USING WHAT WE HAVE OUT THERE NOW? How about putting more packet
repeaters out there, since they do not need to be formally
coordinated? How about going out and getting a 220 rig, or using the
ones we have and getting active on this band?

The premise in the band takeover plans is that they are not getting
used. Lets get out there and prove them wrong!

Peter Baldwin, WA1SNH
ptb@mitre-bedford

From 497879009952684847
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d05d23c04b300eba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 08:44:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 2/1
Message-ID: <15389@mgweed.UUCP>
Date: Tue, 5-Feb-85 11:44:39 EST
Article-I.D.: mgweed.15389
Posted: Tue Feb 5 11:44:39 1985
Date-Received: Wed, 6-Feb-85 05:30:41 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

qst de k9eui
hr crrl bulletin nr 2/1 from crrl headquarters
london, ont february 1, 1985
to all radio amateurs bt

doc has announced a revised schedule of licence fees, effective
april 1.   on that date, amateur radio station licences will
increase from 13 to 20 dollars a year.

doc examinations for 1985 are scheduled for february 19, april
17, june 17 and october 16. if you plan to write, apply to doc
about a month in advance.

ve3gt has been reelected ontario section manager for a two year
term beginning april 1 ar

From 6021509779579067588
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4fa6f08588d29599,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 08:46:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 5
Message-ID: <15391@mgweed.UUCP>
Date: Tue, 5-Feb-85 11:46:11 EST
Article-I.D.: mgweed.15391
Posted: Tue Feb 5 11:46:11 1985
Date-Received: Wed, 6-Feb-85 05:31:08 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 36

qst de k9eui
hr propagation forecast bulletin nr 5 from arrl headquarters

newington ct february 4, 1985
to all radio amateurs bt

though the solar flux peaked at 91 on january 19, the factor more relevant to the propagation picture was the january average of only 76. it is also worth noting that there were 17 days in january when the solar flux was 72 or more, these being close to the minimum possible value at this time of year.

february began on a somewhat more promising note, with the flux back up to 76, and some indications that it may go higher. any solar developments capable of bringing about major propagation changes will be reported in special bulletins as soon as possible after they are observed.

geomagnetic activity was fairly low last week, making for improved high latitude propagation on 21 mhz and lower frequencies. higher k and a indices are expected february 5 through 8, making for poor east west propagation on the higher dx frequencies . transequatorial circuits may actually improve under these conditions. auroral propagation on 50 and 144 mhz is likely february 6 to 8, mainly in our more northerly areas and in adjacent canadian provinces. auroral effects usually peak in the early evening hours, but may last through the night. watch for wwv k indices of 3 or higher and for their predictions of geomagnetic storms. auroras often follow one to three days after major solar flares, also reported in wwv propagation bulletins heard at 18 minutes after each hour and changed 8 times daily.

american sunspot numbers for january 24 to 30 were between 25 and 0 with a mean of 5.1 ar

From 1422447954949744832
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,675d7fdce64461d2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 08:46:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 6 (FCC NPRM on VEC program)
Message-ID: <15392@mgweed.UUCP>
Date: Tue, 5-Feb-85 11:46:42 EST
Article-I.D.: mgweed.15392
Posted: Tue Feb 5 11:46:42 1985
Date-Received: Wed, 6-Feb-85 05:31:39 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 20

qst de k9eui
hr arrl bulletin nr 6 from arrl headquarters
newington ct january 31, 1985
to all radio amateurs bt

fcc has issued a notice of proposed rulemaking affecting the vec program. responding to petitions requesting that the waiting period for retaking a failed amateur examination be changed, fcc proposes to eliminate the waiting period entirely, and to allow vecs to decide on a waiting period for their examinations based on their own administrative requirements. the nprm also proposes to require public notice of volunteer examination sessions only if the sessions are conducted for five or more candidates. the nprm is designated docket 85 21. comments are due by march 7, 1985, reply comments are due by march 22, 1985. complete details on the nprm appear in the latest arrl letter. copies of the nprm are available from hq. for a large s.a.s.e. with 37 cents postage ar

From 4764256684592606164
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7aea2da0d46d33f3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 08:47:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 7 (FCC NPRM on REPEATER COORDINATION)
Message-ID: <15393@mgweed.UUCP>
Date: Tue, 5-Feb-85 11:47:52 EST
Article-I.D.: mgweed.15393
Posted: Tue Feb 5 11:47:52 1985
Date-Received: Wed, 6-Feb-85 05:32:06 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 23

qst de k9eui
hr arrl bulletin nr 7 from arrl headquarters
newington ct january 31, 1985
to all radio amateurs bt

fcc has issued a notice of proposed rulemaking concerning repeater coordination. the nprm is designated docket 85 22, and proposes to add the definitions of a coordinated repeater, frequency coordinator, and harmful interference to part 97, and to define the responsibility for resolving repeater to repeater interference. fcc seeks comments from amateurs concerning whether an amateur operator should be required to seek

frequency coordination for a new repeater in a metropolitan area, and comments as to whether fcc should recognize a single national frequency coordinator for the amateur service. comments are due by july 1, 1985, and reply comments are due by september 30, 1985. until fcc takes further action on this docket, there is a moratorium on new repeater operation in metropolitan areas (see arrl 9). complete details appear in the latest arrl letter. copies of the nprm are available from hq. for a large s.a.s.e. with 54 cents postage ar

From -2748866188798285216
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,538d69b7c6eb5ff6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 08:48:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 8 (FCC NPRM on FREQUENCY ALLOCATIONS)
Message-ID: <15394@mgweed.UUCP>
Date: Tue, 5-Feb-85 11:48:37 EST
Article-I.D.: mgweed.15394
Posted: Tue Feb 5 11:48:37 1985
Date-Received: Wed, 6-Feb-85 05:32:30 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 25

qst de k9eui
hr arrl bulletin nr 8 from arrl headquarters
newington ct february 1, 1985,
to all radio amateurs bt

fcc has released a notice of proposed rulemaking concerning frequency allocations for the amateur service. the nprm is designated pr docket 85 23. the nprm proposes to bring the microwave spectrum allocation sections of part 97 into line with the frequency allocations made at warc 79 for the amateur service. the docket also proposes to list the frequencies 1900 to 2000 khz separately from 1800 to 1900 khz, so that part 97 of the rules will be in harmony with part 2, where the segments are already listed separately. the docket points out that some frequencies are shared by different services in different itu regions, in order to protect everyone, including the amateur service, from interference. the docket seeks to clarify amateur status on some bands above 450 mhz, and to add new microwavd frequencies to the amateur service and amateur satellite service, including some frequencies in the 1.2 ghz band for mode l satellite operation. comments are due by march 11, 1985, and reply comments are due by march 26, 1985. details

will appear in the arrl letter and qst ar

From -2359391245913371656
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36d8b1cf6876ba43,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 08:49:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 9 (FCC MORATORIUM ON NEW REPEATERS!!!!!)
Message-ID: <15395@mgweed.UUCP>
Date: Tue, 5-Feb-85 11:49:29 EST
Article-I.D.: mgweed.15395
Posted: Tue Feb 5 11:49:29 1985
Date-Received: Wed, 6-Feb-85 05:32:57 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

qst de k9eui
hr arrl bulletin nr 9 from arrl headquarters
newington ct february 1, 1985
to all radio amateurs bt

fcc has placed a moratorium on new repeater operation in certain metropolitan areas. details on which metropolitan areas are affected by the moratorium and on what the nprm (garble) available from arrl hq. jim clary, wb9ihh, is handling requests for this information at 203 666 1541 ext 241
ar

From 5499525413968630075
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c06caf5943a94e4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 13:06:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site zeus.UUCP
Path: utzoo!utcs!lsuc!pesnta!hplabs!tektronix!teklds!zeus!jhb
From: jhb@zeus.UUCP (John H. Burgess)
Newsgroups: net.ham-radio
Subject: Novice question
Message-ID: <456@zeus.UUCP>
Date: Tue, 5-Feb-85 16:06:12 EST
Article-I.D.: zeus.456
Posted: Tue Feb 5 16:06:12 1985
Date-Received: Thu, 7-Feb-85 06:47:46 EST
Organization: Tektronix, Beaverton OR

Lines: 21

This is (to date) the best (in my opinion) explanation of the antenna-length
question:

I vote for
     (forgot which letter) The antenna is too short.

According to the question, as you decrease the wavelength of the signal
coming from the transmitter and keep the antenna length constant, you come
closer to a proper match. So the antenna is the correct fraction of a
shorter wavelength than the one corresponding to 3700 KHz, which is to
say that the antenna is too short for 3700 KHz. It might be right for
(say) 3740 KHz, you don't know whether the null is higher or lower than
3750.

     paul rubin wa2qyn/6

John Burgess, N7DCQ

From -7543270523176625090
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aab065ba78060ba6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 16:57:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: AC wiring, outlets, and a warning to mobile home owners
Message-ID: <15406@mgweed.UUCP>
Date: Tue, 5-Feb-85 19:57:42 EST
Article-I.D.: mgweed.15406
Posted: Tue Feb 5 19:57:42 1985
Date-Received: Thu, 7-Feb-85 02:30:34 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 46

I agree with what Bill Mitchel said regarding grounding of outlets.
I was just looking in one of those "do it yourself" wiring books
(from Sears, or whatever) and it shows a ground wire from the
ground screw on the outlet to the box, in the case of conduit,
and the conduit serving as the safety ground conductor. The counduits
and the main box are connected to the neutral bus bar via a "bonding screw"
in the box. An earth ground also connects to this neutral bus.
In the case where non-metallic cable is used (like where I live

Romex is permitted) the safety ground conductor from the box
is provided by a third conductor in the cable,.
The outlet and box are still connected to each other via a wire.
I do have one question, however, regarding house wiring.
I have been told it is not good practice, or may not be "code"
in some cases, to solder connections. WHY???????
I always twist the wires in a box tightly with pliers, then
solder them and install the wire nuts. There have been many
times that I have pulled an outlet or switch out of a box and
the wires have easily pulled out of the wire nut. I can't
think of a better connection than a soldered one.

Mobile home dwellers should check into their wiring! I have
had 2 "homes on wheels" and in both cases there were serious
wiring problems. In both cases, the problem involved a hot
wire that was not cut off after being wrapped around a wall
switch screw. the wire protruded thru some holes in the rear of
the box and was touching the outer shell of the mobile home.
(Both units used stranded wire and the boxes were plastic.
There was at least a 20 year age difference between them and
one was a Shasta camper, while the older one was a 30 foot job).
The older home had just 2 fuses and only the one side was
switched with the main switch. Unfortunately, when I bought it
it was connected to the pole so that the switch and fuses were
in the neutral side! I really got shook when the water heater
element broke down to frame ground and stayed lit like a flash
bulb. Turning off the main switch did not kill the water heater!!!
After disconnecting disconnecting the power via the outside
twist-lock connector, I reversed the wires at the pole.
Then I reconnected the trailer connector. When I grabbed the
door handle to go back inside, I got knocked on my ass!
Then I pulled out all the switches and receptacles and found
all the "tails" on the screws. Too bad it did not have a
safety ground in the power cable.

Bob K9EUI

From 9091963772132836910
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a93ba101c9164319,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-05 19:06:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: wanted: FT209RH modification info (repost)
Message-ID: <472@ihu1h.UUCP>
Date: Tue, 5-Feb-85 22:06:53 EST
Article-I.D.: ihu1h.472
Posted: Tue Feb 5 22:06:53 1985

Date-Received: Thu, 7-Feb-85 02:51:31 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 9

x
I've heard rumors that a simple modification to the Yaesu
FT209RH 2 meter portable will permit extended receive
coverage into the VHF public service band, above
150 MHz.

How does one make this modification?
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6365302521100774520
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9b9c35601d8b266d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-06 05:26:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxi.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!whuxi!rcmcc
From: rcmcc@whuxi.UUCP (MC_CONNELL)
Newsgroups: net.ham-radio
Subject: No NJ Mobile Scan Yet
Message-ID: <265@whuxi.UUCP>
Date: Wed, 6-Feb-85 08:26:30 EST
Article-I.D.: whuxi.265
Posted: Wed Feb 6 08:26:30 1985
Date-Received: Fri, 8-Feb-85 00:49:43 EST
Organization: Bell Labs, Whippany, N.J.
Lines: 15

NJ Hams, don't buy that mobile scanner yet!
As of February 5, 1985, State Assembly ll 2393
and the companion Senate bill are both in
committee and no action is scheduled on either.
Reportedly Governor Kean has been briefed
and he is sympathetic, but he may never see the bill(s).
I can't imagine that a revision to help hams
is very high on the action priority list
in spite of some hard lobblying by some hams
with contacts in the state government.
It's been tried before. This time the fellows were
more knowledgable on how to go about it,
but don't anyone hold their breath.

Ron McConnell, W2IOL, whuxi!mruxd!rcmcc

From 4981402171099594219
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,80a3c33afc8a858d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-06 07:15:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 SMI; site husky.uucp
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!cord!bentley!hoxna!houxm!whuxlm!
akgua!sdcsvax!sdcrdcf!hplabs!hao!seismo!rochester!ritcv!husky!fab
From: fab@husky.uucp (Rick Booth)
Newsgroups: net.ham-radio
Subject: Source of 4-400A's
Message-ID: <131@husky.uucp>
Date: Wed, 6-Feb-85 10:15:55 EST
Article-I.D.: husky.131
Posted: Wed Feb 6 10:15:55 1985
Date-Received: Sun, 10-Feb-85 06:25:41 EST
Organization: Eastman Kodak Company, Rochester, NY
Lines: 15

     Recently I inherited a homebrew 80 -10 meter amplifier
from a local ham who has become inactive. The amplifier is
really a work of art and was easy to get back on the air.
The amplifier suffers from one problem. One of the 4-400A
tubes is defective and requires replacement. New 4-400A's
run typically in the $188 price range (one reason why you
don't see contruction articles using this tube any more).
Any suggestions for alternate sources for this tube?

Rick Booth, K2SA   {allerga,seismo}!rochester!ritcv!husky!fab
Eastman Kodak Company {eagle,astrovax,netword!}sun!sunrise!husky!fab

From 6982682152865006403
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6f986a59689060e8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-06 07:26:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabsc.UUCP
Path: utzoo!utcs!lsuc!pesnta!hplabsc!labelle
From: labelle@hplabsc.UUCP (WB6YZZ La Belle)
Newsgroups: net.ham-radio
Subject: FOR SALE ICOM IC-730
Message-ID: <2377@hplabsc.UUCP>
Date: Wed, 6-Feb-85 10:26:40 EST
Article-I.D.: hplabsc.2377
Posted: Wed Feb 6 10:26:40 1985
Date-Received: Thu, 7-Feb-85 08:33:58 EST

Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 15

FOR SALE: 8 Band SSB/CW/AM Transceiver

ICOM IC-730 w/Fl-30 passband tuning filter and
Service manual.

Exc. Cond. $450.00 firm

George
hplabsc!labelle (415) 857-4679 day

From 671621927309481683
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1ddfac86d7d38d0e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-06 11:39:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!dcdwest!ittvax!decvax!linus!
philabs!cmcl2!seismo!brl-tgr!tgr!schmalz@yuma
From: Rich Schmalzbach [USAISC Appl. Engr.] <schmalz@yuma>
Newsgroups: net.ham-radio
Subject: 80 Meter Antenna
Message-ID: <8088@brl-tgr.ARPA>
Date: Wed, 6-Feb-85 14:39:10 EST
Article-I.D.: brl-tgr.8088
Posted: Wed Feb 6 14:39:10 1985
Date-Received: Mon, 11-Feb-85 06:15:56 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 7

One point that no one seems to have approached is the extremely narrow
band-width of the antenna eluded to in the question. Sounds to me like a
quarter wave trap vertical......

Rich Schmalzbach WA6PEZ

From -340980074302892826
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c06caf5943a94e4

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-06 18:57:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxb!mhuxr!ulysses!allegra!bellcore!
petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Re: Novice question
Message-ID: <277@petrus.UUCP>
Date: Wed, 6-Feb-85 21:57:26 EST
Article-I.D.: petrus.277
Posted: Wed Feb 6 21:57:26 1985
Date-Received: Fri, 8-Feb-85 03:48:55 EST
References: <456@zeus.UUCP>
Organization: Bell Communications Research, Inc
Lines: 15

While we're on the subject of test questions, the most memorable one
I've encountered was on my very first (Novice) test in 1971.

The question was to the effect "what precautions should be taken with
high voltage power supplies?". The obviously correct answer was "the
use of bleeder resistors". In the same list, however, was "Double indemnity
life insurance." Imagine! The FCC with a sense of humor. It really
made my day.

This discussion about what ought to be a trivial (to us hams, anyway)
question brings up an important point. If it becomes obvious that a given
question is ambiguous, how do we go about having it removed from the list?
Can a person who has taken a test appeal such questions?

Phil

From -5083977090099914826
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,882bf15b37a91f01,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-06 20:09:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: VOA information (someone asked a while ago)
Message-ID: <15426@mgweed.UUCP>
Date: Wed, 6-Feb-85 23:09:13 EST
Article-I.D.: mgweed.15426
Posted: Wed Feb 6 23:09:13 1985
Date-Received: Fri, 8-Feb-85 01:15:53 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 93

Here is a list of Voice of America stations. Some of these
apparently relay the American Forces Radio & Television Svc
Programs at times.

Location	transmitters	pwr each (KW)	
(Shortwave stations, except where frequency is shown)			
Bethany, Ohio	3	175	
	3	250	
Delano, Ca.	1	200	
	2	50	
	2	100	
	3	250	
Greenville, Nc.	6	500	
	6	250	
	6	50	
Marathon, Fl.	1	50	(1180 KHz)
Bankok, Thai.	1	1000	(1575 KHz)
Colombo, S.L.	3	35	
Kavala, Greece	1	500	(792 KHz)
	10	250	
Monrovia, Lib.	6	250	
	2	50	
Munich, Germ.	1	300	(1197 KHz)
	4	100	
Phillipines	1	1000	(1143 KHz)
(Poro)	2	35	
	2	100	
	3	50	
Rhodes, Greece	1	500	(1260 KHz)
	2	50	
Tangier	4	100	
	4	35	
	2	50	
Phillipines	3	50	
(Tinang)	10	250	

England 6 250
(Wooferton)

(Orfordness) 1 ?? (1296 KHz)

Antigua 1 ?? (1580 KHz)

Shortwave frequencies are as follows:

3980, 3990, 5955, 5965, 5995, 6005, 6015, 6020, 6030, 6035,
6040, 6045, 6055, 6080, 6090, 6095, 6110, 6125, 6130, 6150,
6160, 6180, 6190, 7105, 7120, 7125, 7130, 7135, 7170, 7175,
7180, 7195, 7200, 7205, 7210, 7220, 7270, 7280, 7285, 7295,
9525, 9530, 9540, 9545, 9555, 9560, 9565, 9580, 9605, 9615,
9620, 9630, 9635, 9640, 9645, 9650, 9660, 9670, 9680, 9700,
9715, 9725, 9730, 9735, 9750, 9755, 9760, 9770, 11710,
11715, 11740, 11755, 11760, 11775, 11780, 11805, 11810,
11825, 11830, 11835, 11840, 11845, 11850, 11855, 11865,
11875, 11890, 11900, 11905, 11915, 11920, 11925, 11930,
11960, 11965, 15120, 15140, 15150, 15160, 15175, 15180,
15185, 15195, 15205, 15215, 15225, 15235, 15240, 15245,
15250, 15260, 15265, 15270, 15275, 15280, 15290, 15300,
15305, 15310, 15320, 15330, 15345, 15385, 15395, 15400,
15405, 15410, 15415, 15425, 15430, 15435, 15445, 17705,
17710, 17715, 17730, 17735, 17740, 17765, 17775, 17780,
17785, 17790, 17800, 17810, 17815, 17820, 17830, 17840,
17845, 17850, 17855, 17860, 17865, 17870, 17875, 21460,
21470, 21480, 21845, 21490, 21500, 21520, 21540, 21550,
21570, 21575, 21590, 21610, 21615, 21625, 21630, 21650,
21660, 21670, 21680, 21695, 21730, 21745, 25800, 25880,
26000, 26040

In addition, I have copied VOA transmissions sending RTTY
(74.2 baud Baudot) on the following frequencies:

5435, 5460, 6441, 7442, 7478, 9855, 10230, 10232, 10410,
10880, 10972, 12224, 13770, 13995, 14525, 15749, 15750,
15875, 18272, 20483, 21801

From -7026200687574358801
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,582ce4a9fcd94899
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-07 07:38:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!
mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: NJ exempts hams from mobile scan

Message-ID: <52800048@trsvax.UUCP>
Date: Thu, 7-Feb-85 10:38:00 EST
Article-I.D.: trsvax.52800048
Posted: Thu Feb 7 10:38:00 1985
Date-Received: Mon, 11-Feb-85 06:42:59 EST
References: <7831@brl-tgr.UUCP>
Lines: 11
Nf-ID: #R:brl-tgr:-783100:trsvax:52800048:000:309
Nf-From: trsvax!mikey   Feb 7 09:38:00 1985

Send a certified letter asking for the permit. Then they have to deny in
writing. This will usually get almost any permit you need. Remember,
your dealing with little mentalities trying to be big and important. Be
friendly but firm, and ask for everything negative in writing.

mikey at trsvax
KA5MJQ

From 5883789615255747962
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 12c65a,552058d5ee9de1da,start
X-Google-Attributes: gid12c65a,public
X-Google-Thread: 151e61,552058d5ee9de1da,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-07 08:12:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site watrose.UUCP
Path: utzoo!watmath!watrose!jrkesselman
From: jrkesselman@watrose.UUCP (jrkesselman)
Newsgroups: net.ham-radio,net.micro.cbm
Subject: RTTY decoders
Message-ID: <7256@watrose.UUCP>
Date: Thu, 7-Feb-85 11:12:55 EST
Article-I.D.: watrose.7256
Posted: Thu Feb 7 11:12:55 1985
Date-Received: Fri, 8-Feb-85 00:21:52 EST
Distribution: net
Organization: U of Waterloo, Ontario
Lines: 9
Xref: watmath net.ham-radio:2341 net.micro.cbm:1160

Does anyone know of a good RTTY decoder program for the Commodore 64?
I have seen MICROLOG advertised in some magazines as a good program for the
Shortwave Listener. Has anybody used itor know of another good software product
that does RTTY/morse decoding?

Jack Kesselman
University of Waterloo

From -2435394358722112144
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5ffc2276198f13d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-08 12:30:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hao!seismo!brl-tgr!
tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: HELP: need Becker radio information
Message-ID: <8143@brl-tgr.ARPA>
Date: Fri, 8-Feb-85 15:30:56 EST
Article-I.D.: brl-tgr.8143
Posted: Fri Feb 8 15:30:56 1985
Date-Received: Wed, 13-Feb-85 02:27:28 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 25

Walt:

1. Well, Sonny Boy, when I was yer age, we usta fixem with a wet finger
   and a Volt-Ohmmeter! A schematic was considered cheating!

2. However, in my old age, I have become more decrepit, and, as I also
   have some similar old units, I would be most grateful if you could
   let me know when you obtain manuals etc. I can be reached at
   jhs at mitre-bedford.ARPA   or at (617) 271-7423 (work) / 235-8753 (home)
   or at

        John H. Sangster
        The MITRE Corporation - K203
        P. O. Box 208
        Bedford, MA 01730

   If you are really desperate to figure out how to fix a Becker Mexico
   radio, please get in touch and I will be glad to try to help, as I
   want to fix mine also, and anything I learn helping you will be worth
   the effort.

3. It would have been more helpful, by the way, if you had included some
   more information such as your phone number or address - I was unable to
   figure out a return address for you other than this broadcast to the net.

                              -John S.

From -5209916583916956625

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7cc3163912f8062,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-09 09:50:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site timeinc.UUCP
Path: utzoo!watmath!clyde!cbosgd!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!
vax135!timeinc!dave
From: dave@timeinc.UUCP (David Mutterer)
Newsgroups: net.ham-radio
Subject: Heath SWL receiver for sale (SW 7800)
Message-ID: <100@timeinc.UUCP>
Date: Sat, 9-Feb-85 12:50:24 EST
Article-I.D.: timeinc.100
Posted: Sat Feb 9 12:50:24 1985
Date-Received: Sun, 10-Feb-85 06:06:15 EST
Distribution: na
Organization: Time, Inc. - New York
Lines: 13

I have a Heathkit SW 7800 Communications receiver that sells for $300+
Covers .5 to 30 MHZ.. for more info just look at any current Heath catalog.

It is in perfect condition, and is only a few months old.. I will
let it go for best offer... try me..!! you might be suprised..!!
--

David Mutterer
[vax135|ihnp4]!timeinc!dave

"Any opinions expressed herein are those of the writer and
do not necessarily reflect the opinion of Time Incorporated."

From -600143567066786564
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,be9bb95569f74a19,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-09 16:56:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: new Radio Shack scanner introduced: PRO-55
Message-ID: <475@ihu1h.UUCP>
Date: Sat, 9-Feb-85 19:56:14 EST
Article-I.D.: ihu1h.475
Posted: Sat Feb 9 19:56:14 1985
Date-Received: Mon, 11-Feb-85 06:01:49 EST
Distribution: net
Organization: AT&T Bell Laboratories

Lines: 12

x
New Radio Shack PRO-55 Scanner

Radio Shack is replacing its lowest priced crystal scanner, the 8 channel, 3 band PRO-54 with a new model: the PRO-55.

The PRO-55 has the same frequency coverage, but has 10 channels and is built into a wood grain plastic cabinet of similar profile.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6145441231222780609
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,53970f262fb2c2c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-27 21:45:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site druxv.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!drutx!druxv!neal
From: neal@druxv.UUCP (Neal D. McBurnett)
Newsgroups: net.ham-radio
Subject: Anyone know of any Esperanto language broadcasts? Radio Peking?
Message-ID: <1414@druxv.UUCP>
Date: Fri, 28-Dec-84 00:45:34 EST
Article-I.D.: druxv.1414
Posted: Fri Dec 28 00:45:34 1984
Date-Received: Sat, 22-Dec-84 02:34:09 EST
Organization: AT&T Information Systems Laboratories, Denver
Lines: 12

I would be very interested in picking up international broadcasts
in Esperanto (the "world interlanguage"). I hear that Radio Peking broadcasts
Esperanto about once a week, and I understand that there are quite a lot
of regular broadcasts from other countries. Does anyone know of any?
It might sound like Spanish or Italian to a non-Esperantist.

For more information on Esperanto itself, contact me or read net.nlang.
I have a short lisp program which will do a crude word for word translation
into "English".

Thanks!
-Neal McBurnett, ihnp4!druny!neal, Boulder CO.

From -793483580093686602
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d021b2697a475248,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-12-28 08:45:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: more recent SWL loggings
Message-ID: <425@ihu1h.UUCP>
Date: Fri, 28-Dec-84 11:45:22 EST
Article-I.D.: ihu1h.425
Posted: Fri Dec 28 11:45:22 1984
Date-Received: Sat, 29-Dec-84 03:06:55 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 80

These stations were heard using an ICOM R-71A receiver and an indoor
MFJ 1020 active antenna:

1.6100	KMB824____IL: IDOT, Travelers' Information Svc [Chicago] (B. Parnass)
	KNAP828___IL: IDOT, Travelers' Information Svc [Chicago] (B. Parnass)
1.6717	none______cordless phone: neighbor, fm [Naperville, IL] (B. Parnass)
1.7530	none______cordless phone: Sybil Fitch/aka "The Alternative", 1669 Kiowa, fm [Naperville, IL] (B. Parnass)
1.7652	none______cordless phone: neighbor, fm [Naperville, IL] (B. Parnass)
1.7717	none______cordless phone: neighbor, fm [Naperville, IL] (B. Parnass)
2.5060	WOU_______New England Telephone, wx report, maritime coastal, usb [Marshfield, MA] (B. Parnass)
2.7170	CCS_______Chile: Chilean Navy, cw marker, "VVV VVV de CCS" [Santiago, Chile] (B. Parnass)
3.7820	CTP_______unidentified: cw marker "VVV VVV de CTP", possibly Portugese Naval station? 12/24/84 @0712Z [location?] (B. Parnass)
3.8100	HD210A____Ecuador: standard time/frequency station, 1 sec pips, 12/24/84 @ 0758Z [Guayaquil, Ecuador] (B. Parnass)
4.1818	VCS_______Canada: Canadian Coast Guard, ship/aircraft to coast calling freq, cw [Halifax, NS] (B. Parnass)
4.1850	DUPC______unidentified: "LGW de DUPC pse up 205.8", cw - 12/27/84 @2343Z [location?] (B. Parnass)
4.2550	CFH_______Canada: Canadian Forces Maritime Radio, cw [Halifax, NS] (B. Parnass)
4.2740	GKB5______Portishead Radio, cw [England] (B. Parnass)
4.2770	HKB_______Barranquilla Radio, cw [Columbia] (B. Parnass)
4.2830	ZSJ5______S Africa: RSA Navy, AMVER, cw [Silvermine, S Africa] (B. Parnass)
4.2920	CUG32_____Sao Miguel Radio, cw [Azores] (B. Parnass)
4.2940	WNU31_____TRT Telecommunications, maritime/coastal station, cw [Slidell, LA] (B. Parnass)
4.3100	WNU41_____TRT Telecommunications, maritime/coastal station, cw [Sl

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                              idell, LA] (B. Parnass)
   4.3130    FUG_______France: French Navy, cw [LaRegine, France] (B. Parnass)
   4.3170    ZSC_______Cape Town Radio, cw [Cape Town, S Africa] (B. Parnass)
   4.3490    EAD_______Aranjuez Radio, cw [Spain] (B. Parnass)
             KLB_______Jobest, Panchot & La..., maritime/coast, cw [Marysville,
                               WA] (B. Parnass)
   4.5540    KLC_______Radio KLC Inc, maritime/coastal, cw [Arcadia, TX] (B. Pa
                              rnass)
   5.0970    CFH_______Canada: Canadian Forces Maritime Radio, "NAWS (Notice to
                               All Allied Warships) de CFH", cw [Halifax, NS]
                              (B. Parnass)
   5.2850    CMU967____USSR: Russian Navy, calling RMIL, wkg URLI who was xmitg
                               numbers in fast clean cw [Santiago, Cuba] (B. P
                              arnass)
   6.3480    KFS_______ITT World Communications, maritime/coast, cw [Palo Alto,
                               CA] (B. Parnass)
   7.4330    CCS_______Chile: Chilean Navy, cw marker, "VVV VVV de CCS" [Santia
                              go, Chile] (B. Parnass)
   7.4350    WMTV______Alternative Radio, pirate bdcst, am PO 1945, Del Rae Bea
                              ch, FL (305)936-1812 [Florida] (B. Parnass)
   8.9929    6WW_______France: French Navy, cw [Dakar, Senegal] (B. Parnass)
  10.0510    VFG_______Gander Radio, aviation wx, usb [NF, Canada] (B. Parnass)
             WSY70_____New York Radio, aviation wx, usb [New York] (B. Parnass)
  10.3400    WFK50_____Associated Press, fax [New York] (B. Parnass)
  12.3641    WLO_______ship-to-shore radiotelephone, ship, usb [Mobile, AL] (B.
                               Parnass)
  13.1163    WOM_______AT&T ship-to-shore radiotelephone, wx, usb [Ft Lauderdal
                              e, FL] (B. Parnass)
  13.1349    WLO_______ship-to-shore radiotelephone, shore, usb [Mobile, AL] (B
                              . Parnass)
  13.4100    6WW_______France: French Navy, cw [Dakar, Senegal] (B. Parnass)
  13.5264    CCS_______Chile: Chilean Navy, cw marker, "VVV VVV de CCS" [Santia
                              go, Chile] (B. Parnass)
  14.6410    EBA_______Spain: Spanish Navy, cw [Madrid, Spain] (B. Parnass)
  15.9200    CFH_______Canada: Canadian Forces Maritime Radio, cw [Halifax, NS]
                               (B. Parnass)
  17.4100    WWD_______US: Commerce, National Marine Fisheries Svc, Scripps Buc
                              om Fisheries, fax wx maps, usb voice id [La Joll
                              a, CA] (B. Parnass)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From 3323184100725480610
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9102eb337575e1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-28 08:57:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site tekcbi.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!hoxna!houxm!ihnp4!mhuxn!
mhuxj!mhuxr!ulysses!allegra!bellcore!decvax!tektronix!tekig!tekcbi!jeffg
```

From: jeffg@tekcbi.UUCP
Newsgroups: net.ham-radio
Subject: Re: RTTY interface, and Packet information wanted.
Message-ID: <156@tekcbi.UUCP>
Date: Fri, 28-Dec-84 11:57:16 EST
Article-I.D.: tekcbi.156
Posted: Fri Dec 28 11:57:16 1984
Date-Received: Thu, 3-Jan-85 04:20:24 EST
References: <606@asgb.UUCP>
Reply-To: tektronix!tekcbi!jeffg
Organization: Tektronix, Beaverton OR
Lines: 9
Keywords: RTTY
Summary:

I just got my Heathkit catalog and described within is such a device.

Does anybody out there have any experience with it, and to receive news
service broadcasts, does it require the optional filter elements?
--
Jeff C. Glover, Tektronix, Inc. PO Box 500, MS Y6-546, Beaverton, OR 97077
{ psu-eea,masscomp,decvax,allegra,uf-cgrl,mit-eddie,mit-ems,uoregon,psu-cs,
  orstcs,zehntel,ucbcad,ucbvax,purdue,uw-beaver,reed,ogcvax,ihnp4,tekred,
  minn-ua,cbosg }!tektronix!tekcbi!jeffg

From 8933397522172053048
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,81dad5ea3d553a1d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-28 09:35:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: NTIS report on 162-174 MHz freq band usage available
Message-ID: <426@ihu1h.UUCP>
Date: Fri, 28-Dec-84 12:35:50 EST
Article-I.D.: ihu1h.426
Posted: Fri Dec 28 12:35:50 1984
Date-Received: Sat, 29-Dec-84 03:11:14 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 35

This report may be of interest to those who scan the VHF bands.
Reference is made to digital voice scrambling and federal radio
assignments.

 ;Subject: CTR: spectrum resource assessment in the 162-174 mhz frequency band.
 ;Organization: National Telecommunications and Information
 ;

```
 ;
 ;              Order number: PB84-210244
 ;Title: SPECTRUM RESOURCE ASSESSMENT IN THE 162-174 MHZ FREQUENCY BAND.
 ;       Technical rept., Flynn, F. P. & Moran, W. M.
 ;       National Telecommunications and Information Administration, Annapolis,
 ;       MD.
 ;       Feb 84, 78p
 ;
 ;       This report is a spectrum resource assessment of the 162-174 MHz band.
 ;       Included is information on allocation, frequency assignments and agency
 ;       equipment usage, along with the results of agency interviews. Present
 ;       spectrum management techniques and associated problems were considered
 ;       in this report. This band contained 35,275 assignments, as of January
 ;       1982, which is approximately one-quarter of all the frequency
 ;       assignments in the GMF.
```

Employees of AT&T Bell Laboratories may obtain a photocopy of
this report by typing the command:

```
         /usr/lbin/library -1 PB84-210244
```

and answering the questions which ask for your name and payroll
account number.

```
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```

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==============================================================================
```

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -5765191495660453269
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27adaf03e0d27703,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-28 15:01:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ucbvax.ARPA
Path: utzoo!decvax!ucbvax!medin
From: medin@ucbvax.ARPA (Milo Medin)
Newsgroups: net.ham-radio
Subject: Trying to put a 2m antenna in my car
Message-ID: <3949@ucbvax.ARPA>
Date: Fri, 28-Dec-84 18:01:53 EST
Article-I.D.: ucbvax.3949
Posted: Fri Dec 28 18:01:53 1984
Date-Received: Fri, 28-Dec-84 23:03:04 EST
Distribution: net
Organization: University of California at Berkeley
Lines: 14

Well, I am still trying to decide on how to mount a 2m antenna
onto my new Celica. I am now considering a trunk mount. I have
talked to a few people and they say performance is ok, but almost

all the trunk mounts leak a bit. Is there a secret to mounting these
things or is it luck? Anyone have any recommendations as to which
2m mobile antenna they like? I am eyeing a few 5/8 wave antennas
right now. I know I know, a roof mount is the best, but I cringe at drilling
holes.....

                ThMilo   anks,

From -8036694160765879248
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6e98d0c94dcb4cb6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-28 22:01:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site iham1.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!iham1!kav
From: kav@iham1.UUCP (Kurt Vangsness)
Newsgroups: net.ham-radio
Subject: y broadcasts
Message-ID: <277@iham1.UUCP>
Date: Sat, 29-Dec-84 01:01:44 EST
Article-I.D.: iham1.277
Posted: Sat Dec 29 01:01:44 1984
Date-Received: Sat, 29-Dec-84 05:47:49 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 65

Here are some stations heard using a Kenwood R-1000 and
a window frame for an antenna (really!). I'll use Bob Parnass's format
for the stations.

0.1850	WGU20_____	Time station: eastern standard time, am [Location unknown, any info anyone?]
1.7600	none______	cordless phone: fm.
2.9000	???_______	"Gander" Air traffic control, usb [NF, Canada]
3.4850	???_______	"Gander" Aviation weather. usb [NF, Canada]
4.0290	none______	Spanish numbers station, female voice, 5 digit, am
4.2500	CFH_______	unidentified: cs marker "VVV VVV VVV de CFH CFH CFH", cw
4.3650	???_______	unidentified: interval marker, accordian, then identification by voice in French? Possibly FFL33 Sainte Lys Radio Sainte Lys France (telecommunicatons>, usb.
4.3930	WOM_______	High seas operator to the "Royal Viking", usb
4.4300	NMN_______	U.S. Coast Guard Marine Forcast, usb [Portsmouth, Va]
4.4800	none______	Spanish numbers station, female voice, 5 digit, am
4.6750	none______	unidentified: male voice repeating (in Spanish?) what sounded like very fast number patterns.
6.3860	FUF_______	unidentified: cw marker "VVV de FUF"

```
  6.4800    ???_______unidentified: "T?? this is R3B radio check", usb
  6.5000    WLO_______unidentified: cw marker for RTTY station:
                "C13L C13L C13L de WLO RTTY k"
  6.5050    NMN_______U.S. Coast Guard Marine Forcast, usb [Portsmouth, Va]
  6.6960    ???_______unidentified: Foxtrot message, mentioned Skyking., usb
  6.8050    none______Spanish numbers station, female voice, 4 digits, am
  8.2220    WOM?______High seas operatior to the "Norway", usb
  8.6040    ???_______unidentified: "D9B to F2V, send RMTT to me", then
                heard what sounded like RTTY, usb
  8.6430    LPD86_____General Packeco Radio, cw marker:
                "VVV dw LPD44/ 86LPD44/ 86LPD44/ 86QSX4 AND
                8MHZ k", [Don Bosco, Argentina]
  8.6940    CFH_______unidentified: cw marker "VVV VVV VVV de CFH CFH CFH", cw
  8.7040    KFS_______ITT world communications, cw marker:
                "de KFS KFS KFS SITOR QSX 6812 AND 16MHZ k"
             [ Half Moon, Ca]
  8.7150    WLO_______unidentified: cw marker "de WLO RTTY k", cw
  8.7310    WOM_______High seas operator to the "Island Princess", usb
  8.7460    WOM?______High seas operator to the "Norway", usb
  8.7620    WOO_______AT&T-C Ocean Gate Radio, traffic list, usb
  8.7770    ???_______unidentified: "H8G calling EZU Batter-up", usb
  8.8110    WOM_______High seas operator to the "Fair Sky", usb
  8.8600    ???_______unidentified: Air traffic, regerences were made
                by pilots to Johannesburg, (S. Africa?).
                Traffic control had British accent, usb
  8.9660    HATE43____unidentified: "Rogers, Rogers, HATE43, Radio check, over"
  8.9910    B6WW______unidentified: cw marker: "B6WW VVV"
 11.2270    ???_______unidentified: "McDill, test, 1234554321", usb
 13.1060    WOO_______AT&T-C Ocean Gate Radio, traffic list, usb
 13.1800    V4S_______unidentified: "Stand by for flash traffic"
 16.4900    WOM?______High seas operator to the "Nordic Prince", usb
 17.2540    WOM?______High seas operator to the "Nordic Prince", usb
 17.2600    WOM_______High seas operator to the "Claudia B", usb



    If anyone has any more info on these stations, or has
    corrections to my information, please send mail.

        Kurt Vangsness
        AT&T Bell Laboratories - Naperville, Ill
        ihnp4!iham1!kav


From 4770178559851630071
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6e98d0c94dcb4cb6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-29 00:01:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site iham1.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!ihnp4!iham1!kav
From: kav@iham1.UUCP (Kurt Vangsness)
```

Newsgroups: net.ham-radio
Subject: Re: y broadcasts
Message-ID: <279@iham1.UUCP>
Date: Sat, 29-Dec-84 03:01:56 EST
Article-I.D.: iham1.279
Posted: Sat Dec 29 03:01:56 1984
Date-Received: Sun, 30-Dec-84 00:53:40 EST
References: <277@iham1.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 10

I noticed a couple of problems with my last posting.
The subject line should have read:
"SWL utility broadcasts" not "y broadcasts"

Also, the frequency for WGU20 is 0.1800 not 0.1850.

Kurt Vangsness
AT&T Bell Laboratories - Naperville, Ill
ihnp4!iham1!kav

From 8019997860408488129
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c657ff3e424dc2da,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-29 05:16:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site clyde.UUCP
Path: utzoo!watmath!clyde!lda
From: lda@clyde.UUCP (Larry Auton)
Newsgroups: net.ham-radio
Subject: RF Grounding and Shielding
Message-ID: <690@clyde.UUCP>
Date: Sat, 29-Dec-84 08:16:54 EST
Article-I.D.: clyde.690
Posted: Sat Dec 29 08:16:54 1984
Date-Received: Sun, 30-Dec-84 00:43:37 EST
Distribution: na
Organization: AT&T Bell Laboratories Whippany NJ
Lines: 25

My brother wants me to find out about RF Grounding and Shielding.
He saw (or heard about) a way to achieve excellent grounding by
anchoring a long flat sheet of copper (20 ft. by 6 in.) to a concrete
floor, and using it as the ground. He wants the nitty-gritty details.

He mentioned a Sperry-Rand publication called "Facility Planning" as a
possible reference, but he didn't know where to look for something like
that. My brother doesn't mind digging for himself, so names of books
or other publications and their sources would be useful, too.

This topic may be too broad, so he threw out a couple of terms that may (to some of you) narrow the scope so that it can be answered quickly.

    Common Mode Current Loop

    Copper Mass Sheeting

I don't know much about grounding or about ham radio, but I'll forward whatever you tell me to him.
--
Larry D. Auton
AT&T Bell Laboratories, Whippany Rd., Whippany, NJ 07981
Room 2C-123
(201)386-4272
ihnp4!clyde!lda

From -568868154663186451
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27adaf03e0d27703
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-29 08:20:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site umd5.UUCP
Path: utzoo!decvax!genrad!mit-eddie!godot!harvard!seismo!umcp-cs!cvl!umd5!louie
From: louie@umd5.UUCP
Newsgroups: net.ham-radio
Subject: Re: Trying to put a 2m antenna in my car
Message-ID: <282@umd5.UUCP>
Date: Sat, 29-Dec-84 11:20:19 EST
Article-I.D.: umd5.282
Posted: Sat Dec 29 11:20:19 1984
Date-Received: Sun, 30-Dec-84 00:17:38 EST
References: <3949@ucbvax.ARPA>
Reply-To: louie@umd5.UUCP (Louis Mamakos WA3YMH)
Distribution: net
Organization: U of Md, CSC, College Park, Md
Lines: 19
Keywords: Celica 2m
Summary:

If you are considering a trunk mount, I assume that you have the coupe version of the Celica, and not the hatchback. You may want to consider a hole-mount type antenna on the trunk lid. It is not as likely to leak, and would probably work better than the trunk lid mount, having a better ground plane. I'd encourage you to put a quarter wave or 5/8 on the roof. I put one on my 1981 Celica, and it only took about 30 minutes. If you'd like the gory details of how I did mine, just ask.

BTW, I'd go with Larson antennas; they may cost more, but its worth it. I have a Larson NMO mount on my car, with a quarter wave whip for around town. I can swap the 5/8 on when I'm on a trip and want better performence.
--

Louis A. Mamakos WA3YMH
Computer Science Center - Systems Programming
University of Maryland, College Park

Internet: louie@umd5.arpa
UUCP: ..!seismo!cvl!umd5!louie

From -7741631064092994685
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c657ff3e424dc2da
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-30 08:30:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site umd5.UUCP
Path: utzoo!decvax!genrad!mit-eddie!godot!harvard!seismo!umcp-cs!cvl!umd5!louie
From: louie@umd5.UUCP
Newsgroups: net.ham-radio
Subject: Re: RF Grounding and Shielding
Message-ID: <284@umd5.UUCP>
Date: Sun, 30-Dec-84 11:30:29 EST
Article-I.D.: umd5.284
Posted: Sun Dec 30 11:30:29 1984
Date-Received: Mon, 31-Dec-84 00:22:24 EST
References: <690@clyde.UUCP>
Reply-To: louie@umd5.UUCP (Louis Mamakos)
Distribution: na
Organization: U of Md, CSC, College Park, Md
Lines: 29
Keywords: Sperry Univac
Summary:

In article <690@clyde.UUCP> lda@clyde.UUCP (Larry Auton) writes:
>My brother wants me to find out about RF Grounding and Shielding.
>He saw (or heard about) a way to achieve excellent grounding by
>anchoring a long flat sheet of copper (20 ft. by 6 in.) to a concrete
>floor, and using it as the ground. He wants the nitty-gritty details.
>
>He mentioned a Sperry-Rand publication called "Facility Planning" as a
>possible reference, but he didn't know where to look for something like
>that. My brother doesn't mind digging for himself, so names of books
>or other publications and their sources would be useful, too.

The publication you mentioned is a facility planning and installation guide
for Sperry's 1100 Series of mainframe computer systems. You'd probably want
to find one for their 1100/80 or 1100/90 mainframe. The idea is that all of
the equipment cabinets are grounded to this system of copper sheets, which
give you a low impedence ground between the components.

I don't know if you can get one of these out of Sperry or not; most of it
deals with the mechanics of installing the ground grid, and not the theory.
I can briefly summarize the installation procedure if you like, having

installed 4 or 5 of these suckers.
--

Louis A. Mamakos WA3YMH
Computer Science Center - Systems Programming
University of Maryland, College Park

Internet: louie@umd5.arpa
UUCP: ..!seismo!cvl!umd5!louie

From 5441861685526173333
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dec120604f7669e4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-31 13:56:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: images on Regency MX5000 scanner
Message-ID: <428@ihu1h.UUCP>
Date: Mon, 31-Dec-84 16:56:09 EST
Article-I.D.: ihu1h.428
Posted: Mon Dec 31 16:56:09 1984
Date-Received: Thu, 3-Jan-85 00:53:42 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 37

x
Images on Regency MX5000 Scanner

Ed Sirovy (IL-004)
Chicago Chapter Moderator
Radio Communications Monitoring Association

The Regency MX5000 with its 750 MHz IF has images after all. Subtract the second harmonic of the transmit fre-
quency from 750 and there is the image! The second har-
monic itself will be heard only for some high-power FM-TV stations and then weakly if at all .... but take any sta-
tion between 100 and 275 MHz double it (200 - 550), sub-
tract it from 750 and you get an image at 550 down to 200 MHz.

Take a UHF-TV station at 550, double it to 1100 and

sub-
tract 750. You get 350 but will find no image as the
front end does not pass anything above 550.

If this were the MX7000 version, passing everything up to
1200 MHz, images would show up all over the place. Maybe
this is why we haven't seen the MX7000. The MX5000
schematic one of our members got a hold of showed the
extra circuitry for the extened range [rumor is that
Regency has given up on the MX7000 due to this very prob-
lem, and is going to offer the MX4000 instead, which
won't cover beyond 950 MHz - Bob Parnass].

Please note we are not getting a harmonic of the injec-
tion frequency, but of the frequency transmitted and
received!
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5007139808630045317
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e8ef3f74e03b6374,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-01 13:09:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!edsel!bentley!hoxna!houxm!
ihnp4!mhuxn!mhuxj!mhuxr!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <244@petrus.UUCP>
Date: Tue, 1-Jan-85 16:09:11 EST
Article-I.D.: petrus.244
Posted: Tue Jan 1 16:09:11 1985
Date-Received: Thu, 3-Jan-85 04:06:11 EST
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84352.42296325
Mon Dec 17 10:09:04.24 1984 UTC
Element set: 714
Inclination: 97.6125 deg
RA of node: 330.1975 deg
Eccentricity: 0.0002482
Arg of perigee: 152.7207 deg
Mean anomaly: 207.4186 deg
Mean motion: 15.26774788 rev/day
Decay rate: 1.939e-05 rev/day^2

```
Epoch rev:           17749
Semi major axis:  6860.563 km
Anom period:     94.316464 min
Apogee:            488.534 km
Perigee:           485.129 km
Ref perigee:      2542.45072355
   Mon Dec 17 10:49:02.514 1984 UTC
Beacon:           145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time:      84351.86617632
   Sun Dec 16 20:47:17.634 1984 UTC
Element set:     150
Inclination:       25.9109 deg
RA of node:       162.7594 deg
Eccentricity:    0.6022672
Arg of perigee:   331.9404 deg
Mean anomaly:       5.6897 deg
Mean motion:    2.05847511 rev/day
Decay rate:        7.9e-07 rev/day^2
Epoch rev:            1137
Semi major axis: 26106.245 km
Anom period:    699.546957 min
Apogee:          35451.939 km
Perigee:          4006.068 km
Ref perigee:      2541.85849844
   Sun Dec 16 20:36:14.265 1984 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84355.21738625
   Thu Dec 20 05:13:02.171 1984 UTC
Element set:     52
Inclination:       98.2179 deg
RA of node:        56.6256 deg
Eccentricity:    0.0014780
Arg of perigee:    66.8442 deg
Mean anomaly:     293.4307 deg
Mean motion:   14.61931694 rev/day
Decay rate:       1.08e-06 rev/day^2
Epoch rev:            4288
Semi major axis:  7062.159 km
Anom period:     98.499814 min
Apogee:            712.161 km
Perigee:           691.285 km
Ref perigee:      2545.23003491
   Thu Dec 20 05:31:15.15  1984 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
```

```
Epoch time:      84348.21172000
   Thu Dec 13 05:04:52.608 1984 UTC
Element set:     109
Inclination:       82.9632 deg
RA of node:        33.8104 deg
Eccentricity:    0.0058171
Arg of perigee:   334.0861 deg
Mean anomaly:      25.7296 deg
Mean motion:   12.15588820 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13265
Semi major axis:  7987.323 km
Anom period:    118.461109 min
Apogee:           1659.664 km
Perigee:          1566.738 km
Ref perigee:      2538.20584045
   Thu Dec 13 04:56:24.615 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84355.36390182
   Thu Dec 20 08:44:01.117 1984 UTC
Element set:     240
Inclination:       82.9566 deg
RA of node:        40.3805 deg
Eccentricity:    0.0019368
Arg of perigee:    50.2699 deg
Mean anomaly:     310.0037 deg
Mean motion:   12.06664240 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           13254
Semi major axis:  8026.684 km
Anom period:    119.337257 min
Apogee:           1676.543 km
Perigee:          1645.451 km
Ref perigee:      2545.37541112
   Thu Dec 20 09:00:35.520 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      84351.60833977
   Sun Dec 16 14:36:00.556 1984 UTC
Element set:     206
Inclination:       82.9614 deg
RA of node:        44.1545 deg
Eccentricity:    0.0011499
Arg of perigee:    84.2643 deg
Mean anomaly:     275.9742 deg
Mean motion:   12.05049825 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13191
Semi major axis:  8033.856 km
Anom period:    119.497134 min
```

```
Apogee:           1685.803 km
Perigee:          1667.327 km
Ref perigee:      2541.62770868
   Sun Dec 16 15:03:54.29  1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84338.57377670
   Mon Dec  3 13:46:14.306 1984 UTC
Element set:     93
Inclination:       82.9596 deg
RA of node:        41.4983 deg
Eccentricity:    0.0050431
Arg of perigee:    14.8822 deg
Mean anomaly:     345.3711 deg
Mean motion:   12.13562906 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13126
Semi major axis:  7996.216 km
Anom period:    118.658867 min
Apogee:           1659.786 km
Perigee:          1579.135 km
Ref perigee:      2528.57712517
   Mon Dec  3 13:51:03.614 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      84349.56190854
   Fri Dec 14 13:29:08.897 1984 UTC
Element set:     184
Inclination:       82.9630 deg
RA of node:        41.0208 deg
Eccentricity:    0.0022432
Arg of perigee:    20.4739 deg
Mean anomaly:     339.7220 deg
Mean motion:   12.08690190 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13206
Semi major axis:  8017.706 km
Anom period:    119.137229 min
Apogee:           1660.123 km
Perigee:          1624.153 km
Ref perigee:      2539.56656877
   Fri Dec 14 13:35:51.541 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      84329.98981768
   Sat Nov 24 23:45:20.247 1984 UTC
Element set:     302
Inclination:       82.9599 deg
RA of node:        58.1798 deg
Eccentricity:    0.0020170
```

```
Arg of perigee:   180.5669 deg
Mean anomaly:     179.5382 deg
Mean motion:   12.02950966 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12908
Semi major axis:  8043.204 km
Anom period:    119.705627 min
Apogee:           1681.284 km
Perigee:          1648.838 km
Ref perigee:      2519.94835986
   Sat Nov 24 22:45:38.292 1984 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84357.08331799
   Sat Dec 22 01:59:58.674 1984 UTC
Element set:     296
Inclination:       99.0726 deg
RA of node:       330.7239 deg
Eccentricity:    0.0012323
Arg of perigee:   289.0729 deg
Mean anomaly:      70.9104 deg
Mean motion:   14.13126528 rev/day
Decay rate:       -9.3e-07 rev/day^2
Epoch rev:           18039
Semi major axis:  7224.014 km
Anom period:    101.901703 min
Apogee:            873.398 km
Perigee:           855.594 km
Ref perigee:      2547.06937916
   Sat Dec 22 01:39:54.359 1984 UTC
Beacon:           137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84335.55063103
   Fri Nov 30 13:12:54.520 1984 UTC
Element set:     95
Inclination:       98.6893 deg
RA of node:         4.3944 deg
Eccentricity:    0.0015986
Arg of perigee:   295.0486 deg
Mean anomaly:      64.9032 deg
Mean motion:   14.22440040 rev/day
Decay rate:        4.5e-07 rev/day^2
Epoch rev:            8712
Semi major axis:  7192.403 km
Anom period:    101.234496 min
Apogee:            842.907 km
Perigee:           819.911 km
Ref perigee:      2525.53795656
   Fri Nov 30 12:54:39.447 1984 UTC
Beacon:           137.5000 MHz
```

From -7568685224640844161
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,92357471e019efdc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-02 08:16:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!hoxna!houxm!mhuxj!mhuxr!
ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Gateway V1 No 10
Message-ID: <246@petrus.UUCP>
Date: Wed, 2-Jan-85 11:16:59 EST
Article-I.D.: petrus.246
Posted: Wed Jan 2 11:16:59 1985
Date-Received: Thu, 3-Jan-85 04:15:53 EST
Organization: Bell Communications Research, Inc
Lines: 400

Message: 511: GATEWAY: 12-18 to: ALL from: K8KA
Filed at: 12/18/84 18:49
Gateway: The ARRL Packet Radio Newsletter
Volume 1, Number 10
December 18, 1984
Season's Greetings!

ATTENTION GLB DIGIPEATER USERS

If you are using a GLB PK-1 primarily as a digipeater, you should immediately get a software update from GLB. Software prior to Version 3.5 will not digipeat multiple frames with multiple digipeaters. If a GLB PK-1 is specified as part of a multirepeater path, only the first frame in any transmission will be repeated. This can exponentially increase the traffic on a channel where a PK-1 is a wide-coverage digipeater.

To get your software updated to Version 3.5, send a $10 deposit (or your current PROMs) to GLB. When you receive your new PROMs, send the old ones to GLB and you will get your deposit back.

This is an important problem, and should not be ignored by GLB users. The GLB address is

GLB Electronics
1952 Clinton St.
Buffalo, NY 14206.

From GLB.

MORE FROM GLB

In Gateway issue 8, we reported that GLB electronics, makers of the PK-1 TNC, were at work on the PK-2. Ed Jackson, an engineer with GLB, was able to confirm that preliminary engineering work is being done on the PK-2, but that it is primarily a "commercial TNC." More important for the radio amateur is GLB's development of the PK-R, an integrated VHF radio and TNC. On the RF end of the PK-R is a 25-watt crystal-controlled, highly stable FM rig. The packet equipment is a PK-1 TNC. For repeater operation, you simply connect the PK-R to a 12-V supply and an antenna, hit the reset button and you're on the air. For home-station use the rig has an RS-232C connector that goes to a terminal or computer. The PK-R is ready for type-acceptance tests, so look for it on the market before long.

Mr. Jackson also reports that a 200-Hz shift modification for the PK-1 is almost complete. This, along with an existing 300-bit/s modification will allow PK-1 users to join the growing number of HF packet users.

Ed.

TWO-METER BAND PLANNING

In several metropolitan areas, the amount of packet-radio traffic has exceeded the capacity of a single 1200-baud channel. On the east coast, the channel that is full is 145.01 MHz, and one of the most-asked questions is "what frequency do we go to next?" This question has no simple answer.

Ultimately, packet radio will move up to and above 220 MHz. When intercity "backbone" links are running on 220 MHz, the congestion on 2 meters will be eased. However, even when the network backbone is in place and experienced packet operators are moving to higher transmission speeds on higher frequencies, local traffic and "entry-level" packet operation will be on 2 meters.

So, the question remains: What frequency do we go to next? Some people on EASTNET have proposed a 20-kHz channel spacing, using 145.010, 145.030, 145.050, 145.070 and 145.090 MHz. Albert Hamilton, AG1F, Chairman of the New England Spectrum Management Committee points out that "Any rig produced in the last 6 years is perfectly capable of operating on a 15-kHz spacing without undue problems. While there are some real pieces of junk operating on 145.010 MHz now, that is no reason to give up sensible spacing." Using a 15-kHz spacing would provide six channels between 145.000 and 145.100 MHz -- one more channel than could be provided with 20-kHz spacing. We may need this extra channel in a few years.

If packet activity in your area is beginning to move away from a single 2-meter frequency, consider the arguments for a 15-kHz

spacing. If you have any comments on this topic, address them to Gateway and

    Albert W. Hamilton, AG1F
    Chairman
    New England Spectrum Management Committee
    54 Hathaway Ave.
    Beverly, MA 01915.

    Ed.

RTTY-TO-PACKET GATEWAYS

Albert Hamilton, AG1F, who made the above suggestions concerning band planning, is also interested in working on a RTTY-to-packet gateway. Ideally, such a gateway would operate in real-time, allowing the RTTY user and the packet user to have a proper contact without knowing what mode the other operator was using. An alternative to this scheme would be to have a bulletin-board system that could be accessed by both packet and RTTY stations. Since there are already many stations equipped for Baudot RTTY, packet-to-RTTY gateways could bring interested amateurs in contact with packet radio while increasing the utility of packet networks for traffic handling.

If you have undertaken a packet-to-RTTY project, send the details to Mr. Hamilton and Gateway.

    From AG1F.

PACKET IN PENNSYLVANIA

Gary Hoffmann, AK3P, sends us a summary of packet activity in central Pennsylvania. Gary got his TAPR TNC in June, and was the first station on the air in the Harrisburg, PA area. Shortly after that, Bob Warrington, WB3FQL, and Tim Shingara, WB3EYB, were also in operation. Tim supplied a link to WB4APR near Balitmore, and the group gained access to EASTNET.

In October, Gary installed a wide-coverage digipeater above Harrisburg in the building of the Central Pennsylvania Repeater Association. The digipeater, running under the call WA3KXG, is in operation 24 hours per day, on 145.01 MHz. From its 1400-foot elevation, WA3KXG provides a reliable link into Baltimore, Washington, and Virginia, via WB4APR and W3VD. A link into New Jersey has been established through WB3FYL and W2FPY.

There are presently about 5 stations on packet in the Harrisburg area, all using TAPR TNCs. Gary hopes that activity will increase in the near future, with links established into

Scranton, PA and New York state.

Another item from Pennsylvania: Neil Sablatzky, WA2WIM, in Edinboro, PA (near Erie) is interested in becoming active on packet. His problem is that no one else in his area is interested. He would like to help link Northwest Pennsylvania with the eastern and southern parts of the state. He would also like to establish some contacts into the Buffalo, NY area. Neil would like to hear from anyone near Erie who is working on packet networking. He can be reached on the WB3USH repeater on 146.76 MHz, where he will be listening on packet when his TAPR TNC arrives. You can write him at:

201 Granada Drive
Edinboro, PA 16412.

From KC2WZ and AK3P

MIDWEST NETWORKING

The packet-radio network that has grown up around central Iowa has finally reached the Iowa-Minnesota border. Lyle Monson, W0FQ, is active from Spirit Lake, IA.

Lyle wants to know what frequencies are being used in southern Minnesota, and is looking for some active stations to hold schedules with. He will be able to connect to the rest of the Iowa packet network via W0ZVY, the wide-coverage digipeater in Guthrie Center, IA.

The Central Iowa Technical Society (CITS) is planning a 220-MHz intercity network. They are looking for a station around Mason City, IA to extend this backbone to the north.

From W0RPK.

MT. BEACON DIGIPEATER

The gaps in EASTNET are beginning to be filled in. The addition of the WB2KMY digipeater on Mt. Beacon, NY will help to tie both Boston, MA and Newington, CT into the southern portion of the network.

The Mt. Beacon digipeater, on 145.01 MHz, is the first part of an ambitious project being undertaken jointly by the Mt. Beacon Amateur Radio Club and the Putnam Emergency Amateur Repeater League (PEARL). When the project is complete, there will be two complementary digipeaters in the mountains around Poughkeepsie, NY. One of the machines will be on Mt. Beacon, a site that has good coverage to the west. The other will be on Mt. Ninham, with a clear path to the east. The two clubs will be working together to minimize interference between the two digipeaters maximize

the coverage provided by the pair.

The call used at the Mt. Beacon site is WB2KMY-1, and the call at the Mt. Ninham site will be KG1O-9. If you are located in northern New Jersey, Northeastern Pennsylvania or Western New England, check out these new facilities. (Leave reports of coverage on the WA2RKN-2 MailBox.)

If you are not in New England, there is still something of value here; packet repeaters, unlike 2-meter voice repeaters, must coexist on a single frequency. If several clubs in one area are interested in packet radio, it is important that they work as a team to provide valuable and useful coverage. Lack of cooperation can only lead to a congested local-area network.

Via WB2KMY.

WESTNET IN MONTEREY

Packet operations in Monterey, CA, have improved due to the addition of a 6-element Yagi at the K6LY digipeater site. Buzz Shaw, WA1NHP, reports that the Monterey packet operators are also looking into a site on Mt. Toro, at an elevation of 3500 feet. This would be a real improvement over the current site, which is only 110 feet above sea level. However, even at the low elevation, stations using K6LY can usually connect to Hank Magnuski, KA6M, and use his Data General computer system.

Via WA1NHP

ILLINOIS PACKET MEETING

Twenty-five people, representing networks in Central Illinois, Southern Illinois, Chicago and St. Louis, attended the December 2 meeting of the Central Illinois Packet Radio Users Society (CIPRUS). The administrative portion of the meeting resulted in a statement of the club's intent "to promote packet radio throughout Illinois by acting as a clearing house for packet information, and to work for reliable packet communication within Illinois."

After electing club officers, those present took up a discussion of packet-radio operating practices. Since packet radio is new to amateur radio, there is no body of common thought as to what constitutes "good operating procedure." In particular, there is still no agreement as to when it is appropriate to send out CQ or QST messages. Broadcasting such frames through wide-coverage digipeaters has started to significantly slow traffic on several crowded networks. However, those at the CIPRUS meeting agreed that QST packets used as propagation indicators or to carry news bulletins were reasonable. They also decided that CW

identification is not necessary and should be discouraged. [Close examination of section 97.84 of the FCC Amateur Radio Service Rules shows this to be an acceptable decision.-- Ed.] It was observed that application of common sense by packet operators would significantly reduce network congestion.

The CIPRUS meeting closed with the distribution of the the national Packet User's Directory as compiled by N9AGC and available through CIPRUS.

Via K9NG.

PACKET MAP

Paul Barnett, N0CRN, placed the following message on DRNET:

"I'm compiling information on existing amateur packet networks to use at an upcoming packet-radio demonstration. I want to be able to show a large map of North America that is sufficiently detailed to explain multiple digipeaters and show how packet-radio networking is progressing.

"I would like everyone to send me information about their local network, so that I can generate the map. Please confine the listed stations to those with wide coverage. I'm not particularly interested in the 50 stations within 25 miles of each other in a metropolitan area. What I am interested in is the stations that make up a link into another metropolitan area.

"I'd like to hear about all forms of networking: VHF (EASTNET, SOUTHNET, WESTNET), HF (particularly gateways and scheduled traffic handling operations) and OSCAR teleports.

"Confine your descriptions to reliable links, noting those that are not available 24 hours per day. Please limit information about planned links to those that will be a available by the end of the year.

"When I get the map done, I will try to reduce it to a single page and make it generally available.

Send information about your local network to
Paul Barnett, N0CRN
130 Demont Ave. East, Apt. 255
Little Canada, MN 55117

or to Gateway at the ARRL.

Via DRNET.

PACKET APPLICATIONS: WEATHER

K6AAG>QST:HIDESERT WX 1100/52/SCTRD/VIS10HZ/SSE10-
15/29.71/"Robbie"

Although running in an attended and manual mode now, the above is an example of what could become an automated service as packet radio continues to grow and rules continue to change.

For those who need help in interpretation (as I did), the above QST frame says that the weather in Southern California's high desert region at 11:00 was 52 degrees, scattered clouds, visibility 10 miles with haze, winds from the south southeast at 10-15 knots, barometer 29.71 inches. Robbie Wohosky, K6AAG, the originator of the message, is active in the California weather net on 75 meters. He currently summarizes the information gathered by this net and distributes it via RTTY. He is now looking into ways to use packet radio as well.
It is probably a safe bet that amateur-gathered weather information will be part of the data stream as regional and national digital networks take shape.

[If you have thought of any interesting applications of packet radio, please send them along to Gateway. -- Ed.]

From NK6K.

PACKET READING

Paul Newland, AD7I, points us toward IEEE's Communications Magazine, an IEEE monthly publication that features tutorial technical discussions about communications concepts and systems. (Don't confuse it with IEEE Transactions on Communications, a mathematical and theoretical journal.) The December issue of Communications Magazine contains the following articles of interest to packet-radio enthusiasts:

"Automatic-Repeat-Request Error-Control Schemes," by Shu Lin, Daniel Costello, Jr., and Michael Miller. Error detection incorporated with automatic-repeat-request (ARQ) is widely used for error control in data communications systems. [Including packet radio. -- Ed.] This method of error control is simple and provides high system reliability. If a properly chosen code is used for error detection, virtually error-free data transmission can be attained. This paper surveys various types of ARQ and hybrid ARQ schemes, and error detection using linear block codes.

"Improving on Bit Error Rate," by Virgil I. Johannes. On the semantics of the term -- its invalidity in the absence of a specified averaging period.

"Digital Signaling Techniques," by William Stallings. A

comparison of various encoding techniques with an eye to superior performance.

Also look into the November, 1984 issue of Proceedings of the IEEE. This special issue on satellite communication networks contains an article titled "Packet Switching for Mobile Earth Stations via Low Orbit Satellite Network." Remember, PACSAT is a low-orbit packet satellite.

R.F. Design magazine for November/December, 1984 contains the conclusion of a series called "RF Modems." This article addresses the design and use of frequency agile modems. Several block diagrams and schematics are presented.

The December, 1984 issue of Telecommunications is a special issue on data communications systems, and contains several articles that packet experimenters might find interesting.

Via AD7I, KA9Q, Ed.

MISSING GATEWAY

When you subscribed to Gateway, you probably subscribed for 25 issues. A few quick calculations will tell you that there should be 26 issues in a 52-month year. The missing issue is to allow me to take some time off around the New Year. Therefore, there will be no Gateway dated January 1, 1985. Look for Gateway issue 11 on January 15. I hope that you all have safe and enjoyable holidays.

Jeff Ward, K8KA

REPRODUCTION OF GATEWAY MATERIAL

Material may be exerpted from Gateway without prior permission, provided that the original contributor is credited and Gateway is identified as the source.

Gateway: The ARRL Packet Radio Newsletter is published by the

American Radio Relay League
225 Main Street
Newington, CT 06111

Jeffrey W. Ward, K8KA

From 6192079491747402978
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,52a438042b5e01cb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-02 21:11:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site lcuxc.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mhuxn!mhuxj!mhuxr!ulysses!gamma!pyuxww!
lcuxc!wjm
From: wjm@lcuxc.UUCP (B. Mitchell)
Newsgroups: net.ham-radio
Subject: RE: Shielding
Message-ID: <118@lcuxc.UUCP>
Date: Thu, 3-Jan-85 00:11:55 EST
Article-I.D.: lcuxc.118
Posted: Thu Jan 3 00:11:55 1985
Date-Received: Fri, 4-Jan-85 04:51:03 EST
Organization: Bell Communications Research, Inc.
Lines: 21

<gulpo>
Yes, you can achieve RF shielding through the use use of a ground mat, which is
a large sheet of conductive material.   However, this is only part of the
shielding system. Usually each equipment cabinet is bonded to this mat
via ONE large conductor (a heavy piece of wire), as in the Sperry Univac
computer systems described in your publication. The key idea is: put all
sensitive equipment in a grounded enclosure that surrounds it with conducting
material. Sometimes, this is done by constructing a room out of conducting
materials, like copper sheets, or by putting the equipment in metal
cabinets. Note tht all openings, like windows, must be covered with conduct-
ive screens for this to work properly. This is called a "Faraday cage".
Another important point is to avoid ground (or common mode current) loops.
These allow currents created (induced) in the shielding system to circulate
among components, creating more interference. To prevent this, only
ONE conductor must be used between each equipment cabinet and the ground mat.
References: The Radio Amateur's Handbook can provide some general grounding and
shielding principles, while a good college physics text can explain why these
shields are effective.
You might look at Halladay & Resnick or the Berkeley physics series.
73's
Bill Mitchell, WB2IAU (ihnp4!lcuxc!wjm)

From 6194161315498936658
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,726f1bb80498492,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-03 09:36:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Hamfest in Arlington Hts, IL - 1/20/85
Message-ID: <429@ihu1h.UUCP>

Date: Thu, 3-Jan-85 12:36:37 EST
Article-I.D.: ihu1h.429
Posted: Thu Jan 3 12:36:37 1985
Date-Received: Fri, 4-Jan-85 00:50:56 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 22

x
Wheaton Community Radio Amateurs

HAMFEST

Arlington Park Expo Center
Arlington Park Race Track
Arlington Heights, Illinois

Sunday
JANUARY 20, 1985

Doors open at 8 a.m.
$3.00 Advance
$4.00 At Door

(I don't have tickets.)
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -1068277271979890020
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c7cb6c59776befc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-03 12:38:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!hoxna!houxm!vax135!ariel!
hou4b!hou5f!hou5g!hou5h!jak
From: jak@hou5h.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: After Christmas Sale on Drake HF Station
Message-ID: <366@hou5h.UUCP>
Date: Thu, 3-Jan-85 15:38:20 EST
Article-I.D.: hou5h.366
Posted: Thu Jan 3 15:38:20 1985
Date-Received: Fri, 4-Jan-85 05:05:38 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 6

I have upgraded to a Drake TR7 ... so:
FOR SALE:

Drake T4XB xmtr, R4B rcvr, MS4 speaker, and AC4 power supply.
Well treated ... excellent condition ... $475 takes the whole station.
Contact: Jim Kutsch KY2D ...!hou5h!jak or houxn!jak
Freehold, NJ (201) 577-5374

From -5482780346739509202
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,663d3ccf3d336411,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-03 12:47:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: strange signal on 14.563 MHz - what is it?
Message-ID: <431@ihu1h.UUCP>
Date: Thu, 3-Jan-85 15:47:24 EST
Article-I.D.: ihu1h.431
Posted: Thu Jan 3 15:47:24 1985
Date-Received: Fri, 4-Jan-85 04:02:22 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 14

For several days, I've heard this very peculiar signal:

unidentified: several hours of what sounds like audio feedback, with varying p
                      itch, am, @1850Z
                      [location?]__________ 14.5630____call?   (B. Parnass)

Can anyone identify the source of this persistent signal? It's quite strong
here in northeastern Illinois. Is it some type of speech scrambling?

I've heard it on two different receivers 8 miles apart, so it's
not generated by some neighbor's appliance.
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -6569260381762856309
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27adaf03e0d27703
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-03 14:28:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!inuxc!pur-ee!ecn-ee!wn9nbt
From: wn9nbt@ecn-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: Trying to put a 2m antenna in my car
Message-ID: <2495@pur-ee.UUCP>

Date: Thu, 3-Jan-85 17:28:10 EST
Article-I.D.: pur-ee.2495
Posted: Thu Jan 3 17:28:10 1985
Date-Received: Fri, 4-Jan-85 05:07:23 EST
Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University
Lines: 14
Nf-ID: #R:ucbvax:-394900:ecn-ee:14900012:000:522
Nf-From: ecn-ee!wn9nbt   Jan 3 12:36:00 1985

Another possibility, Avanti sells some antennas that are coupled thru
the window. The coax runs to a transformer that is epoxy'ed to
the rear window, the antenna has the other half that epoxy's to
the outside. I don't know if they make a 2 meter version, but I
know a guy that has a CB version that works fairly well. I'm sure
it is a compromise over most all other methods, but it is an option.

The hole mounted Larsen has always given me excellent performance
in commercial and ham uses.....Dave Chasey -- WN9NBT

From -3388714354720970724
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9bc06921c53e46b4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-04 07:15:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!houxm!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: Rotor Help!!!
Message-ID: <678@inuxd.UUCP>
Date: Fri, 4-Jan-85 10:15:50 EST
Article-I.D.: inuxd.678
Posted: Fri Jan 4 10:15:50 1985
Date-Received: Sat, 5-Jan-85 03:16:50 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 10

    This is a second request for any information for obtaining
    parts for a Wilson WR1000 rotor. Wilson is no help nor are
    any of their recommendations. Some company(??) in Japan
    made these rotors for them but they will not give me a
    name. This is my last ditch effort so thanks for your
    attention. Any leads will be greatly appreciated.

                    Rich- KN9K

From 8207152075137395556
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4637739cf3bacdb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-04 07:55:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!mcnc!philabs!cmcl2!
seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Sony ICF-2002 modification info
Message-ID: <6984@brl-tgr.ARPA>
Date: Fri, 4-Jan-85 10:55:49 EST
Article-I.D.: brl-tgr.6984
Posted: Fri Jan 4 10:55:49 1985
Date-Received: Mon, 7-Jan-85 01:51:15 EST
Distribution: net
Organization: USAMC ALMSA
Lines: 45

Here is the text of the item in RIB regarding the modification of Sony
2002s to correct the "pulling" problem. This is from the November 84
issue, page 39:

From Ken Maxwell, Albany, NY, via telephone call Dec 6 (RIB cover dates are
usually behind the actual content date):

Regarding the "pulling" problem on some ICF-2002s -- not only does modifying
it void the warranty, but this can be fixed free if the unit is within the
one-year warranty. I've learned that a 26-part modification is available
which may cover other problems too. Calling their 800 number may get the
run-around; I went through my local rep Steve Sneider, 617-329-8479. Note:
new 2002s already have the mod installed; not applicable to 7600D version.
Call first, but I sent to Sony Consumer Service Corp., Attn: Mr. Min Ito,
386 Route 17 South, Mahwah, NJ 07430. This is the preferred procedure
since modifications must be type-accepted by the FCC. This presumably hasn't
been widely publicized in order to prevent a flood of warranty claims.

End of item

What is interesting about this info is what it doesn't say. I'm wondering
whether the non-applicability of this mod to 7600D models means that:

1) They don't need it -- the circuit changes have already been incorporated
when they were made. (Perhaps a batch of 2002's were made first, lacking this
correction, then the assembly line was upgraded, and 7600D's and more
2002's were made, all incorporating the fix? That seems unlikely, as I thought
7600D's were released overseas before 2002's were sold in the US.)

2) Sony of America simply will refuse to work on 7600D's -- I know this is
true for warranty work, since there is no US warranty on those, but what
about simple paid-for non-warranty shop work?

3) There really is enough difference internally between the 2002 and 7600D, contrary to published info and long-accepted rumor, that the mod is really inapplicable to 7600D circuitry.

I have no idea of the answer to this; if anyone knows or learns the truth about this, please post it!

Regards,

Will Martin

ARPA/MILNET: wmartin@almsa-1.ARPA USENET: seismo!brl-bmd!wmartin

From -4119158536185053522
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9102eb337575e1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-04 14:03:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: RTTY interface, and Packet informati
Message-ID: <52800043@trsvax.UUCP>
Date: Fri, 4-Jan-85 17:03:00 EST
Article-I.D.: trsvax.52800043
Posted: Fri Jan 4 17:03:00 1985
Date-Received: Wed, 9-Jan-85 03:36:42 EST
References: <606@asgb.UUCP>
Lines: 22
Nf-ID: #R:asgb:-60600:trsvax:52800043:000:958
Nf-From: trsvax!mikey Jan 4 16:03:00 1985

Why buy an interface? You can build one for less than $50, and that includes the box, cables, and power supply. Using the Exar chips, a basic RTTY interface can be built with just two additional chips, a 1488 and a 1489. If you get ingenious, you can even get rid of these. The only other chip you might want is a driver for TX function. This makes a total of 5 chips, plus passive parts. Chip cost is under $12. If you're like me, the board will lay out exposed for a long time till you finally box it.

The only difficult part is all the gottcha's on the RS-232. Things like will your RS-232 transmit without CD? How hard is it to use DTR to trigger your transmitter? This kind of stuff. If you build it in a box with switches, you can just hardwire a forced CD and CTS and use a dumb terminal package to transmit and receive.

Hardware is the easy part, just tedious. The software can be as complex
as you want it to be.

mikey at trsvax

From -7815534063887057553
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,76646c205c138dc3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-04 21:37:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin 106
Message-ID: <248@petrus.UUCP>
Date: Sat, 5-Jan-85 00:37:27 EST
Article-I.D.: petrus.248
Posted: Sat Jan 5 00:37:27 1985
Date-Received: Sat, 5-Jan-85 07:38:23 EST
Organization: Bell Communications Research, Inc
Lines: 122

Posted: Fri Jan 4, 1985   2:32 PM GMT   Msg: CGIF-1993-7538
From: MSWEETING
To: DOCS
Subj: UoSAT Bull #106 (Edited)

**** UoSAT Bulletin-106 (Edited) 4th January 1985 ****

UoSAT Spacecraft Control Centre, University of Surrey, England

** GENERAL NEWS **

 A H A P P Y and P R O S P E R O U S   N E W   Y E A R

 to all UoSAT Experimenters - worldwide - from the UoSAT Team.

* UoSAT Opportunities at UoS *

There are opportunities for Research Fellows, Assistants and
Technicians to work on the UoSAT Spacecraft Programme at UoS
supported by grants commencing immediately. Details of
responsibilities and requisite qualifications will appear in
next Bulletin.

* Bulletin Information Sources *

The generation and editing of the weekly UoSAT Bulletin is a considerable task for the small team at UoS and therefore we welcome contributions from all sources providing the content is of general interest to satellite users/experimenters. Much general news is gleaned from ASR and other sources worldwide via Telemail. Due to the limited space available for the UoSAT-1 Bulletin, this information is generally edited and condensed and it is not always possible to acknowledge the source in detail. It is quite a problem to 'shoe-horn' the Bulletin to fit efficiently into the OBC memory - we regularly have just ONE byte spare! So you can see that, at times, every letter/space etc counts! We are, however, very grateful for the information passed to us and we hope that the UoSAT User Community finds the service and content interesting & useful.

* UoSAT-OSCAR-11 Stabilisation *

Automatic attitude control manoeuvres, carried out by the OBC, successfully restored gravity-gradient stabilisation to UO-11 after inadvertant destabilision last November - all is OK.

* NOAA-9 *

NOAA-9 was launched at 10:42 gmt on 12 December and is scheduled to enter service on 1st February 1985.

** UoSAT-Oscar-9 Schedule **

The UoSAT-1 Experiment Schedule will change from 110185 to reflect majority interests of the user community derived from an analysis of the many reports and suggestions received during 1984. It is, of course, not possible to please everyone and some of the suggestions would necessitate a great deal of software development which we cannot, at present, support - but we hope that the new schedule will meet with general approval. Comments are welcome however!

The new schedule will be as follows:

```
Friday    -  load Bulletin
Saturday  -  Bulletin/1200 bps telemetry
Sunday    -  Bulletin/1200 bps telemetry
Monday    -  DIGITALKER/1200 bps telemetry
Tuesday   -  Radiation data - next week CCD data
Wednesday -  Computer check-summed telemetry
Thursday  -  Whole orbit telemetry survey
```

This weeks schedule is as follows:

```
Friday    -  load Bulletin
Saturday  -  Bulletin/DIGITALKER/1200 bps telemetry
Sunday    -  Bulletin/DIGITALKER/1200 bps telemetry
Monday    -  Bulletin/DIGITALKER/1200 bps telemetry
Tuesday   -  CCD Camera - next week Radiation data
```

```
    Wednesday -  Whole orbit telemetry survey
    Thursday  -  Computer check-summed telemetry


The 21 MHz Beacon will be in use this week.


** UoSAT-Oscar-11 Operations **

  DAY       ORBIT     CHANNELS       RESET TIME
  ***       *****     ********       **********

Monday      4349      2,3            11:34:49
(OBC told to change d/link from TLM to ODATA after 6hrs)

Thursday    4399      1,2,3,52       21:20:21

Friday      4412
(OBC told to change d/link from ODATA to TLM after 9.5hrs)

Monday      4427      2,3            19:24:46
(OBC told to change d/link from TLM to ODATA after 5hrs)

Sunday      4444      1,2,3,52       23:17:49
(OBC told to change d/link from TLM to ODATA after 5hrs)

Monday      4451      2,3            11:05:06

Wednesday   4479      reset Watch-dog
(OBC told to change d/link from ODATA to TLM after 15min)
            4480      1,2,3,52      10:54:50
                      despin to Zspin=4mins
            4481
(OBC told to change d/link from ODATA to TLM after 7.5hrs)

Thursday    4494      despin to Zspin=5mins

Friday      4509      2,3,          10:32:05
                      435 MHz DSR 9600 bps psk test

            4510      435 MHz DSR afsk tests
(OBC told to change d/link from ODATA to TLM after 19hrs)


From 1907518821697662096
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27adaf03e0d27703
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-05 12:43:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site umd5.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!mit-eddie!
godot!harvard!seismo!umcp-cs!cvl!umd5!louie
```

From: louie@umd5.UUCP
Newsgroups: net.ham-radio
Subject: Re: Trying to put a 2m antenna in my car
Message-ID: <285@umd5.UUCP>
Date: Sat, 5-Jan-85 15:43:09 EST
Article-I.D.: umd5.285
Posted: Sat Jan 5 15:43:09 1985
Date-Received: Tue, 8-Jan-85 03:04:48 EST
References: <2495@pur-ee.UUCP>
Reply-To: louie@umd5.UUCP (Louis Mamakos)
Organization: U of Md, CSC, College Park, Md
Lines: 14
Keywords: avanti
Summary: avanti antenaa loses for me

I originally had an AVANTI 2m thru-the-window antenna, but was not at all
satisfied with its performence. I get better results with the Larson
quarter wave in the roof that I ever did with the Avanti. I'm *still* trying
to get the silicon glue off my hatchback window!

--

Louis A. Mamakos WA3YMH
Computer Science Center - Systems Programming
University of Maryland, College Park

Internet: louie@umd5.arpa
UUCP: ..!seismo!cvl!umd5!louie

From 1116584642650136153
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27adaf03e0d27703
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-05 20:28:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!
mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Trying to put a 2m antenna in my car
Message-ID: <52800044@trsvax.UUCP>
Date: Sat, 5-Jan-85 23:28:00 EST
Article-I.D.: trsvax.52800044
Posted: Sat Jan 5 23:28:00 1985
Date-Received: Wed, 9-Jan-85 01:43:02 EST
References: <3949@ucbvax.UUCP>
Lines: 10
Nf-ID: #R:ucbvax:-394900:trsvax:52800044:000:327
Nf-From: trsvax!mikey   Jan 5 22:28:00 1985

They make a 2 meter and 220 version, and I suspect a UHF version as well.
A friend of mine has one. They work suprisingly well. They are not a 5/8,
but usually they can be mounted high up on the rear window and do better
than some normally better antennas that may be mounted lower on the trunk.

mikey at trsvax
KA5MJQ

From 7960237868111782491
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,122db5e3c00aad62,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-05 23:00:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site isucs1.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!stolaf!umn-cs!isucs1!notes
From: notes@isucs1.UUCP
Newsgroups: net.ham-radio
Subject: Re: Re: RTTY interface, and Packet infor
Message-ID: <262@isucs1.UUCP>
Date: Sun, 6-Jan-85 02:00:41 EST
Article-I.D.: isucs1.262
Posted: Sun Jan 6 02:00:41 1985
Date-Received: Mon, 7-Jan-85 03:29:34 EST
Sender: notes@isucs1.UUCP
Organization: Iowa State University
Lines: 20
Nf-ID: #R:tekcbi:-15600:isucs1:6900001:000:646
Nf-From: isucs1!wdi   Jan 4 23:18:00 1985

iuy

Jeff , I work for a commercial x.25 network. We are doing a lot of
research in the area of packet communications. I have an AIR-1
device that works self contained on a Vic 20 or 64. I have
found that you can do acii,baudot,tty but, the big drawback is the fact
that the hf frequencies are not stable and without an excellent signal
the units on the maarket do not work well and you get junk. I g have
what is supposed to be one of the best units.

Joe Stroup WDI Telecommunications, Inc.
2806 West Street, AMes, Iowa 50010 515-233-5161
TElex 295532 WDI

Via computer: WDI!Joe or isucs11

or best way via notes system isucs1!wdi!Joe

From -647269205116876312
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d8898f37dce58541,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-07 06:33:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 Apollo 12/13/84; site apollo.uucp
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!wanginst!apollo!
rees
From: rees@apollo.uucp (Jim Rees)
Newsgroups: net.ham-radio
Subject: Want Drake R2-A manual
Message-ID: <2405777a.1de6@apollo.uucp>
Date: Mon, 7-Jan-85 09:33:30 EST
Article-I.D.: apollo.2405777a.1de6
Posted: Mon Jan 7 09:33:30 1985
Date-Received: Wed, 9-Jan-85 02:17:34 EST
Organization: Apollo Computer, Chelmsford, Mass.
Lines: 2

Where can I get a manual for a Drake R2-A? Is Drake still in business,
and does anyone have an address for them? Or I will gladly pay photocopy
and postage to anyone willing to send me a copy.

From 5825437335772277911
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fed1d5c9030cf844,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-07 19:33:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (the Born Again Programmer)
Newsgroups: net.ham-radio
Subject: unknown satellite
Message-ID: <157@sask.UUCP>
Date: Mon, 7-Jan-85 22:33:45 EST
Article-I.D.: sask.157
Posted: Mon Jan 7 22:33:45 1985
Date-Received: Thu, 10-Jan-85 06:39:52 EST
Organization: U of Saskatchewan, Canada
Lines: 10

I heard a CW signal apparently from a satellite (i.e. doppler shifted)
this evening between 1807 and 1815 local time (8th dec 0007-0015Z)
on 29.401Mhz. It was transmitting the number 5015   7 times followed by the
number 55 and then repeated this whole sequence all the time. I could not stay
to listen to it to get its time of LOS. Although its frequency is the HF
beacon for RS-3, none of the RS birds were above the horizon at the time.
Can anyone identify it?
tnx + 73

pete ve5bel
ihnp4!sask!hardie

From 8815087384321388014
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5dd844b1ce5b4ca4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-07 20:53:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!inuxc!pur-ee!uiucdcs!uok!
mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Radio Nicaragua being jammed
Message-ID: <2800023@uok.UUCP>
Date: Mon, 7-Jan-85 23:53:00 EST
Article-I.D.: uok.2800023
Posted: Mon Jan 7 23:53:00 1985
Date-Received: Mon, 14-Jan-85 01:33:01 EST
Lines: 7
Nf-ID: #N:uok:2800023:000:188
Nf-From: uok!mpackard   Jan 7 22:53:00 1985

[]

I noticed Radio Nicaragua was getting level 2 jamming.
6.0150 0450Z Carrier Jamming commenced when news of U.S.
exercise was beginning. It's nice to have a war in your
own back yard.

From -3471723700906555852
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4474ca7ce780d5e7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-07 23:26:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <249@petrus.UUCP>
Date: Tue, 8-Jan-85 02:26:48 EST
Article-I.D.: petrus.249
Posted: Tue Jan 8 02:26:48 1985
Date-Received: Tue, 8-Jan-85 07:51:20 EST
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9

```
Catalog number: 12888
Epoch time:      84364.41651463
   Sat Dec 29 09:59:46.864 1984 UTC
Element set:     717
Inclination:       97.6151 deg
RA of node:       342.4261 deg
Eccentricity:    0.0003816
Arg of perigee:   126.4141 deg
Mean anomaly:     233.7490 deg
Mean motion:   15.26815999 rev/day
Decay rate:      1.631e-05 rev/day^2
Epoch rev:           17932
Semi major axis:  6860.440 km
Anom period:     94.313919 min
Apogee:            498.519 km
Perigee:           493.283 km
Ref perigee:      2554.43948382
   Sat Dec 29 10:32:51.401 1984 UTC
Beacon:           145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time:      84365.95286279
   Sun Dec 30 22:52:07.345 1984 UTC
Element set:     152
Inclination:       25.9400 deg
RA of node:       160.5134 deg
Eccentricity:    0.6015415
Arg of perigee:   335.6919 deg
Mean anomaly:       4.8496 deg
Mean motion:    2.05851379 rev/day
Decay rate:       -1.9e-07 rev/day^2
Epoch rev:            1166
Semi major axis: 26105.911 km
Anom period:    699.533813 min
Apogee:          35432.248 km
Perigee:          4024.671 km
Ref perigee:      2555.94631869
   Sun Dec 30 22:42:41.935 1984 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84355.21738625
   Thu Dec 20 05:13:02.171 1984 UTC
Element set:     52
Inclination:       98.2179 deg
RA of node:        56.6256 deg
Eccentricity:    0.0014780
Arg of perigee:    66.8442 deg
Mean anomaly:     293.4307 deg
Mean motion:   14.61931694 rev/day
Decay rate:       1.08e-06 rev/day^2
```

```
Epoch rev:            4288
Semi major axis:  7062.159 km
Anom period:     98.499814 min
Apogee:            712.161 km
Perigee:           691.285 km
Ref perigee:      2545.23003491
   Thu Dec 20 05:31:15.15  1984 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84362.28564943
   Thu Dec 27 06:51:20.110 1984 UTC
Element set:     110
Inclination:       82.9633 deg
RA of node:        26.0043 deg
Eccentricity:    0.0057629
Arg of perigee:   304.2879 deg
Mean anomaly:      55.2738 deg
Mean motion:   12.15588939 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13436
Semi major axis:  7987.322 km
Anom period:    118.461098 min
Apogee:           1669.586 km
Perigee:          1577.526 km
Ref perigee:      2552.27301865
   Thu Dec 27 06:33:08.811 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84355.36390182
   Thu Dec 20 08:44:01.117 1984 UTC
Element set:     240
Inclination:       82.9566 deg
RA of node:        40.3805 deg
Eccentricity:    0.0019368
Arg of perigee:    50.2699 deg
Mean anomaly:     310.0037 deg
Mean motion:   12.06664240 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           13254
Semi major axis:  8026.684 km
Anom period:    119.337257 min
Apogee:           1676.543 km
Perigee:          1645.451 km
Ref perigee:      2545.37541112
   Thu Dec 20 09:00:35.520 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      84366.13739064
   Mon Dec 31 03:17:50.551 1984 UTC
```

```
Element set:     209
Inclination:       82.9606 deg
RA of node:        36.2567 deg
Eccentricity:    0.0011290
Arg of perigee:    58.1202 deg
Mean anomaly:     302.0960 deg
Mean motion:   12.05052555 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13366
Semi major axis:  8033.844 km
Anom period:    119.496863 min
Apogee:           1679.958 km
Perigee:          1661.817 km
Ref perigee:      2556.15073814
   Mon Dec 31 03:37:03.775 1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84363.55338691
   Fri Dec 28 13:16:52.629 1984 UTC
Element set:     94
Inclination:       82.9626 deg
RA of node:        27.7035 deg
Eccentricity:    0.0049409
Arg of perigee:   322.4305 deg
Mean anomaly:      37.3313 deg
Mean motion:   12.13563287 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13429
Semi major axis:  7996.214 km
Anom period:    118.658830 min
Apogee:           1665.408 km
Perigee:          1586.391 km
Ref perigee:      2553.54484199
   Fri Dec 28 13:04:34.347 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      84349.56190854
   Fri Dec 14 13:29:08.897 1984 UTC
Element set:     184
Inclination:       82.9630 deg
RA of node:        41.0208 deg
Eccentricity:    0.0022432
Arg of perigee:    20.4739 deg
Mean anomaly:     339.7220 deg
Mean motion:   12.08690190 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13206
Semi major axis:  8017.706 km
Anom period:    119.137229 min
Apogee:           1660.123 km
Perigee:          1624.153 km
```

```
Ref perigee:      2539.56656877
   Fri Dec 14 13:35:51.541 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:       84364.58779528
   Sat Dec 29 14:06:25.512 1984 UTC
Element set:     305
Inclination:       82.9605 deg
RA of node:        39.4550 deg
Eccentricity:    0.0020783
Arg of perigee:   112.8102 deg
Mean anomaly:     247.5158 deg
Mean motion:   12.02953005 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13324
Semi major axis:  8043.195 km
Anom period:    119.705424 min
Apogee:           1699.664 km
Perigee:          1666.232 km
Ref perigee:      2554.61376937
   Sat Dec 29 14:43:49.673 1984 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:       84365.43820865
   Sun Dec 30 10:31:01.227 1984 UTC
Element set:     300
Inclination:       99.0747 deg
RA of node:       339.1920 deg
Eccentricity:    0.0012216
Arg of perigee:   264.9663 deg
Mean anomaly:      95.0114 deg
Mean motion:   14.13128591 rev/day
Decay rate:          1e-07 rev/day^2
Epoch rev:           18157
Semi major axis:  7224.008 km
Anom period:    101.901554 min
Apogee:            875.381 km
Perigee:           857.731 km
Ref perigee:      2555.41953232
   Sun Dec 30 10:04:07.592 1984 UTC
Beacon:           137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time:       84360.38115977
   Tue Dec 25 09:08:52.204 1984 UTC
Element set:     96
Inclination:       98.6871 deg
RA of node:        28.8646 deg
Eccentricity:    0.0015940
Arg of perigee:   218.8020 deg
```

```
Mean anomaly:     141.2013 deg
Mean motion:   14.22442937 rev/day
Decay rate:        3.7e-07 rev/day^2
Epoch rev:            9065
Semi major axis:  7192.394 km
Anom period:    101.234289 min
Apogee:            833.919 km
Perigee:           810.990 km
Ref perigee:      2550.35358567
   Tue Dec 25 08:29:09.801 1984 UTC
Beacon:           137.5000 MHz


From -4957836059080485950
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab40c792dc031587,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1363ce,ab40c792dc031587,start
X-Google-Attributes: gid1363ce,public
X-Google-ArrivalTime: 1985-01-08 03:35:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.auto,net.ham-radio
Subject: Michigan mobile scanner radio law
Message-ID: <433@ihu1h.UUCP>
Date: Tue, 8-Jan-85 06:35:33 EST
Article-I.D.: ihu1h.433
Posted: Tue Jan  8 06:35:33 1985
Date-Received: Wed, 9-Jan-85 04:12:45 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 35
Xref: watmath net.auto:5348 net.ham-radio:2232

x

Sorry if you've seen this before, but netnews has not
been functioning properly for several days through our
backbone processor, ihnp4:
============================================================
     Michigan mobile scanner law (from the 1/85    issue of the
     RCMA Newsletter):


      VEHICLES EQUIPPED WITH SHORT WAVE LENGTH RADIO
                RECEIVING SETS

        (M.S.A. 28.776) (AS AMENDED IN COMPILED LAWS 1957)


     Section 508.  "Any person who  shall  equip  a  vehicle
     with  a  radio  receiving set that   will receive signals
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sent on frequencies assigned by the Federal Communications Commission of the United States of America for police purposes, or use the same in this state unless such vehicle is used or owned by a peace officer or bona fide amateur radio operator holding a conditional, general, advanced, or extra class amateur license issued by the Federal Communications Commission, without first securing a permit so to do from the Director of the Michigan State Police upon such application as may prescribe, shall be guilty of a misdemeanor, punishable by imprisonment in the county jail not more than 1 year or by a fine of not more than $500.00 or by both such fine and imprisonment in the discretion of the court."

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -7810530497136552732
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ed12eb65d0a231fa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-08 05:33:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: new Fox & Uniden scanners to be shown at CES
Message-ID: <435@ihu1h.UUCP>
Date: Tue, 8-Jan-85 08:33:44 EST
Article-I.D.: ihu1h.435
Posted: Tue Jan 8 08:33:44 1985
Date-Received: Wed, 9-Jan-85 04:07:13 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 28

x

What's in store for the Bearcat scanner product line after its aquisition by Uniden? An article about the upcoming Consumer Electronics show in the December 1984 issue of "Consumer Electronics" relates:

"The company [Uniden] is also displaying two new Uniden Bearcat scanners, which will be available for shipment in the third quarter of 1985."

"'We're hoping to revolutionize the scanner radio

business in the U.S. with a sizable engineering commitment to redesign the table top or syn-
thesized scanner,' Mulhall [consumer group Executive VP] says. New models being shown at CES include a fully synthesized table top programmable scanner with a suggested list of $99 and a handheld scanner with a suggested retail price between $99 and $149."

As for Fox Marketing:

"The company will also introduce three programmable scanners later in 1985, and prototypes will be on display at CES...."

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==========

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 8690727945447453221
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fed1d5c9030cf844
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-09 13:35:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Re: unknown satellite
Message-ID: <252@petrus.UUCP>
Date: Wed, 9-Jan-85 16:35:37 EST
Article-I.D.: petrus.252
Posted: Wed Jan 9 16:35:37 1985
Date-Received: Fri, 11-Jan-85 08:09:35 EST
References: <157@sask.UUCP>
Organization: Bell Communications Research, Inc
Lines: 14

I just ran a check on the reported time for Pete's observations and found that RS-8 was just setting (at 00:07 UTC) (I assume you meant the 8th of January, not December, Pete!)

One possibility is that you were hearing below-the-horizon signals from a bird, probably RS-5, since I heard a report last night that it is failing and the telemetry is sending garbage. (After all, 10 meters *is* supposed to be a DX band, at least once in a while).

This has been reported numerous times with 10 meter satellite beacons, and the phenomenon seems to occur most often when the satellite is near the antipode. At that time, RS-5 was at an elevation of -65 degrees to your QTH.

Phil Karn, KA9Q

From 37583434828576896
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,89a35472095ad617,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,89a35472095ad617,start
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1985-01-10 17:52:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.aviation
Subject: some FAA vhf/uhf scanner freqs in Illinois
Message-ID: <436@ihu1h.UUCP>
Date: Thu, 10-Jan-85 20:52:50 EST
Article-I.D.: ihu1h.436
Posted: Thu Jan 10 20:52:50 1985
Date-Received: Sat, 12-Jan-85 01:38:20 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 225
Xref: watmath net.ham-radio:2235 net.aviation:1301

Here are some vhf/uhf FAA frequencies for Illinois. Many of the entries marked "govt recds" are from US Government files dated May 1984. Several of these frequencies are in use in other areas of the USA.

There are many more, particularly in the 225 - 400 MHz military aero band and the 108 - 132 commercial aircraft band, but they are just too numerous to print in one listing.

The FAA also maintains several networks on the HF bands.

US: FAA, aero marker beacon

	[Aurora]_____	75.0000____call?	(govt recds)
"	[Bloomington]_____	108.2000____call?	(govt recds)
"	[Bloomington]_____	108.3000____call?	(govt recds)
"	[Canokia]_____	75.0000____call?	(govt recds)
"	[Carbondale]_____	75.0000____call?	(govt recds)
"	[Champaign, Decatur]_	75.0000____call?	(govt recds)
"	[Danville, Alton]____	75.0000____call?	(govt recds)
"	[Galesburg]_____	75.0000____call?	(govt recds)
"	[Kankakee]_____	75.0000____call?	(govt recds)
"	[Marion]_____	75.0000____call?	(govt recds)
"	[Mattoon, Mt Vernon]_	75.0000____call?	(govt recds)
"	[Moline]_____	75.0000____call?	(govt recds)
"	[Peoria]_____	75.0000____call?	(govt recds)
"	[Quincy]_____	75.0000____call?	(govt recds)
"	[Rockford]_____	75.0000____call?	(govt recds)
"	[Springfield]_____	75.0000____call?	(govt recds)

```
              "        [Sterling]__________  75.0000____call?     (govt recds)
              "        [Waukeegan]_________  75.0000____call?     (govt recds)
US: FAA, aero station, AM
                       [Aurora]____________ 243.9000____call?     (govt recds)
              "        [Bloomington]_______ 397.9000____call?     (govt recds)
              "        [Champaign]_________ 243.9000____call?     (govt recds)
              "        [Chelanse]__________ 387.1000____call?     (govt recds)
              "        [Chicago]___________ 243.9000____call?     (govt recds)
              "        [Danville]__________ 397.9000____call?     (govt recds)
              "        [Decatur]___________ 243.9000____call?     (govt recds)
              "        [Hampshire]_________ 380.3000____call?     (govt recds)
              "        [Hampshire]_________ 381.4000____call?     (govt recds)
              "        [Harvard]___________ 381.4000____call?     (govt recds)
              "        [Milford]___________ 377.2000____call?     (govt recds)
              "        [Moline]____________ 243.9000____call?     (govt recds)
              "        [Peoria]____________ 243.9000____call?     (govt recds)
              "        [Quincy]____________ 243.9000____call?     (govt recds)
              "        [Rockford]__________ 243.9000____call?     (govt recds)
              "        [Rockford]__________ 379.2000____call?     (govt recds)
              "        [Saunemin]__________ 377.2000____call?     (govt recds)
              "        [Springfield]_______ 243.9000____call?     (govt recds)
              "        [Waukegan]__________ 380.3000____call?     (govt recds)
US: FAA, aircraft, AM__[Kankakee]__________ 385.5000____call?     (govt recds)
US: FAA, AM___________[Peoria]____________ 252.9000____call?     (govt recds)
US: FAA, ATIS_________[Springfield]_______ 270.1000____call?     (others)
US: FAA, Capital Apt, approach/departure, AM
                       [Springfield]_______ 307.0000____call?     (others)
              "        [Springfield]_______ 395.8000____call?     (others)
US: FAA, Capital Apt, ground, AM
                       [Springfield]_______ 348.6000____call?     (others)
US: FAA, Capital Apt, tower, military, AM
                       [Springfield]_______ 257.8000____call?     (others)
US: FAA, DuPage Apt, aero marker beacon
                       [W Chicago]_________  75.0000____call?     (govt recds)
US: FAA, DuPage Apt, military air traffic control, AM
                       [W Chicago]_________ 257.8000____call?     (govt recds)
US: FAA, DuPage Apt____[W Chicago]_________ 108.4000____call?     (govt recds)
US: FAA, Executive Net, maintenance ops & emergency comms
                       [Chicago]___________ 172.9000____call?     (govt recds)
US: FAA, Flight Standards discrete freq, maintenance ops & emergency communica
                       tions, id="Central"
                       [Chicago]___________ 172.8750____call?     (others)
US: FAA, Great Lks Regional Office Comm Ctr, repeats 172.175
                       [Chicago]___________ 172.9750____call?     (others)
US: FAA, hand-held & mobile comms between crew members installing new aeronaut
                       ical systems
                       [USA-wide]__________ 172.8750____call?     (govt recds)
US: FAA, localizer station, runway 04
                       [Kankakee]__________ 108.7000____call?     (govt recds)
US: FAA, low level wind shear alert system using master interrogator & remote
                       transponders providing wind shear data, paired w/162.325
                       , F2D emission
                       [Peoria]____________ 169.2500____call?     (govt recds)
```

US: FAA, low level wind shear alert system using master interrogator & remote transponders providing wind shear data, paired w/165.7625, F2D emission
[Moline]_____ 169.3750____call? (govt recds)
" [Peoria]_____ 169.3750____call? (govt recds)
US: FAA, low level wind shear alert system using master interrogator & remote transponders providing wind shear data, paired w/169.25, F2D emission
[Peoria]_____ 162.2500____call? (govt recds)
US: FAA, low level wind shear alert system using master interrogator & remote transponders providing wind shear data, paired w/169.375, F2D emission
[Moline]_____ 165.7625____call? (govt recds)
" [Springfield]_____ 165.7625____call? (govt recds)
US: FAA, maintenance ops & emergency comm, portable rptr input to 172.875 portable rptr
[Chicago]_____ 169.3500____call? (govt recds)
US: FAA, maintenance ops & emergency comms, input to 172.975
[Chicago]_____ 172.1750____call? (govt recds)
" [Wheeling]_____ 172.1750____call? (govt recds)
US: FAA, maintenance ops & emergency comms
[Wheeling]_____ 172.9750____call? (govt recds)
US: FAA, maintenance, AM
[Moline]_____ 27.6250____KKZ74 (govt recds)
" [Springfield]_____ 27.6250____KBU29 (govt recds)
US: FAA, Midway Apt, aero marker beacon
[Chicago]_____ 75.0000____call? (govt recds)
US: FAA, Midway Apt, airdrome control station, military, AM
[Chicago]_____ 226.3000____call? (govt recds)
US: FAA, Midway Apt, maintenance, AM
[Chicago]_____ 27.6250____KLE72 (govt recds)
US: FAA, military aero distress freq, AM
[Aurora]_____ 243.0000____call? (govt recds)
" [Champaign]_____ 243.0000____call? (govt recds)
" [Chicago]_____ 243.0000____call? (govt recds)
" [Decatur]_____ 243.0000____call? (govt recds)
" [Moline]_____ 243.0000____call? (govt recds)
" [Peoria]_____ 243.0000____call? (govt recds)
" [Quincy]_____ 243.0000____call? (govt recds)
" [Rockford]_____ 243.0000____call? (govt recds)
" [Springfield]_____ 243.0000____call? (govt recds)
US: FAA, military air traffic control, AM
[Alton]_____ 239.0000____call? (govt recds)
" [Alton]_____ 239.9000____call? (govt recds)
" [Bloomington]_____ 388.9000____call? (govt recds)
" [Champaign]_____ 229.4000____call? (govt recds)
" [Chicago]_____ 257.8000____call? (govt recds)
" [Chicago]_____ 390.9000____call? (govt recds)
" [Gerlaw]_____ 239.3000____call? (govt recds)
" [Marion]_____ 257.8000____call? (govt recds)
" [Menfro]_____ 380.2000____call? (govt recds)
" [Moline]_____ 257.8000____call? (govt recds)
" [Moline]_____ 259.3000____call? (govt recds)

```
              "        [Rockford]__________ 239.0000____call?     (govt recds)
              "        [Rockford]__________ 239.3000____call?     (govt recds)
              "        [Rockford]__________ 239.9000____call?     (govt recds)
              "        [Smithboro]_________ 257.9000____call?     (govt recds)
              "        [Springfield]_______ 257.8000____call?     (govt recds)
US: FAA, military flight service, AM
                       [Chicago]__________ 255.4000____call?     (govt recds)
              "        [Decatur]__________ 255.4000____call?     (govt recds)
              "        [Quincy]___________ 255.4000____call?     (govt recds)
              "        [Rockford]__________ 255.4000____call?    (govt recds)
US: FAA, military, aero station, AM
                       [Bloomington]_______ 256.9000____call?    (govt recds)
US: FAA, navaid, runway 21
                       [Danville]__________ 108.5000____call?    (govt recds)
US: FAA, navaid, runway 29
                       [Alton]_____________ 108.5000____call?    (govt recds)
US: FAA, O'Hare Apt, aero marker beacon
                       [Chicago]__________  74.9960____call?     (govt recds)
              "        [Chicago]__________  75.0000____call?     (govt recds)
              "        [Chicago]__________  75.0040____call?     (govt recds)
US: FAA, O'Hare Apt, airway facility maintenance ops
                       [Chicago]__________ 165.6125____KLE72     (govt recds)
              "        [Chicago]__________ 165.7125____call?     (govt recds)
              "        [Chicago]__________ 165.7375____call?     (govt recds)
US: FAA, O'Hare Apt, low level wind shear alert system using master interrogat
                       or & remote transponders providing wind shear data, pair
                       ed w/162.3, F2D emission
                       [Chicago]__________ 169.2500____call?     (others)
US: FAA, O'Hare Apt, low level wind shear alert system using master interrogat
                       or & remote transponders providing wind shear data, pair
                       ed w/169.25, F2D emission
                       [Chicago]__________ 162.3000____call?     (others)
US: FAA, O'Hare Apt, maintenance, AM
                       [Chicago]__________  27.6250____KLG27     (govt recds)
US: FAA, O'Hare Apt, maintenance, id="C#"
                       [Chicago]__________ 166.1750____KLB401    (B. Parnass)
US: FAA, O'Hare Apt, weather telemetry
                       [Chicago]__________ 162.3000____call?     (others)
US: FAA, omnidirectional range station
                       [Jacksonville]_______ 108.6000____call?   (govt recds)
US: FAA, Palestine_____[Robinson]__________ 108.4000____call?    (govt recds)
US: FAA, Palwaukee Apt, aero marker beacon
                       [Wheeling]__________  75.0000____call?    (govt recds)
US: FAA, radio location, 650P9 emission
                       [Bible Grove]________ 988.0000____BIB     (govt recds)
              "        [Bloomington]________ 980.0000____call?   (govt recds)
              "        [Champaign]__________ 998.0000____CMI     (govt recds)
              "        [Chicago]___________ 997.0000____HKH      (govt recds)
              "        [Marion]____________1002.0000____MWA      (govt recds)
              "        [Moline]____________1003.0000____GEQ      (govt recds)
              "        [Pontiac]___________ 994.0000____PNT      (govt recds)
              "        [Rockford]__________1006.0000____RFD      (govt recds)
US: FAA, remote control of airport lighting, 16F2 emission
```

```
                        [Bloomington]________ 172.1750____call?     (govt recds)
                "       [Champaign]__________ 172.1750____call?     (govt recds)
                "       [Decatur]____________ 172.1750____call?     (govt recds)
                "       [E St Louis]_________ 172.1750____call?     (govt recds)
                "       [Galesburg]__________ 172.1750____call?     (govt recds)
                "       [Moline]_____________ 172.1750____call?     (govt recds)
                "       [Peoria]_____________ 172.1750____call?     (govt recds)
                "       [Quincy]_____________ 172.1750____call?     (govt recds)
US: FAA, remote control of airport lighting, runway 20
                        [Marion]_____________ 172.1250____call?     (govt recds)
US: FAA, safety & operations comms, rptr
                        [Great Lks region]___ 172.1250____call?     (govt recds)
                "       [Great Lks region]___ 172.1500____call?     (govt recds)
US: FAA, safety & operations comms
                        [Great Lks region]___ 172.8500____call?     (govt recds)
US: FAA, Security Division, Sky Marshall Net
                        [USA-wide]___________ 169.2500____call?     (govt recds)
                "       [USA-wide]___________ 169.3500____call?     (govt recds)
                "       [USA-wide]___________ 172.8750____call?     (govt recds)
US: FAA, Security Division: field ops
                        [Great Lks region]___ 165.6375____call?     (govt recds)
US: FAA, skyphone air-to-ground telephone service for FAA fleet aircraft
                        [USA-wide]___________ 459.7000_mo_call?     (govt recds)
                "       [USA-wide]___________ 459.7250_mo_call?     (govt recds)
                "       [USA-wide]___________ 459.7500_mo_call?     (govt recds)
                "       [USA-wide]___________ 459.7750_mo_call?     (govt recds)
                "       [USA-wide]___________ 459.8500_mo_call?     (govt recds)
                "       [USA-wide]___________ 459.8000_mo_call?     (govt recds)
                "       [USA-wide]___________ 459.9500_mo_call?     (govt recds)
                "       [USA-wide]___________ 459.9000_mo_call?     (govt recds)
US: FAA, USAF sector discrete freq, maintenance ops & emergency comms
                        [Chicago]____________ 172.9250____call?     (govt recds)
                "       [Chicago]____________ 172.9500____call?     (govt recds)
                "       [Wheeling]___________ 172.9250____call?     (govt recds)
US: FAA_________________[Chicago]____________ 169.2250____KLE72     (magazines)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -1684539840680815277
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a750fcf375afab58,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-11 06:36:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!epsilon!mb2c!gbr
From: gbr@mb2c.UUCP (Jerry Ruhno)
Newsgroups: net.ham-radio
Subject: portable SW radios query
Message-ID: <297@mb2c.UUCP>
Date: Fri, 11-Jan-85 09:36:01 EST
Article-I.D.: mb2c.297
```

Posted: Fri Jan 11 09:36:01 1985
Date-Received: Sat, 12-Jan-85 05:43:22 EST
Lines: 15

I am interested in listening to SW and I would like to get a good portable radio. So far the only discussion I have seen has been on the Sony ICF-2002 and ICF-7600. Are there any other radios out there I should consider? I don't know anything about short wave so I am not sure what I should look for. Also if I can still find a Sony ICF-6500 is it a good radio to get. I know it has an LCD display but does it have quartz lock tuning? Since I am new to this I am not even sure if I should be looking at portables or a base unit. Any and all suggestions will be greatly appreciated. If there are any books or magazines I should read to help me get started let me know. Thanks.

Jerry Ruhno
epsilon!mb2c!gbr

From 3232335201050498145
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a575f45e0665608a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-11 06:52:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: 800 MHz monitoring using a TV
Message-ID: <437@ihu1h.UUCP>
Date: Fri, 11-Jan-85 09:52:36 EST
Article-I.D.: ihu1h.437
Posted: Fri Jan 11 09:52:36 1985
Date-Received: Sat, 12-Jan-85 05:47:31 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 18

800 MHz Land Mobile Monitoring Using a TV

I can monitor some of the land mobile services on the 800 MHz band by tuning my Zenith Space Command 19" television set to channel 79. The bandwidth of the TV is really too wide, permitting simultaneous reception of several signals, but this is actually useful during times of little activity.

My TV has no squelch so listening to the white noise becomes fatiguing. Aren't there some TV's with squelch (muting)?

Has anyone else tried this?
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5972883057083392193
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1f842b4be0d4730,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-11 07:03:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: 14.563 MHz mystery signal may be US Navy
Message-ID: <438@ihu1h.UUCP>
Date: Fri, 11-Jan-85 10:03:44 EST
Article-I.D.: ihu1h.438
Posted: Fri Jan 11 10:03:44 1985
Date-Received: Sat, 12-Jan-85 05:48:16 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 22

The 14.5630 "feedback" signal remains a mystery, but has been on for
weeks now. I found some telling information in US Govt records, though:

```
  14.5625    call?_____US: Navy, ships, ssb and 3A7J emissions, 40kw [Atlantic
                           Ocean] (govt recds)
             NAM_______US: Navy, ssb and 3A7J emissions, 40kw [NW, VA] (govt re
                           cds)
             NAU_______US: Navy, ssb and 3A7J emissions, 40kw [Isabela, PR] (go
                           vt recds)
             NBA_______US: Navy, ssb and 3A7J emissions, 40kw [Farfan, Panama]
                           (govt recds)
             NSS_______US: Navy, ssb and 3A7J emissions, 40kw [Sugar Grove, WV]
                            (govt recds)
  14.5630    call?_____unidentified: several hours of what sounds like audio fe
                           edback, with varying pitch, am, @1850Z, heard du
                           ring daylight hours for at least 1 week, male Sp
                           anish voice communications in lsb heard undernea
                           th at times [location?] (B. Parnass)
```

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -7774283623389062983
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2d7ad926a38022f0,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-11 10:29:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!ittvax!ittral!
yakamavi
From: yakamavi@ittral.UUCP (Vincent J. Yakamaviich)
Newsgroups: net.ham-radio
Subject: 8122 Linear
Message-ID: <498@ittral.UUCP>
Date: Fri, 11-Jan-85 13:29:08 EST
Article-I.D.: ittral.498
Posted: Fri Jan 11 13:29:08 1985
Date-Received: Sun, 13-Jan-85 08:15:33 EST
Lines: 18

I'm trying to build a junk-box special linear, using a pair of 8122 tetrodes.

The only technical literature I've been able to find lists CCAS parameters, and not ICAS specs. As the 8122's are a c-note apiece to replace, I'd prefer not to fry 'em when I throw the switch.

Anybody out there have any specs on ICAS limits on the 8122's?? Is 3KV on the plate / 400 on the screens permissable in ICAS service?? HELP!!!

Also, I understand National Radio used a pair of 8122's in one of their linears.... perhaps the NR-2000. Anyone have a manual for said beast that I could photocopy. (I'd be happy to re-imburse for reasonable copy/postage fees.)

Please contact Vince Yakamavich, WB7TXP
3405 Huntleigh Drive
Raleigh, NC 27604

919-872-3740 home.......919-829-3147 desk @ ITT Raleigh

Thanks!!

From 5596671463405939438
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a575f45e0665608a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-11 14:50:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Re: 800 MHz monitoring using a TV
Message-ID: <254@petrus.UUCP>
Date: Fri, 11-Jan-85 17:50:21 EST
Article-I.D.: petrus.254

Posted: Fri Jan 11 17:50:21 1985
Date-Received: Sat, 12-Jan-85 08:13:04 EST
References: <437@ihu1h.UUCP>
Organization: Bell Communications Research, Inc
Lines: 7

When I lived in Naperville, I could also detect cellular radio signals
on a UHF TV. However, not only is the audio bandwidth too wide, but
a typical TV set depends on the presence of a strong video carrier
4.5 MHz below the audio carrier in order to provide the subcarrier
through AM detection that the sound discriminator needs.

Phil

From -4088781905783952717
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11f2eb,3641023a0460a885,start
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 1363ce,3641023a0460a885,start
X-Google-Attributes: gid1363ce,public
X-Google-Thread: 151e61,3641023a0460a885,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-11 16:16:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.auto,net.ham-radio,net.legal
Subject: NY mobile scanner law
Message-ID: <439@ihu1h.UUCP>
Date: Fri, 11-Jan-85 19:16:40 EST
Article-I.D.: ihu1h.439
Posted: Fri Jan 11 19:16:40 1985
Date-Received: Sat, 12-Jan-85 08:17:45 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 17
Xref: watmath net.auto:5373 net.ham-radio:2240 net.legal:1289

New York state mobile scanner law (from the 7/84 issue of
SCAN Magazine):

NEW YORK SCANNER LAW (paraphrased)
(Title 3@397)

A permit from the local governing body of the city,
town or village is required prior to equipping motor
vehicles with radios capable of receiving signals on
frequencies allocated for police use.

Licensed Amateur Radio operators are exempted.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -346791815965810268
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1f842b4be0d4730
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-12 16:00:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site timeb.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!houxm!vax135!timeinc!timeb!
dwight
From: dwight@timeb.UUCP (Dwight Ernest)
Newsgroups: net.ham-radio
Subject: Re: 14.563 MHz mystery signal may be US Navy
Message-ID: <43@timeb.UUCP>
Date: Sat, 12-Jan-85 19:00:24 EST
Article-I.D.: timeb.43
Posted: Sat Jan 12 19:00:24 1985
Date-Received: Sun, 13-Jan-85 08:49:19 EST
References: <438@ihu1h.UUCP>
Organization: Time, Inc., New York City
Lines: 30

>
> The 14.5630 "feedback" signal remains a mystery, but has been on for
> weeks now. I found some telling information in US Govt records, though:

>   14.5630   call?_____unidentified: several hours of what sounds like audio fe
>   edback, with varying pitch, am, @1850Z, heard du
>   ring daylight hours for at least 1 week, male Sp
>   anish voice communications in lsb heard undernea
>   th at times [location?] (B. Parnass)
> --
> Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

Curious (or is it?) that this appears to coincide with preparation for
Big Pine III, the combined naval/air/ground war games that are
scheduled to begin very soon in the Carribean...?

Conjecture: The carrier [which sounds like audio feedback] is
jamming from some source on the "other side," and the audio
SSB you are occasionally hearing underneath is legit from "our side."

         73 de KA2CNN
--
         --Dwight Ernest   KA2CNN   \ Usenet:...vax135!timeinc!dwight
         Time Inc. Editorial Technology Group, New York City
         Voice: (212) 554-5061 \ Compuserve: 70210,523
         Telemail: DERNEST/TIMECOMDIV/TIMEINC \ MCI: DERNEST

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 reflect the opinions of Time Incorporated, its management, or stockholders."

From 1940410078977851465
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a750fcf375afab58
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-12 16:30:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site timeb.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!vax135!timeinc!timeb!
dwight
From: dwight@timeb.UUCP (Dwight Ernest)
Newsgroups: net.ham-radio
Subject: Re: portable SW radios query
Message-ID: <44@timeb.UUCP>
Date: Sat, 12-Jan-85 19:30:28 EST
Article-I.D.: timeb.44
Posted: Sat Jan 12 19:30:28 1985
Date-Received: Mon, 14-Jan-85 01:22:55 EST
References: <297@mb2c.UUCP>
Organization: Time, Inc., New York City
Lines: 33

> I am interested in listening to SW and I would like to get a good
> portable radio. So far the only discussion I have seen has been on
> the Sony ICF-2002 and ICF-7600. Are there any other radios out there
> I should consider? I don't know anything about short wave so I am not
> sure what I should look for. Also if I can still find a Sony ICF-6500
> is it a good radio to get.
>   Jerry Ruhno
>   epsilon!mb2c!gbr

The Sony models ICF-2002 and the ICF-7600D (note the D) are the
same radio; the 7600D is the European/Japanese model and is now
available with a power supply for 220/110 VAC.

I'd recommend it. I've been a ham for a long time and an SWL for
even longer, and because of various deed restrictions and some
previous financial difficulty I sold off all my high freq ham
gear about four years ago. Since then, I've had a hankering
to listen again, so went out and bought a 7600D at 47th St. Photo
(about $195 and worth it). With the external antenna it comes with
strung out and clipped in my backyard, this little radio works
at least as well as some of the HF gear I used to have.

Go ahead and get one. I no nothing, however, about the other
radios you mentioned.
--
         --Dwight Ernest   KA2CNN   \ Usenet:...vax135!timeinc!dwight
         Time Inc. Editorial Technology Group, New York City

Voice: (212) 554-5061 \ Compuserve: 70210,523
Telemail: DERNEST/TIMECOMDIV/TIMEINC \ MCI: DERNEST

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reflect the opinions of Time Incorporated, its management, or stockholders."

From -6688937880037119862
X-Google-Language: Unknown,Unknown
X-Google-Thread: 151e61,ecbfdc6eba4f1b97,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-12 23:00:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site isucs1.UUCP
Path: utzoo!linus!decvax!bellcore!allegra!ulysses!mhuxr!ihnp4!stolaf!umn-cs!
isucs1!notes
From: notes@isucs1.UUCP
Newsgroups: net.ham-radio
Subject: Re: a rtty freak is born
Message-ID: <263@isucs1.UUCP>
Date: Sun, 13-Jan-85 02:00:46 EST
Article-I.D.: isucs1.263
Posted: Sun Jan 13 02:00:46 1985
Date-Received: Sat, 26-Jan-85 03:02:24 EST
Sender: notes@isucs1.UUCP
Organization: Iowa State University
Lines: 0
Nf-ID: #R:hplabs:-130300:isucs1:6900002:000:1
Nf-From: isucs1!wdi   Jan 7 21:38:00 1985

From 2393067342248153712
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5dd844b1ce5b4ca4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-13 06:56:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site timeb.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!houxm!vax135!timeinc!timeb!
dwight
From: dwight@timeb.UUCP (Dwight Ernest)
Newsgroups: net.ham-radio
Subject: Re: Radio Nicaragua being jammed
Message-ID: <46@timeb.UUCP>
Date: Sun, 13-Jan-85 09:56:51 EST
Article-I.D.: timeb.46
Posted: Sun Jan 13 09:56:51 1985
Date-Received: Mon, 14-Jan-85 03:42:06 EST
References: <2800023@uok.UUCP>
Organization: Time, Inc., New York City
Lines: 19

> I noticed Radio Nicaragua was getting level 2 jamming.
> 6.0150 0450Z Carrier Jamming commenced when news of U.S.
> exercise was beginning. It's nice to have a war in your
> own back yard.

What is "level 2" jamming?
--
         --Dwight Ernest   KA2CNN   \ Usenet:...vax135!timeinc!dwight
         Time Inc. Editorial Technology Group, New York City
         Voice: (212) 554-5061 \ Compuserve: 70210,523
         Telemail: DERNEST/TIMECOMDIV/TIMEINC \ MCI: DERNEST

"The opinions expressed above are those of the writer and do not necessarily
 reflect the opinions of Time Incorporated or its management."

     "Doctor, we can't go flitting about the Universe with a
      dormant Gravis lying about the console, now can we?"
              --Tegan

From 5836528349102752587
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1f842b4be0d4730
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-14 12:27:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!
mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: 14.563 MHz mystery signal may be US
Message-ID: <52800045@trsvax.UUCP>
Date: Mon, 14-Jan-85 15:27:00 EST
Article-I.D.: trsvax.52800045
Posted: Mon Jan 14 15:27:00 1985
Date-Received: Wed, 16-Jan-85 16:13:37 EST
References: <438@ihu1h.UUCP>
Lines: 9
Nf-ID: #R:ihu1h:-43800:trsvax:52800045:000:245
Nf-From: trsvax!mikey   Jan 14 14:27:00 1985

The jamming may be our side. The military sometimes uses omni antennas
to broadcast a jam and directional antennas to broadcast the data/voice.
This means that you must be in line to get the signal. Every little
bit helps.

mikey at trsvax

From -709788783931540201
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47339d2fbf5275a8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-14 14:00:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!zehntel!hplabs!hp-pcd!hplvle!
chris
From: chris@hplvle.UUCP (chris)
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response
Message-ID: <2800005@hplvle.UUCP>
Date: Mon, 14-Jan-85 17:00:00 EST
Article-I.D.: hplvle.2800005
Posted: Mon Jan 14 17:00:00 1985
Date-Received: Thu, 17-Jan-85 04:33:00 EST
References: <-14100@decwrl.UUCP>
Organization: Hewlett-Packard - Loveland, CO
Lines: 28
Nf-ID: #R:decwrl:-14100:hplvle:2800005:37777777600:1520
Nf-From: hplvle!chris   Jan 11 14:00:00 1985

Sorry to be so long in replying, but the route from notes to me had
been constipated for over a month......
I have been usin the TAPR board for about a year, and like it and its
documentation so much, I bought another (no, not the company). The GLB
initially had several poor design problems (cannot talk and listen at the
same time) though I understand this problem has been worked upon for
present/future revisions. Other options include VADCG (vancouver club)
boards, and TRS-80 software versions (no HDLC chip), which may be
worth considering. I believe the reason TAPR gets most press will be
obvious when you get the kit: absolutely first class design, accessable
to the "bearded experimenter", great documentation, good modem design,
flexibility in every feature, and plenty of features in software and hardware.
I am sold on the TAPR kit, a great job for a non-profit club activity.
An off shoot version is also available built and tested from AEA for about
$500.00, and I think TAPR will build for you for a price.
Present and future plans include coast-to-coast digital VHF/UHF links,
ongoing 6 meter meteor scatter tests, level 3 (ISO OSI model) software
design and development (including a write-off contest between the datagram
vs virtual circuit factions). Its a great way to combine computers and
ham radio, and there's lots of work to be done in this new mode.

- 73's, chris (WD5IBS)
hpfcla!hplvla!chris
Hewlett-Packard LID
PO Box 301
Loveland, Colo 80537

From 8780916543378162782
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134694,b2deec5275a82286,start
X-Google-Attributes: gid134694,public
X-Google-Thread: 151e61,b2deec5275a82286,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-14 16:08:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.video
Subject: trick for out-of-band reception on UHF receivers
Message-ID: <441@ihu1h.UUCP>
Date: Mon, 14-Jan-85 19:08:49 EST
Article-I.D.: ihu1h.441
Posted: Mon Jan 14 19:08:49 1985
Date-Received: Tue, 15-Jan-85 02:27:05 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 152
Xref: watmath net.ham-radio:2247 net.video:888

x

TRICK FOR OUT OF BAND RECEPTION ON UHF RECEIVERS

Bob Parnass, AJ9S

Articles in Monitoring Times and Popular Communications have described how one may "trick" various scanner radios into receiving frequencies they were not designed to receive. These tricks fall into 2 categories:

1. Exploiting a bug in the receiver's microprocessor firmware by entering a particular series of keystrokes.

2. Exploiting the receiver's finite image rejection by listening to simple images (e.g. to listen to frequency F, tune the receiver to F + 2 * [the intermediate frequency]).

This article describes a third technique, which permits listening in the 512 - 657 MHz range (UHF television channels 21 through 44) using radios designed to receive the 402 - 512 MHz range. The technique uses "multiple injection frequencies", and requires no receiver modification or additional hardware.

I discovered that my Radio Shack PRO30 scanner receives the audio from TV channel 38 (619.75 MHz) when the radio is programmed for 483.5375 MHz, and from channel 32

(583.75 MHz) when programmed to 456.5375 MHz. This is also true for the Radio Shack PRO2020 scanner.

Bearcat BC100, BC210, and BC350 scanners can also receive UHF TV signals on odd frequencies, but at different pro-
grammed settings: 483.7125 for TV channel 38, and 456.7125 for TV channel 32 (Bearcat and Radio Shack scanners use different intermediate frequencies).

By checking the arithmetic, I've concluded that the same mechanism permits out of band reception on all these scanners.

The Method

In the formulas that follow, all frequencies are in units of Megahertz. To listen on a frequency U between 512 and 657 MHz, tune your radio to:

$$\frac{3(U) - 7(IF)}{4}$$

where IF is the intermediate frequency of the receiver.

Conversely, if you hear a strange signal when your UHF radio is tuned to T MHz, you may be simultaneously listening to the frequency of:

$$\frac{4(T) - 7(IF)}{3}$$

When using this technique to receive TV audio on a scanner, the signal may be weak or distorted because:

- The bandwidth of a TV audio signal exceeds that of the IF filtering in the typical scanner.

- A typical scanner radio is not as sensitive in the 512 - 657 MHz range as it is on the frequencies for which it was designed, due to the inability of the front end tuned circuits to resonate out of their normal range.

- The TV signal format maybe unconventional. Chicago's channel 44, a pay TV service, scrambles the video and transmits the audio signal using an unconventional format not known to this author. PRO30 scanners receive Chicago channel 44 audio when programmed for 510.4875 or 510.5875 MHz.

Technical Explanation

What's happening is that an injection signal with multiple constituent frequencies is being being fed to the mixer stage.

To hear the audio from TV channel 32 (583.75 MHz), the PRO30 is set to 456.5375 MHz. At this setting, the local oscillator/tripler chain is injecting a signal into the mixer stage at:

456.5375 - 10.7
= 445.8375 MHz.

This 445.8375 MHz signal is the output of a frequency tripler, whose input frequency is:

445.8375 / 3
= 148.6125 MHz.

But, in addition to this 3rd harmonic, there seems to be a 4th harmonic component present:

4 (148.6125)
= 594.4500 MHz,

which when mixed with a signal on 583.75 MHz (channel 32), produces a 10.7 MHz IF:

594.4500 - 583.750
= 10.7 MHz

Other Frequencies Possible

Although the scheme described in this article requires no scanner modifications or additional hardware, a multiple injection scheme forms the basis for a product already familiar to scanner enthusiasts, the Grove "Scanverter."

The Scanverter, a novel 216 - 420 MHz converter, makes use of multiple injection frequencies to accomplish what Bob Grove terms "band stacking". In the Scanverter, a local oscillator produces a signal rich in harmonics. This signal is fed into a broadband mixer along with signals from the antenna, causing several frequencies to be received at each setting of the attached scanner.

The ability to receive TV signals on a scanner is usually of little value, but there may be ways of using this multiple injection phenomenon to receive bands other than 512 - 657 MHz. I recall receiving the 787.75 MHz audio from TV channel 66 somewhere on a BC100 once!

A simple scanner modification may be possible that purposely distorts the injection signal in a way that produces both the fundamental frequency and its second harmonic. Theoretically, this could cause a scanner with a 10.7 MHz IF and 420 - 512 MHz coverage, to be receptive to signals in the 807.9 - 991.9 MHz band. Readers are urged to experiment to find other frequencies to which their scanners may be receptive. A well calibrated, harmonic-free signal generator would be helpful.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -4568092496988779677
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1f842b4be0d4730
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-14 17:32:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!inuxc!pur-ee!uiucdcs!uok!mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: 14.563 MHz mystery signal may be US
Message-ID: <2800024@uok.UUCP>
Date: Mon, 14-Jan-85 20:32:00 EST
Article-I.D.: uok.2800024
Posted: Mon Jan 14 20:32:00 1985
Date-Received: Wed, 16-Jan-85 16:12:40 EST
References: <438@ihu1h.UUCP>
Lines: 3
Nf-ID: #R:ihu1h:-43800:uok:2800024:000:58
Nf-From: uok!mpackard Jan 14 19:32:00 1985

[]
Must have Oklahoma nulled out, I haven't heard it yet.

From 2664500326508853445
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,89a35472095ad617
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,89a35472095ad617
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1985-01-15 12:10:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!teddy!panda!
talcott!harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio,net.aviation
Subject: Re: some FAA vhf/uhf scanner freqs in Illinois
Message-ID: <7356@brl-tgr.ARPA>
Date: Tue, 15-Jan-85 15:10:19 EST
Article-I.D.: brl-tgr.7356
Posted: Tue Jan 15 15:10:19 1985
Date-Received: Sun, 20-Jan-85 05:03:03 EST
References: <436@ihu1h.UUCP>
Organization: Ballistic Research Lab
Lines: 25
Xref: watmath net.ham-radio:2268 net.aviation:1336

> Here are some vhf/uhf FAA frequencies for Illinois. Many of the entries
> marked "govt recds" are from US Government files dated May 1984.
> Several of these frequencies are in use in other areas of the USA.
>
> There are many more, particularly in the 225 - 400 MHz military aero
> band and the 108 - 132 commercial aircraft band, but they are just too
> numerous to print in one listing.
>
Don't bother to post the obvious ones at all (like the few navaids you
have posted). If you want to know what they are you can go about it one
of two ways.

The Airport Facilities Directory lists Frequency for navigational aids
and airport communcations by Name. Each entry includes type and lat/long
coordinates for the station. This includes listings for ILS systems.
Also, an explanation on how the ILS system works appears in the Airmans
Information Manual.

For those who prefer a more pictorial view, you can get the Sectional or
WAC charts for your area.

You can find all of these at your local general aviation air port.

-Ron

From -2379122733419995467
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a750fcf375afab58
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-01-15 12:55:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site lanl.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!teddy!panda!
talcott!harvard!seismo!cmcl2!lanl!wkp
From: wkp@lanl.ARPA
Newsgroups: net.ham-radio
Subject: Re: portable SW radios query
Message-ID: <19552@lanl.ARPA>
Date: Tue, 15-Jan-85 15:55:01 EST
Article-I.D.: lanl.19552
Posted: Tue Jan 15 15:55:01 1985
Date-Received: Fri, 18-Jan-85 00:43:26 EST
References: <297@mb2c.UUCP> <44@timeb.UUCP>
Sender: newsreader@lanl.ARPA
Organization: Los Alamos National Laboratory
Lines: 25

> The Sony models ICF-2002 and the ICF-7600D (note the D) are the
> same radio; the 7600D is the European/Japanese model and is now
> available with a power supply for 220/110 VAC.
>
> I'd recommend it.
>   --Dwight Ernest   KA2CNN   \ Usenet:...vax135!timeinc!dwight

Sounds good. I've been looking at short wave radios also (not necessarily
portable). Does anyone else have any other suggestions?

I am especially interested in receiving Hebrew-language broadcasts
from Kol Yisrael (the Voice of Israel). I have the following
questions: Does this station have any Hebrew-language broadcasts?
If not, has anyone ever received this station (especially in the
mountain area of the U.S.--Colorado, New Mexico, etc.).

If someone has gotten this station, what receiver were you using?
Would I have any trouble receiving it with the Sony mentioned above?

Thanks in advance.
---
                        bill peter

                        !seismo!cmcl2!lanl!wkp
                        wkp@lanl.ARPA

From -1641266098081042220
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5dd844b1ce5b4ca4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-15 16:25:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!inuxc!pur-ee!uiucdcs!uok!

mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: Radio Nicaragua being jammed
Message-ID: <2800025@uok.UUCP>
Date: Tue, 15-Jan-85 19:25:00 EST
Article-I.D.: uok.2800025
Posted: Tue Jan 15 19:25:00 1985
Date-Received: Fri, 18-Jan-85 02:24:28 EST
References: <2800023@uok.UUCP>
Lines: 6
Nf-ID: #R:uok:2800023:uok:2800025:000:268
Nf-From: uok!mpackard   Jan 15 18:25:00 1985

<>
Sorry, I drifted off into my military mode. The military uses
a 1, 2, 3 level which means 1-No problem, 2-, 2-desired station still
heard under heavy interferanceence, 3-desired station obliterated.

From -4923737099562141252
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1f842b4be0d4730
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-16 05:39:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: 14.563 MHz mystery signal may be US (now spread spectrum)
Message-ID: <443@ihu1h.UUCP>
Date: Wed, 16-Jan-85 08:39:25 EST
Article-I.D.: ihu1h.443
Posted: Wed Jan 16 08:39:25 1985
Date-Received: Thu, 17-Jan-85 04:43:08 EST
References: <438@ihu1h.UUCP>, <52800045@trsvax.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 14

At about 1800Z on 1/15/85, the unidentified "feedback" signal was still
going strong.

For the first time since I began monitoring the frequency (sporadic
basis since Christmas vacation), what sounded like a SPREAD SPECTRUM
signal also appeared, centered around this frequency.

On past occasions, males speaking Spanish on lsb could be heard under
the "feedback" signal on 14.563 MHz.

Now I'm certain that these signals are not used for commerce.
--

==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 1546954508904732068
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58956fc90de322cd,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,58956fc90de322cd,start
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1985-01-16 19:35:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.aviation
Subject: new Sony AIR-8 AIR/VHF-hi/LF/AM/FM scanner radio
Message-ID: <445@ihu1h.UUCP>
Date: Wed, 16-Jan-85 22:35:49 EST
Article-I.D.: ihu1h.445
Posted: Wed Jan 16 22:35:49 1985
Date-Received: Thu, 17-Jan-85 13:47:25 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 40
Xref: watmath net.ham-radio:2252 net.aviation:1323

x

New Sony AIR-8 VHF-HI/AIR/AM/FM/LF Scanner

Sony, a well known name in the consumer electronics business, has introduced a portable scanner aimed particularly at aviation enthusiasts. Here is the information I have:

Frequency coverage includes:

- commercial aviation 108-136 MHz.
- low frequency weather 200 - 400 KHz.
- vhf-hi public service 144 - 174 MHz.
- AM commercial broadcast
- FM commercial broadcast

There are 10 memory channels in each of 4 bands. Apparently, channels in different bands cannot be intermixed. The unit will "scan the entire aero band at the touch of a button in either direction."

Appearing as a cross between an ICOM IC02A 2 meter walkie-talkie and a piece of aero nav equipment, the top of the Air-8 contains rotary bandswitch, along with

squelch and volume controls. A top mounted BNC connector joins the flexible antenna with the radio. The back lit LCD display on the front displays frequency and prompts. No speaker grille is visible in the picture I have!

Selectable delay on a per-channel basis, and priority channel sample are enabled by front panel pushbuttons. The Air-8 also has jacks for earphone and external AM antenna. Power is supplied by 4 AA batteries.

The price I saw quoted was $269.

--

==========

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 3671343217886372204
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5cc2c59d6e2132d4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-17 08:11:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!hplabs!hpda!fortune!amdcad!decwrl!
decvax!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <260@petrus.UUCP>
Date: Thu, 17-Jan-85 11:11:56 EST
Article-I.D.: petrus.260
Posted: Thu Jan 17 11:11:56 1985
Date-Received: Mon, 21-Jan-85 06:26:16 EST
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 85009.42669701
Wed Jan 9 10:14:26.621 1985 UTC
Element set: 721
Inclination: 97.6154 deg
RA of node: 353.6542 deg
Eccentricity: 0.0004247
Arg of perigee: 97.6793 deg
Mean anomaly: 262.4920 deg
Mean motion: 15.26851058 rev/day
Decay rate: 1.328e-05 rev/day^2
Epoch rev: 18100
Semi major axis: 6860.335 km
Anom period: 94.311753 min
Apogee: 505.738 km
Perigee: 499.911 km

```
Ref perigee:      2565.44443650
   Wed Jan  9 10:39:59.313 1985 UTC
Beacon:           145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time:      85006.75331820
   Sun Jan  6 18:04:46.692 1985 UTC
Element set:     153
Inclination:       25.9806 deg
RA of node:        159.5633 deg
Eccentricity:    0.6017188
Arg of perigee:   337.5136 deg
Mean anomaly:       4.4113 deg
Mean motion:    2.05851439 rev/day
Decay rate:        4.5e-07 rev/day^2
Epoch rev:            1180
Semi major axis: 26105.904 km
Anom period:    699.533609 min
Apogee:           35436.773 km
Perigee:           4019.946 km
Ref perigee:      2562.74736555
   Sun Jan  6 17:56:12.383 1985 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      85009.61342034
   Wed Jan  9 14:43:19.517 1985 UTC
Element set:     53
Inclination:       98.2154 deg
RA of node:        76.9032 deg
Eccentricity:    0.0014001
Arg of perigee:     6.7366 deg
Mean anomaly:     353.4033 deg
Mean motion:   14.61937166 rev/day
Decay rate:        6.2e-07 rev/day^2
Epoch rev:            4586
Semi major axis:  7062.142 km
Anom period:     98.499445 min
Apogee:            694.173 km
Perigee:           674.398 km
Ref perigee:      2565.61467376
   Wed Jan  9 14:45:07.812 1985 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84362.28564943
   Thu Dec 27 06:51:20.110 1984 UTC
Element set:     110
Inclination:       82.9633 deg
RA of node:        26.0043 deg
```

```
Eccentricity:    0.0057629
Arg of perigee:   304.2879 deg
Mean anomaly:      55.2738 deg
Mean motion:   12.15588939 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13436
Semi major axis:  7987.322 km
Anom period:    118.461098 min
Apogee:           1669.586 km
Perigee:          1577.526 km
Ref perigee:      2552.27301865
   Thu Dec 27 06:33:08.811 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84355.36390182
   Thu Dec 20 08:44:01.117 1984 UTC
Element set:     240
Inclination:       82.9566 deg
RA of node:        40.3805 deg
Eccentricity:    0.0019368
Arg of perigee:    50.2699 deg
Mean anomaly:     310.0037 deg
Mean motion:   12.06664240 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           13254
Semi major axis:  8026.684 km
Anom period:    119.337257 min
Apogee:           1676.543 km
Perigee:          1645.451 km
Ref perigee:      2545.37541112
   Thu Dec 20 09:00:35.520 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      85008.43968448
   Tue Jan  8 10:33:08.739 1985 UTC
Element set:     211
Inclination:       82.9623 deg
RA of node:        31.7487 deg
Eccentricity:    0.0010918
Arg of perigee:    44.7290 deg
Mean anomaly:     315.4662 deg
Mean motion:   12.05054235 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           13466
Semi major axis:  8033.836 km
Anom period:    119.496696 min
Apogee:           1674.895 km
Perigee:          1657.352 km
Ref perigee:      2564.44994999
   Tue Jan  8 10:47:55.679 1985 UTC
```

```
Satellite: rs-6
Catalog number: 13002
Epoch time:      84363.55338691
   Fri Dec 28 13:16:52.629 1984 UTC
Element set:     94
Inclination:       82.9626 deg
RA of node:        27.7035 deg
Eccentricity:    0.0049409
Arg of perigee:   322.4305 deg
Mean anomaly:      37.3313 deg
Mean motion:   12.13563287 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13429
Semi major axis:  7996.214 km
Anom period:    118.658830 min
Apogee:           1665.408 km
Perigee:          1586.391 km
Ref perigee:      2553.54484199
   Fri Dec 28 13:04:34.347 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      85008.47666787
   Tue Jan  8 11:26:24.103 1985 UTC
Element set:     186
Inclination:       82.9620 deg
RA of node:        27.3830 deg
Eccentricity:    0.0021111
Arg of perigee:   329.0869 deg
Mean anomaly:      30.8968 deg
Mean motion:   12.08691514 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13507
Semi major axis:  8017.700 km
Anom period:    119.137099 min
Apogee:           1662.041 km
Perigee:          1628.188 km
Ref perigee:      2564.46956726
   Tue Jan  8 11:16:10.611 1985 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      85006.07291204
   Sun Jan  6 01:44:59.600 1985 UTC
Element set:     306
Inclination:       82.9600 deg
RA of node:        35.4020 deg
Eccentricity:    0.0020686
Arg of perigee:    98.1214 deg
Mean anomaly:     262.2188 deg
Mean motion:   12.02953708 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13414
```

```
Semi major axis:  8043.192 km
Anom period:    119.705354 min
Apogee:           1702.329 km
Perigee:          1669.052 km
Ref perigee:      2562.09549100
   Sun Jan  6 02:17:30.422 1985 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:      85006.16459760
   Sun Jan  6 03:57:01.232 1985 UTC
Element set:     302
Inclination:       99.0747 deg
RA of node:       346.0092 deg
Eccentricity:    0.0012187
Arg of perigee:   244.0419 deg
Mean anomaly:     115.9496 deg
Mean motion:   14.13131154 rev/day
Decay rate:        9.8e-07 rev/day^2
Epoch rev:           18252
Semi major axis:  7223.999 km
Anom period:    101.901370 min
Apogee:            871.516 km
Perigee:           853.908 km
Ref perigee:      2562.14180550
   Sun Jan  6 03:24:11.995 1985 UTC
Beacon:           137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84360.38115977
   Tue Dec 25 09:08:52.204 1984 UTC
Element set:     96
Inclination:       98.6871 deg
RA of node:        28.8646 deg
Eccentricity:    0.0015940
Arg of perigee:   218.8020 deg
Mean anomaly:     141.2013 deg
Mean motion:   14.22442937 rev/day
Decay rate:        3.7e-07 rev/day^2
Epoch rev:            9065
Semi major axis:  7192.394 km
Anom period:    101.234289 min
Apogee:            833.919 km
Perigee:           810.990 km
Ref perigee:      2550.35358567
   Tue Dec 25 08:29:09.801 1984 UTC
Beacon:           137.5000 MHz


From 4954240193092806476
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,49bacbb2af175783,start
```

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-17 09:17:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site hplabs.UUCP
Path: utzoo!watmath!clyde!cbosgd!hplabs!paull
From: paull@hplabs.UUCP (Rob KA6SFV)
Newsgroups: net.ham-radio
Subject: RTTY TU's and c64
Message-ID: <1441@hplabs.UUCP>
Date: Thu, 17-Jan-85 12:17:18 EST
Article-I.D.: hplabs.1441
Posted: Thu Jan 17 12:17:18 1985
Date-Received: Fri, 18-Jan-85 03:20:00 EST
Distribution: net
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 12

de WE6B bt

I recently built a TU for my c64 and am experiencing occasional reception errors. This particular TU uses NE567 tone decoders for the demodulator. I'd like to know if anyone else is using the c64 in rtty applications, what type of TU is being used and an estimate the error rate. Also whether you use mostly HF or VHF for rtty work.

Any suggestions or comments are welcome. TNX

de WE6B (ex- KA6SFV) Rob Paull sk

From 3434871810662538794
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d2e7113a463f04e3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-17 09:27:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: free microwave spectrum chart available
Message-ID: <446@ihu1h.UUCP>
Date: Thu, 17-Jan-85 12:27:50 EST
Article-I.D.: ihu1h.446
Posted: Thu Jan 17 12:27:50 1985
Date-Received: Fri, 18-Jan-85 02:47:30 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 17

x
From another newsgroup:

"WAVTEK has developed a new microwave frequency chart that outlines microwave applications by frequency. The chart allows users to identify commercial and military activities in the 1 to 44 GHz band at a glance. Satellite communications uplinks and downlinks for the commercial C- and Ku-bands, military C-band, DBS and MILSTAR are identified, as are the frequency bands for common carrier microwave links. Contact: Charles Foster, manager, Microwave Business Unit, Wavetek San Diego, P.O.Box 85265, San Diego, Calif., 92138, (619) 279-2200."
Satellite Communications,
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 3740415962466606018
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cced3402e756fb7a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-17 17:00:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 2 (Goldwater introduces 2 bills)
Message-ID: <14881@mgweed.UUCP>
Date: Thu, 17-Jan-85 20:00:25 EST
Article-I.D.: mgweed.14881
Posted: Thu Jan 17 20:00:25 1985
Date-Received: Fri, 18-Jan-85 03:44:18 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr arrl bulletin nr 2 from arrl headquarters
newington ct january 16, 1985
to all radio amateurs bt

senator barry goldwater, k7uga, has introduced two amateur related bills into the 99th congress. senate resolution 36 asks the fcc to act favorably on federal preemption for amateur antenna systems, and senate resolution 66 would amend the communications act of 1934 to prohibit willful or malicious interference to radio communication. both bills need your support. see the arrl letter and qst for details ar

From 5466339474267256535
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,ff1125e4cf1732db,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-17 17:00:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 3 (ham exam info)
Message-ID: <14882@mgweed.UUCP>
Date: Thu, 17-Jan-85 20:00:57 EST
Article-I.D.: mgweed.14882
Posted: Thu Jan 17 20:00:57 1985
Date-Received: Fri, 18-Jan-85 03:44:37 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 21

qst de k9eui
hr arrl bulletin nr 3 from arrl headquarters
newington ct january 16, 1985
to all radio amateurs bt

some volunteer examiner teams working with the arrl vec are now accepting walkins. if you know of a test session and did not submit your form 610 before the 30 day preregistration deadline, check with the ve team anyway to see if they will accept walkins. the ve team has the right to limit the number of candidates because of the number of available ves or the size of their facilities.

the arrl/vec maintains a computerized list of all test sessions known to us, updated weekly. send a business size s.a.s.e. to the arrl vec office, 225 main street, newington, ct 06111 and ask for a printout of test sessions in your state. persons living near a state line may ask for the adjacent state as well ar

From -152724327802847018
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b7ffdb98725afd1d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-17 17:01:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 2
Message-ID: <14883@mgweed.UUCP>
Date: Thu, 17-Jan-85 20:01:22 EST
Article-I.D.: mgweed.14883

Posted: Thu Jan 17 20:01:22 1985
Date-Received: Fri, 18-Jan-85 03:44:53 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 34

qst de k9eui
hr propagation forecast bulletin nr 2 from arrl headquarters
newington ct january 13, 1985
to all radio amateurs bt

the exceptional run of very low solar flux reported last week continued through january 11. for ten of these days the reading was seventy. on the fifth it dropped to 69. at this time of year this is very close to quiet sun conditions. no comparably quiet period appears in the records for cycles 18, 19 and 20 more than a few weeks from the end of any cycle.

this does not necessarily imply that cycle 21 is about to end more than two years short of the average length of all cycles for which accurate records are available.

what it does tell us is that our higher dx frequencies can hardly be worse than they have been since late september, regardless of how near or far we may be from the end of cycle 21.

the solar flux rise predicted last week is under way and the upswing is sharper than expected. the flux reached 75 on the 12th. two more days at this rate could make a marked change in the dx picture on all bands. the author has had poor sun viewing weather thus far. if significant visual observation is possible we will pass along results at once in a special bulletin. meanwhile, checking of the beacon range between 28.175 and 28.3 mhz is recommended.

american sunspot numbers for january 3 through 9 were between 0 and 2 with a mean of 0.3 ar

From -5462406918194044088
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1bb7ec6473491ca3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-17 17:18:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: HELP!!! bulletin readers (from K9EUI)
Message-ID: <14885@mgweed.UUCP>
Date: Thu, 17-Jan-85 20:18:06 EST

Article-I.D.: mgweed.14885
Posted: Thu Jan 17 20:18:06 1985
Date-Received: Fri, 18-Jan-85 03:45:12 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 33

qst de k9eui

bulletins have been sparse lately for several reasons; there have not been many, propagation has been stink-o, and qrm seems worse, both due to propagation changes and increased 80 and 40 meter activity because the higher bands are so bad. Also radio moscow is now blasting North America with their sigs on 5 frequencies in the 40 meter band alone!

I have written the arrl, requesting that they consider a change of their bulletin frequencies. It is quite obvious that they do not monitor a frequency before transmitting and this often results in murderous qrm. Also on 40 meters, they are just a few kHz away from a mail box system.

I requested that W1AW begin bulletin transmissions on 30 meters which would give another path to choose from but they said "the board voted not to"!!!!!

I have just installed a diversity comparator that I hope will give better results here but I would like to see those of you that appreciate having the bulletins, write the ARRL and urge them to go elsewhere on 40 meters, and to also transmit on 30 meters. (I expect to see flack/flames on this idea, but my suggestion was that they move to the very bottom of the bands where they would be easy to find and would not have other rtty qrm). The other problem with the present 40 meter frequency is frequent qrm from thos stations that are allowed to operate SSB there.

73 from K9EUI

From 294815750579872302
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,78a32738ac0f551c,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,78a32738ac0f551c,start
X-Google-Attributes: gid15c702,public
X-Google-ArrivalTime: 1985-01-17 18:23:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.audio
Subject: eavesdropping on FM subcarriers

Message-ID: <448@ihu1h.UUCP>
Date: Thu, 17-Jan-85 21:23:30 EST
Article-I.D.: ihu1h.448
Posted: Thu Jan 17 21:23:30 1985
Date-Received: Fri, 18-Jan-85 09:14:35 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 23
Xref: watmath net.ham-radio:2261 net.audio:3821

x
From the January 15, 1985 issue of "Radio Communications Report":

"The City of New York, acting through its Department of General Services, is seeking proposals for the lease of one subcarrier, at 67 kHz, of WNYC/FM......"

"WNYC/FM services audiences in the New York City metropolitan area operating on 93.9 MHz at a rated power transmitter output not exceeding 10 kw."

Now that subcarrier paging is legal, what FM stations in the Chicago area are transmitting information on subcarriers?

I'm considering connecting my shortwave receiver (with VLF coverage) to an FM radio, before any low pass filtering, to listen in if there is enough activity.

Does anyone else on the net listen in?
--
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -856741466867133876
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,98c7659c3a952a77,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-17 22:55:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: PACSAT/Vita Press Release
Message-ID: <263@petrus.UUCP>
Date: Fri, 18-Jan-85 01:55:22 EST
Article-I.D.: petrus.263
Posted: Fri Jan 18 01:55:22 1985
Date-Received: Fri, 18-Jan-85 10:15:51 EST
Organization: Bell Communications Research, Inc

Lines: 56

VITA NEWS RELEASE

JANUARY 17, 1985

FOR IMMEDIATE RELEASE

FOR FURTHER INFORMATION*

ANNE HEYNIGER, VITA PUBLIC
INFORMATION OFFICER
(703) 276-1800

BREAKTHROUGH IN LOW-COST TELECOMMUNICATIONS

RADIO AMATEURS COMMUNICATE WITH LOW-ORBITING SATELLITE

USING A TINY SATELLITE NOW ORBITING THE EARTH OVER THE POLES AT AN ALTITUDE OF 429 MILES (690 KN), A TEAM OF TECHNICAL VOLUNTEERS FROM THE U.S. AND CANADA YESTERDAY SENT LETTER-PERFECT PACKET RADIO MESSAGES TO ENGLAND FROM HAWAII, AND RECEIVED REPLIES. THE TRANSMISSIONS REPRESENT A BREAKTHROUGH IN THE USE OF LOW ORBITING SATELLITES FOR WORLDWIDE COMMUNICATIONS.

INTRODUCING THE NEW CONCEPT AT THE PACIFIC TELECOMMUNICATIONS COUNCIL'S ANNUAL CONFRENCE IN HAWAII, HIGHLY TRAINED TECHNICAL EXPERTS FROM PRIVATE VOLUNTARY AGENCIES IN THE U.S. AND CANADA SENT MESSAGES TO THE UNIVERSITY OF SURREY IN GUILDFORD, ENGLAND, WHERE THE SATELLITE (UOSAT-2) WAS BUILT. THE MESSAGES--DIGITIZED "PACKETS" OF INFORMATION--WERE STORED IN THE SATELLITE'S ON-BOARD COMPUTER. A FEW HOURS LATER, AS THE SATELLITE PASSED OVER GUILDFORD, THE LETTER-PERFECT MESSAGES WERE DOWNLOADED AND PRINTED OUT AUTOMATICALLY BY THE SURREY GROUND STATION'S SMALL PERSONAL COMPUTER.

USING AMATEUR RADIO FREQUENCIES, INEXPENSIVE TRANSMITTERS AND RECEIVERS, AND PERSONAL COMPUTERS TO COMMUNICATE WITH A LOW-ORBITING BIRD, THE SYSTEM THAT WILL UTILIZE THIS TECHNOLOGY IN THE FUTURE (ALREADY KNOWN AS PACSAT), WILL OFFER TELECOMMUNICATIONS NETWORKING AT A FRACTION OF THE COST OF CONVENTIONAL TELEXES. ONCE OPERATIONAL, THE PACSAT SYSTEM WILL PROVIDE ORGANIZATIONS THROUGHOUT THE WORLD MUCH-NEEDED ACCESS TO LOW-COST, RELIABLE TELECOMMUNICATIONS. GROUND STATION EQUIPMENT, COSTING NOT MORE THAN $2000 AND CAPABLE OF OPERATING ON BATTERIES OR SOLAR POWER, CAN BE CARRIED IN A BRIEFCASE. THE FIRST FULL-SERVICE PACSAT SATELLITE IS SCHEDULED FOR LAUNCH ON THE SHUTTLE IN EARLY 1987.

SPEARHEADING THE DEVELOPMENT OF THIS TECHNOLOGY ARE VITA (VOLUNTEERS IN TECHNICAL ASSISTANCE), A PRIVATE VOLUNTARY DEVELOPMENT AGENCY IN WASHINGTON, D.C. THAT SPECIALIZES IN TECHNOLOGY TRANSFER; AND AMSAT (RADIO AMATEUR SATELLITE CORP.), AN INTERNATIONAL ASSOCIATION OF HAM RADIO OPERATORS WHO ALSO DESIGN AND BUILD SATELLITES. INTERPARES, A PRIVATE CANADIAN AGENCY ENGAGED IN COMMUNITY-BASED DEVELOPMENT, SUPPORTS THE EFFORT IN CANADA.

IN WASHINGTON, PACSAT INTERNATIONAL APPLICATIONS MANAGER, DR. GARY GARRIOTT OF VITA, SAID OF THE CONTACT IN SPACE, "I JUST WISH THE PEOPLE COORDINATING FAMINE RELIEF IN ETHIOPIA HAD A PACSAT TO COMMUNICATE WITH. THEY COULD USE

SOLAR ENERGY TO POWER THE RADIO. IT WOULD SOLVE A LOT OF PROBLEMS IN GETTING HELP TO THOSE REMOTE PLACES."

END

From -6839300958722959086
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a750fcf375afab58
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-18 03:38:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site timeb.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!vax135!timeinc!timeb!dwight
From: dwight@timeb.UUCP (Dwight Ernest)
Newsgroups: net.ham-radio
Subject: Re: portable SW radios query (KOL Yisrael; Sony 2002\7600D)
Message-ID: <50@timeb.UUCP>
Date: Fri, 18-Jan-85 06:38:43 EST
Article-I.D.: timeb.50
Posted: Fri Jan 18 06:38:43 1985
Date-Received: Sat, 19-Jan-85 00:59:39 EST
References: <297@mb2c.UUCP> <44@timeb.UUCP> <19552@lanl.ARPA>
Organization: Time, Inc., New York City
Lines: 27

> I am especially interested in receiving Hebrew-language broadcasts
> from Kol Yisrael (the Voice of Israel). I have the following
> questions: Does this station have any Hebrew-language broadcasts?
> If not, has anyone ever received this station (especially in the
> mountain area of the U.S.--Colorado, New Mexico, etc.).
>
> If someone has gotten this station, what receiver were you using?
> Would I have any trouble receiving it with the Sony mentioned above?
>   bill peter

Yes, KOL has Hebrew broadcasts, and some of them are beamed
to North America. I've heard it quite well on my 7600D with
the outside antenna, but I'm near New York City (and there's
no mountains around here, darn it).
--
          --Dwight Ernest   KA2CNN   \ Usenet:...vax135!timeinc!dwight
          Time Inc. Editorial Technology Group, New York City
          Voice: (212) 554-5061 \ Compuserve: 70210,523
          Telemail: DERNEST/TIMECOMDIV/TIMEINC \ MCI: DERNEST

"The opinions expressed above are those of the writer and do not necessarily
 reflect the opinions of Time Incorporated or its management."

     "Doctor, we can't go flitting about the Universe with a
      dormant Gravis lying about the console, now can we?"

--Tegan

From -4658083865914267051
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9cf937ebf756fd3c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-18 12:38:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 8/7/84; site ucbvax.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!luria
From: luria@ucbvax.ARPA (Marc Luria)
Newsgroups: net.ham-radio
Subject: Availability of 2021's by Uniden
Message-ID: <4253@ucbvax.ARPA>
Date: Fri, 18-Jan-85 15:38:31 EST
Article-I.D.: ucbvax.4253
Posted: Fri Jan 18 15:38:31 1985
Date-Received: Sat, 19-Jan-85 04:16:30 EST
References: <254@decwrl.UUCP>
Reply-To: luria@ucbvax.UUCP (Marc Luria)
Organization: University of California at Berkeley
Lines: 15
Summary:

I just ordered a Uniden 2021 from Grove Enterprises. They bought out another dealer and thus are selling them for a bit more than what was the going rate $99, but their price $124.50 including shipping is from what I've heard, still a good deal. The Uniden is a portable unit that is an upgrade of the 2001 by Sony and is almost exactly the same as the Radio Shack DX-400. (The Uniden has a 5LED signal strength meter whereas the DX400 has a analog meter. They have about 30 left. You send them a check to P.O. Box 98 Brasstown, NC 28902 or you can order by credit card though there is a 3% surcharge. (I ordered it by Master Charge since this is always the best option with mail order purchases.) They told me that if I was not satisfied I could return it within 15 days for a full refund. This was important to me as I am still unsure if it is sensitive enough to pick up Kol Israel broadcasts. Their toll free number is 800-438-8155. Send me a note if you decide to get it, and what your experiences are.

Marc Luria

From -4742578135375120889
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3fe2b58fa28d5cb5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-18 13:16:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: Using PLL IC's for RTTY demodulators
Message-ID: <14915@mgweed.UUCP>
Date: Fri, 18-Jan-85 16:16:47 EST
Article-I.D.: mgweed.14915
Posted: Fri Jan 18 16:16:47 1985
Date-Received: Sat, 19-Jan-85 04:28:32 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

The problem with 567's as TU decoders is that with proper lowpass filtering, they do not respond fast enough. Rather than use tone decoder IC's like the 567, you should use either a 565 with a slicer after it (a sample circuit is in the Signetics data book), or better yet, one of the PLL chips that is designed for that purpose like the Exar XR-210.

In any case, a PLL demod is lousy on the HF bands without channel filtering ahead of it, or it will lock onto the strongest signal within its capture range. They should be preceeded by either toroidal or active filters tuned to mark and space tone frequencies. Also, the VCO in the device should be tuned (with no signal input) to midway between mark and space.

Bob K9EUI

From 7771119847234278787
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,61ca982c763a6887,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-18 13:21:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Bad TVI case solved near Chicago
Message-ID: <14917@mgweed.UUCP>
Date: Fri, 18-Jan-85 16:21:54 EST
Article-I.D.: mgweed.14917
Posted: Fri Jan 18 16:21:54 1985
Date-Received: Sat, 19-Jan-85 04:28:44 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

Since some indicated an interest on how our case of TVI was solved, here it is:

As you recall, The cities of Batavia and Geneva, IL. were experiencing a severe case of TVI to channel 5 (Chicago).

I located the source as being a 75.8 MHz paging transmitter on the East side of Geneva (30 watts).

The FCC finally investigated and confirmed what I had found, that the transmitter was clean and it was a case of adjacent channel interference.

The FCC issued them a citation and have given them 90 days to relocate their transmitter. I was told yesterday by the FCC that the transmitter will be moved to Sears tower.

Bob K9EUI

From 9171340670193862965
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,afbd40c8da9aa469,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-18 22:39:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Elements for new wx satellite: NOAA-9
Message-ID: <265@petrus.UUCP>
Date: Sat, 19-Jan-85 01:39:53 EST
Article-I.D.: petrus.265
Posted: Sat Jan 19 01:39:53 1985
Date-Received: Sat, 19-Jan-85 06:37:08 EST
Organization: Bell Communications Research, Inc
Lines: 21

Satellite: noaa-9
Catalog number: 15427
Epoch time: 85002.40499141
   Wed Jan 2 09:43:11.257 1985 UTC
Element set: 11
Inclination: 98.9258 deg
RA of node: 316.9351 deg
Eccentricity: 0.0014950
Arg of perigee: 207.6935 deg
Mean anomaly: 152.3436 deg
Mean motion: 14.11354661 rev/day
Decay rate: 6.1e-07 rev/day^2
Epoch rev: 295
Semi major axis: 7230.057 km
Anom period: 102.029634 min
Apogee: 867.229 km
Perigee: 845.611 km
Ref perigee: 2558.37500769
   Wed Jan 2 09:00:00.664 1985 UTC
Beacon: 137.5000 MHz

From 5068970427790486563
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,eceae71cbd9ff31a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-19 08:12:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: IL snow plow/road crew/towing freqs
Message-ID: <450@ihu1h.UUCP>
Date: Sat, 19-Jan-85 11:12:50 EST
Article-I.D.: ihu1h.450
Posted: Sat Jan 19 11:12:50 1985
Date-Received: Sun, 20-Jan-85 05:47:21 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 95

Here are some Illinois frequencies active in the winter. The best frequency
to listen to for (major) highway road conditions is 151.1 MHz, the Illinois
Dept of Transportation "Minutemen".

```
AAA Towing_____________[Joliet]_____________ 157.5150____KKS531    (govt recds)
Bob's Towing___________[Park Ridge]_________ 467.5750_mo_KAB1478   (govt recds)
Brandywine Towing______[Villa Park]_________ 463.8750____KNAX315   (B. Parnass)
C & D Towing___________[Mokena]_____________ 464.9500____KIJ931    (B. Parnass)
Cherry's Inc, towing___[Bensenville]________ 472.4375____KCK364    (govt recds)
               "       [Bensenville]________ 472.4375____KJ9505    (govt recds)
               "       [Bensenville]________ 472.4375____WGI892    (govt recds)
               "       [Bensenville]________ 472.4375____WGR962    (govt recds)
Chicago Motor Club, AAA, tow trucks
                       [Chicago]___________ 150.9050____KSA756    (govt recds)
               "       [Chicago]___________ 150.9350____KNM876    (govt recds)
Chicago: Bureau of Streets Traffic, tow trucks, Outer Drive Minutemen (Snow Co
                      mmand f3)
                       [Chicago]___________ 453.7750____call?     (others)
Chicago: Bureaus of Sanitation & Equipment Service (Snow Command f1)
                       [Chicago]___________ 453.6500____call?     (others)
Chicago: Bureaus of Sanitation, Rodent Control (Snow Command f8)
                       [Chicago]___________ 453.5500____call?     (others)
Chobar's Towing Svc aka/Chobar, James
                       [Plainfield]________ 151.7750____KDU646    (others)
DuPage County: Highway Dept
                       [Downers Grove]______  37.9600____KNGD612   (govt recds)
Fontana Motor Sales, tow trucks
                       [Warrenville]________ 151.8350____KUV431    (B. Parnass)
Fragas Towing Inc______[Chicago]___________ 461.1000____KCI980    (others)
H & H Arco, gas station, tow trucks
                       [Naperville]________ 150.8900____KFZ765    (B. Parnass)
IL: Dept of Transportation, 'FE' channel, field supervisors
                       [location?]_________ 453.7000____KQO359    (B. Parnass)
IL: Dept of Transportation, Cook/DuPage/Kane/Will, dispatcher, PL2Z
                       [location?]_________  47.3000____call?     (B. Parnass)
```

IL: Dept of Transportation, Cook/DuPage/Kane/Will, mobiles, PL2Z
[location?]_____ 47.3800____call? (others)
IL: Dept of Transportation, DeKalb & northwest counties, dispatcher, PL2Z
[location?]_____ 47.1400____call? (others)
IL: Dept of Transportation, DeKalb & northwest counties, mobiles, PL2Z
[location?]_____ 47.3800____call? (others)
IL: Dept of Transportation, Emergency Patrol Svc, Minutemen
[Schaumburg, Hillsi]_ 151.1000____KTN369 (B. Parnass)
IL: Dept of Transportation, Kendall/Grundy/Lasalle, dispatcher, PL3Z
[Ottawa]_____ 47.1400____call? (others)
IL: Dept of Transportation, Kendall/Grundy/Lasalle, mobiles, PL3Z
[Ottawa]_____ 47.3800____call? (others)
IL: Dept of Transportation, McHenry/Lake, dispatcher, PL2Z
[location?]_____ 47.3000____call? (B. Parnass)
IL: Dept of Transportation, McHenry/Lake, mobiles, PL2Z
[location?]_____ 47.3800____call? (others)
IL: Dept of Transportation, road crews north of I-290
[Chicago, Plato]_____ 150.9950____KSJ281 (B. Parnass)
IL: Dept of Transportation, road crews south of I-290
[Joliet]_____ 151.0700____KSJ281 (others)
IL: Dept of Transportation, road crews
[Hillside]_____ 150.9950____KZZ494 (B. Parnass)
IL: Dept of Transportation
[Naperville]_____ 156.0450____WCS404 (govt recds)
" [Naperville]_____ 156.0600____WCS404 (govt recds)
" [Naperville]_____ 156.1200____WCS404 (govt recds)
IL: State Police, traffic enforcement helicopters wkg ISP cars to find speedin
g vehicles on highway, emergency wx alerts
[Illinois]_____ 42.5000____several (B. Parnass)
Lincoln Towing_____[Chicago]_____ 461.1000____KBJ742 (B. Parnass)
Lisle Twp, highway maintenance
[location?]_____ 151.0250____KNAC683 (govt recds)
Naperville Public Works
[Road Dept.]_____ 154.1000____KSI447 (B. Parnass)
Pink's Towing Inc_____[Bolingbrook]_____ 151.8950____KDI892 (govt recds)
Ramseys Towing_____[Sugar Grove]_____ 464.3000____KNDM396 (govt recds)
Redman Towing_____[Hoffman Estates]____ 150.8750____KTN355 (others)
" [Palatine]_____ 150.8750____KLS475 (others)
" [Schaumburg]_____ 150.8750____KDB591 (others)
Rick's AA Towing_____[Chicago]_____ 462.0750____KAS840 (govt recds)
Roadway Towing_____[Bloomingdale]_____ 151.9550____KVM642 (others)
" [Streamwood]_____ 151.9550____KLM983 (govt recds)
" [Streamwood]_____ 151.9550____KZ9336 (govt recds)
Scagnelli's Towing_____[Lockport]_____ 151.7150____KXN631 (govt recds)
Sick Car Towing_____[Bolingbrook]_____ 151.6550____KAR796 (govt recds)
Sterioti Towing_____[Lockport]_____ 462.0750____KNBI599 (B. Parnass)
unidentified: "PT shop to base", towing, Will County
[location?]_____ 462.0750____call? (B. Parnass)
unidentified: "Second City Towing"
[location?]_____ 462.0750____call? (B. Parnass)
unidentified: I-55 & Lemont area, "PT6 to PT9", towing 4/26/84
[location?]_____ 461.3000____call? (B. Parnass)
Village Towing_____[Elmwood Park]_____ 151.7450____KSN919 (others)

Weg Towing Co_____[Chicago]_____ 461.3250____KQW500   (govt recds)
Woodridge Towing, AAA tows, PL6Z
                      [Woodridge]_____ 462.5750_gm_call?   (B. Parnass)
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -7039665270995033203
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ce86263ed67cb796,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-20 17:18:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Bearcat 210XL scanner controlled by C64
Message-ID: <451@ihu1h.UUCP>
Date: Sun, 20-Jan-85 20:18:45 EST
Article-I.D.: ihu1h.451
Posted: Sun Jan 20 20:18:45 1985
Date-Received: Mon, 21-Jan-85 04:20:42 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 60

x
            Comquest   SXP-210   Scanner   Expansion Package

   There was a demonstration at the Wheaton Hamfest of a new $110
   software package that allows a Commodore 64 personal computer to
   control a Bearcat 210XL scanner. The SXP-210 comes with software
   on a 5.25"   floppy   diskette and a   special   interface cable, which
   connects the   64 to a   ribbon cable within the 210XL.

   Uniden's hasty withdrawl of the Bearcat CompuScan 2100 leaves the
   SXP-210 as the only product   that will allow   a personal computer to
   control a VHF/UHF scanner.

   Some   of the more interesting features listed   in the
     sales litera-
   ture:

      -   Expands   [stock]   18 channels to 50.

      -   Removes   the software constraints [of   the   stock   210XL]   that
     prevented operation on the 6m and 10m amateur bands.

      -   Color graphics that identify type of radio service being moni-
     tored. (Police,   Fire, Amateur, etc.)

- With a printer you can generate a chronological log of selected channels as they become active along with the time of day that the transmissions were received.

- Includes 12 hour time of day clock w/AM and PM designations.

- Adds a "count" feature to the 210XL, similar to the one on more expensive scanners.

- Edit mode allows flexible control of all channel info.

- Includes an improved search mode with a "Hold" [?] trigger feature.

- Channel lockout/selective scan delay.

- Includes a special list function that displays freq info for all 50 channels simultaneously on one screen.

Installation appears simple. A pliers is used to crimp a supplied socket onto an existing ribbon cable within the 210XL. An umbilical cable plugs into this socket and into the computer.

One drawback of the this 64/BC210XL setup is the scan rate rate of only 8 channels/sec, about half the scan rate of a normal 210XL.

For more info, contact:

Comquest Company
5719 Gateway Drive
Indianapolis, IN 46254

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6063645572313513253
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7830def3dab476c9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-21 08:53:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!hplabs!hao!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: New Sony Portable Shortwave Radio
Message-ID: <7599@brl-tgr.ARPA>
Date: Mon, 21-Jan-85 11:53:19 EST
Article-I.D.: brl-tgr.7599
Posted: Mon Jan 21 11:53:19 1985
Date-Received: Wed, 23-Jan-85 19:24:42 EST

Distribution: net
Organization: USAMC ALMSA
Lines: 85

WOW! GOLLY! GEE WHILLIKERS! (And other expressions of excitement...)

A new Sony portable Shortwave (and other coverage) radio is due out soom! This info is culled from the report presented on Radio Nederlands "Media Network" program, GMT Friday, 18 Jan 85. This is all I know:

Keeping up their tradition of confusing model numbers, this new Sony radio will be known as the "2010" in the US, and the "2001D" in the rest of the world. I'll just say "2010" to avoid confusion with the original 2001 model. It is due to be on the US market in March/April 85, and will have a list price around $300 US. It is slightly smaller than the original 2001, weighing 1.8 kg with batteries, and measuring 29 X 16 X 5 cm. Has a 120 cm whip antenna. Power is by 3 D-cells drawing 150 mA (which is far better, and giving far longer battery life, than the old 2001) and 3 (NOT 2!) AA-cells for the computer.

It has 68 - count them - 68 push buttons! (Whee! Love them buttons!)

It has a digital display (LCD, I assume; I seem to have missed that in my notes), of course, and covers (get this!) 150 - 29999 kHz, 76 - 108 MHz FM, AND 116 - 136 MHz Aeronautical band! In addition to the usual direct-keypad frequency entry, it has KNOB tuning too. (Something I have sorely missed on my Sonys & Uniden -- last night I was using my old Hallicrafters and marvelling at the ease of tuning by merely turning a knob... the great wheel of life is turning full circle again...)

Anyway, the knob tuning works in steps; on LW, BCB, & SW, you can choose 100 Hz or 1 kHz steps -- on FM VHF, it works in 50 kHz steps, and on Aeronautical band, in 25 kHz steps. Standard 10 kHz or 9 kHz BCB station-spacing is switch-selectable. (I guess for scanning?)

There is a 10-LED signal-strength meter which doubles as a battery-strength indicator. There is a built-in 12 or 24-hour clock and timer. It uses the TUNING KNOB to set the clock and timer! There is a switchable dial light. There is a recorder output, at low [mike] level (usual Sony practice). There is a 1/8th in. (3.5 mm) headphone jack, wired for stereo headphones (no mention that the FM was stereo, though, so it probably isn't -- I wonder why; it could be done for one or two more chips at little incremental cost, and be a good selling feature).

Memories: 32 - count them - 32 memories; using 32 buttons, in a 4 X 8 matrix. However, there is also a "shift" button, like on calculators, which makes the memory buttons also function as "jump to band X" controls, so, by hitting two buttons, you jump to the lower end of any SW broadcast band, FM, BCB, etc.

Scanning: scan between any two frequencies selected, or can scan the 32 memory channels, pausing 5 seconds on each one. (No info given on scan rate, steps, or limitations.)

New gimmick: A "SYNC" control. Push this button while tuned to an AM signal, and it goes into an automatic ECSS (exalted carrier single sideband) mode. That is, you can choose USB or LSB, and the radio suppresses the station's carrier and injects its own. This reduces some forms of distortion and interference, especially on SW. However, there is a failing (maybe just in the sample tested?) -- the SYNC circuits introduce a great deal of noise of their own on higher-frequency signals (e.g., most SW broadcast bands). However, the circuits do work; the testers were able to "easily" separate the two programs carried on ISB feeder signals! (Independent Side Bands -- many broadcasters using SW relays put two separate signals on a single transmission, one program on each sideband.)

Selectivity: two switchable AM bandwidths. Wide said to be "somewhat too wide" (no numbers given); Narrow = 3 kHz @ 6 dB, said to be effective. Filters characterized as "fair".

Sensitivity: Very good. Has a variable RF Gain control, plus a DX/Local attenuator. Worked best with that left on "DX".

Antenna connections: Radio is matched well to its own whip antenna; using a 10-meter longwire on SW did no good and actually reduced some signals. Separate connections available for VHF Air and FM.

WOW! After the dust settles, this should be discounted to $220 or maybe even lower, so those of you who didn't get a Uniden can now run out and get a newer better toy! And the rest of us can work on how we can justify yet another radio... (If I keep buying these things, I'll NEVER get an ICOM... :-)

Yours in the lust for material possessions,

Will Martin

USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

From 5354792755240549045
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,78a32738ac0f551c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-21 12:23:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!hplabs!hao!seismo!brl-tgr!tgr!
wmartin@ALMSA-1.ARPA
From: Will Martin -- AMXAL-RI <wmartin@ALMSA-1.ARPA>
Newsgroups: net.ham-radio
Subject: Re: eavesdropping on FM subcarriers
Message-ID: <7605@brl-tgr.ARPA>
Date: Mon, 21-Jan-85 15:23:50 EST
Article-I.D.: brl-tgr.7605

Posted: Mon Jan 21 15:23:50 1985
Date-Received: Thu, 24-Jan-85 05:26:34 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 45

FM SCA listening is fun and sometimes worthwhile. One of the best source for info on the subject is the FM Atlas people. Their address is simple: FM Atlas, Adolph, MN (but I forget the Zip Code, the hard part). I've bought a couple SCA decoders from them, and a radio with a built-in decoder and switch, which I gave to my mother as a present. They sell a fancy decoder from Capri Electronics for $98, which has tunable subcarrier dectection up to several hundred kHz or so. I bought one, as their price was lower than direct from Capri ($114 there) and also some "security" or "anti-bugging" firms were selling the same box for over $200! (You can switch it to listen off the power line, too, to detect wireless intercoms or bugs using that technique.) You can buy a simple SCA decoder kit and build it in most FM radios for $20 or $25, which is a cheaper way to go, or buy one of their SCA-equipped radios if you didn't want to muck about in the innards of one. Their prices are fair for the radios, I think.

Anyway, of course most of what you hear is Muzak, which isn't worth paying for, in my opinion. There are some music services which have less elevator-like music than Muzak, though, which might appeal to you. I've never heard one of these adaptors, though, that really filter out the base program well enough to pipe the result into a hifi system, which would be about the only way "background music" would be of use in most home environments. If the sound from a portable radio is good enough, though, this would be worthwhile.

Other things you hear: Physicians' News Service, a program of medical news directed at MDs, laden with drug ads. Could be bizarre to listen to for a while, but soon tiresome. Farm news & agricultural commodity info; once you've heard the price of pork, will you want to hear it again? Services for the blind: this is the really worthwhile service. They read the newspaper (you could listen to the paper while driving, if that interests you) and sometimes read books or magazines. Data: a lot of you out there might want to play with this. Some data transmissions are transmitter-to-studio links, just giving the station its own meter readings. But some is commodity or stock prices, probably encrypted, the access to which is sold, along with the decoding equipment, in some major cities.

Look in your local libraries for the latest (9th) edition of the FM Atlas for more information on stations transmittng SCA and SCA in general.

Regards,
Will Martin

ARPA/MILNET: wmartin@almsa-1.ARPA USENET: seismo!brl-bmd!wmartin

From 5502023712148065914
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5be217561f576056,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-21 12:37:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles - hp 1.2 08/01/83; site hp-pcd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!zehntel!hplabs!hp-pcd!doug
From: doug@hp-pcd.UUCP (doug)
Newsgroups: net.ham-radio
Subject: TR5 Performance Review Request
Message-ID: <5700004@hp-pcd.UUCP>
Date: Mon, 21-Jan-85 15:37:00 EST
Article-I.D.: hp-pcd.5700004
Posted: Mon Jan 21 15:37:00 1985
Date-Received: Thu, 24-Jan-85 06:46:19 EST
Organization: Hewlett-Packard - Corvallis, OR
Lines: 13
Nf-ID: #N:hpcvra:5700004:000:471
Nf-From: hpcvra!doug   Jan 21 12:37:00 1985

Does anyone know of the existence of any performance
reviews of the Drake TR5 transceiver? I have long
considered buying one, and since it appears the R.L.
Drake Co. is going out of the ham radio business, it
looks like its now or never. I have not, however,
been able to find any info on the radio's performance.

Any pointers to reviews in the literature or personal
accounts from users/owners would be appreciated. Please
respond via the net. Thanks

hpcvra!stan

From -3157506261400240494
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11f2eb,86d951d4437c6936,start
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 1363ce,86d951d4437c6936,start
X-Google-Attributes: gid1363ce,public
X-Google-Thread: 151e61,86d951d4437c6936,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-21 15:01:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.auto,net.legal
Subject: NJ exempts hams from mobile scanner law
Message-ID: <452@ihu1h.UUCP>
Date: Mon, 21-Jan-85 18:01:48 EST

Article-I.D.: ihu1h.452
Posted: Mon Jan 21 18:01:48 1985
Date-Received: Tue, 22-Jan-85 06:18:43 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 33
Xref: watmath net.ham-radio:2273 net.auto:5458 net.legal:1342

from the 12/84 issue of the ARRL Southern NJ Section Report:
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Assembly No. 2393
State of New Jersey
Introduced September 13, 1984
by Assemblymen Zimmer, Haines, and Weidel
An Act Concerning Crimes and Amending N.J.S.2A:127-4.

Be it enacted by the Senate and General Assembly of the State of New Jersey: N.J.S.2A:127-4 is amended to read as follows:

2A:127-4. "Any person who installs or has a short-wave receiver operative on frequencies assigned by the FCC for fire, police, municipal or other governmental uses, is guilty of a misdemeanor crime of the fourth degree, unless a permit therefor has first been obtained from the chief of the county police, or from the chief of the police of the municipality, wherein such person resides.

This section does not apply to any fire, police, or other governmental official of the state, or of any county or municipality thereof, nor shall it apply to a resident of New Jersy holding a valid radio amateur license of the Technician, General, Advanced, or Amateur Extra Class."

This act will take effect immediately.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -6633532065750024774
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,78a32738ac0f551c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-22 09:08:07 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!teddy!panda!
talcott!harvard!seismo!brl-tgr!tgr!wmartin@ALMSA-1.ARPA
From: Will Martin -- AMXAL-RI <wmartin@ALMSA-1.ARPA>
Newsgroups: net.ham-radio
Subject: Re: eavesdropping on FM subcarriers
Message-ID: <7628@brl-tgr.ARPA>
Date: Tue, 22-Jan-85 12:08:07 EST
Article-I.D.: brl-tgr.7628
Posted: Tue Jan 22 12:08:07 1985
Date-Received: Sun, 27-Jan-85 05:21:20 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 11

Short followup: I looked up the FM Atlas address last night:

FM Atlas
Adolph, MN 55701

(This is the product of the efforts of Dr. Bruce Elving, by the way.
I had one inquiry about a telephone number. There wouldn't be a business
phone for this one-man operation, but there might be a personal listing
for Dr. Elving; I recommend contact by mail instead, though.)

Will Martin

From -4015902438619294759
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3de810ddecceb5d2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-22 09:24:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!teddy!panda!
talcott!harvard!seismo!brl-tgr!tgr!noao!terak!doug%hao.uucp@Seismo
From: doug%hao.uucp%Seismo@terak.UUCP
Newsgroups: net.ham-radio
Subject: faulty outlets/extension cord, overrated dimmer
Message-ID: <7629@brl-tgr.ARPA>
Date: Tue, 22-Jan-85 12:24:59 EST
Article-I.D.: brl-tgr.7629
Posted: Tue Jan 22 12:24:59 1985
Date-Received: Sun, 27-Jan-85 05:22:15 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 16

> > WARNING: The "Electripak" brand of multiple outlet center (an extension
> > cord with 6 outlets, switch & circuit breaker, commonly used with micros)
> > has loose wires!!!!!

>
> I opened mine up last night. All the wires are pushed in the holes
> firmly, BUT the middle duplex outlet was the only one that was connected
> to the green wire from the power cord. The result was that only two
> out of the six outlets in the power strip had their third holes grounded.

We checked two that we have here. The ground to the other two duplex
outlets is supposed to be via the outlet mounting screws and the
metal case. Unfortunately, the outlet mounting screws on ours were
not tightened down enough for the lock washers to cut through the
paint on the case. We fixed that!
--
Doug Pardee -- Terak Corp. -- !{hao,ihnp4,decvax}!noao!terak!doug

From 1924440499243754040
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fa4268abf1a726cb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-22 11:59:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles
Path: utzoo!dciem!nrcaero!pesnta!hplabs!hp-pcd!hpfcmt!ron
From: ron@hpfcmt.UUCP (ron)
Newsgroups: net.ham-radio
Subject: Calling WA3YMH
Message-ID: <14400001@hpfcmt.UUCP>
Date: Tue, 22-Jan-85 14:59:00 EST
Article-I.D.: hpfcmt.14400001
Posted: Tue Jan 22 14:59:00 1985
Date-Received: Tue, 29-Jan-85 22:53:10 EST
Lines: 15
Nf-ID: #N:hpfcmt:14400001:000:317
Nf-From: hpfcmt!ron   Jan 22 11:59:00 1985

Louie, looey , oooh oooh ....

WA3YMH de WB4UWH what is your E mail path.   Saw your posting in Colorado.

My path, as I know it, is : hplabs!hpfcla!ron-m

Hope it works !

Ron Miller, WB4UWH
Longtime croney of WA3VJB
Hewlett-Packard Co.
Ft. Collins, Colo.
303-226-3800 ext 3260   (Ma Bell's default system)
.

From -8561355002182805636

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,310833062c14308,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-22 12:36:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2e.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!hoxna!houxm!hou2e!rs173
From: rs173@hou2e.UUCP (R.SILVER)
Newsgroups: net.ham-radio
Subject: freqs. of Voice of America in Israel
Message-ID: <418@hou2e.UUCP>
Date: Tue, 22-Jan-85 15:36:17 EST
Article-I.D.: hou2e.418
Posted: Tue Jan 22 15:36:17 1985
Date-Received: Wed, 23-Jan-85 19:32:00 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 8

My friend in Jerusalem has asked what are the best frequencies to listen
to the Voice of America. Can anyone help ?
                                        Thanks

                                Ron Silver   AT&T CP, Holmdel
                                (201)834-1107
                                 ....hou2e!rs173

From -626177886216687597
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11f2eb,86d951d4437c6936
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,86d951d4437c6936
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1363ce,86d951d4437c6936
X-Google-Attributes: gid1363ce,public
X-Google-ArrivalTime: 1985-01-22 13:23:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site watdaisy.UUCP
Path: utzoo!watmath!watdaisy!ndiamond
From: ndiamond@watdaisy.UUCP (Norman Diamond)
Newsgroups: net.ham-radio,net.auto,net.legal
Subject: Re: NJ exempts hams from mobile scanner law
Message-ID: <6875@watdaisy.UUCP>
Date: Tue, 22-Jan-85 16:23:11 EST
Article-I.D.: watdaisy.6875
Posted: Tue Jan 22 16:23:11 1985
Date-Received: Wed, 23-Jan-85 05:12:20 EST
References: <452@ihu1h.UUCP>
Organization: U of Waterloo, Ontario
Lines: 24
Xref: watmath net.ham-radio:2274 net.auto:5468 net.legal:1343

>   This section does not apply to   any fire, police, or

other
> governmental official of the state, or of any county or muni-
> cipality thereof, nor shall it apply to a resident of New
> Jersy holding a valid radio amateur license of the Technician,
> General, Advanced, or Amateur Extra Class."

So if you're a resident of some jurisdiction other than New Jersey, and
have a valid ham receiver in your car, you have to remove it when you
enter New Jersey, right?

As another netter suggested, you have the right to receive whatever
signals you wish, but you just can't drive while receiving certain ones
of those signals because driving is not a guaranteed right. So I guess
you have the right to live outside of New Jersey too, but if you do,
then you might lose the right to drive in New Jersey. (That isn't the
case yet; it just needs one more step to get there.)

-- Norman Diamond

UUCP: {decvax|utzoo|ihnp4|allegra|clyde}!watmath!watdaisy!ndiamond
CSNET: ndiamond%watdaisy@waterloo.csnet
ARPA: ndiamond%watdaisy%waterloo.csnet@csnet-relay.arpa

"Opinions are those of the keyboard, and do not reflect on me or higher-ups."

From 5514211429843860151
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,75f81bdf605cc63d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-22 13:45:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!houxm!whuxlm!akgua!mcnc!decvax!
genrad!teddy!panda!talcott!harvard!seismo!brl-tgr!tgr!wmartin@ALMSA-1.ARPA
From: Will Martin -- AMXAL-RI <wmartin@ALMSA-1.ARPA>
Newsgroups: net.ham-radio
Subject: Re: Kol Yisrael
Message-ID: <7641@brl-tgr.ARPA>
Date: Tue, 22-Jan-85 16:45:19 EST
Article-I.D.: brl-tgr.7641
Posted: Tue Jan 22 16:45:19 1985
Date-Received: Sun, 27-Jan-85 07:53:08 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 30

By the way, I have been searching my memory and back issues of RIB, PopComm,
and the SW Guide, and cannot find any reference to this, yet I am sure
I recall reading it -- does anyone know of this or can point me to a
reference? I remeber seeing (somewhere!) a mention of time and frequencies
for SHORTWAVE transmissions from Israel of their Armed Forces broadcast
service (their equivalent of the US AFRTS); this would have lots of info

interesting to those who asked about Hebrew-language broadcasts from Kol Yisrael -- it should be in Hebrew (and maybe other languages), have lots of "home-town" type news and bits, sports, etc. [sort of local Israel radio for the troops]. The WRTH lists this service on several medium-wave (BCB) and FM frequencies, but has no mention of it on shortwave. Yet I am POSITIVE I saw a reference to this being heard on shortwave!

I can think of an explanation for this: that such a service came into being after the WRTH 84 was compiled, and therefore it isn't listed. Also, maybe this is (or was) a temporary service and no longer exists. Can anyone provide more info about this? Am I simply crazed with the cold, and just totally off-base about this ever existing? Or is it a low-powered DX catch, never listed except in some obscure club column or article, and that is why I cannot find a pointer to it? Or maybe it is considered a "utility" broadcast, never listed in the WRTH anyway [like a feeder relay for a remote broadcast site], and therefore also not listed in info sources about broadcasts either?

"What I need is an index to EVERYTHING..."

Regards,
Will

ARPA/MILNET: wmartin@almsa-1.ARPA USENET: seismo!brl-bmd!wmartin

From -8813826697924927850
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,83f12fb642a1841e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-22 15:17:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 3
Message-ID: <15049@mgweed.UUCP>
Date: Tue, 22-Jan-85 18:17:21 EST
Article-I.D.: mgweed.15049
Posted: Tue Jan 22 18:17:21 1985
Date-Received: Wed, 23-Jan-85 08:23:44 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 34

qst de k9eui
hr propagation forecast bulletin nr 3 from arrl headquarters
newington ct january 20, 1985
to all radio amateurs bt

the solar flux rise of last week was still goin on, through at least the 20th. it held at 75 january 16 to 18, then rose to

77, holding for three days. it went to 78 on the 19th and then was reported by (??) to be 91 on the 20th. this is a remarkable one day rise, after the very low readings in recent weeks. if it holds, or moves higher, there should be a major change in the character of all dx frequencies, approaching their usefulness in the early months of last year.

the level of geomagnetic activity is critical. if the wwv k indices hold to mostly 3 or more, as they have recently, propagation should be much as shown in the qst dx charts for december and january. these were based on a solar flux range in the low 90s.

it should be emphasised that the timing in these charts is quite accurate, as it is based on the suns position with respect to the paths shown. the timing does not change with various solar flux or sunspot numbers. the useful frequency range for a given time period is affected by the solar activity levels.

for the balance of january, good conditions should prevail through the 22nd. high latitude paths will suffer intermittently january 23 through 29, with good propagation returning at the months end and holding through about february 5 ar

From 8329088249022227836
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,25d48571a8b771a5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-23 07:59:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Goldwater Senate Bill info
Message-ID: <15056@mgweed.UUCP>
Date: Wed, 23-Jan-85 10:59:48 EST
Article-I.D.: mgweed.15056
Posted: Wed Jan 23 10:59:48 1985
Date-Received: Thu, 24-Jan-85 07:26:52 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 51

qst de k9eui
information from arrl letter
northeastern illinois emergency net
1200 noon cst tue jan 22 1985

------ senate resolution 36 needs you ------

on january 3 1985 senator barry goldwater ,k7uga, introduced two resolutions. one of them ,s res 36, if adopted, will declare the sense of the u.s. senate that the fcc should affirm that state and local regulations must not unreasonably restrict communications from amateur radio stations. the other resolution pertains to the rights of citizens to erect and maintain television receive only ,tvro, satellite dishes. the amateur radio resolution will send a clear message to the fcc that favorable action on prb-1 ,the league's request for federal preemption of restrictive local antenna ordinances, would meet with the approval of the u.s. senate. your support, and the support of your senators, is needed to ensure its adoption.

the resolution reads: resolution - to express the sense of the senate relative to unduly restrictive state and local regulation of amateur radio antennas.

resolved, that it is the sense of the senate that, consistent with the policy of the united states to recognize and enhance the value of the amateur radio service as a voluntary noncommercial communication service which provides public service and emergency communications, the federal communications commission should affirm that state and local regulatory authority, including, but not limited to, zoning, public safety or health authority, and authority to grant a license or permit, must be exercised so that it does not,

1, discriminate unreasonably among amateur radio antennas and other types of home communications and,or antennas, or reception

2, have the effect of prohibiting or frustrating the transmission or reception of amateur radio communications by federally licensed amateur radio stations,

except as may be necessary to carrying out a clearly articulated and affirmatively expressed compelling governmental interest related to the health and safety of the community.

ar

From 4728988919094144160
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2bb03464a912472f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-23 12:12:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site zeus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!houxm!vax135!cornell!uw-beaver!

tektronix!teklds!zeus!jhb
From: jhb@zeus.UUCP (John H. Burgess)
Newsgroups: net.ham-radio
Subject: Current Novice test information needed
Message-ID: <450@zeus.UUCP>
Date: Wed, 23-Jan-85 15:12:30 EST
Article-I.D.: zeus.450
Posted: Wed Jan 23 15:12:30 1985
Date-Received: Fri, 25-Jan-85 21:09:04 EST
Organization: Tektronix, Beaverton OR
Lines: 16

I will soon be called upon to give the tests for a Novice license. A long time ago, a novice test question bank came across the net, but some of them were outdated, and I no longer have it. If somebody has a set of current questions (with the ratios of numbers of questions from each section), or some sample Novice tests, I would appreciate getting a copy.

Also, what are the specific requirements for the code test: Is it up to the examiner's discretion? Is it a sample QSO with multiple-choice questions? Is it 5 minutes of code, of which 1 minute of perfect copy is required? What numbers/punctuation is required?

As you see, I am in need of whatever current information is available.

Thanks (in advance, of course),

John Burgess, N7DCQ

From -1445406715967942372
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5dd844b1ce5b4ca4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-23 14:09:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!whuxlm!
akgua!mcnc!decvax!genrad!teddy!panda!talcott!harvard!seismo!brl-tgr!tgr!
NOURSE@DEC-MARLBORO
From: NOURSE%DEC-MARLBORO@tgr.UUCP
Newsgroups: net.ham-radio
Subject: Re: Radio Nicaragua being jammed
Message-ID: <7665@brl-tgr.ARPA>
Date: Wed, 23-Jan-85 17:09:17 EST
Article-I.D.: brl-tgr.7665
Posted: Wed Jan 23 17:09:17 1985
Date-Received: Mon, 28-Jan-85 05:53:23 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 5

I heard R. Nicaragua on 6.015 at around 0430Z back in November,

up until they were to start their newscast, at which time an
unmodulated carrier arrived on the same frequency, completely obliterating
the signal here. At 0500Z Voice of America signed on in Spanish...

From -5348141171737313921
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b7bf35eb641f00a1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-23 18:46:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!houxm!vax135!ariel!hou5f!hou5g!
hou5h!jak
From: jak@hou5h.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: volunteer exam schedules
Message-ID: <382@hou5h.UUCP>
Date: Wed, 23-Jan-85 21:46:47 EST
Article-I.D.: hou5h.382
Posted: Wed Jan 23 21:46:47 1985
Date-Received: Fri, 25-Jan-85 05:19:55 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 13

Recently someone asked me if I knew of any amateur license exams to be given
by volunteer examiners in this area. At the time, I did not.
However, it just came to my attention that a list of
exam schedules are kept online at the ARRL.
A printout of exams scheduled in your state (or any ajacent state) can be
had upon request to the ARRL (including SASE for reply)
at 225 Main Street, Newington, CT 06111.

I am posting this here in case other readers of net.ham-radio were unaware
of this information.

73, Jim KY2D ...!ihnp4!hou5h!jak

From -1418466410515939814
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,981bce98d49f7d45,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-24 06:24:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Denver Mods 7/26/84) 6/24/83; site drutx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!drutx!llh
From: llh@drutx.UUCP (HaymakerLL)
Newsgroups: net.ham-radio
Subject: ARRL Gateway #11
Message-ID: <1865@drutx.UUCP>

Date: Thu, 24-Jan-85 09:24:01 EST
Article-I.D.: drutx.1865
Posted: Thu Jan 24 09:24:01 1985
Date-Received: Fri, 25-Jan-85 08:09:12 EST
Organization: AT&T Information Systems Laboratories, Denver
Lines: 353

Gateway: VIA K0ZCO
The ARRL Packet-Radio Newsletter
Electronic Edition
Volume 1, Number
11 January 15, 1985

PACKET NETWORK COORDINATION

The frequency-coordinating body for Northern California, NARC, has officially coordinated the following frequencies for packet radio: 145.01, 145.03, 145.05, 145.07, 145.09, 223.56, 223.58, 223.6, and 441.000 MHz. It is unclear what this means for current activity on 146.58 MHz.

NARC has also requested that all "mountain-top digipeaters placed on the assigned frequencies be coordinated through NARC, to insure proper record keeping." This brings up the question of where the jurisdiction of the frequency-coordinating council ends. Hank Magnuski, KA6M, of the Pacific Packet Radio Society makes the following suggestions:

"The [frequency-coordinating councils] are dealing with very real problems of crowded frequencies, overlapping repeater coverage, intermod, etc. It is a good idea that packet frequencies be coordinated through such councils.

"However, once frequencies have been allocated to packet radio, the jurisdiction of the frequency-coordination council ends, and another type of advisor is needed. This advisor must help track and promote the rational growth of packet radio equipment, repeaters, gateways, and protocols on the assigned frequencies. The advisor may eventually supervise the growth of the packet network.

"Therefore, I would like to propose a new term for amateur radio: 'Network Coordinating Agent' (NCA). The NCA for a region deals with the problems mentioned above, and also represents its area in national discussions of protocols and other issues.

"The Pacific Packet Radio Society, because it is the oldest and largest packet-radio club in the Bay area, has become the Network Coordinating Agent for the San Francisco area."

The need for NCAs has also been recognized on the East Coast. Groups from New England and from the Mid Atlantic states agree that congestion on 145.01 MHz must be dealt with in an organized manner. The first EASTNET NCA is the newly-formed Mid-Atlantic Packet Radio Council. This council will coordinate for MD, DE, Southeastern PA, Southern NJ, Northern VA, and Washington D.C.

Send Gateway any comments that you have on the need for NCAs.

From KA6M.

HIGH-SPEED PACKET PROGRESS

At the January 12 meeting of the Chicago Area Packet Radio Association, Steve Goode, K9NG, demonstrated his 9600-bit/s, 220- MHz modems. When the plans for Steve's modems become available (perhaps early this spring), it should be possible to reduce some of the congestion on 2-meter metropolitan packet networks.

The modems are built around inexpensive Hamtronics FM-5 transmitter and receiver strips. The addition of a "data filter" in the modulator gives the FSK signal desirable spectral characteristics, while a corresponding circuit in the demodulator converts the data back to something that a TNC can understand.

Congratulations to Steve for spending the great amount of time necessary to design and debug the modems. The entire packet-radio community will benefit from his work.

Ed.

ACTIVITY ON THE UoSAT DCE

There has been a lot of activity with the Data Communications Experiment (DCE) aboard the UO-11 satellite this week. In preparation for a possible demonstration of the PACSAT store-and-forward "mailbox" concept, software for a prototype message handling system has been uploaded to the satellite. Monitor UO-11 bulletins to look in on the action.

Via NK6K.

HDLC ADD-ON AVAILABLE

Those of you experimenting with level-3 packet networking should note that a High-Level Data Link Controller (HDLC) add-on is now available for the Xerox 820 computer. This piggyback "FAD board" performs many of the complicated tasks involved in transmitting and receiving AX.25 frames. This development is particularly important because the ARRL Ad Hoc Committee on Amateur Radio Digital Communication agreed that the Xerox 820 with the HDLC add-on would be the standard computer system for level-3 software development and testing.

TAPR now has a limited number of the add-on boards available, intended primarily for those doing level-3 experiments. Each pc board comes with a parts list, a schematic, and a brief survival guide. All told, there are only 2 pages of documentation; this unsupported product is offered only as a service. Parts for the board are not available from TAPR at this time. If you are still interested, the price is $25.

Via WA7GXD.

220-MHZ DIGIPEATERS

Scott Miles, WB6PQM, is establishing two new 220-MHz digipeaters in the San Francisco Bay area. The new simplex machines will be running on 223.58 MHz, and are intended to serve the needs of RACES in Contra Costa county. The digipeaters will be based on GLB PK-1 TNCs.

Rich Collins, NT6V, reports that he and David Bly, WD6EVM, have installed a digipeater on 220.58 MHz in San Leandro, CA. This site, made available by the Alameda County RACES group, provides good coverage of the Bay area.

Via KA6M.

VADCG AX.25 DIGIPEATERS

Those of you who are using VADCG TNCs as digipeaters should be interested to know that Les McClure, W3GXT, and Mike Bruski, AJ9X, have fixed many of the program bugs that make these digipeaters fail regularly. In addition, they have installed some software and hardware timers which make certain that the program can recover from any faults that occur.

Mike and Les would like to hear what other groups around the country are doing with the venerable old VADCG boards. If you want a copy of their "bullet proof" VADCG AX.25 digipeater code, send an 8" SSDD disk to

Tom Clark, W3IWI 66388 Guilford Rd. Clarksville, MD 21029.

Via DRNET.

MAIL FORWARDING IN EASTNET

Several more stations have joined those capable of automatically forwarding and receiving messages via packet radio. In the Mid-Atlantic section of EASTNET, Gary Hoffman, AK3P, is operating W0RLI's MailBox program. From Gary's station in Hummelstown, PA, traffic is forwarded through 3 digipeaters to the W3IWI MailBox that serves Baltimore and Washington. The W3IWI MailBox is able to forward messages to WB2MNF in southern New Jersey. At a recent meeting, members of the Mid-Atlantic Packet Radio Council (MAPRC) agreed that "the linked PBBSs are providing a very ncessary communications conduit for MAPRC."

In the northern portion of EASTNET, Jerry Koniecki, WA2RKN, located in Hyde Park, NY, is providing MailBox service to stations from Long Island up the Hudson River valley. The W1AW packet bulletin-board system has been made fully compatible with the W0RLI forwarding software and is in communication with both WA2RKN and W0RLI (in Boston).

A long-standing goal of EASTNET is to link New England with the Mid-Atlantic. It looks like a well-placed station in Northern New Jersey would be able to

complete that connection.

For further information on the message forwarding protocol being used, contact Gateway or Hank Oredson, W0RLI.

Via W3IWI, Ed.

CENTRAL STATES PACKET NET

The Central States Packet Radio Users Group Net, sponsored by the Central Iowa Technical Society (CITS) has moved from 40 meters to 75 meters. The new frequency for the net is 3865 kHz, and the time remains 1500 CST on Sundays. The net will continue to discuss items of general interest to packet-radio operators, but will concentrate on discussions of linking and networking in the Midwest.

The first session of the net on its new frequency was January 13, and Ralph Wallio, W0RPK, reports that stations checked in from Michigan, Illinois, Iowa, and Nebraska. Experimenters from Nebraska would like to encourage stations from the Rocky Mountain area to check in, and stations in Illinois would like to hear from packet operators in Indiana.

Ralph suggests that Midwestern packet enthusiasts adopt 3865 kHz as an informal "calling frequency." Operators who want more information on packet radio, or who are having trouble with their packet equipment could just give a call on 3865 kHz and get their questions answered.

From W0RPK.

NTS NETS AND PACKET RADIO

Eastern Massachusets Section Manager Luck Hurder, WA4STO, adds these facts to the ongoing discussion of NTS recognition for packet-radio traffic nets:

"I was startled to see the article regarding NTS packet nets in the December 4 issue of Gateway.

"According to the article, the STM of the Southern Florida section has stated that monthly net reports are the key criteria for acceptance of a packet net as a NTS net.

"I certainly don't wish to be a wet blanket about all this;
please understand that I am an active packet operator. To be fair to anyone wishing to attempt to have their packet net become an official part of the National Traffic System, however, there are a few ground rules that must be taken into account. Some of them are:

"1. The Net Manager must be appointed by the Section Manager or his Section Traffic Manager.

"2. The Section net must adhere to section boundaries.

"3. The net must function on the basis of a prescribed, orderly traffic flow.

"4. The net must interface in a prescribed manner with the higher and lower echelons of NTS.

"Points 3 and 4 are the real stumbling blocks for a packet net. Regular interfacing to NTS is a chore! Stations must be available at prescribed times on a reliable, regular basis in order for the traffic flow to be effected properly.

"None of the above is to insinuate that a packet network cannot become officially affiliated with NTS. I just wanted to point out that a monthly net report is NOT the sole criterion for NTS affiliation."

From WA4STO.

DIGITAL COMMUNICATIONS BOOK

Gateway received the following book review from Pete Eaton, WB9FLW:

"While browsing through the bargin table at the local Radio Shack, I happened to glance at their rack of tutorial books. To my suprise, one of the titles was Understanding Data Communications. For the last several years, newcomers to packet radio have been asking for some introductory reference material written in plain language. Understanding Data Communications, developed and published by the Texas Instruments Learning Center, comes close to filling the bill.

"Each chapter introduces you to a fundamental concept in digital communications. Topics covered include an overview of data communications, data terminals, types of messages and transmission channels, asynchronous and synchronous operation, and satellite communications. "Of special interest to amateur packet operators are chapters covering 'Protocols and Error Control,' 'Local Area Networks,' and 'Network Design and Management.' A special treat is Chapter 9, 'Architecture and Packet Networks,' which uses X.25 as an example of a packet-switching network protocol.

"The whole book is written in clear, down-to-earth language. Once a novice has read all the chapters, I'm sure that he will better understand and appreciate the potential of Packet Radio in the Amateur Radio Service. If you are getting confused by all the talk of 'protocols,' 'LANs,' 'FSK,' 'PSK,' and 'level 3,' give yourself a present from Radio Shack."

[Remember that a thorough introduction to packet radio and several projects of interest to packet operators appear in the 1985 edition of The ARRL Handbook for the Radio Amateur. --
Ed.]

From WB9FLW.

PACKET RADIO IN JAPAN

Using a TAPR TNC as a debugging aid and compatibility tester, several Japanese amateurs are implementing their own TNC. The TNC will use a Z80 CPU and an 8273 HDLC chip. JA1MIR reports that JI1BXM is writing the AX.25 software for the TNC and that it should be complete by the end of January.

The Japanese group will be building an OSCAR 10 station to communicate with U.S. packet experimenters. They are particularly interested in internetwork (level-3) protocol development and high-speed modem research. Look for them on the satellite.

Takemi, JA1MIR, notes: "Designing our own TNC through understanding the AX.25 specification is great fun. I haven't been involved in such an exciting amateur-radio project for more than 10 years!"

Via NK6K.

PACKET RADIO IN ENGLAND

The following report on packet-radio activity in England was sent to us by Reg Brake, G8QR:

"In Norwich, there are now five stations equipped with TAPR TNCs. Those stations are G3LDI, G3PMQ, G4RSP, G6JTH, and myself. In addition, there are about fifteen local stations equipped with the software packet-radio program that runs on the BBC microcomputer. This program was developed by G6GIX and G8WJL at the Cambridge University Computer Laboratory.

""All of the stations equipped with TAPR boards have worked successfully on VHF. G3PMQ and I have also made contact with Ipswich. This activity is on 144.68 MHz, using 1200 bauds, 1000-Hz shift. In the last month, however, we have modified the TAPR boards to switch from wide shift to narrow shift at the touch of a button. The physical arrangement for this was designed by G6JTH and it functions very well. Since that time, we have been doing some HF packet operation.

"On 14.103 MHz, we made the first England-to-Germany packet-radio QSO, with DL2MDE. As I speak German, I initiated the contact, but both G3PMQ and I maintained an hour-long QSO with solid copy both ways. We have heard the American packet station [W0RLI] at 14.080 MHz, but signals were weak at the time, and we were not equipped with a tuning indicator. Since then, two stations have built the TAPR LED tuning indicator and use this very successfully on HF. We are looking for contacts on 14 MHz, although we are uncertain of the preferred frequencies. None of us is yet on OSCAR 10, so we are anxious for contacts on HF."

The winter copy of DATACOM, the journal of the British Amateur Radio Teleprinter Group (BARTG) contains a packet-radio column by Ian Wade G8NRW. In that column, Ian provides a list of about 60 stations active on packet radio in England.

If you are going to be in England this spring, note the following (also from

BARTG DATACOM): At the RSGB VHF Convention at Sandown Park on March 23, 1985, Ian Wade, of BARTG, is presenting a talk entitled "How Packet Radio Works." For more information contact

Ian Wade, G8NRW 7 Daubeney Close Harlington, DUNSTABLE Bedfordshire, LU5 6NF ENGLAND.

From G8QR and DATACOM.

SOFTNET WORKSHOP

The SOFTNET User's Group (SUG), in cooperation with Linkoping University, will hold its third SOFTNET Workshop on Sunday May 11, 1985, at Linkoping University, Linkoping, Sweden. Technical papers are solicited on high-speed packet-radio hardware and propagation, distributed routing in packet-radio networks, SOFTNET applications, and SOFTNET specification issues. Camera-ready summaries consisting of less than two standard A4 pages should be received by SUG by MAY 1st. Proceedings from the workshop will be available through SUG. For more information contact:

Per Lundgren SUG, Department of Electrical Engineering Linkoping University S-581 83, Linkoping SWEDEN.

From Softnet News.

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Gateway: The ARRL Packet Radio Newsletter is published by the

American Radio Relay League
225 Main Street
Newington, CT 06111

Jeffrey W. Ward, K8KA
Editor

Larry E. Price, W4RA

From -8373658546310230059
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d08df41a5cf0e7a8,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12745e,d08df41a5cf0e7a8,start
X-Google-Attributes: gid12745e,public
X-Google-ArrivalTime: 1985-01-24 07:50:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!mcnc!philabs!cmcl2!
seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio,net.railroad
Subject: RR excursion with ham station aboard
Message-ID: <7675@brl-tgr.ARPA>
Date: Thu, 24-Jan-85 10:50:38 EST
Article-I.D.: brl-tgr.7675
Posted: Thu Jan 24 10:50:38 1985
Date-Received: Mon, 28-Jan-85 07:11:49 EST
Distribution: net
Organization: USAMC ALMSA
Lines: 47
Xref: watmath net.ham-radio:2294 net.railroad:392

The following is transcribed from Union Pacific System's FRIDAY A.M.,
a biweekly employee publication; this issue Jan 18, 1985. (A copy of this
was giwven to me by a co-worker -- I don't normally ever see this publication.)

8444 Begins Return Trip From New Orleans Jan 23

Union Pacific System will run its famous steam locomotive 8444 on a nine-day
tour this month through Louisiana, Texas, Oklahoma, Kansas, and Nebraska.

Nearly one million people viewed the locomotive when it was on display last
year at the World's Fair in New Orleans.

The trip to the fair was the first time 8444 operated in the South. This trip
will be its first appearance in Texas and Oklahoma. Much of the route hasn't
seen steam power in nearly 30 years.

The tour will begin January 23 near Baton Rouge, Louisiana, and end at Omaha,
Nebraska, on January 31.

Travelling on UP Ssytem's Missouri Pacific Railroad, the locomotive will make
overnight stops at Longview, Houston, and Fort Worth in Texas; Muskogee,
Oklahoma; Osawatomie, Kansas; and Kansas City, Missouri.

It will complete its trip to Nebraska travelling ovr Union Pacific Railroad
via Topeka, Kansas, and Lincoln, Nebraska. ... The train will travel during
daylight hours so as many people as possible can see it. ... The engine will
be on public display for a full day at Houston and Fort Worth and for most
of a day at Kansas City.

One of the unique features of the tour will be an on-board amateur "ham"
radio station. The station, with worldwide capabilities, will be manned by
Ed Askew and Hugh Tinley of the Ak-Sar-Ben Radio Club of Omaha. Radio
amateurs will be able to contact the train on most amateur frequencies.
The call sign for the station will be K0GHK.

Locomotive 8444 was the last steam locomotive built for Union Pacific Railraod.
It was constructed in 1944 and operated in regular service until 1960 when
it was saved for special excursion use. ... The engine will spend the rest

of the winter in Omaha at Union Pacific's maintenance shops where it is scheduled for major overhaul work. The locomotive is stored in Cheyenne, Wyoming, when not in use.

End of article

Hope this is of interest and it gets to you in time to be of value.

Will

From 7830947705522319688
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,76db7560f809cdd0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-24 12:31:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!teddy!panda!talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: NJ exempts hams from mobile scanner law
Message-ID: <7681@brl-tgr.ARPA>
Date: Thu, 24-Jan-85 15:31:41 EST
Article-I.D.: brl-tgr.7681
Posted: Thu Jan 24 15:31:41 1985
Date-Received: Wed, 30-Jan-85 04:48:14 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 9

Does this (the NJ law) mean that non-residents of NJ who are driving through with a scanner in their car and a ham license in their wallet CAN still be arrested if said scanner covers police frequencies?

Also, isn't it true that the Feds pre-empt the control of radio receivers and transmitters?

-John Sangster
jhs at mitre-bedford

From 602429342843689493
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,42506fe45aa8decf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-24 16:06:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site vax135.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!houxm!houxz!vax135!hpk
From: hpk@vax135.UUCP (Howard Katseff)
Newsgroups: net.ham-radio

Subject: Noisy dimmers and fluorescent lights?
Message-ID: <942@vax135.UUCP>
Date: Thu, 24-Jan-85 19:06:54 EST
Article-I.D.: vax135.942
Posted: Thu Jan 24 19:06:54 1985
Date-Received: Fri, 25-Jan-85 08:52:22 EST
Organization: AT&T Bell Labs, Holmdel, NJ
Lines: 10

I am planning to finish my basement. I would like to use a combination
of fluorescent lights and incandescent lights with wall-switch mounted
dimmers. However - I am afraid that they cause interference with my
shortwave and medium wave radio reception.

Can one buy electrically quiet versions of these devices?
Is there some way to tame them?

Howard Katseff
AT&T Bell Laboratories - Holmdel, NJ

From -2185091441295998583
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,86d951d4437c6936
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1363ce,86d951d4437c6936
X-Google-Attributes: gid1363ce,public
X-Google-Thread: 11f2eb,86d951d4437c6936
X-Google-Attributes: gid11f2eb,public
X-Google-ArrivalTime: 1985-01-24 16:21:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site redwood.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!godot!harvard!seismo!hao!
hplabs!hpda!fortune!rhino!redwood!rpw3
From: rpw3@redwood.UUCP (Rob Warnock)
Newsgroups: net.ham-radio,net.auto,net.legal
Subject: Re: NJ exempts hams from mobile scanner law
Message-ID: <138@redwood.UUCP>
Date: Thu, 24-Jan-85 19:21:05 EST
Article-I.D.: redwood.138
Posted: Thu Jan 24 19:21:05 1985
Date-Received: Mon, 28-Jan-85 07:16:38 EST
References: <452@ihu1h.UUCP>
Organization: [Consultant], Foster City, CA
Lines: 64
Xref: watmath net.ham-radio:2295 net.auto:5533 net.legal:1360

Bob, thanks for the update, but your "Subject:" says "mobile scanner law",
and I don't see "mobile" anywhere in the excerpt you quote:

+---------------
| 2A:127-4. "Any   person   who installs   or has
      a short-wave

```
|    receiver  operative  on frequencies  assigned by the FCC for
|    fire, police, municipal or other governmental uses, is
     guilty
|    of  a  misdemeanor crime of the  fourth degree, unless a
     permit
|    therefor has first been obtained from the chief of the
     county
|    police,   or  from the chief of the police of the municipality,
|    wherein  such person resides.
+---------------
```

And I am just a little bit, no, a LOT concerned that this is just the tip of the iceberg, or the first slice of the salami game. Sure, hams are now a priviledged class, so that makes everybody in this newsgroup heave a big sigh of relief, but why should ANY class be so priviledged over ordinary people. (Note that there is no guarantee that the criminals this law is intended to deter are not hams... or politicians!)

```
+---------------
|    This section does not apply to   any  fire,  police,  or
      other
|    governmental  official of the state, or   of any county or muni-
|    cipality thereof, nor shall it apply  to  a  resident  of  New
|    Jersy holding a    valid radio amateur license of the Technician,
|    General, Advanced, or Amateur Extra Class."
+---------------
```

And what about NON-residents of New Jersey who are hams...? or just people driving through...? And non-ham residents, will they all march up and register like good little boys and girls? And what are the possible grounds for denying an applications for such a permit? ("No! You disagreed with me in town meeting last week!", or, "You haven't lived here 10 years.") Or will there be surprise raids of suspicious-looking antennas? Or of anyone who receives out-of-state mail from an electronics store?

Not to carry the extrapolation too far towards paranoia, folks, but I think once again our general civil liberties are being restricted on the (unproven) THEORY that such punishments deter criminals. Friends, I am not sure exactly what a "fourth-degree misdemeanor" is (not being a NJ resident), but it's surely inconsequential compared to the felonies such radios are being used for. Maybe more deterrence could be gained by making ANY use of a radio in committing a crime a "special circumstance" or something (as use of a gun is in California), that increases the penalties on conviction. Note: This does NOT make such use itself a crime (which could open up a whole host of other civil liberties problems), but merely adds "oomph" to a conviction.

IF (and this is a big "if", I'd want to see some documentation first) the use of scanners (receivers) IS a MAJOR crime problem in New Jersey, the much better solution would be encryption of critical services' transmissions, or conversion to digital transmission (possibly with voice compression and coding redundancy to actually improve S/N in marginal areas). (Plus such a "special circ." law.)

Not normally politically inclined, but suddenly worried by this new bit of
legislative not-so-trivia, I remain (not a ham),

Rob Warnock
Systems Architecture Consultant

UUCP: {ihnp4,ucbvax!dual}!fortune!redwood!rpw3
DDD: (415)572-2607
USPS: 510 Trinidad Lane, Foster City, CA 94404

From -6304353324946308039
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2706d3cc905b3b0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-24 19:54:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!teddy!panda!
talcott!harvard!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: More on Sony 7600D/2002
Message-ID: <7688@brl-tgr.ARPA>
Date: Thu, 24-Jan-85 22:54:28 EST
Article-I.D.: brl-tgr.7688
Posted: Thu Jan 24 22:54:28 1985
Date-Received: Wed, 30-Jan-85 04:49:09 EST
Distribution: net
Organization: USAMC ALMSA
Lines: 11

Just mentioned on Radio Nederlands' Media Network program, 24 Jan:
Sony has a new, black-color model of the 7600D out, which has a "New,
Improved" sticker on it, and which incorporates the fixes for the SSB
instability & "pulling" problem. Their tests show marked improvements
over the old model. 2002's of recent manufacture also incorporate this
fix, but will continue to be available only in the silver color.

Will Martin

PS- Congratulations to Bob Parnass on the publication of his article on
extended-range scanner reception in the February Monitoring Times! WM

From -8783838910090243218
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e11b7e015203a011,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-24 21:43:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA

Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!teddy!panda!
talcott!harvard!seismo!brl-tgr!tgr!hplabs!oliveb!jerry@Ucb-Vax
From: jerry%Ucb-Vax@oliveb.UUCP
Newsgroups: net.ham-radio
Subject: faulty outlets/extension cord, overrated dimmer
Message-ID: <7697@brl-tgr.ARPA>
Date: Fri, 25-Jan-85 00:43:33 EST
Article-I.D.: brl-tgr.7697
Posted: Fri Jan 25 00:43:33 1985
Date-Received: Wed, 30-Jan-85 04:49:41 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 27

>From: dts@gitpyr.UUCP (Danny Sharpe)
>I opened mine up last night. All the wires are pushed in the holes
>firmly, BUT the middle duplex outlet was the only one that was connected
>to the green wire from the power cord. The result was that only two
>out of the six outlets in the power strip had their third holes grounded.

Ground wires don't necessarily have to connect to every socket. The
ground connection on an electrical outlet is CONNECTED TO THE METAL
MOUNTING BRACKET. This means that as long as all the outlets are
screwed into a COMMON PIECE OF METAL then they all share the ground
connection. Connecting the green wire to the center outlet sounds like
a good way of providing a ground for all of them.

All of the outlet boxes I have seen are either all metal or have a
front panel made of metal. So if the outlets are all screwed or
riveted to that common piece of metal THEY ARE ALL GROUNDED if any one
of them is.

Grounded outlets run in metal conduit don't connect a ground wire to
any of the outlets. The ground connection is made when the outlet is
screwed into the box. In case you are worried about how good this
connection is, remember that the mounting bracket is heavier than the
copper wire and secured by two screws. It is therefor a much better
connection than a single screw or push on clip.

Jerry Aguirre @ Olivetti ATC
{hplabs|fortune|idi|ihnp4|tolerant|allegra|tymix}!oliveb!jerry

From -73736218764967474
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3da327c1dfb2bdc2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-25 06:09:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site homxa.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxj!houxm!homxa!nd2k
From: nd2k@homxa.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio

Subject: Central NJ VEC Exams
Message-ID: <649@homxa.UUCP>
Date: Fri, 25-Jan-85 09:09:21 EST
Article-I.D.: homxa.649
Posted: Fri Jan 25 09:09:21 1985
Date-Received: Sun, 27-Jan-85 04:45:13 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 37

FCC examinations sponsored by OMARC (Ocean Monmouth ARC) will be given at Ocean Community College. All exams, Novice thru Extra, will be given.

Dates: March 2 and April 6; both days at 1PM

Send a #10 business size SASE to:

Jim Grandinetti KZ2P
P.O. Box 106
Lakewood, NJ 08701

You will receive:

- A 610 form
- tips on filling it out
  (this is the new 610 form)
- a map with directions

The map should be enough but talk-ins will be on:

OMARC 145.110 - 600kHz

JSARS 146.910 - 600kHz

Suggestions:

- pre-registration is preferred

- you need to bring along TWO FORMS OF ID

- bring original license; photocopy is ok,
  BUT NO INSTANT UPGRADE WITH PHOTOCOPY

From -7907556644311263887
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a33b3c0fd5cfb626,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-25 07:42:20 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!vax135!
cornell!uw-beaver!tektronix!hplabs!sdcrdcf!sdcsvax!dcdwest!ittvax!decvax!genrad!
panda!talcott!harvard!seismo!brl-tgr!tgr!ptb@Mitre-Bedford
From: ptb@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: Current Novice test information needed
Message-ID: <7708@brl-tgr.ARPA>
Date: Fri, 25-Jan-85 10:42:20 EST
Article-I.D.: brl-tgr.7708
Posted: Fri Jan 25 10:42:20 1985
Date-Received: Sat, 2-Feb-85 11:20:20 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 14

I suggest that you get in touch with the ARRL VEC Office,

ARRL/VEC
 - same address as in QST -

They certainly have all the information that you would need in that
regard. Also, the current ARRL "Tune in the World with Amateur Radio"
has the up-to-date question bank for the novices - or is it the
License Manual, but definitely one of the two.

Hope this helps,

Peter Baldwin, WA1SNH
ptb@mitre-bedford

From -1738899776171951862
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c936340ad615771f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-25 07:57:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!vax135!
cornell!uw-beaver!tektronix!hplabs!sdcrdcf!sdcsvax!dcdwest!ittvax!decvax!genrad!
panda!talcott!harvard!seismo!brl-tgr!tgr!ihnp4!inuxc!pur-ee!uiucdcs!irwin@Ucb-Vax
From: irwin%Ucb-Vax@uiucdcs.UUCP
Newsgroups: net.ham-radio
Subject: faulty outlets/extension cord, overr
Message-ID: <7710@brl-tgr.ARPA>
Date: Fri, 25-Jan-85 10:57:23 EST
Article-I.D.: brl-tgr.7710
Posted: Fri Jan 25 10:57:23 1985
Date-Received: Sat, 2-Feb-85 11:20:36 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab

Lines: 22

The use of the conduit as the path for the ground, and not having a 3rd wire will not pass code in most U.S. cities. The reason that the mount tabs on a duplex outlet are connected to the third terminal (the ground terminal) is so that if THERE IS NO CONDUIT, as in the way most homes are wired, the rough-in box in the wall (plaster wall, dry wall or what have you) will be grounded via the duplex mount tabs. If this were not done, the box and the screw which secures the duplex cover could be HOT and zap someone, if the hot wire inside of the box had a bare spot and was in contact with the box. With the die stamped boxes and sharp edges, it is not uncommon to happen.

Since the manufacturer has no idea where the duplex outlets will end up, in a system with or without conduit, all are built alike, with the mount tabs of the duplex outlet tied to the third screw (for green wire). If your electrical system depends on the conduit and not a third wire, it is because someone cut costs but I would bet it does not meet code. The third screw was not put on the back of the outlet to hang in the air. If the outlet does not have screws, but has the holes to press the wire into, the same rule applies.

The third wire is required to pass code and if it is not there, it should not be UL approved, referring to your power strip of course.

From 2955369185371825982
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8cb761f8e18691b8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-26 14:49:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: get a Bearcat 20/20 manual at Heath
Message-ID: <456@ihu1h.UUCP>
Date: Sat, 26-Jan-85 17:49:40 EST
Article-I.D.: ihu1h.456
Posted: Sat Jan 26 17:49:40 1985
Date-Received: Mon, 28-Jan-85 04:36:54 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 19

x

CONVENIENT SOURCE FOR BEARCAT 20/20 MANUAL

Need a manual and schematics for the Bearcat 20/20 scanner? The Heathkit GR-740 scanner is really a Bearcat 20/20. Heath sells the GR-740 assembly manual with schematics for $5.

If you're considering a purchase of the Heathkit version, as recently reviewed in QST, be advised that the circuit boards are preassembled at the Bearcat factory. Consequently:

- If something ever goes wrong with an IC or a capacitor on one of the boards, Heath sells you an entire new board rather than replacing the component (now we're talking real money).

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 3261877322160882198
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3f67c47b745c0f33,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-26 14:50:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site umcp-cs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!vax135!
cornell!uw-beaver!tektronix!hplabs!sdcrdcf!sdcsvax!dcdwest!ittvax!decvax!genrad!
panda!talcott!harvard!seismo!umcp-cs!prophet
From: prophet@umcp-cs.UUCP (Dennis Gibbs)
Newsgroups: net.ham-radio
Subject: Table-top shortwave receivers
Message-ID: <2712@umcp-cs.UUCP>
Date: Sat, 26-Jan-85 17:50:06 EST
Article-I.D.: umcp-cs.2712
Posted: Sat Jan 26 17:50:06 1985
Date-Received: Sat, 2-Feb-85 11:23:55 EST
Distribution: net
Organization: U of Maryland, Computer Science Dept., College Park, MD
Lines: 35

<>

With all the recent talk on recommendations on portable shortwave receivers, I would like to hear some recommendations on good table top (non-portable) shortwave receivers. I am looking for a good general-coverage (~100Khz-30Mhz) receiver around the $500 range. I would like to stick pretty close to $500 as the top figure, but I would be willing to spend a little more if I find a receiver that is worth the extra money.

I am looking for a receiver with good basic performance (Good sensitivity, good selectivity, accurate digital readout, good stability, and reliable). It has been awhile since I have been involved with this hobby, and there are many new brands of receivers I am not familiar with. I don't need anything with lots of memory or presets, I just need good basic performance.

It seems there are three brands of receivers that are advertised quite often

in QST and Ham-radio magazine. Those brands are Kenwood, Icom, and Yaesu. I have heard that Icom has had reliabilty problems, but this is third-hand information.

Does anyone have any recommendations and suggestions for a general coverage receiver, keeping the above requirements in mind? Where is a good place to purchase a receiver these days??

Thanks in advance...

Dennis Gibbs

--
Call-Me: Dennis Gibbs, Univ. of Md. Comp. Sci. Center.
UUCP: {seismo,allegra,brl-bmd}!umcp-cs!prophet
CSNet: prophet@umcp-cs
BITNET: GIBBS@UMDB
ARPA: prophet@Maryland

From 4083819478668934177
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,42506fe45aa8decf
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-26 16:37:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site redwood.UUCP
Path: utzoo!dciem!nrcaero!pesnta!amdcad!fortune!rhino!redwood!rpw3
From: rpw3@redwood.UUCP (Rob Warnock)
Newsgroups: net.ham-radio
Subject: Re: Noisy dimmers and fluorescent lights?
Message-ID: <143@redwood.UUCP>
Date: Sat, 26-Jan-85 19:37:49 EST
Article-I.D.: redwood.143
Posted: Sat Jan 26 19:37:49 1985
Date-Received: Mon, 28-Jan-85 02:17:23 EST
References: <942@vax135.UUCP>
Organization: [Consultant], Foster City, CA
Lines: 72

WARNING Any suggestions made below are for discussion purposes only.
No warranty or guarantee of safety is implied. Certain of the modifications discussed may involve hazards to persons or property, including possible fire or shock. It is assumed that in "net.ham-radio", these hazards are understood.

+---------------
| I am planning to finish my basement. I would like to use a combination
| of fluorescent lights and incandescent lights with wall-switch mounted
| dimmers. However - I am afraid that they cause interference with my
| shortwave and medium wave radio reception.
| Can one buy electrically quiet versions of these devices?
| Is there some way to tame them?
| Howard Katseff | AT&T Bell Laboratories - Holmdel, NJ

+---------------

The problem with taming incandescent dimmers is *POWER*; there's a lot of it floating around. When the dimmer is half-on, you are switching the full load current in a microsecond or two. If you have a total of 400 watts, that's a dI/dT of several million amps per second, which just LOVES to shock-excite any little resonances lying around in your wiring (120 times a second).

If you look inside your dimmers, you will see that most of them have (these days) a small hash filter, but it's usually a single L-C in an "el" (look for the heavy wire wrapped around some ferrite). They can't slow the fall-time across the SCR/Triac itself, since the ability of such a small beast to handle that power depends on spending as little time as possible in the switching transition. In fact, the L-C "filter" is really there to speed up the switching more than it is to filter RFI. [*DO NOT* try to add any capacitance across the SCR/Triac, unless you like to watch fires.] The trouble is, the hash filter itself radiates locally (due to the magnetic field?), and I have found that even when the dimmer is relatively "clean", strong broadcast AM (KCBS in S/F) gets RFI within several meters of the dimmer (and within a meter or so or the load wiring).

Solutions? Put the dimmer in a shielded box, and feed it with a commercial high-power RFI filter (in the wall of the box), the sort that are sold for computer switching power supplies. Watch out for leakage out the knob of the dimmer; you might want to replace/extend it with plastic. Don't worry about the load wiring. *CAUTION* Some dimmers will burn up if you put heavy RFI filtering on them, even externally. Using the usual precautions for working with live 110 volts, measure the steady-state temperature of the SCR/Triac with full load at half-bright setting (using a 'scope, it should switch on at the voltage peak -- your eyes can't estimate that well). Then install the RFI filter, re-adjust the dimmer (the RFI filter will probably change the switching point) let the system equilibrate, and measure again. Any additional temperature rise is cause for concern. As an added safety measure, derate the dimmer's power capacity 50% or more when using added filtering. Finally, check with the manufacturer!

Fluorescent lights aren't TOO bad by comparison, since the arc typically re-fires early in the cycle (once the bulb is warm), the ballast is a large inductor physically close to the lamp and in series with it, and the power is (usually) lower. Use the commercial "shop lights", with all-metal housings (and the ballast INSIDE the metal). In extremes, you might have to add more RFI filtering or grounded (to the case) mesh over the light, but I doubt it. When bulbs get old, they get "noisier" -- just replace them.

My overall suggestion would be to avoid using dimmers at all, but light your basement with several smaller lamps that you can turn on and off locally to achieve the desired lighting or mood. A single master switch near the door could retain the convenience of central control. (Most fluorescent dimmers don't work all that well, anyway.)

Rob Warnock
Systems Architecture Consultant

UUCP: {ihnp4,ucbvax!dual}!fortune!redwood!rpw3
DDD: (415)572-2607
USPS: 510 Trinidad Lane, Foster City, CA 94404

From -4177253504059072138
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11f2eb,86d951d4437c6936
X-Google-Attributes: gid11f2eb,public
X-Google-Thread: 151e61,86d951d4437c6936
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1363ce,86d951d4437c6936
X-Google-Attributes: gid1363ce,public
X-Google-ArrivalTime: 1985-01-27 14:35:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!godot!harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio,net.auto,net.legal
Subject: Re: NJ exempts hams from mobile scanner law
Message-ID: <7762@brl-tgr.ARPA>
Date: Sun, 27-Jan-85 17:35:11 EST
Article-I.D.: brl-tgr.7762
Posted: Sun Jan 27 17:35:11 1985
Date-Received: Tue, 29-Jan-85 06:54:34 EST
References: <452@ihu1h.UUCP>
Organization: Ballistic Research Lab
Lines: 40
Xref: watmath net.ham-radio:2299 net.auto:5541 net.legal:1364

> from the 12/84 issue of the ARRL Southern NJ Section Report:
> ==
>
>   Assembly No. 2393
>   State of New Jersey
>   Introduced September 13, 1984
>   by Assemblymen Zimmer, Haines, and Weidel
>   An Act Concerning Crimes and Amending N.J.S.2A:127-4.
>
>   Be it enacted by the Senate and General Assembly of the State
>   of New Jersey: N.J.S.2A:127-4 is amended to read as follows:
>
>   2A:127-4. "Any   person   who installs   or has a short-wave
>   receiver operative on frequencies assigned by the FCC for
>   fire, police, municipal or other governmental uses, is guilty

>   of a misdemeanor crime of the fourth degree, unless a
     permit
>   therefor has first been obtained from the chief of the
     county
>   police,   or from the chief of the police of the municipality,
>   wherein such person resides.
>
>   This section does not apply to any fire, police, or
      other
>   governmental official of the state, or   of any county or muni-
>   cipality thereof, nor shall it apply to a resident of New
>   Jersy holding a   valid radio amateur license of the Technician,
>   General, Advanced, or Amateur Extra Class."
>
>
>   This act will take effect immediately.
>
Nice try, as both a ham and a member of the volunteer fire deptartment
I am more than covered, but I'm still pissed off. Never before in
Americas history has radio reception been banned. Now in the wars
my grandfather modified shorwave sets to disconnect the transmitters
for people, but they weren't required to turn in the receivers. I feel
that the inanity law is even more cut and dried than Gun control. I find
out a good deal about what is happening in my town by listening to the
the police and fire frequencies.

If scanners are outlawed, only outlaws will have scanners.

From -3315063898889593600
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c936340ad615771f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-27 14:38:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!vax135!
cornell!uw-beaver!tektronix!hplabs!sdcrdcf!sdcsvax!dcdwest!ittvax!decvax!genrad!
panda!talcott!harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: faulty outlets/extension cord, overr
Message-ID: <7763@brl-tgr.ARPA>
Date: Sun, 27-Jan-85 17:38:12 EST
Article-I.D.: brl-tgr.7763
Posted: Sun Jan 27 17:38:12 1985
Date-Received: Sat, 2-Feb-85 11:34:31 EST
References: <7710@brl-tgr.ARPA>
Organization: Ballistic Research Lab
Lines: 26

> The use of the conduit as the path for the ground, and not having a
> 3rd wire will not pass code in most U.S. cities. The reason that the

> mount tabs on a duplex outlet are connected to the third terminal (the
> ground terminal) is so that if THERE IS NO CONDUIT, as in the way most
> homes are wired, the rough-in box in the wall (plaster wall, dry wall
> or what have you) will be grounded via the duplex mount tabs. If this
> were not done, the box and the screw which secures the duplex cover
> could be HOT and zap someone, if the hot wire inside of the box had a
> bare spot and was in contact with the box. With the die stamped boxes
> and sharp edges, it is not uncommon to happen.
>
> Since the manufacturer has no idea where the duplex outlets will end
> up, in a system with or without conduit, all are built alike, with the
> mount tabs of the duplex outlet tied to the third screw (for green
> wire). If your electrical system depends on the conduit and not a
> third wire, it is because someone cut costs but I would bet it does
> not meet code. The third screw was not put on the back of the outlet
> to hang in the air. If the outlet does not have screws, but has the
> holes to press the wire into, the same rule applies.
>
> The third wire is required to pass code and if it is not there, it
> should not be UL approved, referring to your power strip of course.

As a matter of fact, the code here requires that not only the wire be
hooked up to the third screw but the box to be grounded as well, if there
is no conduit.

From 8605223795746711752
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1363ce,86d951d4437c6936
X-Google-Attributes: gid1363ce,public
X-Google-Thread: 151e61,86d951d4437c6936
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11f2eb,86d951d4437c6936
X-Google-Attributes: gid11f2eb,public
X-Google-ArrivalTime: 1985-01-27 20:08:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.auto,net.legal
Subject: Re: NJ exempts hams from mobile scanner law
Message-ID: <459@ihu1h.UUCP>
Date: Sun, 27-Jan-85 23:08:11 EST
Article-I.D.: ihu1h.459
Posted: Sun Jan 27 23:08:11 1985
Date-Received: Tue, 29-Jan-85 05:34:48 EST
References: <452@ihu1h.UUCP>, <138@redwood.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 16
Xref: watmath net.ham-radio:2297 net.auto:5538 net.legal:1361

New Jersey overregulates everything. It has laws prohibiting:

-self service gas stations
-BB guns/BB rifles
-sparklers
-slingshots
-mobile scanners

I fled NJ in 1976, seeking refuge in the Midwest, and am now being harbored in Illinois, which prohibits none of the above (and requires no auto inspection!)

==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -4696515942866589803
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c74ab7d522795aa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-01-28 06:43:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!vax135!cornell!uw-beaver!tektronix!hplabs!sdcrdcf!sdcsvax!dcdwest!ittvax!decvax!decwrl!dec-rhea!dec-viking!horton
From: horton@viking.DEC (Ken Horton, RBG LJO2/E4 282-2508)
Newsgroups: net.ham-radio
Subject: Voice of America
Message-ID: <352@decwrl.UUCP>
Date: Mon, 28-Jan-85 09:43:42 EST
Article-I.D.: decwrl.352
Posted: Mon Jan 28 09:43:42 1985
Date-Received: Sat, 2-Feb-85 11:21:07 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 25

The best and easiest way to listen to Voice of America in Israel is to tune to 1260 KHz between 5 PM and 7 PM in the afternoon Eastern MediterraneanTime. VOA operates a relay station from Rhodes, Greece. If your friend in
Jeruselem would stop by the American Cultural Centre's library on King George Street (I forget the exact address, it's right before Jabotinsky if you're approaching from City Centre), he can get a full schedule of VOA's broadcasts for free. A more interesting experience is to listen to the US Armed Forces Radio and Television Service's relays of US network programmes (including "All Things Considered") at 11 PM local Israeli time on 15430 KHz. This has a very good signal to Israel.

Hope this helps,

Fredric J. Einstin
Digital Equipment Co.
Littleton, Mass
617-486-2497

P.S.
 The Israeli Armed Forces Radio station "Gailei Tsahal" ("Waves of the Israeli Defense Forces") used to operate a low powered relay station on 2442 KHz during the time that Israel held the Sinai desert. This relay no longer exists.

From 344197504551209074
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c0656b01c48d7595,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-10 16:07:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!SmithPA.DLOS@XEROX.ARPA
From: SmithPA.DLOS@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Lowly peon w/Question
Message-ID: <8204@brl-tgr.ARPA>
Date: Sun, 10-Feb-85 19:07:45 EST
Article-I.D.: brl-tgr.8204
Posted: Sun Feb 10 19:07:45 1985
Date-Received: Wed, 13-Feb-85 02:41:16 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 7

   Phil
      If you recieve this will you reply so I can lock in your coordinates for beem up? I mean get your address. I would like to apprentice you on some subjects you have been discussing.
                                Space Interest
                                     Paul

From -5562933518822650030
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,266319ca400a9010,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-10 20:54:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles
Path: utzoo!utcs!lsuc!pesnta!hplabs!hp-pcd!hpfcla!jim
From: jim@hpfcla.UUCP (jim)
Newsgroups: net.ham-radio

Subject: Sell TR7 for $500
Message-ID: <16000001@hpfcla.UUCP>
Date: Sun, 10-Feb-85 23:54:00 EST
Article-I.D.: hpfcla.16000001
Posted: Sun Feb 10 23:54:00 1985
Date-Received: Thu, 14-Feb-85 11:44:52 EST
Organization: Hewlett-Packard - Fort Collins, CO
Lines: 9
Nf-ID: #N:hpfcla:16000001:000:299
Nf-From: hpfcla!jim   Feb 10 20:54:00 1985

I would like to sell my Drake TR7, 160-80-40-30-20-15-10 meter rig,
CW-SSB-AM Xtal fltrs, general coverage receiver for $500 FOB in
Ft. Collins, CO. The setup includes the power supply and matching
network (PS7 and MN7).

Jim Conrad
2200 Clydesdale
Ft. Collins, CO   80526
(303) 482-3105 evenings

From -3519531142308844798
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c06caf5943a94e4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-11 07:30:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site zeus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!vax135!
cornell!uw-beaver!tektronix!teklds!zeus!jhb
From: jhb@zeus.UUCP (John H. Burgess)
Newsgroups: net.ham-radio
Subject: Re: Novice question
Message-ID: <459@zeus.UUCP>
Date: Mon, 11-Feb-85 10:30:28 EST
Article-I.D.: zeus.459
Posted: Mon Feb 11 10:30:28 1985
Date-Received: Wed, 13-Feb-85 07:42:53 EST
References: <456@zeus.UUCP> <277@petrus.UUCP>
Reply-To: jhb@zeus.UUCP (John H. Burgess)
Organization: Tektronix, Beaverton OR
Lines: 38
Summary:

In article <277@petrus.UUCP> karn@petrus.UUCP writes:
>
> .
> .
> .
> .
>
>This discussion about what ought to be a trivial (to us hams, anyway)

>question brings up an important point. If it becomes obvious that a given
>question is ambiguous, how do we go about having it removed from the list?
>Can a person who has taken a test appeal such questions?
>
>Phil

Part of the catch-22 is that the examiner isn't supposed to discuss the test results with the applicant. If you remember the one that was ambiguous, you can probably discuss that question with the examiner.

In the case of the novice test, the test procedures are pretty lax. All you need to do is convince the examiner that you know the material; the examiner may even give an oral exam. So, if the ambiguous question is the one that caused failure, and you could convince the examiner that you know the material covered by that question, he can give you credit and pass you.

In the case of the tech to extra, the VE team has no leeway to give credit for missed questions. As a VE, I, at least, would be willing to discuss a specific question with an applicant and would forward your complaint to the VEC and FCC.

Of course, the applicant would also want to follow up on it vigorously, especially if that one question meant the difference between passing and not. Although the FCC and, possibly the VEC, might be able to waive a particular question, the 30-day waiting period would probably lapse sooner and you could re-take the test!

Also, ANYbody can write to the FCC at ANY time about ANY of the questions, or even propose new ones. The question pool is constantly being updated.

John Burgess, N7DCQ

From -4478077779782860333
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,77e8adbe0091a0be,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-11 10:49:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!vax135!
cornell!uw-beaver!tektronix!decvax!decwrl!dec-rhea!dec-regina!kroth
From: kroth@regina.DEC
Newsgroups: net.ham-radio
Subject: Would like HF rig advice
Message-ID: <533@decwrl.UUCP>
Date: Mon, 11-Feb-85 13:49:11 EST
Article-I.D.: decwrl.533
Posted: Mon Feb 11 13:49:11 1985
Date-Received: Wed, 13-Feb-85 04:47:12 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 21

I am in the market for a new HF rig. The main features I am looking for are:

- Portability - not necessarily for mobile use - I am a coop student and my address changes several times a year
- Built-in general coverage receiver
- All solid state

A few friends have recommended the Kenwood TS-430S and I am presently leaning in in that direction. I would appreciate any comments about the TS-430S or any other suggestions or advice (nothing too trivial). (Please reply by mail).

TNX ES 73,

Philip Kroth KA2QIK/1

{...decvax!decwrl!rhea!regina!kroth}

From 5586823896758205219
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b9550f8ae650a845,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-11 16:25:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 6
Message-ID: <15508@mgweed.UUCP>
Date: Mon, 11-Feb-85 19:25:50 EST
Article-I.D.: mgweed.15508
Posted: Mon Feb 11 19:25:50 1985
Date-Received: Tue, 12-Feb-85 06:46:45 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 26

qst de k9eui
hr propagation forecast bulletin nr 6   from arrl headquarters
newington ct february 10, 1985
to all radio amateurs bt

thus far in the month of february the solar flux has been 2 to
6 points higher than it was one solar rotation ago. the trend
to higher solar flux and sunspot numbers began in the middle of
january.   the author of these bulletins expects the trend to

continue through about february 14, keeping the muf slightly higher than it was in early january.

the earths magnetic field was active for several days prior to bulletin time. conditions were becoming more favorable in this respect, making for more stable propagation on all dx frequencies except 28 mhz, where still little more than marginal north south dx can be expected.

the propagation charts in qst will continue to be on the optimistic side, as they are based on much higher solar flux and sunspot numbers than we are likely to see for some time.

american sunspot numbers for january 31 to february 6 were between 25 and 9 with a mean of 18.1 ar

From -2333722603613984694
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bcfe375f0aca2211,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-11 16:26:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 10 (NPRM deadlines corrected)
Message-ID: <15509@mgweed.UUCP>
Date: Mon, 11-Feb-85 19:26:25 EST
Article-I.D.: mgweed.15509
Posted: Mon Feb 11 19:26:25 1985
Date-Received: Tue, 12-Feb-85 06:47:00 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

qst de k9eui
hr arrl bulletin nr 10 from arrl headquarters
newington ct february 6, 1985
to all radio amateurs bt

fcc has corrected the comment deadlines for pr docket 85 21, the nprm affecting the vec program, and pr docket 85 23, the nprm proposing new microwave allocations. comments on both dockets are due by april 8, 1985, reply comments are due by may 10, 1985. ar

From -3344615582267696784
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c7d1f3f100fcb0bb,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-02-11 16:27:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 11 (repeater directory)
Message-ID: <15510@mgweed.UUCP>
Date: Mon, 11-Feb-85 19:27:58 EST
Article-I.D.: mgweed.15510
Posted: Mon Feb 11 19:27:58 1985
Date-Received: Tue, 12-Feb-85 06:47:15 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

qst de k9eui
hr arrl bulletin nr 11 from arrl headquarters
newington ct february 6, 1985
to all radio amateurs bt

with the release of the fcc notice of proposed rulemaking concerning repeaters, docket 85 22, interest in the forthcoming edition of the arrl repeater directory is at an all time high. although the deadline for registrations has long since passed, repeater owners can be assured that listings are being accepted from frequency coordinators right up to press time. coordinators work closely with the directory editor to ensure that all possible listings will be included in the 1985/86 edition. information concerning directory listings should be given to frequency coordinators up until february 15. ar

From -3218674259649124235
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7c8666efc04a17e4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-11 16:29:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 12 (ARRL FILES PETITION OF RECONSIDERATION)
Message-ID: <15511@mgweed.UUCP>
Date: Mon, 11-Feb-85 19:29:58 EST
Article-I.D.: mgweed.15511
Posted: Mon Feb 11 19:29:58 1985
Date-Received: Wed, 13-Feb-85 01:33:08 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 12 from arrl headquarters
newington ct february 8, 1985
to all radio amateurs bt

arrl has filed a petition for reconsideration in pr docket 85
22, the repeater coordination docket. the petition asks the
commisson to lift the moratorium on new repeater operation on
the grounds that the moratorium is severely detrimental to the
amateur radio service   ar

From -8375241740539535638
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,907a21bb131bcaf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-11 16:30:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 13 (ARRL FILES MOTION)
Message-ID: <15512@mgweed.UUCP>
Date: Mon, 11-Feb-85 19:30:42 EST
Article-I.D.: mgweed.15512
Posted: Mon Feb 11 19:30:42 1985
Date-Received: Wed, 13-Feb-85 01:33:25 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

qst de k9eui
hr arrl bulletin nr 13 from arrl headquarters
newington ct february 11, 1985
to all radio amateurs bt

the arrl has filed a motion for interim operating authority in
docket 85 23, the microwave access docket, asking fcc to
authorize mode l earth operation while the docket is being
considered. fcc staffers promise to look at the matter as soon
as possible ar

From 8311514081245576221
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aa0de1b0d781bf7a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-11 18:10:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)

Newsgroups: net.ham-radio
Subject: trick the ICOM R71A to tune below 100 kHz
Message-ID: <478@ihu1h.UUCP>
Date: Mon, 11-Feb-85 21:10:56 EST
Article-I.D.: ihu1h.478
Posted: Mon Feb 11 21:10:56 1985
Date-Received: Wed, 13-Feb-85 01:47:06 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 42

x

Tricking the ICOM R71A to Tune Below 100 kHz

Bob Parnass, AJ9S

The ICOM R71A general coverage receiver is designed for VLF reception down to about 0.097 MHz.

The following steps will confuse the microprocessor-based controller sufficiently to permit reception down to 0.0 MHz:

1. If all 32 memory channels contain frequencies, use the FUNC and CLEAR buttons to clear a memory channel.

2. Place VFO/M switch into the M (Memory) position.

3. Using all the manual dexterity you can muster, rock the Main Tuning knob back and forth, while simultaneously rocking the MEMORY-CH rotary control to switch back and forth between a memory channel with a frequency in it and a clear memory channel.

4. While manipulating both the controls described in the previous step, a frequency of 0.000.0 will appear on the digital display.

   You can now rotate the Main Tuning knob clockwise to tune up from 0.000 MHz to the frequency you want. Be careful: if you rotate the Main Tuning knob counter-clockwise, the radio will immediately revert to 29.999 MHz.

I used a Wavetek 180 sweep/function generator to verify that the R71A is indeed receptive to signals below 100 kHz. To make things easier, store the 0.000 MHz frequency in a memory channel for future use. That way, you don't have to use two hands every time you tune below 100 kHz.

--

==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -3507072122215161395
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4c54ea3b3272c509,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-12 01:15:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!vax135!
cornell!uw-beaver!tektronix!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: Fourth ARRL Network Conference - Corrections
Message-ID: <400@dsd.UUCP>
Date: Tue, 12-Feb-85 04:15:33 EST
Article-I.D.: dsd.400
Posted: Tue Feb 12 04:15:33 1985
Date-Received: Fri, 15-Feb-85 04:24:28 EST
Organization: AMPEX DSD, Redwood City, CA.
Lines: 41

To: All packet radio stations
From: Hank Magnuski, KA6M
Date: February 11th, 1985

Subject: Fourth ARRL Networking Conference - Corrections to preliminary info.

Some late-breaking information and some corrections require changes be made
to my preliminary information bulletin. Please modify the original document
as follows:

1) In the section on conference events, a room has been assigned and
session times have been aligned with those at the Faire.

 All technical sessions for the conference will be held in Room 232. This
 is in the East Wing of Moscone Center near 3rd and Howard.

 March 30th - 10:30 - Opening remarks and Keynote - Paul Rinaldo, W4RI
              10:45 - Pete's Packet Primer by Pete Eaton, WB9FLW.
              11:30 - Applications of Packet Radio - Papers
              12:00 - Applications panel session by Andy Cromarty, N6JLJ.
              12:30 - Lunch break. Location to be announced later.
               1:30 - Technical Papers on packet radio and digital communica-
                      tions. Presentations from the Proceedings, Part I.
               3:15 - Technical Papers on packet radio and digital communica-
                      tions. Presentations from the Proceedings, Part II.
               6:00 - End of technical sessions
               8:00 - Conference dinner. Location and price to be announced.

2) A voice coordination repeater has been approved.

Coordination Frequencies -- There will be packet radio activity on 145.01 and 146.58 MHz. Voice channel coordination will be on WB6FDT/R, courtesy of the Telephone Pioneers. Frequency is 146.19/.79 coupled to 443.1(out)/448.1(in).

3) An invalid electronic mail address was given.

Delete JOSE@PARC-MAX from the list of response addresses.

73, Hank

H. S. Magnuski, 311 Stanford Avenue, Menlo Park, CA 94025 415-854-1927

From 6566371599283162453
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c5ea33ed33cd72e0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-12 05:44:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Trick the ICOM R71A below 100 kHz
Message-ID: <479@ihu1h.UUCP>
Date: Tue, 12-Feb-85 08:44:28 EST
Article-I.D.: ihu1h.479
Posted: Tue Feb 12 08:44:28 1985
Date-Received: Wed, 13-Feb-85 03:53:43 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 42

x

Tricking the ICOM R71A to Tune Below 100 kHz

Bob Parnass, AJ9S

The ICOM R71A general coverage receiver is designed for VLF reception down to about 0.097 MHz.

The following steps will confuse the microprocessor-based controller sufficiently to permit reception down to 0.0 MHz:

1. If all 32 memory channels contain frequencies, use the FUNC and CLEAR buttons to clear a memory channel.

2. Place VFO/M switch into the M (Memory) position.

3. Using all the manual dexterity you can muster,

rock
the Main Tuning knob back and forth, while simultaneously rocking the MEMORY-CH rotary control to switch back and forth between a memory channel with a frequency in it and a clear memory channel.

4. While manipulating both the controls described in the previous step, a frequency of 0.000.0 will appear on the digital display.

   You can now rotate the Main Tuning knob clockwise to tune up from 0.000 MHz to the frequency you want. Be careful: if you rotate the Main Tuning knob counter-clockwise, the radio will immediately revert to 29.999 MHz.

I used a Wavetek 180 sweep/function generator to verify that the R71A is indeed receptive to signals below 100 kHz. To make things easier, store the 0.000 MHz frequency in a memory channel for future use. That way, you don't have to use two hands every time you tune below 100 kHz.

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -8508047798585755442
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,925c23b78d3736f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-12 05:54:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some 17 MHz maritime/coastal stations heard
Message-ID: <480@ihu1h.UUCP>
Date: Tue, 12-Feb-85 08:54:22 EST
Article-I.D.: ihu1h.480
Posted: Tue Feb 12 08:54:22 1985
Date-Received: Wed, 13-Feb-85 03:30:18 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 26

These cw maritime/coastal stations were copied within a two hour period using an ICOM R71A and an indoor active antenna connected to 25' of wire on the floor:

17.0071 PCH61_____Scheveningen Radio, cw marker [Netherlands] (B. Parnass)

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  17.0165    KPH_______RCA Global Communications, maritime/coastal, cw [Bolinas
                              , CA] (B. Parnass)
  17.0181    ZSC_______Cape Town Radio, cw [Cape Town, S Africa] (B. Parnass)
  17.0216    WLO3______Mobile Marine Radio, Inc, marker, cw [Mobile, AL] (B. Pa
                              rnass)
  17.0260    KFS_______ITT World Communications, maritime/coastal, cw marker [P
                              alo Alto, CA] (B. Parnass)
  17.1130    GKB4______Portishead Radio, cw [England] (B. Parnass)
  17.1285    HPN_______Canal Radio, cw marker [Puerto Armuelles, Panama] (B. Pa
                              rnass)
  17.1410    YVG_______La Guaira Radio, chirpy cw marker [Venezuela] (B. Parnas
                              s)
  17.1489    TIM_______Limon Radio, cw [Costa Rica] (B. Parnass)
  17.1595    WOE_______RCA Global Communications, maritime/coastal, cw [Lantana
                              , FL] (B. Parnass)
  17.1609    IAR_______Rome Post Telecomm Radio, cw marker [Rome, Italy] (B. Pa
                              rnass)
  17.1620    PPO_______Olinda Radio, cw marker [Brazil] (B. Parnass)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From 920143617614741406
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,77e8adbe0091a0be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-12 06:58:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!linus!philabs!cmcl2!seismo!brl-
tgr!tgr!ptb@Mitre-Bedford
From: ptb@Mitre-Bedford
Newsgroups: net.ham-radio
Subject: Re: Would like HF rig advice
Message-ID: <8271@brl-tgr.ARPA>
Date: Tue, 12-Feb-85 09:58:43 EST
Article-I.D.: brl-tgr.8271
Posted: Tue Feb 12 09:58:43 1985
Date-Received: Sat, 16-Feb-85 05:59:41 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 22

My feelings on portability is that it is not really a matter of which
HF RIG is more portable than any other (unless you DO wish to go mobile);
but rather, it is the ANTENNA that will make the difference.  There
are several different antenna types that will either go up indoors, or
will go up and come down smoothly.  These are something that I would
suggest looking in to for someone who moves around a lot.

There is a pretty decent book out by Dan Fox, W2IQD, Called "The
Handbook of Apartment Operation" that describes some of these
```

antennas. It is published by Foundation Publishing, PO Box 805,
Merrimac NH 03054.

I have no financial interest in promoting this book, although it is
one that I have read and think that it has some good advice to offer
in this regard. Also, one whould remember that "there is no free
lunch" - you pay for portability in performance.

73,

Peter Baldwin, WA1SNH
ptb@mitre-bedford

From -1076187248403822763
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,77e8adbe0091a0be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-12 07:10:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!linus!philabs!cmcl2!seismo!brl-
tgr!tgr!ERWINVL.DLOS@XEROX.ARPA
From: ERWINVL.DLOS@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Would like HF rig advice
Message-ID: <8273@brl-tgr.ARPA>
Date: Tue, 12-Feb-85 10:10:48 EST
Article-I.D.: brl-tgr.8273
Posted: Tue Feb 12 10:10:48 1985
Date-Received: Sat, 16-Feb-85 06:00:18 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 10

PHIL,

I OWN A YAESU FT757 AND SUGGEST YOU TAKE A LOOK AT IT. THE KENWOOD 430
IS REALLY A DEFEATURED FT757. THE 757 COMES WITH BUILT IN KEYER, FM,
FILTERS WHICH ARE OPTIONAL ON THE KENWOOD. I AM VERY HAPPY WITH MINE.
YAESU HAD SOME START UP PROBLEMS WITH THIS RIG BUT THEY HAVE THEM ALL
CURED NOW--

73 DE VAL, W5PUT

From 5433759164630994833
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,882bf15b37a91f01
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-12 09:28:30 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!linus!philabs!cmcl2!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: VOA information (someone asked a while ago)
Message-ID: <8278@brl-tgr.ARPA>
Date: Tue, 12-Feb-85 12:28:30 EST
Article-I.D.: brl-tgr.8278
Posted: Tue Feb 12 12:28:30 1985
Date-Received: Sat, 16-Feb-85 06:02:16 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 9

Why does the VOA transmit on frequencies in the 40 Meter ham band? Does
anybody know if this constitutes a violation of WARC treaty or something?

I expect this sort of thing from the Russkies, but can't our own side
honor international agreements?

-de W3IKG
 John Sangster
 jhs at mitre-bedford.arpa

From 7140880848745355419
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f29d437d470f56c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-12 10:26:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!utcs!lsuc!pesnta!amdcad!decwrl!dec-rhea!dec-mred!soomre
From: soomre@mred.DEC
Newsgroups: net.ham-radio
Subject: Kenwood Sale
Message-ID: <550@decwrl.UUCP>
Date: Tue, 12-Feb-85 13:26:50 EST
Article-I.D.: decwrl.550
Posted: Tue Feb 12 13:26:50 1985
Date-Received: Wed, 13-Feb-85 19:02:42 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 40

As announced on Glenn Hauser's SWL program "World of Radio"
on February 9, 1985, Kenwwod is discounting their hf receiver line.

R600 sale price $280
R1000 sale proce $360
R2000 sale price $440

Prices through dealers might be less, I do not know. This sale
might be due to the competition from Yaseau's new FRG 8800.

Subject : Review of Yaseau FRG 8800

A review of this receiver was done on the Radio Nederland DX
program "Media Network" on January 31, 1985. Comments were:

- Frequencies must be entered in two parts, first MHZ followed by a entering key function and KHZ followed by a entering key function

- sensitivity on 150 khz-25 MHZ is ok, but 25-30 MHZ is poor

- two filters 2.7 khz and 6 khz are standard

- compatable to the Kenwood R2000 with RIT installed

- no notch filters

- RS-232 port

- optional 118-174 MHZ converter and wide fm filter

73's

Ed Soomre N1BFF
Digital Equipment Corp
1 Iron Way
Marlboro, MA 01752

From 5894453355594573960
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cacffd49badd87dd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-12 13:41:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site iddic.UUCP
Path: utzoo!utcs!lsuc!pesnta!hplabs!tektronix!orca!iddic!brucec
From: brucec@iddic.UUCP (Bruce W. Cheney)
Newsgroups: net.ham-radio
Subject: Morality Excitation Index Bulletin
Message-ID: <1929@iddic.UUCP>
Date: Tue, 12-Feb-85 16:41:30 EST
Article-I.D.: iddic.1929
Posted: Tue Feb 12 16:41:30 1985
Date-Received: Thu, 14-Feb-85 11:50:25 EST
Organization: Tektronix, Beaverton OR

Lines: 16

  Hey, any of you remember the days when Dick Bash used to publish
"exam guides" that had pretty much all the questions and all the
answers to the tests ?? People used to get pretty bent out of shape
over whether this was ethical. Now the FCC does it, and folks have
even posted all the novice questions to the net. But now nobody
even thinks twice about it. I guess ham morality and hypocrisy
fluctutate, kind of like the solar flux. Why just the other day I
saw an ARRL Ham Morality Excitation Index Bulletin:

Through the rest of this cycle, scanners and pirate video topics
will rise in temperature, while local antenna regulation will
remain constant. Exam guides have cooled considerably while
jamming sustains its high level of interest.

NI7M

From 9190970137984332424
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e88bf334a9cf8cb7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-12 13:47:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!linus!philabs!
cmcl2!seismo!brl-tgr!tgr!ABN.ACOS-CE@USC-ISID.ARPA
From: ABN.ACOS-CE@USC-ISID.ARPA
Newsgroups: net.ham-radio
Subject: ADD LIST
Message-ID: <8287@brl-tgr.ARPA>
Date: Tue, 12-Feb-85 16:47:26 EST
Article-I.D.: brl-tgr.8287
Posted: Tue Feb 12 16:47:26 1985
Date-Received: Sat, 16-Feb-85 06:07:29 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 3

PLEASE ADD ME TO YOUR MAILING LIST. ABN.ACOS-CE%USC-ISID.ARPA

PAUL RAMEY KA4VUB

From 9043511594859858244
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13375c,5e60d16897e82db7,start
X-Google-Attributes: gid13375c,public
X-Google-Thread: 151e61,5e60d16897e82db7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-12 19:37:51 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/28/84 based on 9/17/84; site tekig.UUCP
Path: utzoo!utcs!lsuc!pesnta!hplabs!tektronix!tekig!markmo
From: markmo@tekig.UUCP (Mark Morland)
Newsgroups: net.ham-radio,net.aviation
Subject: Re: Sony AIR-8
Message-ID: <2487@tekig.UUCP>
Date: Tue, 12-Feb-85 22:37:51 EST
Article-I.D.: tekig.2487
Posted: Tue Feb 12 22:37:51 1985
Date-Received: Thu, 14-Feb-85 11:52:17 EST
Organization: Tektronix, Beaverton OR
Lines: 21
Xref: utcs net.ham-radio:2137 net.aviation:1321

Sporty's Pilot Shop has priced the AIR-8 at $270.

I'm tempted, it would sure be better than a "Walkman" at work!

Then again, maybe I should get a hand-held 720 so I can talk from
the Champ!

****

Somebody really ought to ask me how cheap the rates are at Wally
Olsen's Evergreen Airport in Vancouver, WA!

Cheers,

Mark Morland   tektronix!tekig!markmo

--
Don't just sit there, DRIVE the damn thing!

tektronix!tekig!markmo

From -3189718105531261312
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,570f76dd9235343a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-13 09:45:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!dcdwest!ittvax!decvax!linus!
philabs!cmcl2!seismo!brl-tgr!tgr!SmithPA.DLOS@XEROX.ARPA
From: SmithPA.DLOS@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Would like HF rig advice
Message-ID: <8312@brl-tgr.ARPA>
Date: Wed, 13-Feb-85 12:45:35 EST
Article-I.D.: brl-tgr.8312

Posted: Wed Feb 13 12:45:35 1985
Date-Received: Sun, 17-Feb-85 05:10:15 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 5

Hi ErwinVL,
I am also interested in this can you give me some particulars on where
you got your's.
Dallas Paul

From 6353834587834381610
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,882bf15b37a91f01
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-13 10:19:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site terak.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!dcdwest!ittvax!decvax!linus!
philabs!cmcl2!seismo!hao!noao!terak!doug
From: doug@terak.UUCP (Doug Pardee)
Newsgroups: net.ham-radio
Subject: Re: VOA on 40 meters
Message-ID: <373@terak.UUCP>
Date: Wed, 13-Feb-85 13:19:59 EST
Article-I.D.: terak.373
Posted: Wed Feb 13 13:19:59 1985
Date-Received: Sun, 17-Feb-85 05:38:43 EST
References: <8278@brl-tgr.ARPA>
Organization: Terak Corporation, Scottsdale, AZ, USA
Lines: 13

> Why does the VOA transmit on frequencies in the 40 Meter ham band? Does
> anybody know if this constitutes a violation of WARC treaty or something?

A long-standing bone of contention...

VOA maintains that since the broadcasts are *intended for reception*
outside of region 2, that it doesn't matter that the *transmitter site*
is in region 2.

Of course, you and I know what would happen if you tried to operate
SSB on 7085 to talk to a VK or ZL using the same rationale :-)
--
Doug Pardee -- Terak Corp. -- !{hao,ihnp4,decvax}!noao!terak!doug

From -108020220493193744
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d51bf225ac213552,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-02-13 19:48:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!cord!bentley!hoxna!houxm!mhuxj!
mhuxm!mhuxn!mhuxb!mhuxr!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Gateway 13
Message-ID: <286@petrus.UUCP>
Date: Wed, 13-Feb-85 22:48:57 EST
Article-I.D.: petrus.286
Posted: Wed Feb 13 22:48:57 1985
Date-Received: Fri, 15-Feb-85 03:51:13 EST
Organization: Bell Communications Research, Inc
Lines: 369

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Electronic Edition.

TAPR MEETING

I have just returned from the Annual Meeting of the Tucson Amateur Packet Radio Corp. (TAPR). Most of the "hotbeds" of U.S. amateur packet radio activity were represented at this day-long forum in Tucson. It was an exciting meeting: Several maps showing packet activity throughout the U.S. illustrated that packet radio is indeed growing rapidly. Last year, most people were worrying about stimulating packet activity in isolated areas; this year, the emphasis was on linking these isolated areas into a network. There were representatives from AEA and Heathkit, two of the commercial manufacturers who have "joined the packet-radio revolution." Perhaps the most exciting items demonstrated at the meeting were the 9.6-kbit/s modems designed by Steve Goode, K9NG. With these modems transmitting data eight times as fast as current modems, a truly multi-level network can be built. (In such a network, a high-speed inter-city link would handle long-haul traffic for several 1200-bit/s conversations.) That TAPR has supported and organized these projects proves that the group responsible for the most popular TNC is still helping advance the amateur-radio state of the art.

One of the purposes of the amateur radio service, as stated in Part 97 of the FCC rules and regulations is to "contribute to the advancement of the radio art." Unfortunately, for many years, commercial technology has been advancing more quickly than amateur radio. Presentations at the TAPR meeting, made it clear that amateur packet radio is advancing the state of the radio art. Both the U.S. Forest Service and Army MARS sent representatives to the meeting to find out how they could use amateur-generated packet-radio technology. Several speakers mentioned that their local Red Cross emergency operation centers are equipped for packet radio. In the west, where search-and-

rescue efforts must cover vast areas of wilderness, the Civil Air Patrol has begun to use packet-radio for search coordination. TAPR TNCs have even found their way onto military hurricane-investigation airplanes. Amateurs are once again contributing to the state of the art.

The TAPR meeting reinforced my belief that packet radio is bringing out the best in amateur radio. The technological advances demonstrated at the meeting and the interest in packet radio shown by Heathkit and AEA lead those present to conclude that packet radio will enjoy rapid growth in the months and years ahead.

Ed.

PACKET AND THE FCC

In late January, the FCC released Notice of Proposed Rulemaking (NPRM) 85-22, proposing to add definitions of "coordinated repeater," "frequency coordinator," and "harmful interference" to Section 97.83 of the FCC rules and regulations. The NPRM also proposes adding text to Section 97.85 concerning resolution of conflicts between repeaters. Complete text of this NPRM is available from the ARRL for an s.a.s.e. with $0.54 postage.

In a move that worried many packet-radio experimenters, the FCC stated that "during the pendency of this proceeding there will be a moratorium on new repeater operation in Central Metropolitan Statistical Areas and Metropolitan Statistical Areas." These areas include many growing packet-radio networks. Packet-radio operators are asking whether this moratorium extends to simplex digipeater operation on previously established or coordinated frequencies. Informally, FCC officials have stated that packet radio is not covered by this repeater ban. While no formal determination has been made, it is clear that the FCC did not consider digipeaters before placing the 9-month ban on new repeater installations.

On February 7, the ARRL filed a Petition for Partial Reconsideration, asking the FCC to drop the moratorium on new repeaters from NPRM 85-22. The ARRL sees both practical and legal problems with the ban. Part of the Petition for Partial Reconsideration reads: "the suggested moratorium comes at a very bad time in the evolution of packet-switching networks in the Amateur Radio Service which are dependent on repeaters for their operation. The suggested moratorium will place a chill on the development of packet repeaters and hence the communications experimentation which is presently at the forefront of amateur technology." The FCC should consider this request soon.

Comments on NPRM 85-22 must be filed by July 1, 1985. Since the proposed rule changes would have some impact on frequency coordination for packet radio, packet operators should be sure to comment on the NPRM.

Ed.

NETWORK COORDINATION

The recent FCC actions concerning repeater coordination underscore the need for packet-radio operators to work with local (and perhaps national) frequency-coordinating bodies. (For a discussion of such interactions, see Gateway number 11.)

On February 2nd, packet-radio operators from Northern New Jersey, Eastern New York and Connecticut met to discuss the formation of a Network Coordinating Agent (NCA). Those present agreed to form a NCA called the Tri-State Packet-Radio Council (TSPRC). TSPRC will be a council of packet radio clubs from the areas covered by the Tri-State Amateur Repeater Council (TSARC), a frequency coordinating body. All clubs within TSARC jurisdiction are invited to attend the initial meeting of TSPRC, at the Trenton Computer Fest, April 21st. For further information on TSPRC, contact:

TSPRC, c/o Jeff Ward, K8KA
52 Alden St., Apt. 202
Hartford, CT 06114.

Ed.

HEATHKIT TNC

Those lucky enough to attend either the Miami Hamfest or the TAPR Annual Meeting have seen the second entry into the "TAPR-clone" field. The Heathkit HD-4040 is a TAPR TNC in a brown and beige low-profile cabinet. Status-indicating LEDs are grouped on the left side of the front-panel, and the only switch on the unit is an ON/OFF switch on the right side of the panel. Inside, the HD-4040 is purely a TAPR TNC, complete with modem-configuration headers and AC power supply. The kit will sell for $299.99 and should be available by the second week in April.

The kit will feature an "improved" TAPR manual. Considering that the TAPR manual is one of the best seen in amateur radio, the Heathkit manual should be a superb document. Parts for the HD-4040 will come on an adhesive strip, in the order that they are required in kit construction. This packaging technique makes parts-list checking unnecessary, and should make construction go quite quickly.

The HD-4040 will bring two new marketing techniques to Heathkit: For the first time, the Heathkit TNC manual will explain how to connect a Heathkit accessory to non-Heathkit radios. Also, Heathkit will probably be selling the HD-4040 in a specially-priced package with another manufacturer's assembled and tested amateur radio transceivers.

Wayne Wilson, Heathkit's Product Line Manager for General Consumer Products, attended the TAPR meeting. Mr. Wilson believes that packet radio could breath life into the sagging amateur-radio industry. Heathkit is eager to build connections between amateur radio and computers, hoping that technically-inclined youth can be drawn back into amateur radio.

TAPR will continue to produce the TNC kit as long as there is demand for them. Most of TAPR's research and development funding comes from TNC sales. TAPR made the TNC available to commercial interests believing that packet radio is a field with room for more than one manufacturer. With nearly 2000 TAPR TNCs sold, they are being proven right.

Ed.

FOURTH COMPUTER NETWORKING CONFERENCE

The Fourth ARRL Computer Networking Conference will be held in San Francisco on March 30th, 1985. The conference, co-sponsored by the ARRL and the Pacific Packet Radio Society, will be held in conjunction with the Tenth West Coast computer Faire, which runs from March 30th through April 2nd at the Moscone Convention Center. The tremendous growth and interest in packet radio terminals, equipment, networks and applications promises to make this conference one of the largest and best-attended ever.

The conference schedule for Saturday, March 30th follows:

1000 - Introduction to Packet Radio
1100 - Panel session on Applications of Packet Radio
1200 - Lunch Break
1300 - Technical papers delivered
1800 - End of technical session
2000 - Conference dinner (price and location to be announced later).

Through special arrangements with the Faire and the ARRL, a special pre-registration fee of $20 will purchase a four day ticket to the Faire and the ARRL conference proceedings. Send a check for $20 and a s.a.s.e. to:

Hank Magnuski, KA6M
311 Stanford Avenue
Menlo Park, CA 94025.

The deadline for submitting papers for the conference proceedings is March 1st, 1985. If you need an author's kit, contact the ARRL.

Via KA6M.

WESTNET LINKED

The first reliable, 24-hour link between Northern California and Southern California was completed on February 3. In an amazing burst of energy, several digipeaters in Northern California were brought up in the last few weeks, extending the network 200 miles south. Coincidentally, a critical mountain range near Santa Barbara had just been bridged by amateurs from Southern and Central California. Until 145.01 MHz is allocated in Southern California, an audio link on 450 MHz connects the 145.01-MHz digipeater at Arroyo Grande with the 145.35-MHz machine at Santa Barbara. Eventual removal of this audio link will make the Los Angeles to San Francisco path a three-digipeater connection. Now, stations from San Francisco can use a six-digipeater path to connect with Los Angeles. For packet operators in California, the completion of this path is a milestone and an indication of better things to come.

For those keeping track of packet-radio DX records, the link between Northern and Southern California is approximately 530 miles long, and will be extended north another 100 miles soon.

Via NK6K, KA6M.

SOUTHERN WESTNET COORDINATION

The packet-radio community in Southern California has formed the Southern California Digital Communications Council (SCDCC). The purpose of this council is similar to that of groups previously formed in Northern California and the Mid-Atlantic States: to provide a single point of contact to the area frequency coordinating bodies and to serve as a clearing house for information and a forum for discussion of effective use of network resources. The first act of SCDCC was to petition the local two-meter coordinating body for allocation of 145.01 MHz as an inter-region packet linking frequency.

Membership in SCDCC is open to anyone with an interest in digital communication. All California packet-radio operators from Santa Barbara to the Mexican border are encouraged to join. The SCDCC mailing address is:

SCDCC
P.O. Box 6026
Mission Hills, CA 91345.

Via NK6K.

FREQUENCIES COORDINATED

The New England Spectrum Management Committee met on January 26, 1985 and made the following packet-radio frequency allocations:

2 meters: 145.01 to 145.09 MHz, for operation with less than 5 kHz deviation.

1 1/4 meters: 5 100-kHz channels between 220.5 and 221 MHz and 10 20-kHz channels from 221.00 to 221.18 MHz.

70 cm.: 10 100-kHz channels from 430 to 431 MHz and a single frequency at 441.00 MHz for 5-kHz deviation operation.

This allocation scheme follows a plan discussed at the Third ARRL Amateur Radio Computer Networking Conference and published recently in the newsletter 220 NOTES.

In Florida, the Florida Repeater Council has coordinated 145.01 MHz as the state-wide packet-radio frequency. In addition, they have coordinated 221.72, 221.78 and 221.40 MHz as 20-kHz channels and 220.57 for 100-kHz bandwidth operation.

Via K4NTA and AG1F.

NTS AND PACKET RADIO

Don Haney, KA1T, is running a packet-radio bulletin board system (PBBS) dedicated to NTS traffic. Don's PBBS guides users who are unfamiliar with NTS radiogram format through the message origination process. The PBBS is part of the growing network of W0RLI MailBoxes that are forwarding traffic around New England on 145.01 MHz. Don is looking for stations on HF to extend this network.

In the January issue of the NEPRA Packetear, Don writes that 110 pieces of formal NTS traffic went through his PBBS in December. Forty-five percent of that traffic was for delivery outside New-England and 35% was between the Eastern and Western Massachusetts. The balance of the traffic was for delivery in New Hampshire, Connecticut and Eastern Massachusetts.

If packet traffic is originated on a crowded channel or entered by keyboard, each message takes about 3 to 5 minutes -- longer than it would take to originate the same message on FM or CW. The advantages of packet radio are realized when the messages are being forwarded from computer to computer automatically. With automatic forwarding, messages can be passed at times that would otherwise be inconvenient, and they can be passed without introduction of errors.

VIA PACKETEAR.

MODEMS AVAILABLE

Jerry Quimby, N4AJH, is making available a limited number of PC boards for EXAR modems. Jerry is selling a finished PC board, parts

placement diagram, parts list, schematic diagram and tune-up instructions. The PC board measures 1 1/2 by 3 in., and can be used for either 300-bit/s or 1200-bit/s AFSK operation. If you are interested, send $8.50 in check or money order to:

Jerry Quimby, N4AJH
2677 Hereford Rd.
Melbourne, FL 32935.

These modems are already in service on some heavily-used Florida digipeaters, and the chips in the circuit are the same ones used in all of the available TNCs. Even though you must supply your own parts for the PC board, this is an inexpensive modem.

VIA DRNET.

TWO-PORT DIGIPEATER

If you want to link two packet networks that are on different frequencies, you may have to use complex digital and audio contraptions. Most of the available schemes involve auxiliary links between digipeaters on different frequencies, or single digipeaters that use audio mixing to communicate simultaneously on two channels. While these solutions to the frequency-translation problem work, they are not always the simplest or most efficient solutions.

A simple solution to this problem is a digipeater with two independent packet I/O ports and enough internal logic to route packets from one port to another. Jon Bloom, KE3Z, has written a program that implements such a digipeater. The software runs on a Xerox 820, using the serial I/O port (SIO) to send and receive packets. It has several mechanisms for routing packets from one port to another. The program resides in ROM, and is suitable for remote digipeaters.

If you are interested in this software, send an 8" SSSD disk to Gateway. In return, you will receive the software source, a schematic for necessary hardware and installation documentation.

Ed.

CORRECTION

In the item "12-V DC SUPPLY FOR TNCS" in Gateway number 12, there were two errors. The list of those who developed the power supply should include Don Brown, N0BRZ, and the item should be attributed to N0CCZ, not N0CCX. Sorry about that.

Ed.

PACKET AT HAMFESTS

Feb. 23 -- Midwinter Technology Fair, Fridley, Minnesota. Talk-in frequency 147.00/.60 MHz.

Feb. 23 -- ARRL Ohio State Convention, Cincinnati, Ohio. Packet forum at 1:00 PM.

Gateway is produced by the:

American Radio Relay League
225 Main Street
Newington, CT 06111.

Editor: Jeffrey W. Ward, K8KA.

From 1472041924732628422
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,76befb520bdeb698,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-15 06:07:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site cp1.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!hplabs!hao!seismo!umcp-cs!aplvax!cp1!hart
From: hart@cp1.UUCP (rod)
Newsgroups: net.ham-radio
Subject: oscar ant. recommendations
Message-ID: <922@cp1.UUCP>
Date: Fri, 15-Feb-85 09:07:45 EST
Article-I.D.: cp1.922
Posted: Fri Feb 15 09:07:45 1985
Date-Received: Tue, 19-Feb-85 06:47:29 EST
Distribution: net
Organization: C & P Tel. Co., Baltimore, Md.
Lines: 18

My old Oscar Array blew down the other day and self-destructed.
Since I will be replacing it as soon as I can, I would like to
know what replacements are available. The old antenna never did
live up to expectations and I would like to do it right this time.
Any info will be appreciated. Thanks.

--

==========
Signed by:
  Rod Hart (WA3MEZ)
  Minicomputer Technical Support District
  Chesapeake & Potomac Tel. Co.
  A Bell Atlantic Company
  Silver Spring, Md.

  sabre!cp1!hart - gamma!cp1!hart - umcp-cs!cp1!hart - aplvax!cp1!hart
==========

From -8226304281713565592
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5b5f8d9d50d0bb1b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-15 13:07:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ttidca.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!decvax!linus!philabs!ttidca!sorgatz
From: sorgatz@ttidca.UUCP (Avatar)
Newsgroups: net.ham-radio
Subject: VOA vs. 40m.
Message-ID: <199@ttidca.UUCP>
Date: Fri, 15-Feb-85 16:07:21 EST
Article-I.D.: ttidca.199
Posted: Fri Feb 15 16:07:21 1985
Date-Received: Mon, 18-Feb-85 06:22:46 EST
Organization: TTI, Santa Monica, CA.
Lines: 14

<munch!chomp!chew!nibble!crunch!smeck!eat! AHHHH! BUURRPP!>
Hello, this message comes to you from a soon-to-be-General-Licensee. My
question is: Under what authority is the VOA regulated? I cant seem to
find the answer in my ARRL handbook,FCC Rulebook, or Gen/Tech license
manual. If 40m. is allocated to Amateur Service on a Primary Basis in ITCU
reg 2 (as it appears in all 3 texts!) Then shouldnt the VOA be required to
utilize the band on a 'non-interfering basis' *provided* that they can use
the frequency at all?

      confused,

            Erik
ps-Some of the questions in the Part3 syllabus are FUNNY! I never thought
studying for my ticket would be so entertaining!

From -5209071611687771889
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d0d29190e89a266,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-16 15:31:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: the Regency MX-4000 scanner exists!
Message-ID: <481@ihu1h.UUCP>
Date: Sat, 16-Feb-85 18:31:11 EST
Article-I.D.: ihu1h.481

Posted: Sat Feb 16 18:31:11 1985
Date-Received: Mon, 18-Feb-85 05:28:37 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 77

x

Regency MX-4000 Scanner Exists!

The first synthesized scanner to cover the 800 MHz frequency band is now available. I had a chance to try the new Regency MX-4000 at Erickson's Communications (Chicago) today. I'd have bought one instantly, but the $530 discount price is way out of line for this radio! Even the salesman cringed at the price, admitting it wasn't worth that kind of money.

Unlike the MX-7000, which has been advertised for about a year and hasn't yet been seen in public, the MX-4000 is more than a balsa wood and foam prototype.

My first impressions may be summed up in one word: 'peculiar'.

This 20 channel scanner covers the conventional bands, including the commercial aircraft band, plus the new allocations at 800 MHz. Too bad the coverage is not continuous, like the MX-5000, which affords coverage of military aircraft in the 200 - 400 MHz range, as well as the little monitored 72 MHz band. MX-4000 users may select between AM or FM modes on a channel-by-channel basis. Scanning speed seems to meet the specifications: 15 ch/sec. This is a welcome change over the MX-5000, that has a scanning speed several times slower than published specifications. (The spec sheets for the new HX-1000 and MX-5000 contain untruths.)

The speaker is on the bottom of the plastic case, which rests at an angle, due to a plastic foot on the bottom of the cabinet. This small scanner looks like a table radio, is billed as a mobile radio, but contains NiCd batteries! It's not shaped like a walkie-talkie, so don't plan on wearing it your belt.

The instruction manual, written in Japan, is scanty at best. For $530, you don't even get a schematic. An errata sheet is included, but doesn't fill in all

the
holes. The instruction sheet shows 2 antenna jacks on the back of the scanner. It looks like the manufacturer cheapened the design at the last minute and plugged up the hole where the SO239 was supposed to go, leaving only a single Motorola-type jack.

There is an odd slide switch on the front panel which doesn't appear in the pictures on Regency's sales literature. Apparently, this switch offsets the displayed frequency by 12.5 kHz, but the manual doesn't elucidate this.

The rather large LCD display is crisp, and contains several indicators. The 120 milliwatts of audio falls far short of what a mobile scanner requires. The scanner has to be operated with its slide volume control at the highest setting. Even then, it's difficult to hear well in all but the most quiet of rooms.

The MX-4000 contains another feature which no other Regency unit has: in addition to the ability to lock out channels from the scan list in the conventional manner, the user can set the scanner to scan between channels A and B, where A <= B, and A and B are between 1 and 20 inclusive. This is an odd way of implementing scanning in "banks". Instead of fixed banks of 10 channels, as in the Bearcat scanners, one essentially can choose his own logical bank.

I'm eager for someone, myself excluded, to buy one and rave about it. If the price dropped by $230 or so, I'd be more tempted.

--

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -2787782278609125851
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9e204c092453e1c0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-18 06:43:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site homxa.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!homxa!nd2k
From: nd2k@homxa.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: Exam second reminder
Message-ID: <713@homxa.UUCP>

Date: Mon, 18-Feb-85 09:43:11 EST
Article-I.D.: homxa.713
Posted: Mon Feb 18 09:43:11 1985
Date-Received: Wed, 20-Feb-85 03:15:32 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 37

FCC examinations sponsored by OMARC (Ocean Monmouth ARC) will be given at Ocean Community College. All exams, Novice thru Extra, will be given.

Dates: March 2 and April 6; both days at 1PM

Send a #10 business size SASE to:

Jim Grandinetti KZ2P
P.O. Box 106
Lakewood, NJ 08701

You will receive:

- A 610 form
- tips on filling it out
  (this is the new 610 form)
- a map with directions

The map should be enough but talk-ins will be on:

OMARC 145.110 - 600kHz

JSARS 146.910 - 600kHz

Suggestions:

- pre-registration is preferred

- you need to bring along TWO FORMS OF ID

- bring original license; photocopy is ok,
  BUT NO INSTANT UPGRADE WITH PHOTOCOPY

From -8870802511615612599
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d0d29190e89a266
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-18 09:36:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxb!mhuxn!mhuxm!mhuxj!houxm!ihnp4!
ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: the Regency MX-4000 scanner exists!
Message-ID: <482@ihu1h.UUCP>
Date: Mon, 18-Feb-85 12:36:42 EST
Article-I.D.: ihu1h.482
Posted: Mon Feb 18 12:36:42 1985
Date-Received: Wed, 20-Feb-85 03:16:06 EST
References: <481@ihu1h.UUCP>
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 21

EGE, Inc, of Woodbridge, VA has the MX-4000 in stock now
for $399. (Phone (800)336-4799 for order information.)

The HX2000, a walkie-talkie shaped version of the MX-4000,
minus 30 - 50 MHz coverage, is expected by March.
EGE quotes a discount price of $359 for the HX2000.

> Regency MX-4000 Scanner Exists!
>
>
> The first synthesized scanner to cover the 800 MHz
fre-
> quency band is now available. I had a chance to try
> the new Regency MX-4000 at Erickson's Communications
> (Chicago) today. I'd have bought one instantly, but
> the $530 discount price is way out of line for
this
> radio!
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -5285487536362579516
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69d87daaf14245c3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-18 14:46:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!utcs!lsuc!pesnta!amdcad!decwrl!dec-rhea!dec-fsleng!virgona
From: virgona@fsleng.DEC
Newsgroups: net.ham-radio
Subject: New Hampshire hams need your Support to pass a law for us
Message-ID: <633@decwrl.UUCP>
Date: Mon, 18-Feb-85 17:46:04 EST

Article-I.D.: decwrl.633
Posted: Mon Feb 18 17:46:04 1985
Date-Received: Tue, 19-Feb-85 04:42:21 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 58

Newsgroup : net.ham-radio
From : FSLENG::VIRGONA
Organization : Digital Equipment Corp.

to all new hamshire hams

My name is Pete Virgona N1DHD ex KA2KSR/1. Over the last year
I have been trying to get the New Hampshire Legislature to get
 pass a law to get ham plates at a
reduce rate. the current rate is $25.00 and it is clasified as a vanity plate.
We want to have the plates clasified as special plates and reduce the fee to
$10.00 for the first year then $5.00 for the rest of the time.
 Please send your letters to gov sununu at the State house in concord n.h.
 03301
to your local state rep and to Rep Phil LaBombardi W1OMZ , at
  60 Indian Rock Rd nashua n.h.

there was a bill intoduced in 1981 HR292-FN which was knocked down but
 I have gotten about 350+ petitions signed and sent to Gov Sununu and
 Richard Flyn Commisioner of Safety.

The time is getting near so your letter are a must!!

Please help our Cause !

I have the ARRL sending a letter also.

we need this.

Why should we have to pay $25.00 while national guard pay only $3.00??

thanks !

my node is FSLENG::Virgona
Home # 603 659-6294
Work # 617 938-2301

I do not know what my net node is.

so bear with me
As of today 2/18/85 there are two bills which are coming up to have a public
hearing I will keep you posted as to when it will be we need your support
on this so come out and speak your mind!!!!!!

73's

DE

N1DHD ex KA2KSR

End Forwarded Message

From 5290220152172467016
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9fb6f85288e9c04e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-19 08:31:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Re: ACSB Transmissions
Message-ID: <291@petrus.UUCP>
Date: Tue, 19-Feb-85 11:31:21 EST
Article-I.D.: petrus.291
Posted: Tue Feb 19 11:31:21 1985
Date-Received: Fri, 22-Feb-85 06:58:54 EST
References: <625@decwrl.UUCP>
Organization: Bell Communications Research, Inc
Lines: 35

> A new experimental mode of transmission on the VHF land mobile
> band (150-174 MHZ) is being used called ACSB. I am not sure what it
> stands for, something like Amplitude Compared Side Band. I think it
> is used like SSB on hf.

"ACSB" is a trademark of STI (Sideband Technology Inc), the very same
guys who want to take our 220 mhz band. The acronym stands for
Amplitude Compandored [single] SideBand.

>
> Is a transmission of this type receiveable on a Kenwood R2000 hf
> receiver with the optional 118-174 MHZ converter using either
> LSB or USB modes ?

Yes, ACSB can be received on a standard SSB receiver, although not with
the same fidelity as the intended receiver. ACSB consists of an ordinary
SSB signal in which the audio has been compressed and a "pilot tone"
indicating the level of compressor gain has been added. The receiver
simply locks to the pilot tone (which has the side effect of providing

a stable frequency reference) and varies the gain of an expander amplifier
so as to keep the pilot tone at a constant level.

ACSB really works, particularly in marginal fading conditions like a
channel on Oscar-10. The extra gain during unvoiced speech segments
and higher average transmitter power makes the difference between being
intelligible and being mostly below the noise floor. Off-axis spin fading
is taken right out. Listening fatigue is considerably reduced because the
background noise almost disappears between syllables.

A couple of stations are beginning to experiment with ACSB on Oscar-10.
For more info, contact Vern Riportella, WA2LQQ, POB 177, Warwick, NY 10990.

Homebrew ACSB circuits are starting to appear in the ham magazines.

Phil

From 8511078116272157599
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fe683e16e4d4650d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-19 13:59:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2a.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!houxm!hou2a!sg
From: sg@hou2a.UUCP (S.GROSS)
Newsgroups: net.ham-radio
Subject: Kosher Hams!ham radiuo
Message-ID: <505@hou2a.UUCP>
Date: Tue, 19-Feb-85 16:59:27 EST
Article-I.D.: hou2a.505
Posted: Tue Feb 19 16:59:27 1985
Date-Received: Fri, 22-Feb-85 08:08:57 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 47

From houxm!mhuxj!mhuxm!sftig!sftri!sfmag!samet Wed Dec 31 19:00:00 1969
Relay-Version: version B 2.10 5/3/83 based; site hou2a.UUCP
Posting-Version: version B 2.10.2 9/18/84; site sfmag.UUCP
Path: hou2a!houxm!mhuxj!mhuxm!sftig!sftri!sfmag!samet
From: samet@sfmag.UUCP (A.I.Samet)
Newsgroups: net.religion.jewish
Subject: Other Jewish Nets: Ham Discusssions, Telephone Classes
Message-ID: <483@sfmag.UUCP>
Date: Wed, 13-Feb-85 20:51:23 EST
Article-I.D.: sfmag.483
Posted: Wed Feb 13 20:51:23 1985
Date-Received: Wed, 13-Feb-85 23:43:01 EST
Distribution: net
Organization: AT&T Bell Laboratories, Summit, NJ
Lines: 29

Net readers who are also radio hams may be interested in knowing that there is a Ham Torah Net called Mesivta D'Rakia (Heavenly Academy) which meets to study Mishna and Halacha on 3.825 Mhz daily (except shabbos) at 8:30 PM EST. The "Rosh Mesivta" is Rabbi Yitzchok Sokol (KA2B) in Lakewood New Jersey. The radio dimension adds alot to the discussions which are usually very friendly and stimulating. There are active and passive (no Ham license required to recieve) participants around the continent, and some silent listeners in Russia. This has been going on for several years and features special guest appearances from Torah personalities and festive get-togethers.

Another communications medium for Torah study is the telephone. Dial-a-Daf programs exist in major cities for studying a page of Talmud a day at a time.

Rabbi Sokol (who is also a master technician) has installed various dial-up Torah-tape classes in Lakewood, and Dial-a-Daf equipment in other cities.

Anyone interested in these activities, or in help or advice in setting up ANY type of media classes is invited to contact him:

Rabbi Yitzchok Sokol Phone:201-364-3382
676 9th Street
Lakewood, NJ

Posted by Y. Samet

From 4888458597561874228
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c5c1e21c0d7be82d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-19 16:15:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 7
Message-ID: <15566@mgweed.UUCP>
Date: Tue, 19-Feb-85 19:15:07 EST
Article-I.D.: mgweed.15566
Posted: Tue Feb 19 19:15:07 1985
Date-Received: Fri, 22-Feb-85 07:36:40 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 30

qst de k9eui
hr propagation forecast bulletin nr 7 from arrl headquarters

newington ct february 17, 1985
to all radio amateurs bt

instead of rising as predicted last week, the solar flux fell off slowly, from a high of 76 on the 10th to a low of 72 on the 14th, 15th and 16th. it then turned upward, to 73 on the 17th, but this is 18 points below the peak reached on january 20, when the same area of the sun was facing our way. that considerable active area seems to have run its course. it would have been visible for several days now, but so far hardly a trace of it has been seen.

some flux rise is likely during this week, but anything approaching the activity of january 16 to 23 seems unlikely in february.

if the solar flux remains in the low 70s, with no large day to day change, the high peaks of geomagnetic disturbance experienced in the second half of january will not be repeated. this will mean more stable daytime propagation on 14 mhz and lower frequencies. the 21 mhz band will be open for brief periods daily, but signals will be very erratic except on north south paths. long skip on 7 mhz and lower frequencies will continue to bother traffic nets that normally rely on these frequencies for reliable night time operation over relatively short distances ar

From -3229215555948535024
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fb0f05003e2350a9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-19 16:15:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 14 (section mgrs elections)
Message-ID: <15567@mgweed.UUCP>
Date: Tue, 19-Feb-85 19:15:35 EST
Article-I.D.: mgweed.15567
Posted: Tue Feb 19 19:15:35 1985
Date-Received: Fri, 22-Feb-85 07:36:58 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 14 from arrl headquarters
newington ct february 19, 1985
to all radio amateurs bt

ballots for the section manager elections for arizona, arkansas and montana have been counted according to the prescribed rules. the following have been declared elected. arizona w7ff arkansas wb5igf and montana n7aik. their terms begin april wqn 1985 ar

From 7912415844216667849
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,77e320313cbcb05b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-19 16:16:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 15 (cw contest with Australia)
Message-ID: <15568@mgweed.UUCP>
Date: Tue, 19-Feb-85 19:16:29 EST
Article-I.D.: mgweed.15568
Posted: Tue Feb 19 19:16:29 1985
Date-Received: Fri, 22-Feb-85 07:37:13 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 19

qst de k9eui
hr arrl bulletin nr 15 from arrl headquarters
newington ct february 19, 1985
to all radio amateurs bt

to celebrate the 75th anniversary of its founding, the wireless institute of australia will sponsor a single operator, cw only, contest beginning at 0000 utc march 10 and ending at 2400 utc march 10. all bands except 10, 18 and 24 mhz may be used. the exchange is rst plus 3 figure serial number. stations outside australia may make one contact per band with any australian station. contacts on 1.8 and 3.5 mhz count 3 points, on 7 mhz 2 points, and on other bands 1 point. the final score is sum of the number of points on each band multiplied by the number of prefixes worked on that band. single band and multiband awards will be made. logs should be sent to cw 75, box 1065, orange nsw 2800, australia ar

From 2162713018754373049
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dde456287967489a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-19 20:20:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP

Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: highest FAA freq is 283 THz
Message-ID: <484@ihu1h.UUCP>
Date: Tue, 19-Feb-85 23:20:33 EST
Article-I.D.: ihu1h.484
Posted: Tue Feb 19 23:20:33 1985
Date-Received: Fri, 22-Feb-85 07:42:27 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 32

x
FAA on 283.0 Terrahertz

The highest frequency FAA allocation in government records dated May 1984 is for 283.0 THz. I don't understand all the information, but thought I'd post it for those in the know:

283.0 Terrahertz

Experimental Research Station
Atlantic City, NJ Tech Center

transmitter location coordinates: 392733N 0743428W

power: 2.5 megawatts
emission: 800M00P0N
equipment: neodymium

100 pps, 50 Mjoules/pulse, 20 sec pulse
3 milliradian beam width, Q-switched
aircraft retroreflector equipped

Note: This listing represents a use of a laser(s) for telecommunication purposes and it is entered in the list of frequency assignments to government radio stations for information.

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 1362001811208497416
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,64ab41fc81e34600,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-20 04:41:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!inuxc!pur-ee!mahler
From: mahler@pur-ee.UUCP (Mahler)
Newsgroups: net.ham-radio
Subject: info request
Message-ID: <2637@pur-ee.UUCP>
Date: Wed, 20-Feb-85 07:41:01 EST
Article-I.D.: pur-ee.2637
Posted: Wed Feb 20 07:41:01 1985
Date-Received: Fri, 22-Feb-85 21:45:54 EST
Organization: Electrical Engineering Department , Purdue University
Lines: 20

Article Cancelled

From 6857688128698601632
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,64ab41fc81e34600
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-20 04:59:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!inuxc!pur-ee!mahler
From: mahler@pur-ee.UUCP (Mahler)
Newsgroups: net.ham-radio
Subject: info request
Message-ID: <2638@pur-ee.UUCP>
Date: Wed, 20-Feb-85 07:59:07 EST
Article-I.D.: pur-ee.2638
Posted: Wed Feb 20 07:59:07 1985
Date-Received: Fri, 22-Feb-85 21:46:07 EST
Organization: Electrical Engineering Department , Purdue University
Lines: 20

I am currently requesting an antenna variance. The city where I live
has a 25 foot limit, and I am asking for an increase to 60 feet.
As you might expect, some of the neighbors see doom coming from
the sky in the form of lightning.

Can you recommend a text or paper that discusses the situation
when proper grounding of the tower is maintained? Any text would
be appreciated, but the lower the technical level the better.
Or how about something that uses lightning rods as an analogy?

Beyond that, any material you have used to obtain a variance
would be appreciated.

Please reply by mail ... tnxs ...

73s Steve

{ihnp4 | decvax | ucbvax} !pur-ee!mahler   (UUCP)

mahler@purdue-ecn (ARPA)

From -1074898775652212883
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,757fd4bc2e049495,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-20 07:43:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!tgr!SPECTOR@NYU-CMCL1.ARPA
From: SPECTOR@NYU-CMCL1.ARPA (David H M Spector)
Newsgroups: net.ham-radio
Subject: Xerox 820 Boards
Message-ID: <8343@brl-tgr.ARPA>
Date: Wed, 20-Feb-85 10:43:52 EST
Article-I.D.: brl-tgr.8343
Posted: Wed Feb 20 10:43:52 1985
Date-Received: Sun, 24-Feb-85 04:19:48 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 14

Hello,

Can anyone tell me where a good source for the Infamous Xerox820 board may be found? Also, what are most people using as the "standard" (hardware) configuration with them?

Tnx & 73's,

David, N2BCA

From -63112555271585675
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c061fe7a404ec86f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-20 08:13:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 exptools; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: British Radio Pirates QRM Navigational Aids
Message-ID: <485@ihu1h.UUCP>
Date: Wed, 20-Feb-85 11:13:45 EST
Article-I.D.: ihu1h.485

Posted: Wed Feb 20 11:13:45 1985
Date-Received: Fri, 22-Feb-85 20:04:45 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 26

x
From the British publication WIRELESS WORLD, February 1985:

Pirate Navigation Interference Overcome

"Helicopter pilots flying to the North Sea oil rigs have found it increasingly difficult to use their navigational aids to locate the rigs. This is caused by pirate radio stations operating at frequencies in the medium waveband used by standard non-directional beacons. Racal Avionics have [sic] solved the problem by designing (within a month) a new non-directional beacon with a much increased frequency range...."

"...The transmitters are used as landing site locators or as route markers and the new design... allow[s] adjustable, reduced power outputs to be used from 100W stepping down to 20W. Because of the reduced power consumption, the beacon can be operated by solar, gas or wind generators at remote locations."

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 4249126291348875601
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2683a3a7c7b787f4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-20 11:41:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!DSDC-SDT2@GUNTER-ADAM.ARPA
From: DSDC-SDT2@GUNTER-ADAM.ARPA (Walt Livingston)
Newsgroups: net.ham-radio
Subject: Ham Programs & BBoards
Message-ID: <8355@brl-tgr.ARPA>
Date: Wed, 20-Feb-85 14:41:03 EST
Article-I.D.: brl-tgr.8355
Posted: Wed Feb 20 14:41:03 1985
Date-Received: Tue, 26-Feb-85 08:20:10 EST
Sender: news@brl-tgr.ARPA

Organization: Ballistic Research Lab
Lines: 30

Here in the deep south, also known as "red neck country" we don't have
packet radio repeaters, on-the-air BBoards, etc. In fact, we are
just getting into computerized RTTY.(No jokes please, it's a bad situation).

I am trying to get some interest up here in Montgomery Alabama, in using
our computers (almost every ham has one now) for hobby; research; public
service; etc., and need some info from the rest of the ham community.

How does a club get into packet switching, what cost, what equipment is
needed, what programs available, etc. The whole gammet (sp).

That part out of the way, how about some programs for such computers as the
C64, VIC 20, IBM-PC, CoCo, Timex, etc. Is there a repository somewhere
within info-hams that has such programs (logging, duping, beam headings,
circuit board design, etc). If I could get hold of such programs and info
I can get some interest generated. Altho' Montgomery is "a hick city (?)"
we do have some of the finest computer talent around. We have the
Data Systems Design Office (USAF) where I work, with 11 large mainframes,
16 Mini's, and over 3000 micro's available. We also have the Air Force
Air War College where all the prof's get formal military training. We have
a very active Red Cross (ham wise) as well as Civil Defense (state, and county),
and I can see the need for computerized traffic. Many hams are NTS inclined,
as well as local net liaisons, and mostly, we have our share of disasters.

Any info, programs, hints, nasty remarks (not really) will be much appreciated.

Mucho thnks in advance.

73's Walt WA4YCM (Central Alabama Dstrict Emergency Coordinator)

From 1673921355197136405
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2683a3a7c7b787f4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-20 12:21:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!clements@bbncd1.arpa
From: clements@bbncd1.arpa (Bob Clements)
Newsgroups: net.ham-radio
Subject: Re: Ham Programs & BBoards
Message-ID: <8357@brl-tgr.ARPA>
Date: Wed, 20-Feb-85 15:21:28 EST
Article-I.D.: brl-tgr.8357
Posted: Wed Feb 20 15:21:28 1985
Date-Received: Tue, 26-Feb-85 08:20:24 EST
Sender: news@brl-tgr.ARPA

Organization: Ballistic Research Lab
Lines: 54

Walt,

I can't help much with your question about logging, beam heading or board design programs. But I can chew your ear off about packet radio at any length you want.

The basic setup of packet radio as it has evolved so far is that each ham has a terminal or a little computer with a terminal emulator program, and he has a TNC (Terminal Node Controller) and a radio, usually 2 meters but also HF and other VHF bands.

The TNC is a single board computer with a modem, transmitter control, serial ports, protocol and so on all ready to go. The hookup is literally a terminal on one side (DB25 connector) and three signals to the radio on the other side, namely transmit audio, receive audio and push-to-talk. TNC's are available from TAPR, GLB, AEA, and some others, and according to the Gateway that just came out, they will be available from Heathkit.

Most packet radio operation is simplex (145.01 MHz on most of the East Coast). To get farther than your own neighborhood, you relay through other stations, also on the same simplex channels. Your TNC allows others to relay through you. This is called "Digipeating". Typically, a club will put up a digipeater at a good site and everybody can digipeat through it or go directly to those in their neighborhood.

The thing that comes as a surprise to most 2-meter operators is that a dozen or so QSO's can be going on at once, all on the same simplex frequency, without interference. This is because each station sends only an occasional short burst of data when the operator finishes typing a line. Most of the channel time is idle. If two stations happen to transmit at once, so that a transmission is lost in the QRM, the protocols in the TNC take care of re-sending the packet until it gets through.

To keep interest up in the area, it is good to establish a Mailbox or Bulletin board system. Most of these (about 25 and climbing) are based on the Xerox 820 boards that were available a while ago. They use software developed by Hank, W0RLI. Many of these are linked together by HF on 20, 30 and 40 meters. I have posted the W0RLI software on SIMTEL20. (It's about time to send an update, now that I think of it. The new features of automatic mail forwarding among BBS's aren't in the current one on SIMTEL20.) Hank's software has been mentioned in Gateway and 73 magazine.

I'll cut this message short here. Let me know if I can expand on any of this for you. I guess I'll CC: this to info-hams, too. Anybody on the list who wants to chat about Packet Radio and packet BBS's, please do!

73,
Bob Clements
(K1BC)

From -8100720829567772821
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bbf9d606649c9764,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-20 13:25:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!Augenbra%udel-eecis3.delaware@UDEL-LOUIE
From: Augenbra%udel-eecis3.delaware@UDEL-LOUIE
Newsgroups: net.ham-radio
Subject: MOV transient protectors
Message-ID: <8365@brl-tgr.ARPA>
Date: Wed, 20-Feb-85 16:25:06 EST
Article-I.D.: brl-tgr.8365
Posted: Wed Feb 20 16:25:06 1985
Date-Received: Tue, 26-Feb-85 08:21:53 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 7

What is the proper configuration for hooking up an MOV to a power
line? (i.e. in series or in parallel?).

If it hooks up in parallel to the power line, why wouldn't one MOV
work for your entire house? It seems that it would, because all the
lines in the house are connected to together in parallel.
Joe

From 1991822835471323140
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,84c6b4909f82b60c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-20 19:21:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!clements@bbncd1.arpa
From: clements@bbncd1.arpa (Bob Clements)
Newsgroups: net.ham-radio
Subject: That list of Novice questions
Message-ID: <8389@brl-tgr.ARPA>
Date: Wed, 20-Feb-85 22:21:21 EST
Article-I.D.: brl-tgr.8389
Posted: Wed Feb 20 22:21:21 1985
Date-Received: Tue, 26-Feb-85 08:22:37 EST

Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 31

I finally got around to looking at that list of Novice questions
and answers that was posted here a while ago.

My question is: Where did the answers come from and why are there
a bunch of wrong answers (or am I going crazy)?

> Question 2A-20.3 asks what the prefixes are for callsigns assigned
> by the FCC. The given answer is "AA to AM, K, N and W".
> But "AM" is wrong. The right answer is "AA to AL, ...".
>
> Questions 2A-23.1 through 2A-23.8 deal with identification. The
> key question is 2A-23.3, "Do the FCC Rules require an amateur
> radio station to identify at the beginning of a transmission?"
> The given answer is "Yes". But the real answer is "Unfortunately,
> no. This requirement was dropped a while back when identification
> requirements were relaxed. At this time, the requirement to
> identify the party with whom you are in contact was also dropped."
> All the other questions about "How many times must you identify..."
> are wrong, since their answers say you need to identify at the
> beginning.

I haven't gone through the whole list, so I don't know how many other
errors there are.

Does anyone know the source of these answers? Am I wrong about any of
the above? I was going to give a copy of the list to a prospective
amateur, but I think I'd better not. Or at least tell him that he
shouldn't trust the answers.

/Rcc

From -1686673650846456098
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2683a3a7c7b787f4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-20 22:58:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!andy@aids-unix.ARPA
From: andy@aids-unix.ARPA (Andy Cromarty)
Newsgroups: net.ham-radio
Subject: Re: Ham Programs & BBoards
Message-ID: <8392@brl-tgr.ARPA>
Date: Thu, 21-Feb-85 01:58:31 EST
Article-I.D.: brl-tgr.8392
Posted: Thu Feb 21 01:58:31 1985

Date-Received: Tue, 26-Feb-85 08:22:52 EST
Sender: news@brl-tgr.ARPA
Organization: Ballistic Research Lab
Lines: 76

Walt,

The Red Cross in Palo Alto has committed pretty heavily to the packet radio system produced by the Tuscon Amateur Packet Radio (TAPR) group. TAPR has a board (a "Terminal Node Controller," or "TNC") that comes as a kit for something like $300. Heath has just announced their own kit version of the TAPR design for the same amount, I believe -- see this month's 73 magazine. The TAPR TNC's are professional-quality design, good-looking, and work like a champ. One end plugs into your radio (usually your HT), the other end plugs into your computer terminal (or your home computer running a terminal emulator program), and you're on the air. Done. Sit down and type; QSO in progress. Since you say your guys have home computers already, all they need is the TAPR or Heath "Terminal Node Controller" and the program that lets their PC act as a terminal to another computer.

There are other vendors of packet systems, perhaps most notably AEA (who makes an assembled version of the TAPR board for five or six hundred dollars) and GLB (which makes a low-end system with much or most of the TAPR TNC's capability for fewer dollars.)

We have put together a complete package for our own (Red Cross) use in a single aluminized attache case that includes a small Texas Instruments terminal with thermal printer, a TAPR board, and a 2-meter HT; you can carry it in one hand. (It does require 120 volt AC; we're working on a 12-volt version.) It's pretty straightforward to assemble this sort of package, if you decide you need it for Red Cross disaster services operations. We have also used it for Simulated Emergency Test, the county-wide Medical Exercise, and other drills, and we've learned a lot about how packet can be used for emergency applications (including the problems it doesn't solve). Overall, it's a very impressive thing for a fire marshall or police chief to be able to *see* printed radiograms being sent back and forth between emergency stations -- it usually beats anything they have at their disposal for disaster communications hands down.

The next step is to put up repeaters in your area, once local hams can converse via packet. This is a least as easy as putting up a regular two-meter repeater. As a matter of fact, every TAPR board *is* a repeater (a "digipeater") without you doing anything special to it, at the same time that it's your personal TNC, so you can get along for a while without installing special high-level repeaters in your area if everyone is within 2-meter FM simplex distance of the next guy. Most of us who work for the Red Cross leave our stations on the air 24 hours a day as digipeaters; if I want a QSO when I get home from work at night, I just sit down at my terminal

and type -- everything's all warmed up and on the air. In many cases
you can extend you range by going through existing duplex 2m FM
repeaters; some of us do this now in the San Francisco area.
It's not optimal, but it often works.

The problem of how to link into the existing National Traffic System
is being worked on. Suffice it to say that we aren't there yet.
The currently implemented approaches are, unfortunately, "think
small" approaches, and we still lack a good model of what such a
system should look like on a national scale and what its high-level
protocols should be. There are some systems in place now that
provide a limited capability for NTS traffic passing via packet,
mostly in the Northeast; they suffer from the disadvantage of being
utterly ad hoc but offer the advantage of giving people exposure to
the idea of traffic-via-packet now. (Admittedly an opinion, but I
design and build distributed artificial intelligence systems for a
living, so I allow myself the luxury of holding such an opinion.)
Some of us here on the west coast (emergency comm people, traffic
handlers, and packeteers) are working on a general solution to this
problem that can be implemented on a national scale. (Anyone who's
interested is more than welcome to participate in the design process,
by the way; there are a lot of hard problems to solve before we're
all linked together -- it's not just a matter of more repeaters and
more mailboxes -- and we need all the good networking ideas we can get.)

Good luck & 73,
                    Andy N6JLJ
                    AEC, Palo Alto Red Cross

From 5097197904712854132
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9fb6f85288e9c04e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-21 07:29:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ecsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!mcnc!ecsvax!mjg
From: mjg@ecsvax.UUCP (Michael Gingell)
Newsgroups: net.ham-radio
Subject: Re: ACSB Transmissions
Message-ID: <739@ecsvax.UUCP>
Date: Thu, 21-Feb-85 10:29:52 EST
Article-I.D.: ecsvax.739
Posted: Thu Feb 21 10:29:52 1985
Date-Received: Tue, 26-Feb-85 08:14:25 EST
References: <625@decwrl.UUCP>, <291@petrus.UUCP>
Organization: NC Educational Computing Service
Lines: 7

ACSB sounds a lot like LINCOMPEX - a modulation scheme used
in radio equipment made and sold for years by Standard Telephone

and Cables in Britain. I understand it is sold mainly for
diplomatic (embassy) communications equipment all over the world.

Mike Gingell   (..decvax!mcnc!ecsvax!mjg)

From -3246825244879949177
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9fb6f85288e9c04e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-21 09:24:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: ACSB Transmissions
Message-ID: <8406@brl-tgr.ARPA>
Date: Thu, 21-Feb-85 12:24:31 EST
Article-I.D.: brl-tgr.8406
Posted: Thu Feb 21 12:24:31 1985
Date-Received: Tue, 26-Feb-85 20:07:47 EST
Sender: news@brl-tgr.ARPA
Lines: 21

ACSB is Amplitude Companded Single sideBand or something like that.
As near as I can tell, it is very much like the SSB widely used on the ham
bands these days by speech processor afficionadi, except that the receiver
has a provision for expanding the dynamic range again, so it shouldn't sound
quite so awful on receivers so equipped. If you listen with your Kenwood,
it should be perfectly intelligible, but probably would sound like someone
running a lot of compression (which they are).

According to some of my old cohorts at Motorola, ACSB is nice in theory, but
loses out to FM (which they conveniently happen to be able to supply from
their standard product line) in urban environments where the real limiting
factors are adjacent-channel interference, intermod, multipath, and all those
things that don't show up in the academic investigations of SNR in FM versus
ACSB systems. Clearly, Motorola has an axe to grind, but they also have a
whole lot of RF systems expertise and actual experience with urban
environments, so their opinion should be considered very seriously before
everybody converts madly to ACSB!

73,
John Sangster, W3IKG
jhs at mitre-bedford

From -2349597661121992225
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c27a9265f501449f,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1985-02-21 11:22:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site aluxz.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!aluxz!mrh
From: mrh@aluxz.UUCP (HUDOCK)
Newsgroups: net.ham-radio
Subject: Equip. For Sale
Message-ID: <226@aluxz.UUCP>
Date: Thu, 21-Feb-85 14:22:40 EST
Article-I.D.: aluxz.226
Posted: Thu Feb 21 14:22:40 1985
Date-Received: Tue, 26-Feb-85 03:47:58 EST
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 19

FOR SALE

DRAKE TR-3 XCVR
RV-3 REMOTE VFO
AC-3 AC POWER SUPPLY
MS-4 SPEAKER

250.00 TAKES ALL

M.R.Hudock
215-770-2220
8-624-2220
aluxz!mrh

From -6949286621368068905
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f11d2e909075b65d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-21 11:37:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site ucla-cs.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!hao!hplabs!sdcrdcf!trwrb!cepu!ucla-cs!wales
From: wales@ucla-cs.UUCP
Newsgroups: net.ham-radio
Subject: Mounting a 2-meter rig in a Honda Accord
Message-ID: <4019@ucla-cs.ARPA>
Date: Thu, 21-Feb-85 14:37:16 EST
Article-I.D.: ucla-cs.4019
Posted: Thu Feb 21 14:37:16 1985
Date-Received: Thu, 28-Feb-85 12:32:06 EST

Reply-To: wales@ucla-cs.UUCP (Rich Wales)
Organization: UCLA Computer Science Department
Lines: 42

I have a Kenwood TR-7950 in my '84 Honda Accord LX hatchback.

I mounted the rig under the center of the dash, by rigidly bolting the "quick-release" mounting bracket to the underside of a small plastic panel underneath the lighter/ashtray/cruise-control stuff. The mike hangs on a plastic hook (kitchen-type dishtowel or potholder hook) glued to the front of the ashtray.

This works fine, except that vibrations from the road cause the rig to vibrate -- resulting in "squeaky-creaky" sounds as said small plastic panel jiggles slightly. Obviously, this particular panel was not intended to bear any kind of load (least of all a TR-7950 attached to it!).

I tried wrapping electrical tape around the little plastic tabs that protrude from the plastic panel and hold it in; this dampened the noise a bit, but not much.

Mounting the Kenwood in the dash, in place of the AM/FM radio, is out of the question: it won't fit, and in any case I like to have an AM/FM radio in my car! (Please, no flames about car stereo quality.)

Does anyone have some better idea I might try (either some way to damp the vibrations, or some other place to mount the rig)? Most appreciated would be case histories from people who have actually mounted a TR-7950 (or similar rig) in a Honda Accord (or similar car) -- but I would welcome any input.

Mail directly to me if possible; I will summarize to the net in a couple of weeks.
--

-=-=-=

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!carpenter@NBS-VMS
From: carpenter@NBS-VMS
Newsgroups: net.ham-radio
Subject: ACSB
Message-ID: <8425@brl-tgr.ARPA>
Date: Thu, 21-Feb-85 15:54:52 EST
Article-I.D.: brl-tgr.8425
Posted: Thu Feb 21 15:54:52 1985
Date-Received: Tue, 26-Feb-85 20:08:37 EST
Sender: news@brl-tgr.ARPA
Lines: 9

I think the recent answer about ACSB Amplitude Compandered Side Band
missed one point. As far as I can tell, a pilot carrier is transmitted
in ACSB. This makes receiver afc/lockon possible - which would seem to
be needed at UHF (no tuning dial, wide temperature range). Thus reception
on a ham receiver might turn up "poor carrier suppresion" (or a
whistle if the pilot has been chosen above the intended audio range).

Bob Carpenter, W3OTC

From 172799361563648773
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bbf9d606649c9764
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1985-02-21 13:21:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!bellcore!decvax!genrad!panda!
talcott!harvard!seismo!brl-tgr!tgr!d3unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@d3unix.UUCP
Newsgroups: net.ham-radio
Subject: MOV transient protectors
Message-ID: <8426@brl-tgr.ARPA>
Date: Thu, 21-Feb-85 16:21:05 EST
Article-I.D.: brl-tgr.8426
Posted: Thu Feb 21 16:21:05 1985
Date-Received: Tue, 26-Feb-85 20:14:19 EST
Sender: news@brl-tgr.ARPA
Lines: 71

" What is the proper configuration for hooking up an MOV to a power
  line? (i.e. in series or in parallel?).

  If it hooks up in parallel to the power line, why wouldn't one MOV
  work for your entire house? It seems that it would, because all the
  lines in the house are connected to together in parallel.

Joe "

The MOV is a shunt device: it has a high impedance until a transient causes a large voltage to appear across it, at which point its resistance becomes small, or more precisely, it prevents the voltage from getting much bigger by shunting a large current through the MOV.

To protect equipment with MOVs connected to the AC line, you would want to choose an MOV rated for a voltage which would not NORMALLY appear across the line. Be sure to find out (does anybody know?) whether the MOV is rated in terms of instantaneous peak voltage or RMS line voltage. The peak voltage is sqrt(2) times the RMS value of 115 or 120, thus about 170 volts. To allow for manufacturing tolerances, an MOV which limits peaks to about 190 or 200 volts would probably be about right.

Another parameter you need to choose is the maximum shunt current you need to handle in the MOV. The right choice depends on the application. For EMP protection, FEMA recommends a rule of thumb of 25 to 120 Amps per FOOT of exposed conductor if the conductor is vertical and 5 to 10 Amps per foot if it is horizontal. In either case, a practical limit would occur at about 2000 Amps because more than that will arc over around even your MOV. So probably a 2000 Amp peak current rating would handle most transients in the real world. I'm not sure just how LIGHTNING transients would differ from EMP, but it is generally claimed that the risetime is longer (slower) for lightning. I suspect that the above rules of thumb for EMP would result in a conservative design that would handle lightning nicely also.

The MOV would be connected across the line (in parallel, in your terms). A single MOV at the power entrance point would be very useful if all wiring beyond that point is in metal conduit. However, note that MOVs may become ineffective after being zapped a couple of times, so it might be well to install several of them in parallel at the entrance point. It is also a good idea to inspect or test them periodically.

Bear in mind that both EMP and lightning are fairly wideband phenomena, EMP particularly extending well into the VHF region. Because they are so wideband, they act like (they in fact ARE) radio waves and can get picked up by even a few FEET of conductor betwee the "central" MOV and the device in question. MOVs at various other points in the system would provide better protection to specific (expensive) equipment especially if the entrance-point MOV(s) failed or if the distribution wiring in the building is not shielded.

The LEAD LENGTH and inductance in series with the MOV will greatly reduce its effectiveness in limiting voltage peaks. It is best to use techniques similar to those used in building VHF/UHF amplifiers: very short leads, wide "straps" rather than ordinary wire, or else large diameter conductor, avoid bending the conductor (because bends introduce inductance) etc.

Additional protection can be provided more locally by using Zener diodes on low-voltage lines and gas gap devices on antenna feedlines. NOTE THAT AIR GAPS ARE NOT EFFECTIVE against EMP transients because the risetime is much faster than the time required to ionize air. Buy a gas discharge device

specifically designed for EMP or lightning protection, and then check it
periodically (after every major electrical storm, for example).

I hope the above is helpful. Please note that I am only an "instant"
expert on this subject rather than a "real" expert, so I may not be able
to give you much more detail than the above. However, I would be glad to
try to answer any further questions or point you at someone who can do so.

73,
John Sangster, W3IKG
jhs at mitre-bedford.arpa

From -256842214152482718
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,95be96ceea7c20d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-04 06:38:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site lcuxc.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!pyuxww!lcuxc!wjm
From: wjm@lcuxc.UUCP (B. Mitchell)
Newsgroups: net.ham-radio
Subject: Re: Special Call Signs
Message-ID: <103@lcuxc.UUCP>
Date: Tue, 4-Dec-84 09:38:03 EST
Article-I.D.: lcuxc.103
Posted: Tue Dec 4 09:38:03 1984
Date-Received: Thu, 6-Dec-84 02:46:22 EST
Organization: Bell Communications Research, Inc.
Lines: 13

I've never seen much use for the special 'temporary' call signs -
eg the "AB2IAU" that I could have used (but didn't) during the US Bicentennial
in 1976, although I think special event calls like WF5AIR (a call used for
a station at a fair a while back - I don't remember when but it was written
up in QST sometime in the 70's) are appropriate for special stations at the
events - as are the commemorative QSL's they generally provide. I also think
the FCC should allow club stations to apply for calls that reflect the name
of their organization (if the call is unassigned), e.g. Southwestern State
College (not intended to be a real institution) might ask for somthing like
N2SSC.
73's
Bill Mitchell, WB2IAU (lcuxc!wjm)

From 8005361857871729428
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ca25c438256e75aa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-04 11:27:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!mhuxn!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: air-to-ground phone scanner freqs
Message-ID: <410@ihu1h.UUCP>
Date: Tue, 4-Dec-84 14:27:33 EST
Article-I.D.: ihu1h.410
Posted: Tue Dec 4 14:27:33 1984
Date-Received: Wed, 5-Dec-84 00:36:02 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 13

Anyone heard any air-to-ground telephone conversations yet?
Here's a start:

Illinois Bell Telephone, domestic public air-to-ground
                      [Illinois]__________ 454.6750____KSC881   (govt recds)
              "   [Illinois]__________ 454.9500____KSC881   (govt recds)
unidentified: air-to-ground telephone, only the aircraft side of conversation
                      heard, strong signals 12/3/84
                      [location?]__________ 459.9750_mo_callsign? (B. Parnass)

--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 3687191679283728849
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1c93196f29b5f5ea,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-04 23:13:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site orca.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!zinfandel!tektronix!orca!miker
From: miker@orca.UUCP (Mike Reiney)
Newsgroups: net.ham-radio
Subject: Iambic keyer paddles wanted in Portland, Oregon
Message-ID: <1208@orca.UUCP>
Date: Wed, 5-Dec-84 02:13:05 EST
Article-I.D.: orca.1208
Posted: Wed Dec 5 02:13:05 1984
Date-Received: Thu, 6-Dec-84 07:41:13 EST
Organization: Tektronix, Wilsonville OR
Lines: 9

Wanted:

Want to buy set of paddles for an electronic keyer.   Will consider
purchase of keyer too if it's cheap.

Please reply by phone to Tigard, Oregon (503) 639-9847.

If it is long distance, you're too far away.
Thanks WA7VAG

From -2519449794695719108
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b1de50dc8615f025,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-05 06:16:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!dual!amdcad!decwrl!dec-rhea!dec-whyvax!opalka
From: opalka@whyvax.DEC (Bill Opalka 231-1224)
Newsgroups: net.ham-radio
Subject: Packet radio questions...
Message-ID: <141@decwrl.UUCP>
Date: Wed, 5-Dec-84 09:16:34 EST
Article-I.D.: decwrl.141
Posted: Wed Dec 5 09:16:34 1984
Date-Received: Thu, 6-Dec-84 07:45:12 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 21

Well to change the subject from CB/Ham debate. I am interested in
getting involved in PACKET RADIO. I understand there are 2 different
boards on the market. The GLB board which is a hardware/software
implementation of AX.25 and the TAPR board which is a true hardware
implementation.   The difference is about $100 with the GLB board
being the cheaper of the two. Is there any particular reason to buy
the TAPR board over the GLB board. Has anyone had any experience
good or bad that they would like to share with the rest of the world.
Most of the information on PACKET RADIO in the ham press revolves around
the TAPR board. Is there any reason for this?
     I'm sure that there are other hams, like myself, how would be interested
in getting involved with packet radio but don't want to make a mistake
and buy the wrong hardware. So lets hear from some of the "experts" in
the field.

thanks,

/bill
WB1ECB

From -7576684878520205578
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,38e2c5bb096517e9,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 126c94,38e2c5bb096517e9,start

X-Google-Attributes: gid126c94,public
X-Google-ArrivalTime: 1984-12-05 14:43:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site hplabs.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!gatech!hplabs!piety
From: piety@hplabs.UUCP (Bob Piety)
Newsgroups: net.analog,net.ham-radio
Subject: Telephone Glitch suppressor query
Message-ID: <1219@hplabs.UUCP>
Date: Wed, 5-Dec-84 17:43:33 EST
Article-I.D.: hplabs.1219
Posted: Wed Dec 5 17:43:33 1984
Date-Received: Fri, 7-Dec-84 00:38:55 EST
Distribution: net
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 14
Xref: watmath net.analog:104 net.ham-radio:2153

A friend has a Uniden EX-3100 cordless telephone that has a "CMOS latchup"
problem. Every couple of days, the base unit quits working, necessitating
unplugging the power and plugging it back in to restore proper operation.
I'm guessing that it is caused by his archaic telephone switching office's
transients & glitches. He has exchanged the unit-- same results.

Has anyone else had similar problems with this or any other model cordless
telephone? What have you done to solve the problem? A transient suppressor?
Details?

Suggestions?

Thanks,
  Bob

From -2744672955073873585
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,239afe70dac5902c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-05 16:17:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sphinx.UChicago.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!gargoyle!sphinx!west
From: west@sphinx.UChicago.UUCP (Steve Westfall)
Newsgroups: net.ham-radio
Subject: recommendations on packet radio books
Message-ID: <128@sphinx.UChicago.UUCP>
Date: Wed, 5-Dec-84 19:17:29 EST
Article-I.D.: sphinx.128
Posted: Wed Dec 5 19:17:29 1984
Date-Received: Thu, 6-Dec-84 06:44:04 EST
Organization: U. Chicago - Computation Center
Lines: 12

I recently became interested in packet radio and would like to
read some books to inform myself about this. I am computer literate
and used to interface my IBM PC with my transceiver for hf rtty, so
I don't need anything explaining the basics of computing or computer
communications. Any recommendations will be appreciated. Please
reply to me and I will summarize to net.ham-radio. Thanks!

--

              Steve Westfall, Staff Analyst
              University of Chicago Computation Center
              uucp: ihnp4!gargoyle!sphinx!west
              Mailnet: staff.westfall@UChicago.Mailnet

From -4832233641414410580
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,363c467c89fbe1a6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-05 23:52:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 SMI; site bellcore.uucp
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!dcdwest!ittvax!decvax!bellcore!karn
From: karn@bellcore.uucp (Phil R. Karn)
Newsgroups: net.ham-radio
Subject: AO-10 RTTY Telemetry Format
Message-ID: <130@bellcore.uucp>
Date: Thu, 6-Dec-84 02:52:01 EST
Article-I.D.: bellcore.130
Posted: Thu Dec 6 02:52:01 1984
Date-Received: Sat, 8-Dec-84 05:49:11 EST
Organization: Bell Communications Research, Inc
Lines: 146

AO-10 RTTY Format Delineated

On 3 Sep 84 a new beacon system was implemented on AO-10 which
included for the first time an RTTY transmission. This signal
coded key spacecraft operating conditions in a format convenient
for many Amateurs not equipped with the PSK decoders used by the
command stations and a fortunate few others. Now comes word on
how to decode the RTTY telemetry being heard both on Mode B
(145.810 MHz) at 15 and 45 minutes past the hour and on Mode L
(436.040 MHz) at 0, 15, 30 and 45 minutes past the hour.

According to command station VE1SAT/VE6, the so-called "Y" block
sent as RTTY is a version of the "Z" block telemetry send via
PSK. Thus many of the key operating parameters are now
available for general consumption to anyone who has 45 baud
baudot RTTY demodulation and display capability.

The exact baud rate is 50 rather than the 45 baud (60wpm)
standard but most electronic and mechanical machines equipped to

receive 45 baud will respond well to 50 baud. The AO-10 RTTY telemetry is sent in FSK with 170 Hz shift and is standard baudot (5-level) coded.

The following table provides the key to understanding the transmitted information about the spacecraft operating conditions. The parameters are organized and transmitted as six rows of ten columns. For convenience we will label the rows "A" through "F" and the columns 1 through 10 thus:

	1	2	3	4	5	6	7	8	9	10
A										
B										
C										
D										
E										
F										

Each of the 60 telemetry cells or channels is sent as a 1, 2 or 3 character numeric group such as "0", "16" or "165". Each block of 60 is preceded by a narrative, the decimal date (day zero equals 1 Jan 78) and several hexadecimal numbers. Your key to knowing when the block of 60 begins is to watch for a long series of space characters followed by numerous carriage return/line feed sequences.

Tlm Row/Col	Meaning	Equation	Units
A1	Solar panel out and BCR input voltage	n*150	mV
A2	70cm xmtr average power output	(253-n)^2/2000	W
A3	70cm rcvr temperature	(n-127)/1.82	C
A4	Nutation dampner temperature	(inoperative)	-
A5	BCR output and main battery voltage	(n-10)*75	mV
A6	Special purpose	xxxxxxxxxxx	-
A7	70cm xmtr temperature	(n-127)/1.82	C
A8	14 volt rail current to xponder	(n-15)*20.64	mA
A9	10 volt regulator voltage	(n-12)*50	mV
A10	He tank pressure at hi pres regulator	(n-34)*44.46	bar

B1	IHU temperature	(n-127)/1.82	C
B2	14 volt rail current to magnetorquers		-
	and antenna relay	(n-15)*4.128	mA
B3	BCR #1 status	0=Off; N>10=On	-
B4	He tank pres at low pres regulator	(n-37)*0.8	bar
B5	BCR temperature	(n-127)/1.82	C
B6	10 volt regulator current	(n-15)*4.128	mA
B7	BCR #2 status	0=Off; N>10=On	-
B8	Not used	xxxxxxxxxxxx	-
B9	SEU temperature	(n-127)/1.82	C
B10	Battery charge current	(n-15)*10.32	mA
C1	Top photocell sensor	65 means sun normal	-
		to Z (spin) axis;	-
		20-30 nominal	-
C2	Special purpose	xxxxxxxxxxxx	-
C3	Main battery case #1 temperature	(n-127)/1.82	C
C4	Active BCR ouput current	(n-15)*20.64	mA
C5	Bottom photocell sensor	(same as C1)	-
C6	Kick motor strut temperature	(Inoperative)	-
C7	Main battery case #2 temperature	(n-127)/1.82	C
C8	Active BCR input current on 28 volt line	(n-15)*10.32	mA
C9	Spin rate {if n<139,	r=(139-n)*0.8+20	rpm
	or {if n>=139	r=508/(n-116)-2	rpm
C10	24cm rcvr AGC {if n<100	AGC=0	dB
	or {if n>=100	AGC=(n-100)^2/189	dB
D1	Auxillary battery temperature	(n-127)/1.82	C
D2	Solar panel #6 current	(n-15)*4.128	mA
D3	2m xmtr average power output	(200-n)^2/2000	W
D4	He tank temperature	(n-127)/1.82	C
D5	Solar panel #1 temperature	(n-127)/1.82	C
D6	Solar panel #5 current	(n-15)*4.128	mA
D7	70cm rcvr AGC	(n-83)^2/1000	dB
D8	70cm xmtr temperature	(n-127)/1.82	C
D9	Solar panel #3 temperature	(n-127)/1.82	C
D10	Solar panel #4 current	(n-15)*4.128	mA
E1	Special purpose	xxxxxxxxxxxx	-
E2	70cm rcvr temperature	(n-127)/1.82	C
E3	Solar panel #5 temperature	(n-127)/1.82	C
E4	Solar panel #3 current	(n-15)*4.128	mA
E5	14 volt regulator voltage	(n-10)*61.5	mV
E6	Wall temperature in arm #3	(n-127)/1.82	C
E7	Top surface temperature of arm #1	(n-127)/1.82	C
E8	Solar panel #2 current	(n-15)*4.128	mA
E9	Internal 9 volt bus from transponder	(n-10)*50	mV
E10	Wall temperature in arm #2	(n-127)/1.82	C
F1	Bottom surface temperature of arm #1	(n-127)/1.82	C
F2	Solar panel #1 current	(n-15)*4.128	mA
F3	Special purpose	xxxxxxxxxxxx	-
F4	Wall temperature in arm #1	(n-127)/1.82	C

F5	N2O4 tank temperature	(n-127)/1.82	C
F6	UDMH tank temperature	(Not used)	-
F7	Auxillary battery voltage	(n-10)*75	mV
F8	Central supt cylinder temp near arm #1	(n-127)/1.82	C
F9	Earth sensor temperature	(n-127)/1.82	C
F10	Not used	xxxxxxxxxxx	-

NOTES

B1: IHU = Integrated Housekeeping Unit; the computer
B3: BCR = Battery Charge Regulator
B4: He = Helium
B9: SEU = Sensor Electronics Unit
C8: Direct from solar panels
F5: N2O4 is nitrogen tetroxide; the propellant oxidizer
F6: UDMH is unsymmetrical di-methyl hydrazine; the propellant fuel

Compiled 04Dec84 by WA2LQQ with VE1SAT, KA9Q, DB5ER, R.Gape

From -8427609189954065758
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,21cf6fd8a908892c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-06 04:57:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!mhuxn!houxm!hou2h!ad7i
From: ad7i@hou2h.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: Used TAPR boards for same
Message-ID: <686@hou2h.UUCP>
Date: Thu, 6-Dec-84 07:57:28 EST
Article-I.D.: hou2h.686
Posted: Thu Dec 6 07:57:28 1984
Date-Received: Fri, 7-Dec-84 01:40:37 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 34

for sale to a good home.

TAPR KIT board with TAPR snazzy cabinet.

This is a brand new kit board and cabinet
that I just put together. It has been fully
tested and checked out. Buy this from TAPR in
kit form and pay over $325. Buy it from me
and I will put it on your doorstep (UPS) for
the same price assembled and fully guaranteed.

TAPR BETA board in Ten-Tec cabinet.

  This is the board that TAPR put out for system
  test of what became the kit board. This board was
  assembled in Tucson by the TAPR folks and I put it
  in the cabinet. With full documentation and delivered
  to your door (UPS) $175. Fully guaranteed

why am I selling some of my packet stuff? i need the money.

for more information contact:

 Paul Newland, ad7i
 POB 205
 Holmdel, NJ 07733

 201-834-1149 anytime
 ...!ihnp4!hou2h!ad7i

From -7194804173726845193
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8f34a6c056005692,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-06 04:59:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!mhuxn!houxm!hou2h!ad7i
From: ad7i@hou2h.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: Oooops
Message-ID: <687@hou2h.UUCP>
Date: Thu, 6-Dec-84 07:59:11 EST
Article-I.D.: hou2h.687
Posted: Thu Dec 6 07:59:11 1984
Date-Received: Fri, 7-Dec-84 01:40:52 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 5

sorry folks, my previous items title should have been

  USED TAPR BOARDS FOR ***SALE*** not same.

please excuse my confusion!

From 9139688554849926634
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,943fd3a117d03a2,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-06 05:37:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!mhuxn!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: announcement of HX-2000 800 MHz scanner rumored
Message-ID: <413@ihu1h.UUCP>
Date: Thu, 6-Dec-84 08:37:04 EST
Article-I.D.: ihu1h.413
Posted: Thu Dec 6 08:37:04 1984
Date-Received: Fri, 7-Dec-84 01:59:47 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 15

x
      New 800 MHz Handheld Scanner in the Works?

Look for a future announcement by Regency of the new HX-2000
handheld scanner. Rumor has it that this radio   will include
coverage of the   800 MHz land mobile band, as well as
      the
traditional public service bands.

I may be a while before you can get your hands on one. When
Regency announced the HX-1000, it took over a year to get it
onto store shelves.
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -8016893813704795749
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,70ed022fbfcd3bd4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-06 05:52:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!mhuxn!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: MBA-TOR/Kantronics non-compatibility!
Message-ID: <14012@mgweed.UUCP>
Date: Thu, 6-Dec-84 08:52:14 EST
Article-I.D.: mgweed.14012
Posted: Thu Dec 6 08:52:14 1984
Date-Received: Fri, 7-Dec-84 02:17:06 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 20

A friend of mine just got the MBA-TOR rtty package from AEA. He soon
found out that it will NOT work with the Kantronics interface (TU).
He is using the Commodore 64.

There are a couple of signal lines that are inverted in a couple of
the states: rtty data is inverted in the send-space mode, and cw.id
is inverted in the send-mark mode.

I solved the problem by decoding the leads from the Commodore 64
with a 74LS138 and then re-creating the proper outputs with a
74LS00.

If anyone out there has the same problem, I will be glad to furnish
the details.

The folks at AEA said "just invert one lead" and were not sympathetic.
I guess that because the cable furnished will fit, they think that
makes it "compatible"!

From -3457635777562747762
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,18b38aacfe740cfd,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 15f443,18b38aacfe740cfd,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 151e61,18b38aacfe740cfd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-06 10:10:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ttidca.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!philabs!ttidca!sorgatz
From: sorgatz@ttidca.UUCP (Avatar)
Newsgroups: net.wanted,net.ham-radio,net.analog
Subject: Capacitors Wanted!
Message-ID: <182@ttidca.UUCP>
Date: Thu, 6-Dec-84 13:10:19 EST
Article-I.D.: ttidca.182
Posted: Thu Dec 6 13:10:19 1984
Date-Received: Sun, 9-Dec-84 06:24:08 EST
Organization: TTI, Santa Monica, CA.
Lines: 16
Xref: watmath net.wanted:5315 net.ham-radio:2162 net.analog:111

< munch! gobble! chomp! chew! Why don't "THEY" fix this bug? >

           Desperate plea for HELP!
 *Wanted! Pyramid electrolytic caps TM-58's, dual 40/80 mfd @ 450v.
    will pay any reasonable price or take any reasonable quantity.
 *Also Wanted-information about the formula of the electrolytic solution
    utilized by this particular manufacture (Pyramid) and the availability
    of bulk rolls of 2.75" capacitor foils and Kraft paper.

(will pay finder's fees too!)

advTHANKS!ance,

-Avatar->

("..Let's grind-up a few of these 'HOLY-COWS' for hamburger and see just
HOW hungry-for-the-Truth you *really* are!" -EKS)

From 3728727842926398647
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,35b11b3477b70a13,start
X-Google-Attributes: gid126c94,public
X-Google-Thread: 15f443,35b11b3477b70a13,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 151e61,35b11b3477b70a13,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-06 11:05:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ttidca.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!philabs!ttidca!sorgatz
From: sorgatz@ttidca.UUCP (Avatar)
Newsgroups: net.wanted,net.ham-radio,net.analog
Subject: Capacitors Wanted! (my USENET path)
Message-ID: <183@ttidca.UUCP>
Date: Thu, 6-Dec-84 14:05:28 EST
Article-I.D.: ttidca.183
Posted: Thu Dec 6 14:05:28 1984
Date-Received: Sun, 9-Dec-84 06:24:40 EST
Organization: TTI, Santa Monica, CA.
Lines: 9
Xref: watmath net.wanted:5316 net.ham-radio:2163 net.analog:112

< munch! gobble! chomp! chew! Why don't "THEY" fix this bug? >
ADDENDUM to previous message: Sorry about that, This includes a real path
so that y'all can send me mail about the "SAGAN's and SAGAN's" of Pyramid
TM-58 capacitors that are available!
advTHANK'Sance!,
-Avatar->
USENET path: {garfield,lasspvax,linus,cmcl2,seismo}!philabs!ttidca!sorgatz
("..Let's grind-up a few of these 'HOLY-COWS' for hamburger and see just
HOW hungry-for-the-Truth you *really* are!" -EKS)

From -4665343043151422014
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 126c94,38e2c5bb096517e9
X-Google-Attributes: gid126c94,public
X-Google-Thread: 151e61,38e2c5bb096517e9
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-06 12:04:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site wateng.UUCP
Path: utzoo!watmath!wateng!ksbszabo
From: ksbszabo@wateng.UUCP (Kevin Szabo)
Newsgroups: net.analog,net.ham-radio
Subject: Re: Telephone Glitch suppressor query
Message-ID: <1734@wateng.UUCP>
Date: Thu, 6-Dec-84 15:04:04 EST
Article-I.D.: wateng.1734
Posted: Thu Dec 6 15:04:04 1984
Date-Received: Fri, 7-Dec-84 01:10:27 EST
References: <1219@hplabs.UUCP>
Organization: VLSI Group, U of Waterloo
Lines: 30
Xref: watmath net.analog:105 net.ham-radio:2154

The problem with CMOS is that there are many P-N-P-N structures between
Vdd and Vss. As most of you know this is a SCR (Silicon Controlled
Rectifier) Structure, and is quite sensitive to High dV/dT (transients).
I would suggest putting a small capacitor across the line. The impedance
of a telephone line is 600 ohms, so the reactance of the capacitor
should be quite a bit higher so that it doesn't attenuate the high frequency
components. I would try a cap that gave 1K ohm at 5khz,

    Xc = 1 / (2 * pi * C) ... === 31 * 10 ^ -9 Farad.

Which sounds a little high... maybe start with .001 micro farad and then
try moving up to to the .031 micro farad cap. Remember that the ring
voltage is 90v p-p supermiposed on the 45v dc that is normally on the
line. I forget the frequency, but it is below 1000 hz (20 Hz?). Anyway,
your cap shouldn't be polorized, and should be good for 200 V.

I trust your friend is on an old step-by-step Central Office... I think
capacitors on the line would probably confuse a modern CO.

With regards to Latch - Up, (plug time) we have some people doing interesting
research that will predict latch up paths in VLSI circuitry. It is a
difficult problem for CMOS designers since Latch - Up is a very large
problem yet one which still has to be check for manually (i.e. look
at the I.C. masks and identify the suspect P-N-P-N between Vss and Vdd).
A grad student here has modified a circuit extractor to Identify these
paths and analyze them for latch-up susceptibility. Very nice.

                  Kevin
--
Kevin Szabo watmath!wateng!ksbszabo (U of Waterloo VLSI Group, Waterloo Ont.)

From 1380246346242121796
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f5f1bffebfc6813a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-07 14:12:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10 5/3/83; site olivee.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!hplabs!oliveb!olivee!gnome
From: gnome@olivee.UUCP (Gary Traveis)
Newsgroups: net.ham-radio
Subject: Looking for scanner
Message-ID: <222@olivee.UUCP>
Date: Fri, 7-Dec-84 17:12:38 EST
Article-I.D.: olivee.222
Posted: Fri Dec 7 17:12:38 1984
Date-Received: Mon, 10-Dec-84 01:37:24 EST
Organization: Olivetti ATC, Cupertino, Ca
Lines: 21

I'm looking for references to a good scanner presently
on the market. If you reply, please let me know WHERE
you found the best prices.

Preferred features:
1) 12vdc/110ac operation
2) covers most widely used freqs
   (that 30MHZ-2.N GHZ looks nice, but too expensive!)
3) Can be altered to take external digital input.
4) Will do "sweeps" from one freq to another.

All of the above are preferences. I still want to hear
both good and bad reports on all scanners that people have
used out there.

     Thanks,

     Gary

(hplabs,allegra,ihnp4)oliveb!olivee!gnome

From 1681380853646174289
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,41ccefe83429108e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-08 06:22:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site uok.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!uok!mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: CB vs HAM comments
Message-ID: <2800022@uok.UUCP>
Date: Sat, 8-Dec-84 09:22:00 EST
Article-I.D.: uok.2800022
Posted: Sat Dec 8 09:22:00 1984
Date-Received: Tue, 11-Dec-84 04:23:09 EST
Lines: 26
Nf-ID: #N:uok:2800022:000:1477

Nf-From: uok!mpackard   Dec 8 08:22:00 1984

[eat me]

I've said this before and you all are probably tired of hearing it, but if the word CB is mentioned then the majority of the Amateur Radio public will sneer and jeer. This may be quite appropriate but it doesn't sit well when you hear it again and again. I only consider CB as a radio and not a mentality. Doctors do the same thing as Hams by sneering and jeering at chiropractors (sp?) and thinking that they are better than them. When in truth both of them can be justified. It's common to think of yourself as being better than the rest because you had to study more or had a tougher exam. I used to think I was better because to learn how to fix a radar took 37 weeks and to learn how to operate it took maybe a fourth of that. So me and my co-workers would sneer and jeer. It made us look bad, it makes you look bad and is considered unprofessional. When CB was proposed, the Hams formed an action commitee to ensure that CB is where it is in the spectrum and to ensure that it would fail. I think if the Hams welcomed the CB'ers to a UHF or even VHF spectrum they would themselves prosper. I always think of the radio's that are used on 10 meters now, and probably why 10 meters is such a success is due to being able to buy a CB radio, easily convert it enjoy. By welcoming the CB'ers to UHF we could expand 10 meters and also get new radios for UHF and build up that band. God knows there aren't enough Hams up there to attract a manufacturer.

From -6709917919542245624
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6caabf65148c3ba7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-08 15:13:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: more US govt SWL freqs
Message-ID: <415@ihu1h.UUCP>
Date: Sat, 8-Dec-84 18:13:06 EST
Article-I.D.: ihu1h.415
Posted: Sat Dec 8 18:13:06 1984
Date-Received: Sun, 9-Dec-84 03:51:07 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 65

Here are some more interesting stations, most found while rummaging through some microfiche:

US: FEMA, time signals by voice, 50 KW am

```
                      [Edgewood Arsenal, ]_   0.1790____WGY20     (others)
US: Navy, radiolocation land station, 300w
                      [San Clementi, CA]___   1.7845____callsign? (govt recds)
              "       [Pt Mugu, CA]________   1.7850____callsign? (govt recds)
US: Army, radiolocation mobile station, 2w
                      [Belton, TX]_________   1.7930____callsign? (govt recds)
              "       [Ft Hood, TX]________   1.7930____callsign? (govt recds)
              "       [Gatesville, TX]_____   1.7930____callsign? (govt recds)
              "       [Topsey, TX]_________   1.7930____callsign? (govt recds)
US: Navy, radionavigation land station, 300w
                      [Camp Pendelton, CA]_   1.9926____callsign? (govt recds)
              "       [Seal Beach, CA]_____   1.9930____callsign? (govt recds)
US: Air Force, experimental testing station, 600w
                      [Grand Forks,ND]_____   2.0000____callsign? (govt recds)
              "       [Verona, NY]_________   2.0000____callsign? (govt recds)
US: Air Force, sounder network station, 100w
                      [Bergstrom, TX]______   2.0000____callsign? (govt recds)
              "       [Dixon, CA]__________   2.0000____callsign? (govt recds)
              "       [Driver, VA]_________   2.0000____callsign? (govt recds)
              "       [Elgin AFB, FL]______   2.0000____callsign? (govt recds)
              "       [MacDill AFB, FL]____   2.0000____callsign? (govt recds)
              "       [Nellis AFB, NV]_____   2.0000____callsign? (govt recds)
              "       [Shaw, SC]___________   2.0000____callsign? (govt recds)
US: Air Force, sounder network station, 5kw
                      [Bingham, ME]________   2.0000____callsign? (govt recds)
US: Air Force, sounder prediction station, 100w
                      [Homestead AFB, FL]__   2.0000____callsign? (govt recds)
US: Air Force, sounder prediction station, 10w
                      [Avon Pk, FL]________   2.0000____callsign? (govt recds)
              "       [Cape Canavrl, FL]___   2.0000____callsign? (govt recds)
              "       [Kissimee, FL]_______   2.0000____callsign? (govt recds)
              "       [Patrick AFB, FL]____   2.0000____callsign? (govt recds)
              "       [St Luciec, FL]______   2.0000____callsign? (govt recds)
US: Air Force, sounder prediction station, 20w
                      [Robins AFB, GA]_____   2.0000____callsign? (govt recds)
US: Navy, experimental research station, 10w
                      [Chspk Beach, MD]____   2.0000____callsign? (govt recds)
US: Navy, sounder network station, 100w
                      [Isabella, PR]_______   2.0000____NAU       (govt recds)
US: Navy, sounder network station, 30kw
                      [Lualuale, HI]_______   2.0000____NPM       (govt recds)
              "       [Barrigad, Guam]_____   2.0000____NPN       (govt recds)
              "       [Mt Moffett, AK]_____   2.0000____NUD       (govt recds)
US: Commerce, ship station or bridge-to-bridge station, 100w am
                      [Great Lakes]________   2.0030____callsign? (govt recds)
US: Coast Guard, ship station or bridge-to-bridge station, 125w ssb
                      [Great Lakes]________   2.0044____callsign? (govt recds)
US: Coast Guard, ship station or bridge-to-bridge station, 1kw ssb
                      [San Fran, CA]_______   2.0044____callsign? (govt recds)
US: Army, fixed station, 400w 1.1F1 emission
                      [Ft Meade, MD]_______   2.0050____AAC       (govt recds)
              "       [Ft Monroe, VA]______   2.0050____AAA       (govt recds)
US: Coast Guard, ship station or bridge-to-bridge station, 100w am
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                      [Los Angeles, CA]____   2.0090____callsign? (govt recds)
              "       [Tampa, FL]__________   2.0090____WFA       (govt recds)
US: FEMA, slow speed encrypted cw 10/18, 0437Z
                      [Denver, CO]_________   3.3797____WGY908    (B. Parnass)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -1923334506375785558
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4950aa29da84c21e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-09 19:22:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: GE Withdraws PRCS from FCC
Message-ID: <416@ihu1h.UUCP>
Date: Sun, 9-Dec-84 22:22:35 EST
Article-I.D.: ihu1h.416
Posted: Sun Dec  9 22:22:35 1984
Date-Received: Mon, 10-Dec-84 06:36:41 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 34


From Radio Communications Report (International    Thomson
     Com-
munications, Inc.) December 3, 1984:


            GE WITHDRAWS PRCS FROM FCC

   SYRACUSE - The General Electric Co. has anounced it  will
   no  longer  pursue development of its personal radio com-
   munications service [PRCS]......

   The corporate move comes surprisingly close to an  expec-
   ted   FCC  rulemaking    on a proposed allocation of spectrum
   for the PRCS    and a variety of other newly proposed servi-
   ces.   GE was  seeking  4 MHz of spectrum (898 - 902 MHz and
   937 - 941 MHz) from the land  mobile reserve spectrum.....

   The proposed    radio service received mixed reviews  within
   the   land  mobile  radio  industry, with comments ranging
   from  "a poor  man's cellular"    to a sophisticated  citizens
   band  radio.

   GE's  PRCS was actually a little of both.  It   proposed  to
   offer low-priced two-way communications with    the capabil-
```

ity of interconnection to the public switched telephone network. The proposed service was expected to have a range of 5 miles up to 15 miles with a repeater.....

Mura Corp. is also seeking FCC support for a "consumer radio service" using 900 MHz land mobile reserve frequencies.

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 3978392651963655144
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,86c661f20afbd829,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-11 08:23:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2.fluke 9/24/84; site fluke.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!houxm!vax135!cornell!uw-beaver!ssc-vax!fluke!limey
From: limey@fluke.UUCP (Paul Baldock)
Newsgroups: net.ham-radio
Subject: KA9Q could I have your E-Mail path
Message-ID: <1296@vax3.fluke.UUCP>
Date: Tue, 11-Dec-84 11:23:31 EST
Article-I.D.: vax3.1296
Posted: Tue Dec 11 11:23:31 1984
Date-Received: Wed, 19-Dec-84 02:33:13 EST
Distribution: net
Organization: John Fluke Mfg. Co., Inc., Everett, WA
Lines: 9

Phil,

Could you reply to this, so that I can get the 'path' to you.

Thanks,

Paul KW7Y

From 8191664848968918794
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2e8930a94c7b36e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-11 12:41:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site terak.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!godot!harvard!seismo!hao!

noao!terak!doug
From: doug@terak.UUCP (Doug Pardee)
Newsgroups: net.ham-radio
Subject: Re: Commemorative callsigns
Message-ID: <222@terak.UUCP>
Date: Tue, 11-Dec-84 15:41:43 EST
Article-I.D.: terak.222
Posted: Tue Dec 11 15:41:43 1984
Date-Received: Thu, 13-Dec-84 02:29:18 EST
References: <6186@brl-tgr.ARPA>
Distribution: net
Organization: Terak Corporation, Scottsdale, AZ, USA
Lines: 14

> I've seen several notices in this newsgroup, and also seen and heard
> references in other ham publications and radio programs, referring to
> the use and authorization of "commemorative" or "special-event" callsigns.
> It seems that these are usually just a replacement of the normal prefix
> of a callsign with some other prefix, and effective for a limited time.
>
> My query is, basically, "why?"
> Are these things really worthwhile or just gimmicks?

The idea here is to create yet another prefix, so that prefix-hunters
have something new to hunt. This assures that the operator of the
commemorative station will have plenty of QSO's.

Doug Pardee/N7FB -- Terak Corp. -- !{hao,ihnp4,decvax}!noao!terak!doug

From 1551282331511209749
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d744263aa4790a9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-11 21:09:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: non-ham stations on 75/80m freqs
Message-ID: <418@ihu1h.UUCP>
Date: Wed, 12-Dec-84 00:09:02 EST
Article-I.D.: ihu1h.418
Posted: Wed Dec 12 00:09:02 1984
Date-Received: Thu, 13-Dec-84 00:42:07 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 148

Ever wonder what those non-amateur stations are on 75/80 meters?
Here's a start:

```
Continental Air Lines, aero/fixed
                      [Agana, Gulf of Mex]_   3.9914____KGA57     (govt recds)
               "      [Agana, Gulf of Mex]_   3.9915____KGA57     (govt recds)
US: Coast Guard, fixed station, 1.24F1 and ssb emission, 1kw
                      [Gesashi, Ryukyu Is]_   3.7875____NRT2      (govt recds)
               "      [Guam]_____________     3.7875____NRV       (govt recds)
               "      [Hokkaido, Japan]____   3.7875____NRT9      (govt recds)
               "      [Iwo Jima]__________    3.7875____NRT3      (govt recds)
               "      [Kamiseya, Japan]____   3.7875____NRT       (govt recds)
               "      [Marcus Is]_________    3.7875____NRV6      (govt recds)
               "      [Saipan, Mariana Is]_   3.7875____NRV2      (govt recds)
               "      [Yap]_______________    3.7875____NRV7      (govt recds)
US: Coast Guard, fixed station, 1.24F1 emission, 1kw
                      [Sardinia, Italy]____   3.6275____NCI11     (govt recds)
US: Coast Guard, fixed station, ssb, 1kw
                      [Lampedusa, Italy]___   3.6270____NCI3      (govt recds)
               "      [Sardinia, Italy]____   3.6270____NCI11     (govt recds)
               "      [Sardinia, Italy]____   3.7995____NCI11     (govt recds)
US: Coast Guard, Mediterranean LORAN-C Net, fixed station, 1.24F1 emission, 1k
                     w
                      [Lampedusa, Italy]___   3.6275____NCI3      (govt recds)
US: Coast Guard, Mediterranean LORAN-C Net, fixed station, ssb, 1kw
                      [Lampedusa, Italy]___   3.7995____NCI3      (govt recds)
US: Coast Guard, Norwegian Sea/N Atlantic LORAN-C Net, fixed station, 6A9B and
                      0.1A1 emissions, 1kw
                      [Shetland Island, G]_   3.6070____NMS       (govt recds)
US: Interior, fixed station, 6A9B emission, 5kw
                      [Babelthp]__________    3.9530____KUP68     (govt recds)
               "      [Ponape]____________    3.9750____KUP66     (govt recds)
               "      [Saipan, Mariana Is]_   3.9530____KUP71     (govt recds)
               "      [Saipan, Mariana Is]_   3.9750____KUP71     (govt recds)
               "      [Yap]_______________    3.9530____KUP69     (govt recds)
US: Interior, Pacific Trust Territory Net, fixed station, ssb, 100w
                      [Aerik]_____________    3.9885____KUS83     (govt recds)
               "      [Ailuk Is]__________    3.9885____KWQ30     (govt recds)
               "      [Aimeliik]__________    3.9885____KUS99     (govt recds)
               "      [Airai]_____________    3.9885____KWQ61     (govt recds)
               "      [Airik Is]__________    3.9885____KWQ29     (govt recds)
               "      [Angaur Is]_________    3.9885____KUP99     (govt recds)
               "      [Arbwa Is]__________    3.9885____KWQ78     (govt recds)
               "      [Arno Is]___________    3.9885____KWQ63     (govt recds)
               "      [Asor Is]___________    3.9885____KUS87     (govt recds)
               "      [Aur Is]____________    3.9885____KWQ35     (govt recds)
               "      [Bikini Is]_________    3.9885____KWQ60     (govt recds)
               "      [Chol]______________    3.9885____KWQ62     (govt recds)
               "      [Eauripki]__________    3.9885____KWQ45     (govt recds)
               "      [Ebeye]_____________    3.9885____KUP73     (govt recds)
               "      [Ebon Is]___________    3.9885____KUS81     (govt recds)
               "      [Elato Is]__________    3.9885____KWQ55     (govt recds)
               "      [Enyu Is]___________    3.9885____KWQ52     (govt recds)
               "      [Fais Is]___________    3.9885____KWQ44     (govt recds)
               "      [Falalopi]__________    3.9885____KUS80     (govt recds)
               "      [Faraulpi]__________    3.9885____KWQ46     (govt recds)
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" [Ifalik Is]_____ 3.9885____KWQ27 (govt recds)
" [Imroj Is]_____ 3.9885____KUP84 (govt recds)
" [Ine Is]_____ 3.9885____KUP64 (govt recds)
" [Jabor]_____ 3.9885____KUP80 (govt recds)
" [Jabwot]_____ 3.9885____KWQ65 (govt recds)
" [Japtan Is]_____ 3.9885____KWQ79 (govt recds)
" [Jebal Is]_____ 3.9885____KWQ66 (govt recds)
" [Jem Is]_____ 3.9885____KWQ67 (govt recds)
" [Kaven Is]_____ 3.9885____KUS88 (govt recds)
" [Kayangel]_____ 3.9885____KUP90 (govt recds)
" [Kilangei]_____ 3.9885____KWQ68 (govt recds)
" [Kili Is]_____ 3.9885____KUP85 (govt recds)
" [Kosrae]_____ 3.9885____KUP76 (govt recds)
" [Kpngmrng]_____ 3.9885____KUP89 (govt recds)
" [Kwajalen]_____ 3.9885____KUP75 (govt recds)
" [Lae Is]_____ 3.9885____KWQ34 (govt recds)
" [Lamotrki Is]_____ 3.9885____KWQ28 (govt recds)
" [Laura]_____ 3.9885____KWQ69 (govt recds)
" [Lib Is]_____ 3.9885____KWQ31 (govt recds)
" [Likiep Is]_____ 3.9885____KUS86 (govt recds)
" [Losap Is]_____ 3.9885____KUP92 (govt recds)
" [Lukunori]_____ 3.9885____KUP81 (govt recds)
" [Mae Is]_____ 3.9885____KWQ70 (govt recds)
" [Majkin Is]_____ 3.9885____KWQ71 (govt recds)
" [Mejit Is]_____ 3.9885____KUS85 (govt recds)
" [Mejurrki]_____ 3.9885____KWQ72 (govt recds)
" [Melekeok]_____ 3.9885____KUS99 (govt recds)
" [Mili Is]_____ 3.9885____KUS90 (govt recds)
" [Mokil]_____ 3.9885____KUS91 (govt recds)
" [Nama Is]_____ 3.9885____KWQ58 (govt recds)
" [Namoluki]_____ 3.9885____KUP96 (govt recds)
" [Namorik]_____ 3.9885____KUS82 (govt recds)
" [Namu Is]_____ 3.9885____KUS89 (govt recds)
" [Ngardmau]_____ 3.9885____KUS94 (govt recds)
" [Ngarmlng]_____ 3.9885____KUS97 (govt recds)
" [Ngatik Is]_____ 3.9885____KWQ25 (govt recds)
" [Ngatpang]_____ 3.9885____KWQ40 (govt recds)
" [Ngehesar]_____ 3.9885____KUS98 (govt recds)
" [Ngerechl]_____ 3.9885____KUP91 (govt recds)
" [Ngulu Is]_____ 3.9885____KWQ57 (govt recds)
" [Nikalapi]_____ 3.9885____KWQ54 (govt recds)
" [Nomwin Is]_____ 3.9885____KUP94 (govt recds)
" [Nukuoroi]_____ 3.9885____KWQ24 (govt recds)
" [Ogiwalpt]_____ 3.9885____KUS95 (govt recds)
" [Ollei]_____ 3.9885____KWQ21 (govt recds)
" [Oroluk Is]_____ 3.9885____KWQ77 (govt recds)
" [Pingelpi]_____ 3.9885____KUP88 (govt recds)
" [Pisarasi]_____ 3.9885____KWQ41 (govt recds)
" [Ponape]_____ 3.9885____KUP66 (govt recds)
" [Puloanni]_____ 3.9885____KWQ59 (govt recds)
" [Pulusuki]_____ 3.9885____KWQ23 (govt recds)
" [Puluwati]_____ 3.9885____KUP93 (govt recds)
" [Rongelpi]_____ 3.9885____KUP95 (govt recds)

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               "        [Ruo Is]_____________   3.9885____KWQ22     (govt recds)
               "        [Satawali]___________   3.9885____KWQ26     (govt recds)
               "        [Satawani]___________   3.9885____KUP97     (govt recds)
               "        [Sonsorli]___________   3.9885____KWQ43     (govt recds)
               "        [Sorol Is]___________   3.9885____KWQ56     (govt recds)
               "        [Tabal Is]___________   3.9885____KWQ33     (govt recds)
               "        [Tjan Is]____________   3.9885____KWQ73     (govt recds)
               "        [Tobi Is]____________   3.9885____KWQ42     (govt recds)
               "        [Toka Is]____________   3.9885____KUP79     (govt recds)
               "        [Truk]_______________   3.9885____KUP67     (govt recds)
               "        [Ujae Is]____________   3.9885____KWQ39     (govt recds)
               "        [Ujelangi Is]________   3.9885____KWQ98     (govt recds)
               "        [Ulimang]____________   3.9885____KUS93     (govt recds)
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               "        [Uman Is]____________   3.9885____KWQ48     (govt recds)
               "        [Utirik Is]__________   3.9885____KWQ38     (govt recds)
               "        [Wenekiti]___________   3.9885____KWQ49     (govt recds)
               "        [Woleai Is]__________   3.9885____KUP70     (govt recds)
               "        [Wonmej Is]__________   3.9885____KWQ74     (govt recds)
               "        [Wotho Is]___________   3.9885____KWQ37     (govt recds)
               "        [Wotja Is]___________   3.9885____KWQ75     (govt recds)
               "        [Wotje Is]___________   3.9885____KUS84     (govt recds)
               "        [Yap]________________   3.9885____KUP69     (govt recds)
US: Interior, Pacific Trust Territory Net, fixed station, ssb, 150w
                        [Kagmanpt]___________   3.9885____KUP74     (govt recds)
US: Interior, Pacific Trust Territory Net, fixed station, ssb, 1kw
                        [Kagmanpt]___________   3.9885____KUP71     (govt recds)
               "        [Korkor]_____________   3.9885____KUP68     (govt recds)
               "        [Majuro]_____________   3.9885____KUP65     (govt recds)
US: Navy, fixed station, 12A9 emission, 40kw
                        [Sand Is, Midway Is]_   3.8100____NQM       (govt recds)
               "        [Wahiawa, HI]________   3.8100____NPM       (govt recds)
US: Navy, fixed, ship, bridge-to-bridge stations, 1.24F1 and A7J emissions, 10
                       kw
                        [Barrigad, Guam]_____   3.9250____NPN       (govt recds)
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================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From 8134809745635149010
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,99b137c081390606,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-12 04:38:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!dual!decwrl!dec-rhea!dec-beta!
blanchard
From: blanchard@beta.DEC
Newsgroups: net.ham-radio
Subject: Merry Christmas
Message-ID: <218@decwrl.UUCP>
```

Date: Wed, 12-Dec-84 07:38:54 EST
Article-I.D.: decwrl.218
Posted: Wed Dec 12 07:38:54 1984
Date-Received: Fri, 14-Dec-84 05:00:06 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 84

TWAS THE NIGHT BEFORE CHRISTMAS, WHEN ALL THROUGH THE SHACK,
NOT A METER WAS STIRRING, NOT EVEN ON THE RACK,
THE FINALS WERE HUNG BY THE CHIMMNEY WITH CARE,
IN HOPES THAT ST. NICK WOULD TUNE THEM RIGHT THERE.

THE CHILDREN WERE NESTLED ALL SNUG IN THEIR BEDS,
WHILE VISIONS OF MOONBOUNCE DANCED IN THEIR HEADS;
AND MAMA WITH HER HANDHELD, AND I WITH A TRAP,
HAD JUST SETTLED OUR BRAINS WITH A HIGH VOLTAGE ZAP.

WHEN OUT ON THE TOWER, THERE ROSE SUCH A CLATTER,
I SPRANG FROM THE BENCH TO SEE WHAT WAS THE MATTER.
AWAY TO THE WINDOW I FLEW LIKE A HIGH TENSION FLASH,
TORE OPEN THE SHUTTERS AND THREW UP THE SASH.

THE MOON ON THE BREAST OF THE NEW FALLEN SNOW,
GAVE THE GLOW OF TUBES OF DAYS LONG AGO.
WHEN WHAT TO MY WONDERING EYES SHOULD APPEAR,
BUT A MINIATURE SLEIGH, WITH MOBILE AMATEUR GEAR;

WITH A LITTLE OLD HAM, SO LIVELY AND QUICK,
I KNEW IN A MOMENT, IT MUST BE ST. NICK.
MORE RAPID THAN McELROY, HIS KEYING IT CAME
AND HE LISTENED AND HE TUNED AND CALLED THEM BY NAME;

"NOW DASHER! NOW DAMPER! NOW PHASOR AND DX'EN,
ON COMMON! ON COUPLED! ON DONOR AND BLITZEN!
TO THE TOP OF THE SHACK, TO THE TOP OF THE WALL!
NOW DASH AWAY! DASH AWAY! DASH AWAY ALL!"

AS DRY DAYS BEFORE THE FIELD DAY DO FLY,
WHEN THEY MEET WITH THE FORECAST AND NEVER COMPLY,
SO UP ON THE SHACK TOP THE SIGNALS THEY FLEW,
WITH THE SLEIGH FULL OF GEAR, AND ST. NICHOLAS TOO.

AND THEN IN A BAND OPENING I HEARD ON THE ROOF,
ANTENNA WORK BY A HAM ON THE HOOF,
AS I DREW IN MY HEAD AND WAS TUNING AROUND,
DOWN THE FEEDLINE CAME ST. NICHOLAS WITH A BOUND.

HE WAS ALL TANGLED IN COAX, FROM HIS HEAD TO HIS FOOT
AND HIS CHECKSHEETS WERE ALL TARNISHED WITH ASHES AND SOOT.
A BUNDLE OF GEAR HE HAD FLUNG ON HIS BACK,

AND HE LOOKED LIKE A CONTESTER OPENING A SIX PACK.

HIS HANDHELD-HOW IT CRACKLED! THE SIGNALS WOULD VARY!
HIS EQUIPMENT MADE NOISES, HIS QSO WAS QUITE MERRY!
HIS DROLL LITTLE MOUTH WAS DRAWN UP LIKE A MHO
AND THE BEARD OF HIS CHIN WAS WHITE AS SLOW SCAN SNOW.

THE STUMP OF A PIPE HE HELD TIGHT IN HIS TEETH,
AND THE SMOKE IT ENCIRCLED HIS HEAD LIKE A WREATH.
HE HAD A BROAD FACE AND A ROUND LITTLE BELLY,
THAT SHOOK WHEN HE LAUGHED, LIKE THE ROLL OF A TELE.

HE WAS CHUBBY AND PLUMP, A RIGHT OLD ELF,
AND I LAUGHED WHEN I SAW HIM, IN SPITE OF MYSELF;
A WINK OF HIS EYE AND A TWIST OF HIS HEAD
SOON GAVE ME TO KNOW I HAD NOT TO QR-ZED.

HE SPOKE NOT A WORD, BUT WENT STRAIGHT TO HIS WORK,
AND TUNED ALL THE FINALS, THEN TURNED WITH A JERK,
AND KEYING HIS FINGER ASIDE OF HIS NOSE
AND GIVING A NOD, UP THE FEEDLINE HE ROSE.

HE SPRANG TO HIS SLEIGH, HIS HANDHELD GAVE A WHISTLE,
AND AWAY THEY ALL FLEW, LIKE THE DOWN OF A THISTLE.
BUT I HEARD HIM EXCLAIM ERE HE FADED OUT OF SIGHT;

"HAPPY CHRISTMAS TO ALL

AND TO ALL

A GOOD NIGHT"

K1YPP

From -3310903082895085342
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d744263aa4790a9
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-12 08:55:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: non-ham stations on 75/80m freqs
Message-ID: <419@ihu1h.UUCP>
Date: Wed, 12-Dec-84 11:55:13 EST

Article-I.D.: ihu1h.419
Posted: Wed Dec 12 11:55:13 1984
Date-Received: Thu, 13-Dec-84 03:19:05 EST
References: <418@ihu1h.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 108

More 75/80m non-ham users:

US: Interior, Pacific Trust Territory Net, fixed station, ssb, 100w

	[Aerik]	3.9915	KUS83	(govt recds)
"	[Ailuk Is]	3.9915	KWQ30	(govt recds)
"	[Aimeliik]	3.9915	KUS99	(govt recds)
"	[Airai]	3.9915	KWQ61	(govt recds)
"	[Airik Is]	3.9915	KWQ29	(govt recds)
"	[Angaur Is]	3.9915	KUP99	(govt recds)
"	[Arbwa Is]	3.9915	KWQ78	(govt recds)
"	[Arno Is]	3.9915	KWQ63	(govt recds)
"	[Asor Is]	3.9915	KUS87	(govt recds)
"	[Aur Is]	3.9915	KWQ35	(govt recds)
"	[Bikini Is]	3.9915	KWQ60	(govt recds)
"	[Chol]	3.9915	KWQ62	(govt recds)
"	[Eauripki]	3.9915	KWQ45	(govt recds)
"	[Ebeye]	3.9915	KUP73	(govt recds)
"	[Ebon Is]	3.9915	KUS81	(govt recds)
"	[Elato Is]	3.9915	KWQ55	(govt recds)
"	[Enyu Is]	3.9915	KWQ52	(govt recds)
"	[Fais Is]	3.9915	KWQ44	(govt recds)
"	[Falalopi]	3.9915	KUS80	(govt recds)
"	[Faraulpi]	3.9915	KWQ46	(govt recds)
"	[Ifalik Is]	3.9915	KWQ27	(govt recds)
"	[Imroj Is]	3.9915	KUP84	(govt recds)
"	[Ine Is]	3.9915	KUP64	(govt recds)
"	[Jabor]	3.9915	KUP80	(govt recds)
"	[Jabwot]	3.9915	KWQ65	(govt recds)
"	[Japtan Is]	3.9915	KWQ79	(govt recds)
"	[Jebal Is]	3.9915	KWQ66	(govt recds)
"	[Jem Is]	3.9915	KWQ67	(govt recds)
"	[Kaven Is]	3.9915	KUS88	(govt recds)
"	[Kayangel]	3.9915	KUP90	(govt recds)
"	[Kilangei]	3.9915	KWQ68	(govt recds)
"	[Kili Is]	3.9915	KUP85	(govt recds)
"	[Kosrae]	3.9915	KUP76	(govt recds)
"	[Kpngmrng]	3.9915	KUP89	(govt recds)
"	[Kwajalen]	3.9915	KUP75	(govt recds)
"	[Lae Is]	3.9915	KWQ34	(govt recds)
"	[Lamotrki Is]	3.9915	KWQ28	(govt recds)
"	[Laura]	3.9915	KWQ69	(govt recds)
"	[Lib Is]	3.9915	KWQ31	(govt recds)
"	[Likiep Is]	3.9915	KUS86	(govt recds)
"	[Losap Is]	3.9915	KUP92	(govt recds)
"	[Lukunori]	3.9915	KUP81	(govt recds)
"	[Mae Is]	3.9915	KWQ70	(govt recds)

" [Majkin Is]_____ 3.9915____KWQ71 (govt recds)
" [Mejit Is]_____ 3.9915____KUS85 (govt recds)
" [Mejurrki]_____ 3.9915____KWQ72 (govt recds)
" [Melekeok]_____ 3.9915____KUS99 (govt recds)
" [Mili Is]_____ 3.9915____KUS90 (govt recds)
" [Mokil]_____ 3.9915____KUS91 (govt recds)
" [Nama Is]_____ 3.9915____KWQ58 (govt recds)
" [Namoluki]_____ 3.9915____KUP96 (govt recds)
" [Namorik]_____ 3.9915____KUS82 (govt recds)
" [Namu Is]_____ 3.9915____KUS89 (govt recds)
" [Ngardmau]_____ 3.9915____KUS94 (govt recds)
" [Ngarmlng]_____ 3.9915____KUS97 (govt recds)
" [Ngatik Is]_____ 3.9915____KWQ25 (govt recds)
" [Ngatpang]_____ 3.9915____KWQ40 (govt recds)
" [Ngehesar]_____ 3.9915____KUS98 (govt recds)
" [Ngerechl]_____ 3.9915____KUP91 (govt recds)
" [Ngulu Is]_____ 3.9915____KWQ57 (govt recds)
" [Nikalapi]_____ 3.9915____KWQ54 (govt recds)
" [Nomwin Is]_____ 3.9915____KUP94 (govt recds)
" [Nukuoroi]_____ 3.9915____KWQ24 (govt recds)
" [Ogiwalpt]_____ 3.9915____KUS95 (govt recds)
" [Ollei]_____ 3.9915____KWQ21 (govt recds)
" [Oroluk Is]_____ 3.9915____KWQ77 (govt recds)
" [Pingelpi]_____ 3.9915____KUP88 (govt recds)
" [Pisarasi]_____ 3.9915____KWQ41 (govt recds)
" [Ponape]_____ 3.9915____KUP66 (govt recds)
" [Puloanni]_____ 3.9915____KWQ59 (govt recds)
" [Pulusuki]_____ 3.9915____KWQ23 (govt recds)
" [Puluwati]_____ 3.9915____KUP93 (govt recds)
" [Rongelpi]_____ 3.9915____KUP95 (govt recds)
" [Ruo Is]_____ 3.9915____KWQ22 (govt recds)
" [Satawali]_____ 3.9915____KWQ26 (govt recds)
" [Satawani]_____ 3.9915____KUP97 (govt recds)
" [Sonsorli]_____ 3.9915____KWQ43 (govt recds)
" [Sorol Is]_____ 3.9915____KWQ56 (govt recds)
" [Tabal Is]_____ 3.9915____KWQ33 (govt recds)
" [Tjan Is]_____ 3.9915____KWQ73 (govt recds)
" [Tobi Is]_____ 3.9915____KWQ42 (govt recds)
" [Toka Is]_____ 3.9915____KUP79 (govt recds)
" [Truk]_____ 3.9915____KUP67 (govt recds)
" [Ujae Is]_____ 3.9915____KWQ39 (govt recds)
" [Ujelangi Is]_____ 3.9915____KWQ98 (govt recds)
" [Ulimang]_____ 3.9915____KUS93 (govt recds)
" [Ulul Is]_____ 3.9915____KUP82 (govt recds)
" [Uman Is]_____ 3.9915____KWQ48 (govt recds)
" [Utirik Is]_____ 3.9915____KWQ38 (govt recds)
" [Wenekiti]_____ 3.9915____KWQ49 (govt recds)
" [Woleai Is]_____ 3.9915____KUP70 (govt recds)
" [Wonmej Is]_____ 3.9915____KWQ74 (govt recds)
" [Wotho Is]_____ 3.9915____KWQ37 (govt recds)
" [Wotja Is]_____ 3.9915____KWQ75 (govt recds)
" [Wotje Is]_____ 3.9915____KUS84 (govt recds)
" [Yap]_____ 3.9915____KUP69 (govt recds)

```
US: Interior, Pacific Trust Territory Net, fixed station, ssb, 150w
                      [Kagmanpt]__________   3.9915____KUP74     (govt recds)
US: Interior, Pacific Trust Territory Net, fixed station, ssb, 1kw
                      [Kagmanpt]__________   3.9915____KUP71     (govt recds)
              "       [Korkor]____________   3.9915____KUP68     (govt recds)
              "       [Majuro]____________   3.9915____KUP65     (govt recds)
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================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -956417641589097909
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9302b63ce578e758,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-13 06:43:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!mhuxt!mhuxj!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some non-ham users of 10.1 - 10.15 MHz freqs
Message-ID: <420@ihu1h.UUCP>
Date: Thu, 13-Dec-84 09:43:35 EST
Article-I.D.: ihu1h.420
Posted: Thu Dec 13 09:43:35 1984
Date-Received: Fri, 14-Dec-84 06:46:04 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 134


x
  10.1000    callsign?_[Bingham, ME]________US: Air Force, experimental testin
                                             g station, 100F9 emission 1200kw (
                                             govt recds)
             callsign?_[Clmbflls, ME]_______US: Air Force, experimental testin
                                             g station, 100F9 emission 1200kw (
                                             govt recds)
             callsign?_[Stanthny, Canada]___US: Air Force, experimental testin
                                             g station, 100F9 emission 1200kw (
                                             govt recds)
             callsign?_[White Sands, NM]____US: Navy, White Sands Missle Range
                                             , experimental contract developmen
                                             tal station, .06A2 emission 1w (go
                                             vt recds)
             WDR71_____[Arecibo, PR]________US: NSF, Arecibo Ionospheric Obser
                                             vatory, experimental research stat
                                             ion, 160P0 emission 800kw (govt re
                                             cds)
  10.1050    callsign?_[Seattle, WA]________US: Air Force, experimental contra
                                             ct developmental station, 6A9B emi
                                             ssion 1kw (govt recds)
             KUP67_____[Truk]_______________US: Interior, fixed station, 6A9B
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emission 5kw (govt recds)
KUP71_____[Saipan, Mariana Is]_US: Interior, fixed station, 6A9B emission 5kw (govt recds)
10.1065 callsign?_[Seattle, WA]_____US: Air Force, experimental contract developmental station, ssb 1kw (govt recds)
10.1150 NPM_____[Wahiawa, HI]_____US: Navy, fixed station, 12A9B emission 40kw (govt recds)
NUD_____[Mtmofftt, AK]_____US: Navy, fixed station, 12A9B emission 40kw (govt recds)
10.1230 KUP68_____[Babelthp]_____US: Interior, fixed station, 6A9B emission 5kw (govt recds)
KUP71_____[Saipan, Mariana Is]_US: Interior, fixed station, 6A9B emission 5kw (govt recds)
10.1300 callsign?_[Bermuda]_____US: Navy, fixed/coastal station, several modes (govt recds)
callsign?_[Garrity, Iceland]___US: Navy, fixed/coastal station, several modes (govt recds)
callsign?_[Atlantic Ocean]_____US: Navy, ships, several modes (govt recds)
CNL_____[Sidivahi, Morocco]__US: Navy, fixed/coastal station, several modes (govt recds)
NAA_____[Cutler, ME]_____US: Navy, fixed/coastal station, several modes (govt recds)
NAM_____[Driver, VA]_____US: Navy, coastal station, several modes (govt recds)
NAU_____[Sabanasc, PR]_____US: Navy, fixed/coastal station, several modes (govt recds)
NPN_____[Barrigad, Guam]_____US: Navy, fixed station, 1.7F1 @ 5 kw, 6A9B @ 20kw (govt recds)
NSS_____[Annapolis, MD]_____US: Navy, fixed/coastal station, several modes (govt recds)
10.1350 callsign?_[Manilla]_____US: Navy, fixed/coastal station, .1A1 and 1.24F1 emissions 10kw (govt recds)
callsign?_[Yokosuka, Japan]____US: Navy, fixed/coastal station, .1A1 and 1.24F1 emissions 10kw (govt recds)
NPM_____[Barrigad, Guam]_____US: Navy, fixed/coastal station, .1A1 and 1.24F1 emissions 10kw (govt recds)
10.1380 NMA_____[Miami, FL]_____US: Coast Guard, fixed station, several modes (govt recds)
NMF_____[Marshfield, MA]_____US: Coast Guard, fixed station, several modes (govt recds)
NMF_____[Cape Cod, MA]_____US: Coast Guard, ship station or bridge-to-bridge station (govt recds)
NMG_____[New Orleans, LA]____US: Coast Guard, fixed station, several modes (govt recds)
NMM_____[NW, VA]_____US: Coast Guard, fixed station, several modes (govt recds)
NMN_____[Pungo, VA]_____US: Coast Guard, fixed station, se

veral modes (govt recds)
NMR_____[San Juan, PR]_____US: Coast Guard, fixed station, se
veral modes (govt recds)
NOZ_____[Elizabeth City, NC]_US: Coast Guard, fixed station, se
veral modes (govt recds)
10.1400 callsign?_[USA-wide]_____US: Air Force, fixed/land/mobile s
tations, 6A9B emission 2500w (govt
recds)
10.1415 callsign?_[Bergstrom AFB, TX]__US: Air Force, Bergstron AFB, fixe
d/land/land mobile/aircraft statio
ns, 3A9J and ssb emissions 400w (g
ovt recds)
callsign?_[Dyess AFB, TX]_____US: Air Force, Dyess AFB, fixed/la
nd/land mobile/aircraft stations,
3A9J and ssb emissions 400w (govt
recds)
callsign?_[McChord AFB, WA]____US: Air Force, McChord AFB, fixed/
land/land mobile/aircraft stations
, 3A9J and ssb emissions 400w (gov
t recds)
callsign?_[Pope AFB, NC]_____US: Air Force, Pope AFB, fixed/lan
d/land mobile/aircraft stations, 3
A9J and ssb emissions 400w (govt r
ecds)
callsign?_[Belleville, IL]_____US: Air Force, Scott AFB, fixed/la
nd/land mobile/aircraft stations,
3A9J and ssb emissions 400w (govt
recds)
callsign?_[Shaw AFB, NC]_____US: Air Force, Shaw AFB, fixed/lan
d/land mobile/aircraft stations, 3
A9J and ssb emissions 400w (govt r
ecds)
callsign?_[Garland, TX]_____US: Air Force, fixed/land/land mob
ile/aircraft stations, 3A9J and ss
b emissions 400w (govt recds)
callsign?_[Little Rock, AR]____US: Air Force, fixed/land/land mob
ile/aircraft stations, 3A9J and ss
b emissions 400w (govt recds)
callsign?_[USA-wide]_____US: Air Force, fixed/land/land mob
ile/aircraft stations, 3A9J and ss
b emissions 400w (govt recds)
10.1430 AFI_____[Davis, CA]_____US: Air Force, fixed station, 12A9
B emission 40kw (govt recds)
NPN_____[Guam]_____US: Air Force, fixed station, 12A9
B emission 40kw (govt recds)
10.1500 AAA_____[Ft Monroe, VA]_____US: Army, Ft Monroe, 6A39B emissio
n 1kw (govt recds)
AAC61_____[Ft Knox, KY]_____US: Army, Ft Knox, 6A39B emission
1kw (govt recds)
AAC_____[Ft Meade, VA]_____US: Army, Ft Meade, 6A39B emission
1kw (govt recds)
AAF_____[N Chicago, IL]_____US: Army, Ft Sheridan, 6A39B emiss
ion 1kw (govt recds)

AAJ_______[Ft Leavenworth, KA]_US: Army, Ft Leavenworth, 6A39B emission 1kw (govt recds)

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Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 2653626953862692481
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c31be8bdd3056fc3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-13 09:13:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site isosvax.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hao!noao!terak!asuvax!isosvax!wb7asr
From: wb7asr@isosvax.UUCP (Tom Boza, WB7ASR)
Newsgroups: net.ham-radio
Subject: Amateur Radio News for December 84
Message-ID: <192@isosvax.UUCP>
Date: Thu, 13-Dec-84 12:13:12 EST
Article-I.D.: isosvax.192
Posted: Thu Dec 13 12:13:12 1984
Date-Received: Wed, 19-Dec-84 00:16:51 EST
Organization: Intel Corp, Phoenix (Deer valley), AZ
Lines: 294

iARC3

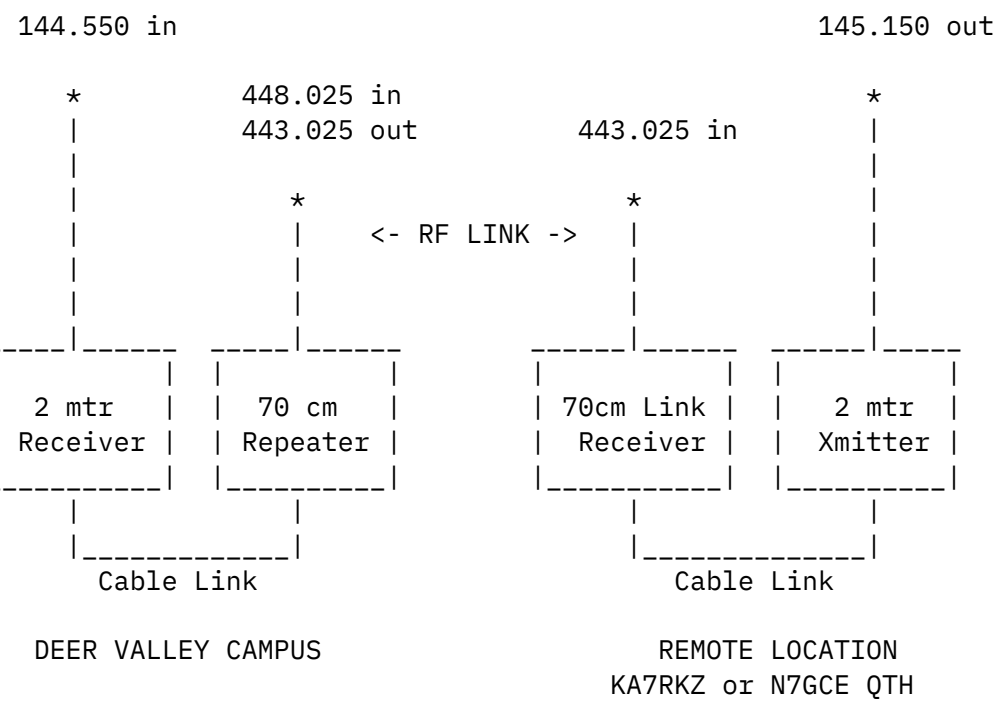
intel Amateur Radio/Computer Communications Club

AMATEUR RADIO NEWS FOR THE MONTH OF DECEMBER, 1984

REPEATER UPDATE

John, KF7B, has contacted the Arizona Repeaters Owners Ass. and has good news. The 144 to 145 Mhz FM Repeater sub bands are available for "Back Porch" type repeaters. A Back Porch repeater is one which runs a 100 watts or less and has an maximum antenna height of 100 feet. This is perfect for our application. The two meter frequency pair that has been approved for our club is: 144.550 Mhz in and 145.150 Mhz out. Bud, W5BDZ, has all the hardware to get the two repeater going, the only thing needed is to order the crystals. We have been talking about running the two meter repeater as a split site system, placing the receiver at the Deer Valley campus and the transmitter at someones home QTH. This will eliminate the need of a duplexer. We would link the repeater together via the 443 Mhz repeater. We are in need for both finical and time support to make it happen. There are three xtals to buy and several hours of debugging. Tom, WB7ASR, has the two meter receive xtal on order. If you want help with this project, contact John, KF7B, at x4008, in Deer Valley. The target date to have the two meter repeater up and on the air is mid-January.

PROPOSED TWO METER REPEATER CONFIGURATION



A XMAS PRESENT TO THE WORLD FROM A GERMAN AMATEUR RADIO CLUB

Since the ionosphere is at a low density level due to the eleven year sum spot cycle, a German Amateur Radio Club will launch four barium capsuls into the ionosphere that will cause the ionosphere to become extremity dense. The metallic powder will be launched from a air-craft on December 25th, at 1208 UTC (0508 MST) to a elevation of 60,000 nautical miles. Radio conditions

from 30 Mhz and up should be considerly improved for about four to six hours. Also take note, with the metallic powder in the sky, the sun rise should be one not to miss.

VU2RG IS INDIA'S NEW LEADER

Rajiv Gandhi, VU2RG, son of India's slain leader Indira Gandhi, is prime minister of the worlds largest democracy. Chosen by his party and sworn in to office only hours after his mother's death on October 31, Rajiv will head the country until at least January, when national elections must be held. A former pilot with Air India, he entered the political arena in 1981, when he became a member of Parliament. His political future was all but sealed when his mother named him a general secretary of the ruling Congress Party.

HAMS IN SPACE

The latest word on the proposed April 1985 Amateur Radio operation from abord the Space Shuttle is that Astronaut Anthony England, W0ORE, will not be the only ham aboard. Dr. John-David Bartoe, W4NYZ, of the Naval Research Laboratory will be accompaning him. Dr. Bartoe will be a payload specialist for the CHALLENGER STS-51F mission. Groundwork for the project is proceeding on the assumption that formal notification of acceptance from NASA is forthcoming.

ALso, Dr. Ron Parise, WA4SIR, is schedled to fly on STS-61F, as a Payload Specialist. Dr. Parise is an astronomer with a Phd from the University of Florida (1979) and is 33 years old. He has been a licensed amateur since he was 11 having held prior calls WN8JBR and WA8MHD. Ron is a native of Ohio, is married and has a young son. Regarding his operating Amateur Radio from the shuttle, Ron says he is "ENTHUSIASTIC" and looks forward "to bring some radios aboard." Ron says he will support proposals to NASA for Amateur Radio activity on the mission he will be flying.

AMSAT-OSCAR 10 HAS NEW OPERATING SCHEDULE

This new schedule is effective immediately, and should not require any modifications until mid-January. Remember that OSCAR-10's orbit of 699.5 minutes is measured in 256 divisions, with zero starting at perigee. This measurement is called Mean Anomaly.

MEAN ANOMALY	MODE	TIME
0-99	B	Mon-Sat.
100-117	L	Mon-Sat.
100-117	B	Sun.
118-218	B	Daily
219-234	OFF	Daily
235-256	B	Daily

PACKET RADIO AT JOHN'S, KF7B

```
CONNECT K7PYK
Welcome to the K7PYK MailBox/Gateway from Wes in Scottsdale, AZ.
Type X <return> for menu with explanations, H <return> for help.
Date 841120 Time 0150 Last message 64 active messages 17
(B,D,G,H,I,K,L,R,S,T,U,W,X) >
L
```

Msg#	T	R	Size	To	From	Date	Title
24		N	226	ALL	KF7B	841113	PACKET USERS GROUP MEETING
32		Y	237	W7KB	WB0IBZ	841115	TNC
33		Y	56	W7KB	K7PYK	841115	CWID FOR K7PYK
35		N	673	ALL	K7PYK	841115	HF SCHEDULE
39	B	N	156	ALL	WB4APR	841117	Greetings from Maryland
41		Y	108	K7PYK	N1DL	841117	Thanksgiving Greetings
42		Y	68	W0RLI	N1DL	841117	"Q S P"
43		Y	94	W0RLI	W0RLI	841117	UR GATEWAY
44		Y	246	W0RLI	W7KB	841117	thanks
45		N	140	W7KB	W0RLI	841117	Forwarded from W0RLI
46		Y	184	KF7B	W0RLI	841117	Forwarded from W0RLI
48		Y	210	K7PYK	W0RLI	841117	Forwarded from W0RLI

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  55   Y  405 K7PYK  W0RLI  841118 Forwarded from W0RLI
  57   N  175 ZL1AOX W0RLI  841118 Forwarded from W0RLI
  59   N   39 W3IWI  W0RLI  841118 Disk
  60   N  505 N1DL   K7PYK  841119 A0-10 ACCESS
  64   N  119 K7PYK  WA4SZK 841120 BOARD
Date 841120 Time 0150 Last message 64 active messages 17
(B,D,G,H,I,K,L,R,S,T,U,W,X) >
T
Hang on one minute, I will page Wes.
Wes did not answer, you might leave a message in the MailBox.
Date 841120 Time 0153 Last message 64 active messages 17
(B,D,G,H,I,K,L,R,S,T,U,W,X) >
Enter message number:
35
Msg# T R  Size  To    From   Date     Title
  35   N  673 ALL    K7PYK  841115 HF SCHEDULE
UNTIL FURTHER NOTICE THE HF STATION WILL BE ON 20 METERS FROM 1700Z TO
2400Z MONDAY THROUGH FRIDAY AND FROM 0500Z TO 2400Z ON WEEKENDS AND
HOLIDAYS. THE FREQUENCY IS 14.103 LSB USING AFSK AND 1600 HZ. AND 1800
HZ. TONES (IN OTHER WORDS 14.103 LSB WITH A TAPR TNC). HE REST OF THE
TIME IT WILL BE ON 30 METERS. THAT FREQUENCY IS 10.1496 LSB (TAPR TNC).
AT PRESENT THE VHF STATION WILL BE ON 144.91 MHZ. AS SOON AS SOMEONE IN
TUCSON GETS A GOOD SIGNAL INTO THE 10/70 REPEATER I WILL TUNE THE VHF
STATION TO THAT REPEATER. ESTIMATES RANGE FROM A WEEK TO SEVERAL WEEKS
DEPENDING...  IT'S ENCOURAGING TO SEE SO MUCH ACTIVITY. THANKS FOR THE
SUGGESTIONS.
73 FOR NOW...SIGNED  WES

Date 841120 Time 0155 Last message 64 active messages 17
(B,D,G,H,I,K,L,R,S,T,U,W,X) >
R
Enter message number:
24
Msg# T R  Size  To    From   Date     Title
  24   N  226 ALL    KF7B   841113 PACKET USERS GROUP MEETING
THE FIRST LOCAL PACKET USERS GROUP MEETING WILL BE
HED ON NOV. 29 AT 8:30 PM ON THE 146.76 REPEATER, OPEN
FORUM. WE HAVE LOTS OF THINGS IN THE WORKS.INVITE A FRIEND
AND SPREAD THE WORD TO ANYONE INTERESTED IN PACKET RADIO.

Date 841120 Time 0155 Last message 64 active messages 17
(B,D,G,H,I,K,L,R,S,T,U,W,X) >
R
Enter message number:
60
Msg# T R  Size  To    From   Date     Title
  60   N  505 N1DL   K7PYK  841119 A0-10 ACCESS
SO FAR I HAVN'T DONE MUCH WITH A GATEWAY FOR AO-10
IT'S DIFFICULT TO GATE IT TO THE LOCAL 2 METER NET BECAUSE OF THE
PROXIMITY OF THE TWO 2 METER STATIONS. MANY OF THE HF STATIONS ALSO HAVE
AO-10 CAPABILITY. COUPLE ALL THAT WITH THE CHANGING SCHEDULE AND SOMETIMES
MARGINAL SIGNALS FROM AO-10 SO I SAY (ON THE SATELLITE BEACON) "MAILBOX/
GATEWAY AVAILABLE ON REQUEST". SO FAR IAN (ZL1AOX) HAS BEEN THE ONLY TAKER.
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I HEARD YOU ON AO-10 EVERYBODYS SIGNAL WAS TOO WEAK TO COPY HERE.
73 FOR NOW...SIGNED WES

Date 841120 Time 0206 Last message 64 active messages 17
Messages: L - List, R - Read, S - Send, K - Kill
Files: W - What, D - Download from, U - Upload to
B - Bye, G - Gate Way, H - Help, T - Talk to Wes
I - Information, X - Short/Long Menu >
R
Enter message number:
T
CONNECT K7PYK
cmd:CONNECT K7PYK
cmd:*** CONNECTED to K7PYK
Welcome to the K7PYK MailBox/Gateway from Wes in Scottsdale, AZ.
Type X <return> for menu with explanations, H <return> for help.
Date 841120 Time 0255 Last message 65 active messages 16
(B,D,G,H,I,K,L,R,S,T,U,W,X) >
G
Date 841120 Time 0255 Gate Way active.
(C,R,U,X) >
X
Date 841120 Time 0255 Gate Way active.
C - Attempt a connect, U - Call CQ, R - Return to the MailBox.
X - Short/Long menu >
C W0RLI

**********   SOFTWARE COURTESY of HANK W0RLI   **********

The HF system includes a transceiver (IC-720A),a 30 meter beam
(KLM 30M-3) up 42 feet, and a Swan tri-bander up 55 feet.

The VHF system is a 2 meter transceiver (IC-27A) and a Ringo
Ranger up about 20 feet.

The satellite station's uplink is an IC-471, a Mirage D1010,
45 feet of half inch hardline, and a KLM 18-C cross yagi.
The downlink is a KLM 22-C cross yagi, a AR^2 GaAsFET preamp
at the antenna, and an IC-271.

The system uses 3 TAPR TNC's and can link HF stations to either
the satellite or the 2 meter LAN which includes the Phoenix and
Tucson area.
Work is proceeding on the computer interface and software to
enable the 720A to scan the hf bands. Also in the mill is the
system which will tune the satellite station automatically.

Other functions supported are message store and forward, file
upload/download, and information about stations heard or connected.
The computer is a Xerox 820 board with two eight inch disk drives.
The HF port is 300 baud, 200 hz shift, centered at 14.101,3 Mhz.on
20 meters (That's 14.103 Mhz. LSB using a TAPR board) and 10.147,9
Mhz. on 30 meters (That's 10.149,6 Mhz. LSB with a TAPR board).

The hf radio is on 20 meters in the daytime and 30 meters at night.
The VHF port is on 146.10/70 1200 baud, NBFM.
The system is on forever. ...Well almost forever.

From 1665007066234983438
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6db1ba4682a94604,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-13 10:27:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site trsvax.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Swan help
Message-ID: <52800040@trsvax.UUCP>
Date: Thu, 13-Dec-84 13:27:00 EST
Article-I.D.: trsvax.52800040
Posted: Thu Dec 13 13:27:00 1984
Date-Received: Sun, 16-Dec-84 04:52:30 EST
Lines: 22
Nf-ID: #N:trsvax:52800040:000:1127
Nf-From: trsvax!mikey   Dec 13 12:27:00 1984

Does anyone on the net know about how much a Swan VFO unit should
sell for? I'm looking for one, but I'm always too late. Of the two
that I almost got, they were both in good shape (or so I was told)
but the prices varied greatly. One was less than $50, the other well
over $100. Does anyone know where I might find one? I would like
the one that attached to the Swan 500C, I'm told there were three
different models for the 500. There was a 4xx number VFO that had both
the VOX and the VFO in one box, which would be real nice. I have the
VOX unit now, but it attaches to the back of the unit where it is
very difficult to adjust. I set it for a real slow semi-break-in
on CW. The unit that is in the 500C owners manual is the 508. It is
a VFO unit only. Both units that I was too late for were 508's. I've
looked into building one, which I may have to do, but the Swan 500C
doesn't use a fixed VFO. Each band is different. There is one fixed
mixing frequency in the main unit and the VFO changes bands. Not that
difficult, but there is always the appeal of the factory unit.

mikey at trsvax
KA5MJQ

From 8715022857063947056
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf56cd7232e92f30,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-14 10:53:36 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: update of Amateur band chart
Message-ID: <14160@mgweed.UUCP>
Date: Fri, 14-Dec-84 13:53:36 EST
Article-I.D.: mgweed.14160
Posted: Fri Dec 14 13:53:36 1984
Date-Received: Sat, 15-Dec-84 02:38:35 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 65

FREQUENCIES & EMISSIONS AUTHORIZED FOR U.S. AMATEURS 12-84

30 meter band temporary authorization since Oct.1982
20 meter phone band expansion effective May 22, 1983
New FSK, shift, and ID rules effective June 15, 1983
Power limit was changed from 1000 watts D.C.
input to 1500 watts PEP output Aug. 29, 1983
160 meter power restrictions removed Mar. 28, 1984
10/15/75 phone band expansion effective Sept 1, 1984
Use of full 10.1 to 10.15 Mhz authorized Nov, 1984

Novice/Technician A1 emission only	General/Advanced A1 and F1	Extra A1 and F1
3700 - 3750	3525 - 3750	3500 - 3750
7100 - 7150	7025 - 7150	7000 - 7150
21100 - 21200	10100 - 10150	10100 - 10150
28100 - 28200	14025 - 14150	14000 - 14150
	21025 - 21200	21000 - 21200
	28000 - 28300	28000 - 28300

NOTE: 200 watts PEP max output in Novice subbands and 30 meters.

General	Advanced A1, A3, A4, A5, F3, F4, F5 (1800-2000 are A1 and A3 only)	Extra
1800 - 2000	1800 - 2000	1800 - 2000
3850 - 4000	3775 - 4000	3750 - 4000
7225 - 7300	7150 - 7300	7150 - 7300
14225 - 14350	14175 - 14350	14150 - 14350
21300 - 21450	21225 - 21450	21200 - 21450
28300 - 29700	28300 - 29700	28300 - 29700

NOTE: The bandwidth of an F3 emission below 29 MHz shall not exceed that of an A3 emission.

NOTE: Phone operation in Alaska and Hawaii permitted on

7075 - 7100 kHz after 9-1-84.

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6 and 2 Meters:

50.0 - 50.1	A1 only
51.0 - 54.0	A0, A1, A2, A3, A4, A5, F1, F2, F3, F4, F5
50.1 - 54.0	A1, A2, A3, A4, A5, F1, F2, F3, F4, F5
144.0 - 144.1	A1 only
144.1 - 148.0	A0, A1, A2, A3, A4, A5, F0, F1, F2, F3, F4, F5

The "Considerate Operators Frequency Guide"
(Frequencies generally recognized for certain activities)

1800 - 1825	cw only	14.08 - 14.10	RTTY
1825 - 1830	dx window	14.23	SSTV
1850 - 1855	dx window	21.09 - 21.10	RTTY
3610 - 3630	RTTY	21.34	SSTV
3637.5	AMTOR	28.09 - 28.10	RTTY
3845	SSTV	28.68	SSTV
7090 - 7100	RTTY	29.30 - 29.50	SATELLITES
7171	SSTV	29.52 - 29.58	RPTR inputs
10.14-10.15	RTTY	29.60	FM simplex
14.075	AMTOR	29.62 - 29.68	RPTR outputs

From -8320382945557481233
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e286552d77af4285,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-15 01:21:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: Vrtx experience anyone?
Message-ID: <355@dsd.UUCP>
Date: Sat, 15-Dec-84 04:21:37 EST
Article-I.D.: dsd.355
Posted: Sat Dec 15 04:21:37 1984
Date-Received: Wed, 19-Dec-84 03:11:45 EST
Organization: AMPEX DSD, Redwood City, CA.
Lines: 33

M 19698 Larry Kayser (2967) 12/14/84   4:15 PM L:35
KEYS:/NEED INFO/VRTX/SILICON SOFTWARE/
TO: (Group 95)

To #95 EIES, TMAIL AMSAT From Larry Kayser Information needed - Re VRTX and the VRTX C Language Library

VRTX is a Versatile Real-Time Executive for micro systems that has multi tasking and real-time operating system. It has many features amongst them - Interrupt-driven, priority-based scheduling Intertask communication and synchronization Dynamic memory allocation Real-time clock control, with optional time slicing Character I/O support Real-time responsiveness (what ever that means!)

VRTX is a product of Hunter & Ready, 445 Sherman Avenue, P. O. Box 11803, Palo Alto, Ca 94306. (415) 326-2950

Would anyone with direct experience with this product, or with contacts that can be approached about this product get in touch with me ASAP. Anyone with information about this product being placed in a CMOS masked ROM (High Rel - but I am probably dreaming) can probably negotiate a free bottle of scotch or equivalent. This product has a number of interesting features that would make it very attractive for some amateur radio applications.

Please move this request around, to USENET etc to find some contacts.

Regards, Larry Kayser 36 Glebe Ave. Ottawa, Ontario, Canada K1S 2C1 (613) 239-2089 Days or (613) 2343816 Evenings

From 2754778506196224507
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8b02999ddb71843f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-15 18:48:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: US govt freqs in 18.068 - 18.168 MHz WARC-79 band
Message-ID: <421@ihu1h.UUCP>
Date: Sat, 15-Dec-84 21:48:39 EST
Article-I.D.: ihu1h.421
Posted: Sat Dec 15 21:48:39 1984
Date-Received: Sun, 16-Dec-84 09:23:49 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 138

x

WARC-79 proposed to allocate 18.068 - 18.168 MHz exclusively for Amateur and Amateur Services. But this won't take effect until the fixed stations presently using this band are relocated (no later than 7/1/89).

Several US Government agencies have allocations in our new proposed ham band:

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US: Air Force, fixed station, 12A9B emission, 40kw
[Ewa Beach, HI]_____ 18.1460____AGD (govt recds)
" [Kwajalen, Marshall]_ 18.1460____ABK (govt recds)
US: Air Force, fixed station, cw and 1.1F1 emissions
[Rheinman AFB, Germ]_ 18.1550____callsign? (govt recds)
" [USA-wide]_____ 18.1550____callsign? (govt recds)
" [Zwebrckn, Germany]__ 18.1550____callsign? (govt recds)
US: Army, experimental developmental station, 0A0 @ 100w, ssb @ 400w, 6A3 @ 100w
[Ft Huachuca, AZ]____ 18.0900____callsign? (govt recds)
US: Army, fixed station, ssb @ 2kw
[USA-wide]_____ 18.1295____callsign? (govt recds)
US: Interior, fixed station, 6A9B emission, 5kw
[Majuro, Marshall I]_ 18.0750____KUP65 (govt recds)
" [Saipan, Mariana Is]_ 18.0750____KUP71 (govt recds)
US: Navy, aircraft stations, ssb @ 1kw and 3A7J @ 200w
[Atlantic Ocean]_____ 18.1250____callsign? (govt recds)
" [Mediterranean Ocea]_ 18.1250____callsign? (govt recds)
US: Navy, aircraft, experimental testing station, several modes
[Atlantic Ocean]_____ 18.1000____callsign? (govt recds)
US: Navy, coastal station, cw, 6A9B, and 2.85F1 emissions, 10kw
[Lualale, HI]_____ 18.1490____NPM (govt recds)
US: Navy, experimental testing station, 0A0 @ 5kw
[Portsmouth, NH]_____ 18.1000____callsign? (govt recds)
US: Navy, experimental testing station, cw, ssb, 3A7J emissions, 20w
[Fullerton, CA]_____ 18.1000____callsign? (govt recds)
US: Navy, experimental testing station, several modes
[Patxntrv, MD]_____ 18.1000____callsign? (govt recds)
US: Navy, fixed and mobile stations, 6A3B and 6A9B emissions, 500w
[AZ]_____ 18.1250____callsign? (govt recds)
" [CA]_____ 18.1250____callsign? (govt recds)
US: Navy, fixed coast station, several modes, 10kw
[Driver, VA]_____ 18.0780____callsign? (govt recds)
US: Navy, fixed station, 1.24F1 @ 10kw
[Annapolis, MD]_____ 18.1280____NSS (govt recds)
US: Navy, fixed station, 12A9B emission, 40kw
[Annapolis, MD]_____ 18.1000____NSS (govt recds)
" [Clamlagn, AK]_____ 18.1625____NUD (govt recds)
" [Ewa Beach, HI]_____ 18.1250____AGD (govt recds)
" [Kwajalen, Marshall]_ 18.1250____ABK (govt recds)
" [Kwajalen, Marshall]_ 18.1460____NPM (govt recds)
" [Rota, Spain]_____ 18.1000____AOK (govt recds)
" [Sand Is, Midway]____ 18.1625____NQM (govt recds)
" [Sidiyahi, Morocco]__ 18.1000____CML (govt recds)
" [Wahiawa, HI]_____ 18.1625____NPN (govt recds)
US: Navy, fixed station, 9A9B and 12A9B emissions, 15kw
[Enewetak, Marshall]_ 18.1110____callsign? (govt recds)
" [Lualuale, HI]_____ 18.1110____NPM (govt recds)

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US: Navy, fixed station, cw @ 10kw and 1.24F1 @ 5kw
                    [Barrigad, Guam]_____  18.1000____NPN       (govt recds)
               "    [Wahiawa, HI]________  18.1000____NPM       (govt recds)
US: Navy, fixed/coastal and aircraft station, 6A9B emission, 40kw
                    [Belconnn, Australi]_  18.1250____callsign? (govt recds)
               "    [Lualuale, HI]_______  18.1250____NPM       (govt recds)
US: Navy, fixed/coastal station, 1.24F1 emission, 10kw
                    [Chollsht, CA]_______  18.0680____NPL       (govt recds)
               "    [Clamlagn, CA]_______  18.0680____NUD       (govt recds)
               "    [Dixon, CA]__________  18.0680____NPG       (govt recds)
               "    [Imperial Beach, CA]_  18.0680____NPL       (govt recds)
               "    [Mtmofftt, AK]_______  18.0680____NUD       (govt recds)
               "    [Skaggs Is, CA]______  18.0680____NPG       (govt recds)
               "    [Wahiawa, HI]________  18.0680____NPM       (govt recds)
               "    [Whidbeyi, WA]_______  18.0680____NUW       (govt recds)
US: Navy, fixed/coastal station, 12A9B and 6A9B emission, 40kw
                    [Lualuale, HI]_______  18.0990____NMP       (govt recds)
               "    [Midway Is]__________  18.0990____NQM       (govt recds)
US: Navy, fixed/coastal station, 12A9B emission, 40kw
                    [Clamlagn, AK]_______  18.1460____NUD       (govt recds)
               "    [Finegayn, Guam]_____  18.0990____NPN       (govt recds)
               "    [Skaggs Is, CA]______  18.0990____NPG       (govt recds)
US: Navy, fixed/coastal station, 3A7J emission, 10kw
                    [Chollsht, CA]_______  18.0675____NPL       (govt recds)
               "    [Clamlagn, CA]_______  18.0675____NUD       (govt recds)
               "    [Dixon, CA]__________  18.0675____NPG       (govt recds)
               "    [Imperial Beach, CA]_  18.0675____NPL       (govt recds)
               "    [Mtmofftt, AK]_______  18.0675____NUD       (govt recds)
               "    [Skaggs Is, CA]______  18.0675____NPG       (govt recds)
               "    [Wahiawa, HI]________  18.0675____NPM       (govt recds)
               "    [Whidbeyi, WA]_______  18.0675____NUW       (govt recds)
US: Navy, fixed/coastal station, cw and 1.24F1 emission, 20kw-50kw
                    [Barrigad, Guam]_____  18.0700____NPN       (govt recds)
               "    [Chollsht, CA]_______  18.0700____NPL       (govt recds)
               "    [Clamlagn, CA]_______  18.0700____NUD       (govt recds)
               "    [Dixon, CA]__________  18.0700____NPG       (govt recds)
               "    [Imperial Beach, CA]_  18.0700____NPL       (govt recds)
               "    [Kamiseya, Japan]____  18.0700____NDT       (govt recds)
               "    [Mtmofftt, AK]_______  18.0700____NUD       (govt recds)
               "    [San Miguel]_________  18.0700____NPO       (govt recds)
               "    [Skaggs Is, CA]______  18.0700____NPG       (govt recds)
               "    [Wahiawa, HI]________  18.0700____NPM       (govt recds)
               "    [Whidbeyi, WA]_______  18.0700____NUW       (govt recds)
US: Navy, fixed/coastal station, several modes
                    [Annapolis, MD]______  18.1250____NSS       (govt recds)
               "    [Chollsht, CA]_______  18.0800____NPL       (govt recds)
               "    [Clamlagn, CA]_______  18.0800____NUD       (govt recds)
               "    [Dixon, CA]__________  18.0800____NPG       (govt recds)
               "    [Imperial Beach, CA]_  18.0800____NPL       (govt recds)
               "    [Mtmofftt, AK]_______  18.0800____NUD       (govt recds)
               "    [Skaggs Is, CA]______  18.0800____NPG       (govt recds)
               "    [Wahiawa, HI]________  18.0800____NPM       (govt recds)
               "    [Whidbeyi, WA]_______  18.0800____NUW       (govt recds)
```

US: Navy, mobile, land, and aircraft stations, ssb @ 1kw and 3A7J @ 200w
[Cherry Pt, NC]_____ 18.1250____NKI (govt recds)
US: Navy, ship station or bridge-to-bridge station, ssb, 6A3B, 6A9B, and 1.24F
1 emissions @ 2kw
[Delaware River]_____ 18.1000____callsign? (govt recds)
US: Navy, ships, 1.24F1 emission, 10kw
[Pacific Ocean]_____ 18.0680____callsign? (govt recds)
US: Navy, ships, 3A7J emission, 10kw
[Pacific Ocean]_____ 18.0675____callsign? (govt recds)
US: Navy, ships, cw and 1.24F1 emission, 20kw-50kw
[Pacific Ocean]_____ 18.0700____callsign? (govt recds)
US: Navy, ships, several modes, 10kw
[Atlantic Ocean]_____ 18.0780____callsign? (govt recds)
US: Navy, ships, several modes
[Pacific Ocean]_____ 18.0800____callsign? (govt recds)
US: State, fixed station, embassies?, cw and 0.85F1 emissions @ 1kw
[world-wide]_____ 18.1690____callsign? (govt recds)
US: Voice of America, fixed station 6A3B emission, 40kw
[Baguio, Philippine]_ 18.1375____VOA (govt recds)
" [Baguio, Philippine]_ 18.1570____VOA (govt recds)
" [Delano, CA]_____ 18.1375____VOA (govt recds)
" [Dixon, CA]_____ 18.1375____VOA (govt recds)
" [Dixon, CA]_____ 18.1570____VOA (govt recds)
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 1862703886567658796
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dee6d7721ab848b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-17 09:22:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 115 (arrl reorganizes)
Message-ID: <14248@mgweed.UUCP>
Date: Mon, 17-Dec-84 12:22:08 EST
Article-I.D.: mgweed.14248
Posted: Mon Dec 17 12:22:08 1984
Date-Received: Tue, 18-Dec-84 02:48:12 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 34

qst de k9eui
hr arrl bulletin nr 115 from arrl headquarters
newington ct december 12, 1984
to all radio amateurs bt

in a move designed to improve service to the arrl members, and hq efficiency and to more effectively address recruitment/membership promotion goals, a reorganization of the arrl hq structure is being implemented. effective immediately, five offices have been established, with each office manager reporting to the general manager. the five offices are publications, volunteer resources, membership communications services, development, and administrative services. the office of publications coordinates the activities of the production, circulation, advertising and technical departments. of particular interest to arrl field organization volunteers is the new office of volunteer resources, which centralizes support for the leagues important volunteer community, including the field organization, volunteer examiners, affiliated clubs, and league sanctioned conventions and hamfests, into one office. the office of membership communications services is responsible for providing information and individual services to arrl members, such as w1aw, the arrl letter, contests, operating awards including dxcc, legal/regulatory information, and other related activities. the office of development will undertake the substantial recruitment and membership promotion campaign as authorized at the last board meeting, as well as public information and fund raising. the office of administrative services includes accounting, purchasing, central computer, and hq building maintenance. details will follow in the arrl letter and qst ar

From -4019484292352352567
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5622a95fd67ce7e9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-17 09:22:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 114 (section managers)
Message-ID: <14249@mgweed.UUCP>
Date: Mon, 17-Dec-84 12:22:43 EST
Article-I.D.: mgweed.14249
Posted: Mon Dec 17 12:22:43 1984
Date-Received: Tue, 18-Dec-84 02:48:25 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 11

qst de k9eui
hr arrl bulletin nr 114 from arrl headquarters
newington ct december 12, 1984
to all radio amateurs bt

the following have been elected without balloting as section managers for their respective sections, iowa k0cy, mississippi kw5t, northern texas k5pc, orange w6ubq and wyoming wa7wfc. those elected will begin new terms april 1, 1985 ar

From -1379511774668429758
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ed6e9939e182a637,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-17 09:23:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 113 (220 MHz petition info)
Message-ID: <14250@mgweed.UUCP>
Date: Mon, 17-Dec-84 12:23:26 EST
Article-I.D.: mgweed.14250
Posted: Mon Dec 17 12:23:26 1984
Date-Received: Tue, 18-Dec-84 02:48:37 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

qst de k9eui
hr arrl bulletin nr 113 from arrl headquarters
newington ct december 11, 1984
to all radio amateurs bt

the petition of sideband technologies, inc, sti, for reallocation of 216 to 222 mhz for narrow band land mobile use is back on the front burner. rm 4831 had been placed on hold pending solution of a problem involving attorneys. that problem now having been resolved, the fcc chief scientist has established the deadline for comment in reference to rm 4831 as december 19, 1984. reply comments are due on january 3, 1985. official participation requires the filing of an original and five copies, though even a single page will be considered informally ar

From 4442486791116705171
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e1b47adc678b418,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-17 09:25:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)

Newsgroups: net.ham-radio
Subject: arrl bulletin nr 112 (RM no's assigned arrl petitions)
Message-ID: <14251@mgweed.UUCP>
Date: Mon, 17-Dec-84 12:25:02 EST
Article-I.D.: mgweed.14251
Posted: Mon Dec 17 12:25:02 1984
Date-Received: Tue, 18-Dec-84 02:52:44 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 112 from arrl headquarters
newington ct december 11, 1984
to all radio amateurs bt

the fcc has assigned rulemaking numbers rm 4879 and rm 4880 to league petitions for automatic control of computer based message systems above 30 mhz, and f2 emissions at 29.5 to 29.7 mhz, respectively.   comments on each are due january 9, 1985 ar

From -7006355270672754008
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,68d08acf2b0fa675,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-17 09:26:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 111 (3rd pty agreement/ U.S.> Korea)
Message-ID: <14252@mgweed.UUCP>
Date: Mon, 17-Dec-84 12:26:27 EST
Article-I.D.: mgweed.14252
Posted: Mon Dec 17 12:26:27 1984
Date-Received: Tue, 18-Dec-84 02:53:11 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 111 from arrl headquarters
newington ct december 4, 1984
to all radio amateurs bt

a temporary third party traffic agreement between korea and the united states will be in effect between 0001 utc december 20, 1984, and 2400 utc january 4, 1985. u.s. amateurs may exchange third party traffic with u.s. military personnel stationed in korea ar

From 5151578986299600789
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b9fb02fa73266e1f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-17 09:27:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 39 (Ontario section manager)
Message-ID: <14253@mgweed.UUCP>
Date: Mon, 17-Dec-84 12:27:11 EST
Article-I.D.: mgweed.14253
Posted: Mon Dec 17 12:27:11 1984
Date-Received: Tue, 18-Dec-84 02:53:40 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 10

qst de k9eui
hr crrl bulletin nr 39 from crrl headquarters
london ontario december 14, 1984
to all radio amateurs bt

section communication manager elections for the ontario section
were held recently. larry thivierge, ve3gt, was uncontested
and declured elected. his new term begins april 1, 1985 ar

From 8770167231456152860
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5f300a7b5a9a2ab2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-17 09:27:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxr!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 51
Message-ID: <14254@mgweed.UUCP>
Date: Mon, 17-Dec-84 12:27:36 EST
Article-I.D.: mgweed.14254
Posted: Mon Dec 17 12:27:36 1984
Date-Received: Tue, 18-Dec-84 02:54:03 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 28

qst de k9eui

hr propagation forecast bulletin nr 51 from arrl headquarters
newington ct december 17, 1984
to all radio amateurs bt

thus far in december, the solar flux has been slightly higher
than at the same time in november, but the difference has been
too small to improve propagation substantialy. the highest flux
reading, 81 on december 11, was nearly 14 per cent below the
base figure used in compiling the propagation charts in qst for
december. readings mostly in the nineties or higher would be
needed for good propagation in the higher latitudes of the
northern hemisphere at this time of year.

the flux was at 77 at bulletin time. it should be higher during
the rest of the year, as the area of the sun responsible for
the 86 in late november will be facing the earth again later
this week, having maximum effect december 22 through 26.
erratic conditions prevalent during the past week will improve
gradually. the best signal level and minimal fading will be
observed in the above period. the year will close with the
solar flux falling and geomagnetic activity rising, making for
no better than fair conditions december 27 through january 2.

american sunspot numbers for november 29 through december 5
were between 11 and 19 with a mean of 15.1 ar

From 4852180504443898632
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb056a57fba5e73a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-19 09:50:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site csu-cs.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hao!denelcor!csu-cs!
walicki
From: walicki@csu-cs.UUCP (Jack Walicki)
Newsgroups: net.ham-radio
Subject: sw receiver query
Message-ID: <2669@csu-cs.UUCP>
Date: Wed, 19-Dec-84 12:50:40 EST
Article-I.D.: csu-cs.2669
Posted: Wed Dec 19 12:50:40 1984
Date-Received: Sun, 23-Dec-84 01:45:14 EST
Distribution: net
Organization: Colo State Univ - CS Dept, Ft Collins, CO
Lines: 14

Could this knowledgeable group suggest a good short-wave receiver
which would allow me to listen to european stations ?

On the old continent I used listen to different stations (uk, germany,
ussr) on wavelengths from 13m to 51m, mainly because commercial stations

(and also bbc, radio free europe and voa) broadcast in those bands.
But I guess a wider range wouldn't hurt. So, I think I'm looking for
a sensitive and selective receiver for under $200(?). I do not know
in what flavors they come here, but it could be a stand-alone unit
(amp,speaker) or a plain rx pluggable into my stereo system.

Jac(e)k Walicki
Colo State U, Computer Science, Fort Collins, CO 80523 [303-491-7026]
...!{boulder,cires,denelcor,hao,hplabs,mit-vax,unmvax}!csu-cs!walicki

From 8708266990699720927
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d6151312097c909,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-19 15:10:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site vax135.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!vax135!hpk
From: hpk@vax135.UUCP (Howard Katseff)
Newsgroups: net.ham-radio
Subject: Modification to Sony ICF-2002 wanted
Message-ID: <913@vax135.UUCP>
Date: Wed, 19-Dec-84 18:10:17 EST
Article-I.D.: vax135.913
Posted: Wed Dec 19 18:10:17 1984
Date-Received: Thu, 20-Dec-84 04:19:28 EST
Organization: AT&T Bell Labs, Holmdel, NJ
Lines: 12

The Sony ICF-2002 receivers from their first production run have a
problem with oscillator pulling when receiving strong CW and SSB
signals. I have heard that a circuit modification to fix this problem
has been published.

I have one of these these receivers and would like to fix it! Can
anybody send me the reference, or better yet, a copy of the article
describing the changes?

Howard Katseff
AT&T Bell Laboratories
Holmdel, NJ

From -2606266411221690596
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c82caa9972fcbdd8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-19 15:28:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 8/7/84; site ucbvax.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ucbvax!luria
From: luria@ucbvax.ARPA (Marc Luria)

Newsgroups: net.ham-radio
Subject: Request for information about shortwave
Message-ID: <3893@ucbvax.ARPA>
Date: Wed, 19-Dec-84 18:28:06 EST
Article-I.D.: ucbvax.3893
Posted: Wed Dec 19 18:28:06 1984
Date-Received: Thu, 20-Dec-84 04:19:52 EST
Reply-To: luria@ucbvax.UUCP (Marc Luria)
Organization: University of California at Berkeley
Lines: 11
Summary:

A friend recently gave me an old shortwave radio. I haven't been able
to receive much except Radio Moscow. What I'd like to do is be able to
listen to Israel Radio. Can anyone suggest any books I could read about
shortwave? Does anyone know the frequencies and times of Israel Radio
and or the BBC World Service?

The radio is made by Reader's Digest and all I have is the antenna they
provide. I assume that an External antenna would improve reception.
There is a jack for one. I live in an apartment so an indoor
antenna would be preferable. Can anyone suggest what I should use
for such an antenna?

From 3445774348974555317
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9102eb337575e1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-21 07:40:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site asgb.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!bmcg!asgb!hageman
From: hageman@asgb.UUCP
Newsgroups: net.ham-radio
Subject: RTTY interface, and Packet information wanted.
Message-ID: <606@asgb.UUCP>
Date: Fri, 21-Dec-84 10:40:47 EST
Article-I.D.: asgb.606
Posted: Fri Dec 21 10:40:47 1984
Date-Received: Sun, 23-Dec-84 01:46:34 EST
Organization: Burroughs Corporation, Boulder Colo.
Lines: 26

I am very new to Ham radio and still working on geting my Novice
license togeather (I'm getting pretty close.) My profession is
Electronics Engineering so the theory wont be the problem. I am
looking for information on the various RTTY interfaces to RS-232
computer ports. My main interest is up grading to technition as
soon a possible and get into packet ratio. So if any of you can
provide me with information on which RTTY interface is the best
for the money it would be much apreciated.

Also, the ARRL has just approved the packet switching protocol x.25 addaptation to ham - radio. I also program in assembly and C and would be very interested in developing a program similar to modem7, mex and mdm112 for CPM systems which would utilize this protocol for ham. If anyone can furnish me with information concerning this protocol, or can recommend any source of information for this protocol (I already have ordered the new ARRL book on the subject), or source I will share my results.

Thank you,

George Hageman 303-444-3185 (hm)
303-530-3905 #202 (wk)
P.O. BOX 68
Jamestown, Colorado 80455
comuter interfaces available
for RS-232 interface t

From 7212813550698361715
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 14023a,b703d928d9caa00f,start
X-Google-Attributes: gid14023a,public
X-Google-Thread: 151e61,b703d928d9caa00f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-21 08:35:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!godot!harvard!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.consumers,net.ham-radio
Subject: Re: Portable SW radios: summary
Message-ID: <6721@brl-tgr.ARPA>
Date: Fri, 21-Dec-84 11:35:04 EST
Article-I.D.: brl-tgr.6721
Posted: Fri Dec 21 11:35:04 1984
Date-Received: Sun, 23-Dec-84 00:18:33 EST
References: <38@decwrl.UUCP>
Organization: USAMC ALMSA
Lines: 71
Xref: watmath net.consumers:1592 net.ham-radio:2191

I've sent this as mail, but am posting it for general interest and because the long path to the addressee makes me fear it will not get through:

Hi!

I hope you saw my Uniden postings in net.ham-radio; several were long comparative reviews of the features of the Sony models vs. the Uniden. If you hadn't, let me know at the address below, and I'll send you copies (it won't be until after New Year, though, as I'll be on leave and cut off from net mail until I return).

I recall seeing your initial query, but I think I didn't respond, being rather burnt-out from extensive radio-related newsgroup traffic. I can offer a few other comments, though, by now...

One other radio, which, though discontinued, is still advertised and may be still available for around $100, is the Sony ICF-6500W. This is a portable with slide-rule dial and an LCD digital readout. Check your local newstand for copies of Popular Communications magazine and look in the ads. Also, 47th St. Photo was advertising this for around $70 in their latest catalog, so some of the other New York discounters may have it too.

The Sony ICF-2002 is the same radio as the ICF-7600D. The difference is that the 2002 is the US (Sony of America) version, and has a US warranty. Don't expect any warranty service on a 7600D; it is grey-market. However, I bought a 7600D myself, as I don't think much of warranty service on this sort of thing -- I figure that, if it works when you get it, it will work at least as long as the warranty covers. My experience with the 7600D bears this out -- no trouble. The other difference is in the accessories. The New York discounters play games with these. They ask an extra $10 for the AC adapter, whcih they remove from the package and sell separately. The 7600D AC adapter is multi-voltage; the 2002's is 110 VAC only. If you travel overseas, the former would be useful. I bought neither, and made my own from one I had for a defunct calculator.

Other accessories you should look for include an external battery pack. This holds 4 "C" cells and plugs into the external power jack on the 2002/7600D, to use instead of the 4 internal "AA" cells for longer battery life. It doesn't sound too great to me; it impedes the main advantage to the 2002/7600D -- the small size and extreme portability. This did NOT come with my 7600D, and I don't know if it was pulled out by the discounter (47th St.), or if it comes with the 2002 only. You may want a more protective carrying case for this radio than the soft cloth bag it comes with; check out camera cases -- one correspondent in RIB said that a "Lowe Pro Opti-Pouch" fit his 2002. However, I've checked camera stores and the Lowe catalog, and cannot find one that fits it right, in that or any other brand. Some almost fit, but are 1/4" too small in one direction. I bought a cheap lady's zippered small purse at Woolworth's that fit it, though. No foam padding but room for accessories and notepads, etc., with the radio. I would like a padded case with a belt loop, though, that would be conducive to hands-free operation while walking. Haven't found one yet.

One other item, just published in the latest (this week!) Review of International Broadcasting: some ICF-2002's (and probably ICF-7600D's) suffered from a "pulling" malfunction in the SSB mode; a strong station near a weaker (when the radio was tuned to the weaker one) would cause the radio to shift off-frequency toward the strong signal. This only has an effect on you if you wanted to listen to amateur radio or utility traffic, not regular SW broadcasters. There is a factory modification, available as warranty-covered work, for this on 2002's. Recent 2002's have this change built in, of course. I don't know if Sony will even do this for money on the 7600D's. I haven't really noticed this on my 7600D, though, so the concern is academic for me. No data is yet available on

the serial numbers the factory revisions began to be installed at,
so I can't define a serial number range for "old" vs. "current" models
of these radios.

Regards,
Will Martin

USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

From 7433035095814879904
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c82caa9972fcbdd8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-21 14:54:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!genrad!mit-eddie!godot!harvard!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Re: Request for information about shortwave
Message-ID: <6732@brl-tgr.ARPA>
Date: Fri, 21-Dec-84 17:54:43 EST
Article-I.D.: brl-tgr.6732
Posted: Fri Dec 21 17:54:43 1984
Date-Received: Sun, 23-Dec-84 08:21:22 EST
References: <3893@ucbvax.ARPA>
Organization: USAMC ALMSA
Lines: 59

> A friend recently gave me an old shortwave radio. I haven't been able
> to receive much except Radio Moscow. What I'd like to do is be able to
> listen to Israel Radio. Can anyone suggest any books I could read about
> shortwave? Does anyone know the frequencies and times of Israel Radio
> and or the BBC World Service?
>
From the December issue of Miller Publishing's The Shortwave Guide, which
I happen to have with me here at the office, you lucky person!:

Kol Israel: 0000-0030 GMT 7412, 9440, 9815
         0100-0130 GMT the same
         0200-0230 GMT the same
         0500-0515 GMT 9009, 9440, 9815 kHz
         2000-2030 GMT 7412, 9440, 9815 kHz
         2230-2300 GMT 7410, 9440, 9815 kHz (I wonder if 7410 is a
                                misprint?)
(These are the scheduled English-language transmissions.)
(GMT is Greenwich Mean Time, which is 6 hours ahead of Central Standard.
So 0000 GMT is 1800 or 6 PM CST, 0500 GMT is 2300 or 11 PM CST, etc.)

A note in the October Review of International Broadcasting mentions the
possibility that the 0000 and 0100 broadcasts might also be on 11655 and
15585 kHz, and the 0200 also on 11655 kHz, and the 2230 one might also

be on 12025 kHz and 15585 kHz. (The later RIB has a by-country schedule, but I don't have it with me, drat!)

As for the BBC, there are many different relay stations and lots of frequencies. For general purposes, in the US evening, 6175 kHz is the best. 9510 kHz is also good for later in the evening/night. 21660, 15070, and 15260 are good in the mornings, at different times, as various relays come on and off.

As for sources of info. The best is (in my opinion):

Review of International Broadcasting
Glenn Hauser
PO Box 490756
Ft. Lauderdale, FL 33349

(Sample issue $1.50 US, subscription $18 US)

Next is:

The Shortwave Guide
Miller Publishing
424 West Jefferson St.
Media, PA 19063

(Sample issue 95 cents, subscription $9.95)

[Tell 'em both Will Martin sent you... It won't do you any good, but it'll inflate my ego...]

The former is a small-format magazine; the latter is a tabloid paper.

Regards,
Will Martin

USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

From 3683522882494892653
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,588e2420757cb510,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-22 09:40:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site opus.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hao!cires!nbires!
opus!scott
From: scott@opus.UUCP (Scott Wiesner)
Newsgroups: net.ham-radio
Subject: Ham software for an IBM PC
Message-ID: <1000@opus.UUCP>
Date: Sat, 22-Dec-84 12:40:12 EST
Article-I.D.: opus.1000

Posted: Sat Dec 22 12:40:12 1984
Date-Received: Thu, 27-Dec-84 02:43:49 EST
Distribution: net
Organization: NBI,Inc, Boulder CO
Lines: 10

Hi,

I've got a friend who will be getting an IBM PC-AT soon, and he's
interested in getting any software that might be available to
enhance his Ham system. I can't directly access any ARPA stuff,
but I'd like to hear from anyone that might be able to help us out.
--

Scott Wiesner
{allegra, ucbvax, cornell}!nbires!scott

From 1082720142336272015
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5e0af5c12944cbd1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-22 13:24:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: nyu notesfiles V1.1 4/1/84; site csd2.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hao!seismo!cmcl2!
csd2!spector
From: spector@csd2.UUCP
Newsgroups: net.ham-radio
Subject: Looking for programs.....
Message-ID: <55300001@csd2.UUCP>
Date: Sat, 22-Dec-84 16:24:00 EST
Article-I.D.: csd2.55300001
Posted: Sat Dec 22 16:24:00 1984
Date-Received: Thu, 27-Dec-84 02:22:50 EST
Organization: New York University
Lines: 16
Nf-ID: #N:csd2:55300001:000:499
Nf-From: csd2!spector   Dec 22 16:24:00 1984

Hello,

I am looking for all of the varios and sundrie basic and pascal programs that
have been on the net to Calculate orbital elements, track satellites, et al.

Could someone point me in the right direction (towards the archive?) or send
me whatever copies of these you may have handy? I am trying to put together
a disk full as a public domain object for Macintoshes.

              Thanx much,
              Dave, N2BCA

David HM Spector

NYU/acf Systems Group
Spector@nyu-cmcl1.ARPA
...!allegra!cmcl2!cmcl1!spector

From -8084252962502096289
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,19cd64009769d4c5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-22 18:02:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!houxm!mhuxr!ulysses!
allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin 104
Message-ID: <240@petrus.UUCP>
Date: Sat, 22-Dec-84 21:02:26 EST
Article-I.D.: petrus.240
Posted: Sat Dec 22 21:02:26 1984
Date-Received: Sun, 23-Dec-84 08:43:57 EST
Organization: Bell Communications Research, Inc
Lines: 85

**** UoSAT Bulletin-104 (Edited) 14th December 1984 ****

UoSAT Spacecraft Control Centre, University of Surrey, England

** GENERAL NEWS **

* UoSAT-OSCAR-11 Stabilisation *

Automatic attitude control manoeuvres, carried out by the on-board computer over last weekend, have successfully restored gravity-gradient stabilisation to the UO-11 spacecraft. The spacecraft was inadvertantly destabilised a month previously during a routine despin manoeuvre causing UO-11 to go into a complex tumbling motion. Several weeks of navigation data analysis, followed by four days of autonomous attitude manouevres by the OBC were necessary to de-tumble the spacecraft and recapture gravity lock. The autonomous manoeuvres could be seen by those monitoring the multiple orbit magnetometer data surveys - the attitude algorithm was initiated after the first orbit displayed. Gravity lock, at present, looks even better than before - we shall try to keep it that way! We are back in business!

* NOAA-9 *

NOAA-9 was launched at 10:42 gmt on 12 December - no additional information available at present.

** UoSAT-Oscar-9 Schedule **

This weeks schedule is as follows:

Friday	-	load Bulletin
Saturday	-	Bulletin/DIGITALKER/1200 bps telemetry
Sunday	-	Bulletin/DIGITALKER/1200 bps telemetry
Monday	-	Bulletin/DIGITALKER/1200 bps telemetry
Tuesday	-	Radiation data - next week CCD data
Wednesday	-	Whole orbit telemetry survey
Thursday	-	Computer check-summed telemetry

The 2 GHz Beacon will be in use this week.

** UoSAT-Oscar-11 Operations **

DAY	ORBIT	CHANNELS	RESET TIME
***	*****	********	**********
Friday	4100	reset telemetry calendar-clock	
		load auto-attitude control s/w	
		2,3,	10:40:50
	4101	check auto-att.cntrl s/w	
		arm magnetorquers	
		commence auto-attitude control	
	4105	whole orbit data dump	
	4107	back to 1200 tlm!	
Saturday	4107	whole orbit data dump	
		continue attitude control	
Sunday		continue attitude control	
Monday	4150	whole orbit data dump	
Tuesday	4158	2,3	09:53:16
	4159	1.2GHz uplink tests	
	4164	2,3	19:29:15
Wednesday	4172	2,3	08:57:08
	4173	terminate attitude control	
	4179	1,2,3,52	20:07:28
	4180	2,3	21:42:40
		tlm speed to 600 bps	
		multiple orbit survey dump	
Thursday	4187	1,2,3,52	09:36:00
		tlm to 1200 bps	
	4193	2,3	19:01:10
(OBC told to change d/link from TLM to ODATA after 6hrs)			
Friday	4202	Despin from Zspin=1.9 mins	

** Thanks for Reports & Questionnaire Returns ** I2KBD, ZL1MO,

JA2WO,

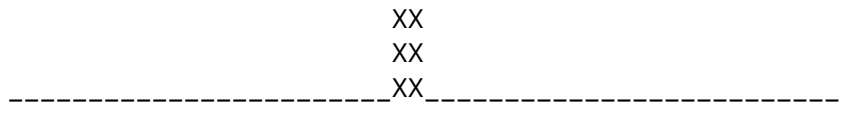
This week: W.T.Smith, DL7OU

From -1768707169802467540
X-Google-Language: FRENCH,ASCII-7-bit
X-Google-Thread: 151e61,1283dd1d9109c4f1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-22 18:04:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!houxm!mhuxr!ulysses!
allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin 105
Message-ID: <242@petrus.UUCP>
Date: Sat, 22-Dec-84 21:04:13 EST
Article-I.D.: petrus.242
Posted: Sat Dec 22 21:04:13 1984
Date-Received: Sun, 23-Dec-84 08:44:15 EST
Organization: Bell Communications Research, Inc
Lines: 180

**** UoSAT Bulletin-105 (Edited) 21st December 1984 ****

UoSAT Spacecraft Control Centre, University of Surrey, England

** GENERAL NEWS **



H A P P Y C H R I S T M A S & N E W Y E A R

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* 1984 *

Thanks for all those who sent Xmas cards, it is nice to know you think of us! 1984 has been a hectic but rewarding year for all at UoS - having overcome the teething problems following the launch of UoSAT-OSCAR-11 in March, we have been most pleased with the spacecraft's performance. The gravity gradient stabilisation has operated extremely well (provided we do not 'kick' it too hard!) and a great deal of work is under way on the various experiments.

The DCE has been in use since May assisting spacecraft operations and is about to be activated as a communications experiment shortly in the new year - although initially in a limited experimental way only.

The Particle/Wave Experiment has carried out experiments in conjunction with the AMPTE spacecraft in November and more are scheduled for April 1985.

Test images have been received from the CCD camera on UO-11, but further work is required on the ground station facilities at UoS before this experiment can be fully evaluated. Considerable efforts are under way on the 9600 bps psk 435 MHz downlink with some success.

Although little has been seen from the Space Dust Experiment, a number of events were recorded in early December - coinciding with a meteor shower. This data is still being analysed.

The OBC has been used continuously to provide autonomous attitude control; whole-orbit experiment and telemetry data surveys; automatic experiment and downlink switching and special experiment support.

The telemetry, telecommand and power systems continue to perform well. The programmable channel 'dwell' facility on the telemetry has been used frequently for attitude control navigational support.

The UoSAT Team would like to thank the very many experimenters world-wide for their support and regular reports on the

spacecraft - they are much appreciated.

UoSAT-OSCAR-9 has had a good year too - supporting a regular experiment schedule and, of course, the Bulletin! The UO-9 schedule is likely to be modified in the New Year to reflect user interests.

The UoSAT Team do, however, suffer increasing manpower problems. Operating two spacecraft - as well as planning future missions - is VERY labour-intensive and there is much we cannot do, due to resource limitations, which we would like to be able to do! We are trying to improve this situation but it will take time.

1985 promises to be a busy year too - more experiments on UO-11 and preparation for PACSAT and other missions - we are looking forward to another exciting year!

* AMPTE Spacecraft Barium Release *

Early risers on Christmas day will be treated to an unusual display from an experiment that will study the Earth's magnetic field and how it affects the solar wind. An AMPTE satellite will release four canisters of barium 70,000 miles above the Pacific Ocean, creating, in effect, a man-made comet. The spectacular display that should result will be visible throughout the western U.S., northern Mexico, southwestern Canada and Hawaii.

At approximately 4:08 AM PST on Christmas morning the West German satellite will eject the canisters and their barium load. The comet will be visible about ten minutes later when sunlight causes the barium atoms to radiate colored light. The display will be visible to the naked eye in an area west of a line running from Chicago to the southern end of Texas. It will not be visible in areas where the sun has already risen.

* NOAA-9 *

NOAA-9 was launched at 10:42 gmt on 12 December - no additional information available at present except that the launch appears to have been successful and signals from NOAA-9 have been received at UoS on 191284.

** UoSAT-Oscar-9 Schedule **

This weeks schedule will be modified as follows due to Xmas:

Friday	211284	-	load Bulletin
Saturday	221284	-	Bulletin/DIGITALKER/1200 bps telemetry until

Wednesday 020184

The 21 MHz Beacon will be in use during this time.

** UoSAT-Oscar-11 Operations **

DAY	ORBIT	CHANNELS	RESET TIME
***	*****	********	**********
Friday	4203	2,3	11:51:49
(OBC told to change d/link from TLM to ODATA after 6hrs)			
Saturday		whole orbit data dump	
Sunday	4232	reset Watch-Dog	
		ODATA dump	
	4233	2,3	13:00:10
	4237		
(OBC told to change d/link from TLM to ODATA after 1.5hrs)			
Monday	4245	1,2,3,52	08:47:02
	4246	despin	
	4247	despin	
	4252	2,3,	20:02:00
(OBC told to change d/link from TLM to ODATA after 2.5hrs)			
Tuesday	4261	despin	
	4262	despin	
	4266	2,3,	19:01:16
(OBC told to change d/link from TLM to ODATA after 6hrs)			
Wednesday	4275	despin	
	4276	despin	
	4282	1,2,3,52	21:18:02
(OBC told to change d/link from TLM to ODATA after 1.5hrs)			
Thursday	4290	despin	
	4291	2,3	12:21:55
		DCE tests	
Friday	4304	reset Watch Dog	
	4305	DCE tests	
		2,3	11:24:15

** Thanks for Reports & Questionnaire Returns ** I2KBD, ZL1MO, JA2WO, W.T.Smith, DL7OU

From -1285833412869679845
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1b8fb7752edef4c8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-22 18:07:42 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site petrus.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!houxm!mhuxr!ulysses!
allegra!bellcore!petrus!karn
From: karn@petrus.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <243@petrus.UUCP>
Date: Sat, 22-Dec-84 21:07:42 EST
Article-I.D.: petrus.243
Posted: Sat Dec 22 21:07:42 1984
Date-Received: Sun, 23-Dec-84 08:44:31 EST
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84346.39328290
   Tue Dec 11 09:26:19.642 1984 UTC
Element set: 712
Inclination: 97.6120 deg
RA of node: 324.0514 deg
Eccentricity: 0.0002106
Arg of perigee: 170.5010 deg
Mean anomaly: 189.6257 deg
Mean motion: 15.26752400 rev/day
Decay rate: 2.004e-05 rev/day^2
Epoch rev: 17657
Semi major axis: 6860.630 km
Anom period: 94.317847 min
Apogee: 484.502 km
Perigee: 481.612 km
Ref perigee: 2536.42428085
   Tue Dec 11 10:10:57.865 1984 UTC
Beacon: 145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84342.15115545
   Fri Dec 7 03:37:39.830 1984 UTC
Element set: 149
Inclination: 25.8657 deg
RA of node: 164.4952 deg
Eccentricity: 0.6026253
Arg of perigee: 329.1670 deg
Mean anomaly: 6.2844 deg
Mean motion: 2.05852136 rev/day
Decay rate: -1.08e-06 rev/day^2
Epoch rev: 1117
Semi major axis: 26105.859 km
Anom period: 699.531240 min
Apogee: 35460.834 km
Perigee: 3996.732 km

```
Ref perigee:      2532.14267525
   Fri Dec  7 03:25:27.141 1984 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84322.22759342
   Sat Nov 17 05:27:44.71  1984 UTC
Element set:     50
Inclination:       98.2229 deg
RA of node:        23.8200 deg
Eccentricity:    0.0013543
Arg of perigee:   163.2241 deg
Mean anomaly:     196.9419 deg
Mean motion:   14.61922097 rev/day
Decay rate:       1.23e-06 rev/day^2
Epoch rev:            3806
Semi major axis:  7062.191 km
Anom period:     98.500461 min
Apogee:            695.355 km
Perigee:           676.227 km
Ref perigee:      2512.25857586
   Sat Nov 17 06:12:20.954 1984 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84348.21172000
   Thu Dec 13 05:04:52.608 1984 UTC
Element set:     109
Inclination:       82.9632 deg
RA of node:        33.8104 deg
Eccentricity:    0.0058171
Arg of perigee:   334.0861 deg
Mean anomaly:      25.7296 deg
Mean motion:   12.15588820 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13265
Semi major axis:  7987.323 km
Anom period:    118.461109 min
Apogee:           1659.664 km
Perigee:          1566.738 km
Ref perigee:      2538.20584045
   Thu Dec 13 04:56:24.615 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84344.58530014
   Sun Dec  9 14:02:49.932 1984 UTC
Element set:     237
Inclination:       82.9588 deg
RA of node:        46.2560 deg
Eccentricity:    0.0019304
```

```
Arg of perigee:    72.6921 deg
Mean anomaly:     287.6245 deg
Mean motion:   12.06666875 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           13124
Semi major axis:  8026.672 km
Anom period:    119.336996 min
Apogee:           1683.221 km
Perigee:          1652.232 km
Ref perigee:      2534.60196116
   Sun Dec  9 14:26:49.444 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      84344.63437993
   Sun Dec  9 15:13:30.425 1984 UTC
Element set:     204
Inclination:       82.9601 deg
RA of node:        47.9418 deg
Eccentricity:    0.0011624
Arg of perigee:    98.7864 deg
Mean anomaly:     261.4515 deg
Mean motion:   12.05048299 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13107
Semi major axis:  8033.863 km
Anom period:    119.497285 min
Apogee:           1685.629 km
Perigee:          1666.952 km
Ref perigee:      2534.65709652
   Sun Dec  9 15:46:13.138 1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84338.57377670
   Mon Dec  3 13:46:14.306 1984 UTC
Element set:     93
Inclination:       82.9596 deg
RA of node:        41.4983 deg
Eccentricity:    0.0050431
Arg of perigee:    14.8822 deg
Mean anomaly:     345.3711 deg
Mean motion:   12.13562906 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13126
Semi major axis:  7996.216 km
Anom period:    118.658867 min
Apogee:           1659.786 km
Perigee:          1579.135 km
Ref perigee:      2528.57712517
   Mon Dec  3 13:51:03.614 1984 UTC

Satellite: rs-7
```

```
Catalog number: 13001
Epoch time:      84344.26441926
   Sun Dec  9 06:20:45.824 1984 UTC
Element set:     183
Inclination:       82.9630 deg
RA of node:        43.9170 deg
Eccentricity:    0.0022646
Arg of perigee:    30.1053 deg
Mean anomaly:     330.1311 deg
Mean motion:   12.08689594 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           13142
Semi major axis:  8017.709 km
Anom period:    119.137288 min
Apogee:           1663.021 km
Perigee:          1626.707 km
Ref perigee:      2534.27128365
   Sun Dec  9 06:30:38.907 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      84329.98981768
   Sat Nov 24 23:45:20.247 1984 UTC
Element set:     302
Inclination:       82.9599 deg
RA of node:        58.1798 deg
Eccentricity:    0.0020170
Arg of perigee:   180.5669 deg
Mean anomaly:     179.5382 deg
Mean motion:   12.02950966 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12908
Semi major axis:  8043.204 km
Anom period:    119.705627 min
Apogee:           1681.284 km
Perigee:          1648.838 km
Ref perigee:      2519.94835986
   Sat Nov 24 22:45:38.292 1984 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84347.87876475
   Wed Dec 12 21:05:25.274 1984 UTC
Element set:     288
Inclination:       99.0712 deg
RA of node:       321.3951 deg
Eccentricity:    0.0012666
Arg of perigee:   315.5887 deg
Mean anomaly:      44.4245 deg
Mean motion:   14.13136983 rev/day
Decay rate:      2.086e-05 rev/day^2
Epoch rev:           17909
Semi major axis:  7223.979 km
```

Anom period: 101.900949 min
Apogee: 865.196 km
Perigee: 846.897 km
Ref perigee: 2537.87003231
   Wed Dec 12 20:52:50.791 1984 UTC
Beacon: 137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time: 84335.55063103
   Fri Nov 30 13:12:54.520 1984 UTC
Element set: 95
Inclination: 98.6893 deg
RA of node: 4.3944 deg
Eccentricity: 0.0015986
Arg of perigee: 295.0486 deg
Mean anomaly: 64.9032 deg
Mean motion: 14.22440040 rev/day
Decay rate: 4.5e-07 rev/day^2
Epoch rev: 8712
Semi major axis: 7192.403 km
Anom period: 101.234496 min
Apogee: 842.907 km
Perigee: 819.911 km
Ref perigee: 2525.53795656
   Fri Nov 30 12:54:39.447 1984 UTC
Beacon: 137.5000 MHz

From 1660839414234141800
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,be3b2e838bc48736,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-26 15:29:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site trsvax.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Stereo TV
Message-ID: <52800042@trsvax.UUCP>
Date: Wed, 26-Dec-84 18:29:00 EST
Article-I.D.: trsvax.52800042
Posted: Wed Dec 26 18:29:00 1984
Date-Received: Sat, 29-Dec-84 02:48:19 EST
Lines: 24
Nf-ID: #N:trsvax:52800042:000:1044
Nf-From: trsvax!mikey   Dec 26 17:29:00 1984

Does anyone on the net know anything about the proposed format for

the networks broadcasting in stereo? The latest info that I got
is that NBC has been sporadically broadcasting stereo of the
Tonight Show since July 26, and that ABC only broadcast selected
cuts of the Olmypics in stereo. I know that PBS is planning on
nationwide stereo before the end of 85.

I just bought a Beta HiFi. It doesn't make sense to me to go buy
a stereo TV receiver. I'm going to run raw video to my TV (after
I gut the tuner, which is shot anyway). Since the Beta will always
be set to channel 3 output, I want to make a separate decoder box
so I can run the stereo signals into the Beta in the simulcast mode
and to the audio amplifier for listening. So far I haven't been
able to find anything out about the format of the encoding. Most
people I've talked to THINK it is either similar to or the same as
FM stereo. If not the same, just a different pilot frequency with
extended frequency response. Does ANYBODY know?

mikey at trsvax
KA5MJQ

From 6762474651803814020
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a9b376cdbd32b9c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-27 01:05:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: 220 MHz. Digipeaters in SFO area
Message-ID: <360@dsd.UUCP>
Date: Thu, 27-Dec-84 04:05:00 EST
Article-I.D.: dsd.360
Posted: Thu Dec 27 04:05:00 1984
Date-Received: Sat, 29-Dec-84 02:40:09 EST
Organization: AMPEX DSD, Redwood City, CA.
Lines: 19

To: All packet stations
From: Hank Magnuski, KA6M
Subject: 220 MHz. Digipeaters in Bay Area

Today I received a call from Scott Miles, WB6PQM, who informed me of plans
to establish two new digipeaters in the Bay Area.

The new simplex machines will be running on 223.58 MHz. and are intended
to serve the needs of RACES in Contra Costa county, linking together all
three parts of the county. The hardware will be based on GLB controllers
purchased and installed by Scott. WB6PQM-1 is currently on the air, and
WB6PQM-2 will be running shortly.

Scott is on the Board of Directors of NARC, and is the 220 MHz. frequency coordinator for that organization.

Scott currently resides at 12 Big Oak Ct., Walnut Creek, CA 94596, and may be reached at (415) 934-6081 (home) or (415) 827-4700 x 49 (work).
His USENET address is UCBVAX!ZEHNTEL!ZPS!DIGGER.

From -5579358373004616195
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f1ea0656962ba07f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-27 15:45:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site hplabs.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!hplabs!paull
From: paull@hplabs.UUCP (Rob KA6SFV)
Newsgroups: net.ham-radio
Subject: a rtty freak is born
Message-ID: <1303@hplabs.UUCP>
Date: Thu, 27-Dec-84 18:45:35 EST
Article-I.D.: hplabs.1303
Posted: Thu Dec 27 18:45:35 1984
Date-Received: Fri, 28-Dec-84 06:04:11 EST
Distribution: net
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 30

cq de KA6SFV bt

I recently acquired a C64 computer and built the rtty modem described in the SEP-82 issue of 73. With my own brand of receive program the diddles on the air became characters on my screen. It was like learning morse for the first time. What a thrill to finally make sense out of what was previously thought of as 'interference'. I got so hooked on rtty that I could hardly pull myself away from the shack. In fact I worked so late getting the system working, that I couldn't find any rtty stations to receive when I'd make a change in the program. Very frustrating! Now you know the beginnings of my rtty career. Now I'm working on the transmit part of the program.

Now to the questions:

1. What I'd like to know is what rtty modulation techniques are being used, what are the 'usual' freqs and where on the bands that type of operation can be found.
2. Any tips for a neophyte rtty operator?
3. What rtty stuff is happening in the SF bay area.

TNX es 73 de KA6SFV (Rob) sk

From 7601737763031690985
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,872e4ef4db544d13,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-09 15:16:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin 100
Message-ID: <221@mouton.UUCP>
Date: Fri, 9-Nov-84 18:16:47 EST
Article-I.D.: mouton.221
Posted: Fri Nov 9 18:16:47 1984
Date-Received: Sat, 10-Nov-84 09:40:37 EST
Organization: Bell Communications Research, Inc
Lines: 116

**** UoSAT Bulletin-100 (Edited) 8th November 1984 ****

UoSAT Spacecraft Control Centre, University of Surrey

** GENERAL NEWS **

** 100th UoSAT Bulletin **

It seems a long time ago now that we generated and loaded the first UoSAT Bulletin back in October 1981 and, since then, the Bulletin has settled down to a regular format after a number of modifications suggested by the 'readers'. The technical feats in loading the Bulletin on a regular basis in the early days have long since been stream-lined - but the editorial effort is still demanding! Material for the Bulletin is gleaned from many sources - Telemail, ASR, various space news sources, G3YJO's thoughts and, of course, the many letters we receive daily from UoSAT experimenters. The response to the Questionnaire transmitted during the summer of 1984 was excellent and provided the UoSAT Team with valuable feedback concerning the most popular and useful experiments and schedules as well as Bulletin content & format suggestions.

The Bulletin was compiled by G3YJO for the first 9 months, then by G8NEF for the following year, before reverting to G3YJO in August 1984 as G8NEF took up full-time teaching commitments.

You may have wondered (or probably not!) how the Bulletin is compiled & loaded. Work commences in earnest early on Friday morning scanning the various news sources and compiling them into the Bulletin file on the UoS Prime mainframe computer. The operations of UO-9 and UO-11 are summarised from the Command Operator's Log and the schedule for the coming week agreed. A list of correspondents/reports for the week is compiled. The Keplerian Elelments are copied automatically from a Telemail file generated by KA9Q in the USA and the 'old-fashioned' EQX's generated automatically by an program and inserted into the Bulletin file. The raw text is then run through a text processor to format it into the 64 character lines compatible with most displays. The processed Bulletin is then run through an 1802 Assembler written by G8NEF which produces a OBC compatible file (with error checking) ready for transmission to the spacecraft, which is executed using bi-directional packet communications with the UO-9 OBC.

The loading of the Bulletin obviously takes longer than the time taken for you to receive it - exactly how much longer depends on the UoS-to-UO-9 link quality - but a few iterations between the OBC on UO-9 and the UoS groundstation Prime are usaully sufficient. Then it is all yours for the weekend!

* UoSAT-OSCAR-11 QSL *

The second printing of these QSL cards was rejected too, but relacements are promised for next week! Patience will be rewarded!

** UoSAT-Oscar-9 Schedule **

This weeks schedule will be modified as G3YJO & G8NOB will be attending the AMSAT AGM in the USA:

Thursday 8th - load Bulletin
Friday 9th to Tuesday 20th - Bulletin/DIGITALKER/1200 bps telemetry
Then back to normal!

The 21 MHz Beacon will be in use this week.

** UoSAT-Oscar-11 Operations **

A daily account of UO-11 operations follows:

DAY	ORBIT	CHANNELS	RESET TIME
***	*****	********	**********
Friday	3588	Telemetry	

```
Saturday    3609      1,2,3,52      19:28:10
                      145 MHz returned to Telemetry

Sunday      3624      ODATA dump
(OBC told to change d/link from ODATA to TLM after 7.5hrs)

Monday      3632      2,3            09:50:15
                      435 MHz DCE 1200 bps afsk test
            3633      ODATA dump
            3634      435 MHz DCE 1200 bps AFSK Tlm tests
           3638       ODATA dump
(OBC told to change d/link from ODATA to TLM after 8.5hrs)

Tuesday     3646      Reset Watch-Dog & 145 Tlm speed test
            3647      435 MHz DSR 9600 bps psk tests
            3648      same
            3649      ODATA dump
(OBC told to change d/link from ODATA to TLM after 8.5hrs)

Wednesday   3661      P-Wave survey reset at 09:29:20
                      435 MHz DSR 9600 bps psk tests
            3662      435 MHz DSR 9600 bps psk tests
            3663      435 MHz 9600 bps psk DSR data dump

Thursday    3676      Despin from 3m30s to 23m10s!
                      1,2,3,52       10:11:49

** Thanks for Reports & Questionnaire Returns **

ZS1BI, DL7OU, H.J.Meerza, G4BBH, JA2WO, HB9RJV, VK2AVH, HB9RKR,
ZL2AHK, VE3CIE,

This week:  H.Meerza, JA2WO,


From -8012771272516067529
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c9738ad69f315ccc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-11 01:26:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT1.00C 11/1/84; site vortex.UUCP
Path: utzoo!linus!decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: A method for "secure" communications via ham packet radio
Message-ID: <444@vortex.UUCP>
Date: Sun, 11-Nov-84 04:26:49 EST
Article-I.D.: vortex.444
Posted: Sun Nov 11 04:26:49 1984
Date-Received: Tue, 13-Nov-84 00:57:47 EST
Organization: Vortex Technology, Los Angeles
```

Lines: 29

While I haven't worked out all of the details, I can see one reasonably
practical method for fairly "secure" communications (for login
sessions with a central computer) via ham packet radio.

This technique assumes either a specialized hardware device, or
a programmable terminal (e.g. Radio Shack Model 100 or some such)
on the remote end. The technique would involve synchronizing a long
pseudo-random sequence on both the mainframe and remote ends, and then
including the "next" element of the sequence as "non-information"
data in each packet sent to the mainframe. This sequence might be
as small as one word or byte of sequence info per packet, and would be
inserted by the remote terminal device--it would not require modifications
to the packet radio boards. While maintaining synchronization would
not be trivial, it should not be terribly difficult.

Additional security might be provided over login sequences, including
specialized pseudo-random query/response sequences to replace
conventional logins via the packet radio channel.

This sort of technique would provide a high level of integrity and
control over sessions, yet would not require the (presumably illegal)
use of encryption over full sessions. It would have the ability
of providing sessions which would ONLY respond to packets from
the designated user and would ignore all other transmissions.

I welcome comments on this technique.

--Lauren--
{decvax, ihnp4, allegra, seismo, clyde}!vortex!lauren

From 4045869439670419716
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b85a675d856cd651,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-11 12:03:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxg!wheatley
From: wheatley@inuxg.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Russian Satellite Query
Message-ID: <349@inuxg.UUCP>
Date: Sun, 11-Nov-84 15:03:08 EST
Article-I.D.: inuxg.349
Posted: Sun Nov 11 15:03:08 1984
Date-Received: Sun, 18-Nov-84 05:35:08 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 11

I have noticed that the Russian RS satellites have been somewhat

erratic in operation the past few weeks. In many passes, the beacons are not heard. Further, I have not heard RS-6 in some time, although i have been told that it is no longer functional. Anyone know whats up here? Are the batteries weakening, and they are being used sparingly to extend the satellites life? HELP!

73, KU9C

steve wheatley
inuxg!wheatley

From -2682480777996912986
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36556193a3a1dd3c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-16 07:13:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: Vegas Nev. Hams??/Wilson
Message-ID: <654@inuxd.UUCP>
Date: Fri, 16-Nov-84 10:13:31 EST
Article-I.D.: inuxd.654
Posted: Fri Nov 16 10:13:31 1984
Date-Received: Mon, 19-Nov-84 03:16:11 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 20

I am in desperate need to find repair parts for a Wilson MR 1000 antenna rotor. I understand Wilson has moved on to new and better??? things and is now out ofd the Ham business. There must be parts stored somewhere for these expensive rotors so I am trying by requesting if there are any hams in the Vegas area who might know someone who works at Wilson?? If there are any parts available there locally. I need a couple of the drive gears and possibly a new ring gear.

Any Help is Appreciated

R. C. Fitch KN9K
send info by mail
or post on net

Thanks

From -6298011374269566058

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,945b7e53ad844cd1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-16 11:37:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!hou2h!ad7i
From: ad7i@hou2h.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: more thoughts on secure packet radio networks
Message-ID: <685@hou2h.UUCP>
Date: Fri, 16-Nov-84 14:37:08 EST
Article-I.D.: hou2h.685
Posted: Fri Nov 16 14:37:08 1984
Date-Received: Sat, 17-Nov-84 04:57:56 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 41

i too have been thinking about how to verify that a user of
a packet network is who he or she claims to be. i see from
laurens comments that our ideas are very similiar. mine
are still somewhat half-baked but i will present them here
so that others can recommend improvements or alternatives.

what i am considering is the situation that a user would
like to change some parameters of a remote station (digipeater,
host, weather stn, nuclear reactor, etc.) but doesn't want the bad
guys to screw it up. the though would be that when i was connected
to, say, my remote home station and wanted to turn on the the coffee pot,
the home station would respond with a command prompt that included
a random number (64 bits printed as a 16 digit hex value). I would
encrypt that random number using DEA (that's Data Encryption Algorithm,
the software approach to DES) using the key-of-the-day and return
it with my command to turn on the coffee pot. my home station would
also encrypt the random number it generated using the same key and
compare the result with what i sent to it. if they are the same
then it is very likely i am who i say i am (within the 'bad-guys'
fudge factor) and the home station will switch on the coffee pot.
if they don't match, the home station will give me a new prompt
and a new random number to encrypt and send back with my command.
note that the command and response are not encrypted, only the
verification data.

because every prompt from the home station would include a NEW
random number and because the keys are changed daily, it would
be very difficult for a 'bad-guy' to masquerade as a 'good-guy'.
Simply repeating the command and the encrypted random number
wouldn't solve the problem for the 'bad-guy'. more sophistocated
techniques would be needed (and i am sure the 'bad-guys' would
try them -- some might succeed).

If you don't like DES/DEA then choose another encryption scheme.

At the least, DES is a known algorithm that offers good security.

what do others think about this???
cu, paul, ad7i

SK

From 592542433368345672
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cf1a8f1202769208,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-18 19:59:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site vax135.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!mhuxh!mhuxi!vax135!hpk
From: hpk@vax135.UUCP (Howard Katseff)
Newsgroups: net.ham-radio
Subject: WWV Geophysical Alerts query
Message-ID: <887@vax135.UUCP>
Date: Sun, 18-Nov-84 22:59:28 EST
Article-I.D.: vax135.887
Posted: Sun Nov 18 22:59:28 1984
Date-Received: Mon, 19-Nov-84 07:44:01 EST
Organization: AT&T Bell Labs, Holmdel, NJ
Lines: 10

WWV broadcasts Geoalerts at 18 minutes past the hour. I am interested
in how to apply this information to obtain propogation conditions.
Either references to published works, or a computer program
would be useful.

I will summarize to the net.

Howard Katseff
AT&T Bell Laboratories
Holmdel, NJ

From 517784364399313979
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d29bb5eba3715498,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-19 08:03:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbdkc1.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!cly
From: cly@cbdkc1.UUCP (Carl Yaffey)
Newsgroups: net.ham-radio
Subject: advice wanted on mounting a beam
Message-ID: <813@cbdkc1.UUCP>
Date: Mon, 19-Nov-84 11:03:29 EST
Article-I.D.: cbdkc1.813

Posted: Mon Nov 19 11:03:29 1984
Date-Received: Tue, 20-Nov-84 03:20:49 EST
Organization: AT&T Bell Laboratories, Columbus
Lines: 13

I'm considering putting up a small triband beam but don't want
to buy a tower. I would also like to avoid holes in my roof and walls.
I would like to mount it on my chimney, but don't know if this
is a good idea given the weight and windload (although the chimney
IS fairly sturdy). Any ideas, suggestions, hints? Is there a
GOOD chimney mount kit available? The antenna would end up at about
the 30 foot level. Is this too low for decent 20 meter performance?
Any opinions as to the "best" small tribander (Moseley, Cushcraft,
Hustler, Hy-gain) ? Would a quad be a better choice?
Carl, K8NU
--
Carl Yaffey at AT&T Bell Laboratories Columbus, Ohio
614-860-3399 cbosgd!cbdkc1!cly

From 426279366357409430
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,10d69ae9fe27680a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-20 08:39:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/3/84; site aluxe.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!aluxe!richah
From: richah@aluxe.UUCP (ahrens)
Newsgroups: net.ham-radio
Subject: RS-232 for TI99/4A
Message-ID: <528@aluxe.UUCP>
Date: Tue, 20-Nov-84 11:39:25 EST
Article-I.D.: aluxe.528
Posted: Tue Nov 20 11:39:25 1984
Date-Received: Wed, 21-Nov-84 00:54:03 EST
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 12

     Does anyone on the net have information or schematics on the
construction of an RS-232 interface to plug into the side of a
TI99/4A console????

     I would like to use the TI99/4A with a TAPR Packet Terminal
Node Controller.............73 and Thanks In Advance..........

****
     Richard E. Ahrens, W3WJC, AT&T Bell Laboratories, mhuxi!aluxe!richah
Room 30-130, 2525 N. 12th St. Reading, Pa. 19604 (215)929-6174 Cornet 8+234-6174
****

From 8519714089596094015
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f9efe514eba423e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-20 12:46:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/3/84; site aluxe.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!aluxe!richah
From: richah@aluxe.UUCP (ahrens)
Newsgroups: net.ham-radio
Subject: CUSHCRAFT R3 ANTENNA
Message-ID: <529@aluxe.UUCP>
Date: Tue, 20-Nov-84 15:46:22 EST
Article-I.D.: aluxe.529
Posted: Tue Nov 20 15:46:22 1984
Date-Received: Wed, 21-Nov-84 01:10:59 EST
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 52

Yes, the present price for the Cushcraft R3, in my opinion, is a bit steep, but it works. I purchased an R3 at Dayton in spring of '83, $215 including shipping from Edge, Inc.

I did not install the antenna until Oct 1983. For background information, Cushcraft announced the antenna in 1980. The R3 was reviewed in the April '83 issue of CQ, pages 40 through 43. The R3 is essentially an end fed 10, 15, & 20 meter trap half-wave vertical. The matching network at the feed end consists of a tapped inductor (the ring) in parallel with an air spaced variable capacitor driven by a small motor. In my unit the drive motor is a 1 RPM Airpax (K81352-P3-S2). The motor also drives a 1000 ohm pot for the simple control box readout. The capacitor has 13 rotor plates and 14 stators, with a rotor to stator spacing of .070". This is not the original capacitor pictured in some of the early advertisement literature. The number on my capacitor is 73175 27DEBB.

The antenna has a slim wind profile, and I mounted the R3 on my chimney with an all stainless steel South River Model 2002 Chimney Mount (about $20). My XYL thinks it looks fine.

Ok now the shortcomings. After about one month, and a few rain storms the tuning became erratic. I took the antenna down and found water between the rotor and stator plates. I think the water wicked down the threads of the ceramic feed-through screw, then down the aluminum strap connecting the feed-through and the tuning capacitor. The the water settled between the capacitor plates. The feed-through, the cracks and seams in the plastic cover, the screw holes and the threads should be sealed with RTV, I used Dow 3145 RTV Adhesive/Sealant. A more severe design problem, in my opinion, is the use of aluminum capacitor plates and threaded brass tie rods and nuts. In one month their was evidence of corrosion or galvanic action between the brass and aluminum. I replaced the aluminum strap connecting the feed-through

and capacitor with a homemade strap made of brass. I also replaced the nickel plated feed-through screw with a brass screw and used brass nuts on the feed-through. I covered the outside connection of the feed-through with a good covering of RTV. The one end of the aluminum inductor ring attaches to the feed-through. Also replace or RTV the screws on the control cable terminal strip, they are steel.

Since Nov. '83 the antenna has performed quite well, I have worked my share of DX during contests. The antenna presents a clean appearance and DOES NOT REQUIRE RADIALS. I have been thinking about making a ground mounted 40 meter version.

One other comment, I have an all electric home with a fire place in the basement. I have not been using the fireplace for a few years. If you should chimney mount a unit on an in-use chimney you might have to mount the R3 higher to avoid the hot gases.

Best of luck and 73.....Rich Ahrens, W3WJC

From -6484286030278026120
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,caa2d482c55fd9f4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-20 14:15:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 105 (TRN subject will be packet)
Message-ID: <13694@mgweed.UUCP>
Date: Tue, 20-Nov-84 17:15:01 EST
Article-I.D.: mgweed.13694
Posted: Tue Nov 20 17:15:01 1984
Date-Received: Wed, 21-Nov-84 19:05:12 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr arrl bulletin nr 105 from arrl headquarters
newington ct november 16, 1984
to all radio amateurs bt

packet radio overview and prospective will be the subject of the december 2 north american teleconference radio net, trn, beginning at 6 p.m. cst, 0000 utc december 3. speakers will be wa7gxd and nk6k. for a complete list of gateway station locations and frequencies, write the trn manager, c/o midway amateur radio club, box 1231, kearney, ne 68847,; encloseing an sase, or check the compuserve hamnet xa4 database ar

From 1530505081290662020
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c98719f3683d2d3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-20 14:15:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 36/37
Message-ID: <13695@mgweed.UUCP>
Date: Tue, 20-Nov-84 17:15:24 EST
Article-I.D.: mgweed.13695
Posted: Tue Nov 20 17:15:24 1984
Date-Received: Wed, 21-Nov-84 19:05:45 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 24

qst de k9eui
hr crrl bulletin nr 36/37 from crrl headquarters
london ont november 16, 1984
to all radio amateurs bt

doc has said no to a crrl request that doc issue a gazette notice calling for expansion of the canadian 75 metre phone band. doc now expects to release proposals for public comment by next summer.

in commemoration of the 250th anniversary of la verendryes arrival in manitoba, amateurs in manitoba may use the prefix cg4 during the month of december.

a dxpedition to establish a station at a favorable location on the west coast of ireland to attempt a transatlantic 2 metre contact is being planned for august 1985 by the west kent amateur radio society in the u.k. they would like to hear from canadian amateurs who would be in a position to operate high power stations on the east coast during the dxpedition. for details, contact david green, g4otv, 13 culverden down, tunbridge wells, kent tn4 9sb, united kingdom ar

From 2712832091098760657
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b19cd9556aaf1943,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-20 14:15:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr

From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 47
Message-ID: <13696@mgweed.UUCP>
Date: Tue, 20-Nov-84 17:15:39 EST
Article-I.D.: mgweed.13696
Posted: Tue Nov 20 17:15:39 1984
Date-Received: Wed, 21-Nov-84 19:05:57 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 32

qst de k9eui
hr propagation forecast bulletin nr 47 from arrl headquarters
newington ct november 18, 1984
to all radio amateurs bt

the solar flux has been between 69 and 77 since early september. the most recent comparable low came in may, june and the first few days of july 1976. that ten week summer period had much less impact on thu dx scene than the present low which began just as the northern hemisphere was moving into its best month of the year for worldwide dx on the higher frequencies. as for sunspots, the author of these bulletins has never seen the surface of the sun so clean, or for so long, in more than ten years of observation, including the final two years of the previous solar cycle.

propagation was fair to poor on all frequencies much of the past week as predicted. during a major geomagnetic storm on the 16th, the geomagnetic a index reached 76, its highest in more than two years. this produced watery and weak signals on all hf bands and a wild aurora delighted the vhf fraternity in the more northerly states. aftereffects of this disturbance may be with us for a day or two, however, much better propagation will move in after about the twenty first. the solar flux is unlikely to go above the middle seventies, so dx opportunities on 21 and 28 mhz will be brief, except for low latitude east west and low latitude north south circuits.

american sunspot numbers for november 8 through 15 were between 3 and 19 with a mean of 13.6 ar

From -7617661519485021592
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a45fe2d45ae36ed6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-20 15:54:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site isosvax.UUCP
Path: utzoo!linus!decvax!genrad!mit-eddie!godot!harvard!seismo!hao!noao!terak!
asuvax!isosvax!wb7asr

From: wb7asr@isosvax.UUCP (Tom Boza, WB7ASR)
Newsgroups: net.ham-radio
Subject: Amateur news
Message-ID: <182@isosvax.UUCP>
Date: Tue, 20-Nov-84 18:54:17 EST
Article-I.D.: isosvax.182
Posted: Tue Nov 20 18:54:17 1984
Date-Received: Fri, 23-Nov-84 07:38:14 EST
Organization: Intel Corp, Phoenix (Deer valley), AZ
Lines: 276

WHAT IS BAUD RATE ?

Baud rate is the basic rate of information exchange. It refers to the number of changes a signal makes in one second.

The signal changes to off or zero at one second, back to a one at two seconds, and back to zero at three seconds, and so on. So, after one second it has changed once, after two seconds it has changed twice. Hence, it changes one each second and the baud rate is therefore ONE.

For most RTTY found in the amateur bands, the baud rate is 45.45. This means that each bit of information within each RTTY character is 1/45.45 seconds in duration. Another way to say it is that a 45.45 baud, the signal changes 45 times in one second. For all the speeds of RTTY, the following table applies.

BAUDOT SIGNALING RATES AND SPEEDS

Signaling Rate (bauds)	Data Pulse (ms)	Stop Pulse (ms)	Speeds (wpm)	Common Name
45.45	22.0	22.0	65.00	Western Union;
	22.0	31.0	61.33	60 Speed
	22.0	33.0	60.61	45 bauds
50.00	20.00	30.0	66.67	European; 50 bauds
56.92	17.57	25.00	76.68	75 speed
	17.57	26.36	75.89	57 bauds
74.20	13.47	19.18	100.00	100 speeds
	13.47	20.21	98.98	74 bauds
100.00	10.00	15.00	133.33	100 bauds

NEW 24-Ghz RECORD

A new 24-Ghz record apparently was set on August 11th, when I0SNY/IC8 and I8YZO/8 established a two-way CW contact spanning 331 km. I8YZO/8 operated from Mt. Montalto (in the Aspromonte Mts.), in southern Italy, at an altitude of 1956 meters. I0SNY/IC8, operated from Mt. Epomeo, on the island of Ischia (off the coast of Naples), was at an altitude of 788 meters.

It'll Never Work 30 DB of GAIN ?

Would it be possible to have an HF antenna with 30db of gain on 20 meters? What you say, Crazy!!!!

But think, A flashlight has at least 30db of gain. The light shines in all directions, but the reflector concentrates the light beam down to a fine cone. If we could build a reflector large enough for 20 meters, we could do it!

Now, how big would this dish have to be? Let's assume that it would have to be at least ten wave lengths wide in order to simulate the action of a flashlight reflector. Let's see, ten times 20 meters would be ten times about 3.3 feet or 300 feet. Once. I guess it depends on how bad one wants to simulate a flashlight.

An acre of land is about 220 by 220 feet. Our dish would then be about the size of one acre! Oh, how high up would we want this rig? Would the dish work on it's side? Probably not. We would have to elevate it at least a wave length or so. I think this idea has gotten out of hand. Maybe a computer would work better, using it to control a dozen verticals. Phase all the verticals together under program control, thats it. Hm?

TRN TO GIVE PACKET RADIO OVERVIEW

"PACKETEERS" and other interested in knowing more about this exciting new

mode for Amateur communications should tune in to the North American Teleconference Radio Net on December 2nd, at 2400Z. Two leading authorities in packet radio technology, Lyle Johnson, WA7GXD, and Harold Price, NK6K, will give a presentation entitled "Packet Radio Overview and Perspective." Access to TRN is provided by more than 180 gateway stations, mostly VHF repeaters, linked to cover virtually every metropolitan area in the U.S. and much of Canada. In the Phoenix area, tune to 147.240/147.840 Mhz repeater.

Sponsor for the TRN is the Midway ARC, of Kearney, Nebraska, under the direction of club President Merlin Feikert, WB0USW, and Net Manager Timothy Loewenstien, WA0IVW. In the Phoenix area, the Motorola ARC is the sponsor along with the ARA (Arizona Repeater Association).

NEW FORM 610

Planning to upgrade? Renew? Change your address? Apply for a Novice exam? If so, you'll be facing a new FCC form 610. Although Volunteer Examiners will have a big hand in filling out the recently revised form, the applicant's portions have not changed significantly. The new forms are available for a business size S.A.S.E. from FCC in Gettysburg and all FCC field bureaus.

DECEMBER IS THE MONTH FOR BIG CONTESTS

ARRL 160 meter CW Contest, from 2200 UTC November 30 to 1600 UTC December 2nd.

ARRL 10 meter, all mode Contest, from 0000 UTC December 8th to 2400 UTC December 9th.

ABUSE IT AND LOSE IT

Part # 97.114 of the FCC Rules and Regulations

The transmission or delivery of the following amateur radiocommunications is prohibited:

(a) International third party traffic except with countries which have assented thereto:

(b) Third party traffic involving material compensation either tangible or intangible, direct or indirect, to a third party, a station licensee, a control operator, or any other person:

(c) Except for an emergency communication as defined in this part, third party traffic consisting of business communications on behalf of any party. For the purpose of this section, business communication shall mean any transmission ot communication the purpose of which is facilitate the regular business or commercial affairs of any party.

NEW THIRD-PARTY AGREEMENT

The United States has signed a third-party traffic agreement with St. Christopher, Nevis and Anguilla. St. Christopher is known as St. Kitts. Call sign prefixes are VP2E and VP2K. This agreement went into effect 08 August 1984.

MYSTERY SATELLITE

A "MYSTERY SATELLITE" has been heard on several occasions. Paul Wilson, W4HHK, of Collierville, Tenn., says that he has heard satellite signals on 2301.0 Mhz. During the two-hour period, on October 5th, Wilson heard a steady carrier with doppler shift on 2304.0 Mhz. At 0212 UTC, the dish heading was 52 degrees azimuth, 20.5 degrees elevation. The signals and headings were confirmed with WA4HGN, 80 miles away. W4HHK uses a 18 foot dish and WA4HGN a 28 footer. Signals were 20 to 30 db out of the noise.

The signals were heard again at 1754 UTC the same day, in the same general heading. If anyone is interested in these mysterious satellite signals, contact Wilson at box 73, Collierville, Tn. 38071, Tel: (901) 853-7373.

160 METER NEWS

The FCC has proposed to reallocate half of the 160 meter band (1900-2000 Khz) to non-government radio location because of the anticipated expansion of the AM Broadcast Band. This would force certain radiolocation stations to move. Although the September 11th release of Docket 84-874 came as a surprise to the Amateur Radio community, ARRL took a swift reaction.

ARRL filed a motion to hold this NPRM in abeyance pending the resolution of an ARRL petition filed September 10th.

Ironically, the day before this NPRM was released, the ARRL filed a Petition for Initiation of Inquiry Procedure on the present use of the medium Frequency bands by non-government radiolocation users.

The purpose of this inquiry is twofold:

First, to define the spectrum requirements of individual users, and second, to find the number of radiolocation stations needed in a given geographical area. The ARRL requests that the Commission take a look at the spectrum efficiency and the technical need for the use of the 1900-2000 Khz band by non-government radiolocation users. As we go to press, we have no indication of the course that the FCC will follow in this case, which is beginning to look like the bureaucratic equivalent of a soap opera. For further info on this matter, watch the RTTY bulletins from the ARRL.

BETTER WORD

To refer to children as harmonics may be cute but it doesn't fit the facts of life, electronic or human. Figure ir out. A harmonic is an integral multiple of a signal fundamental frequency. A ham harmonic, it follows, would have to be the offspring of a single parent. Parthenogenesis (look it up in your dictionary) occurs in plants but not in people. A better term would be heterodyne, which is a third signal that results from the mixing of two different frequencies. If you think your kids are especially bright, you can call them superheterodynes.

From -4415968861711873721
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36446b1a2c8c2fd6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-21 11:13:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!genrad!mit-eddie!godot!harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Amateur.vs_CB
Message-ID: <6004@brl-tgr.ARPA>
Date: Wed, 21-Nov-84 14:13:35 EST
Article-I.D.: brl-tgr.6004
Posted: Wed Nov 21 14:13:35 1984
Date-Received: Fri, 23-Nov-84 07:36:32 EST
References: <176@isosvax.UUCP>
Organization: Ballistic Research Lab
Lines: 8

> THEY ARE USED SOLELY FOR PERSONAL SATISFACTION, NOT FOR COMMERCIAL PURPOSES.

Actually, there is no regulation that prohibits me from using Citizen's Band the course of my business. On the whole a fairly accurate article.

-Ron
Ham radio, not chidren's band.

From -2504368372264066803
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36446b1a2c8c2fd6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-21 11:17:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!genrad!mit-eddie!godot!harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Amateur.vs_CB
Message-ID: <6005@brl-tgr.ARPA>
Date: Wed, 21-Nov-84 14:17:57 EST
Article-I.D.: brl-tgr.6005
Posted: Wed Nov 21 14:17:57 1984
Date-Received: Fri, 23-Nov-84 07:36:44 EST
References: <176@isosvax.UUCP>
Organization: Ballistic Research Lab
Lines: 20

>
>   AMATEUR RADIO, ON THE OTHER HAND, IS QUITE DIFFERENT.   AMATEUR RADIO
> OPERATORS, SOMETIMES REFERRED TO AS "HAMS," MUST TAKE FOUR DIFFERENT TESTS
> ADMINISTERED BY THE FEDERAL COMMUNICATIONS COMMISSION.   THESE TESTS CONSIST
> OF MORSE CODE, SENDING AND RECEIVING, ELECTRONIC THEORY ON HOW THEIR RADIOS
> AND ANTENNAS WORK, RULES AND REGULATIONS, AND MATH. AFTER PASSING ALL FOUR
> OF THESE TEST, HAMS ARE THEN ISSUED A LICENSE AND CALL SIGN.
>
My first HAM ticket didn't have any MATH test and my later ticket didn't
involve Morse code sending (only a multiple choice receiving test).

>   MOST HAM RADIO OPERATORS BUILD THEIR OWN EQUIPMENT OR RESURRECT OLD
> SURPLUS JUNK.   THERE IS LOTS OF EXPERIMENTAL RADIO WORK BEING DONE BY HAMS,
> SINCE MOST OF THEM ARE ELECTRONICALLY TECHINCAL PEOPLE BY PROFESSION.
> MARCONI, THE INVENTER OF THE "WIRELESS" (RADIO), WAS HIMSELF AN AMATEUR RADIO
> OPERATOR AND EXPERIMENTER.
>
With the advent of cheap Japanese rigs, a lot of the homebrew and commercial
retrofit is disappearing, Sigh.

From -7871495901060429231
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8481d94029afc2ca,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-21 14:47:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!genrad!mit-eddie!godot!harvard!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio

Subject: Gateway running and Uniden CR-2021 info
Message-ID: <6009@brl-tgr.ARPA>
Date: Wed, 21-Nov-84 17:47:54 EST
Article-I.D.: brl-tgr.6009
Posted: Wed Nov 21 17:47:54 1984
Date-Received: Fri, 23-Nov-84 07:46:51 EST
Distribution: net
Organization: Ballistic Research Lab
Lines: 39

(If manual intervention will be possible to prevent this from getting
sent out the ARPA gateway, please do so. If you are reading this on
ARPA or MILNET, please forgive the duplication.)

The new BRL-based gateway for net.ham-radio to Info-Hams is working;
I'm not sure of the reverse feed. The following is an item I posted on
the ARPA side a few days ago, before the gateway was up and running (as
far as I was aware), but failed to post on the USENET side at that time.
Sorry about that.

Hi! Just got back from a trip and being sick, and find lots of interest
in the Uniden, according to my mailbox... Here's another place that
is at least advertising the CR-2021's in their catalog. You'll have to
call to see if they really have any in stock, though.

Scanner World, USA
10 New Scotland Ave
Albany, NY 12208
(518) 436-9606

Price is $94.99, plus $4.00 shipping, total $98.99.

By the way, ask for their catalog if you call, even if they are out of
the radio. They have more info on the Uniden in their catalog than any
other ads I've seen, including Uniden's own flyer. Someone asked about the
IF bandwidth specs, and this lists them: Wide = +-3 kHz at 6 db, +-6 kHz
at 50 db; Narrow = +-2.5 kHz at 6 db, +-5 kHz at 50 db.
(Don't sound so good in print, do they? Nonetheless, the narrow position
cleans up the interference fairly well, such as on the BBC on 6175, which
has WRNO on 6185 and Radio Nederland on 6165 on either side.)

Their catalog has a lot of scanner specs in it, so it's a handy reference
when comparison shopping.

Good luck!

Will

ARPA/MILNET: wmartin@almsa-1.ARPA   USENET: seismo!brl-bmd!wmartin

From 5098318298671869l9
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,36446b1a2c8c2fd6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-23 05:50:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!abc
From: abc@brl-tgr.ARPA (Brint Cooper)
Newsgroups: net.ham-radio
Subject: Re: Amateur.vs_CB
Message-ID: <6026@brl-tgr.ARPA>
Date: Fri, 23-Nov-84 08:50:50 EST
Article-I.D.: brl-tgr.6026
Posted: Fri Nov 23 08:50:50 1984
Date-Received: Sat, 24-Nov-84 20:55:29 EST
References: <176@isosvax.UUCP>
Organization: Ballistic Research Lab
Lines: 12

>
>   FIRST OF ALL, LET'S CONSIDER CITIZEN BAND OPERATERS.   PEOPLE WHO ARE
> CITIZENS OF THE UNITED STATES OF AMERICIA CAN APPLY AND HOLD A LICENSE. ALL
> THEY HAVE TO DO IS JUST FILL OUT AN APPLICATION AND SEND IT TO THE FEDERAL
> COMMUNICATIONS COMMISSION. SEVERAL WEEKS LATER THEY HAVE THEIR LICENSE AND
> CALL SIGN. NEXT, THEY GO TO THE LOCAL RADIO SHACK OUTLET STORE AND PURCHASE
> A TWO-WAY RADIO WITH ANTENNA; THEN AWAY THEY GO.

Actually, I believe that the FCC no longer issues CB licenses; they have
"deregulated" CB radio. You simply purchase one and talk.

Brint

From 56695932312712013
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3ff541cb167f052d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-26 10:26:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site extel.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!tellab1!extel!larry
From: larry@extel.UUCP
Newsgroups: net.ham-radio
Subject: 800mhz. converter or scanner info?
Message-ID: <43300001@extel.UUCP>
Date: Mon, 26-Nov-84 13:26:00 EST
Article-I.D.: extel.43300001
Posted: Mon Nov 26 13:26:00 1984
Date-Received: Wed, 28-Nov-84 02:45:26 EST
Lines: 10
Nf-ID: #N:extel:43300001:000:159
Nf-From: extel!larry   Nov 26 12:26:00 1984

Does anybody know of a converter or scanner which will allow
listening to the 800mhz. frequencies?

Thanks

Larry Pajakowski
WA9QOO
ihnp4!tellab1!extel!larry

From 4077493369561215826
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2343ed3b0730edb4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-26 17:45:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 48
Message-ID: <13818@mgweed.UUCP>
Date: Mon, 26-Nov-84 20:45:17 EST
Article-I.D.: mgweed.13818
Posted: Mon Nov 26 20:45:17 1984
Date-Received: Tue, 27-Nov-84 04:43:30 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 29

qst de k9eui
hr propagation forecast bulletin nr 48 from arrl headquarters
newington ct november 26, 1984
to all radio amateurs bt

after ten weeks at close to quiet sun levels, the solar flux started upward november 17. from 72 it rose to 85 by the 25th, and may continue upward another day or two. this rise came as geomagnetic activity was declining, making for some of the best propagation 0f the autumn dx season. improvement was most marked on 21 mhz. on 28 mhz, there was some propagation to africa from eastern usa, and north south conditions were good.

geomagnetic activity will be rising after about the 27th, and propagation will be more variable through about december tenth. the major geomagnetic disturbance of mid november will recur, probably at lower levels about december 13 to 15.

it is too early to tell if the new solar activity in recent days is more than a brief event. it could signal a critical period in which predictions based on the rotational period of the sun become unreliable. more on this later in subsequent

bulletins.

the updated table of ten meter beacon stations announced in bulletin number 46 is still available. send an sase to ed tilton, w1hdq, po box 137, canton, ct 06019 ar

From 1809149555608168960
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1e4369cf750589ab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-26 17:45:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 38 (election results)
Message-ID: <13819@mgweed.UUCP>
Date: Mon, 26-Nov-84 20:45:40 EST
Article-I.D.: mgweed.13819
Posted: Mon Nov 26 20:45:40 1984
Date-Received: Tue, 27-Nov-84 04:43:42 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 26

qst de k9eui
hr crrl bulletin nr 38 from crrl headquarters
london, ontario november 20, 1984
to all radio amateurs bt

the crrl committee of tellers met today to count ballots in elections just concluded for crrl regional directors. the number of votes credited to each candidate is as follows.

atlantic region, g. andrew mc lellan ve1asj, 162,
ronald j. hesler, ve1sh, 71.

ontario region, raymond perrin, ve3fn: 643,
william loucks, ve3ar, 360,

prairies region, william gillespie, ve6abc, 260,
bert anderson, ve4ap, 132,
john gowron, ve4ads, 55.

the first candidate listed for each region was declared elected. candidates previously declared elected were quebec region, albert daemen, ve2ij, western region, william kremer, ve7csd. all begin new two year terms of office on january 1, 1985 ar

From -5424598019864084848
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6099e83490a4cee7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-26 17:46:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 107 (arrl election results
Message-ID: <13820@mgweed.UUCP>
Date: Mon, 26-Nov-84 20:46:00 EST
Article-I.D.: mgweed.13820
Posted: Mon Nov 26 20:46:00 1984
Date-Received: Tue, 27-Nov-84 04:43:59 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 56

qst de k9eui
hr arrl bulletin nr 107 from arrl headquarters
newington, ct november 20, 1984
to all radio amateurs bt

the arrl committee of tellers met today to count ballots in the elections just concluded for director and vice director. the number of votes credited to each candidate is as follows. the first listed candidate is declared elected for the next term of office.

central division for vice director,
howard s. huntington, k9km, 2924,
kenneth a. ebneter, k9en, 1217.

hudson division for director,
linda ferdinand, n2yl, 1940,
george diehl, w2iha, 1642.

new england division for director,
thomas frenaye, k1ki, 2752,
john c. sullivan, w1hhr, 1398,

northwestern division for director,
mary e. lewis, w7qgp, 1535,
joseph n. winter, wa7rwk, 1179,
m.l. gibson, w7jie, 1091.

northwestern division for vice director,
rush drake, w7rm: 1839,
robert s. orr, kb7cc, 1364,
armand r. pilotte, wa7iim, 576.

rocky mountain division for vice director,
marshall quiat, ag0x, 1601,
robert a. scupp, wb5yyx, 311.

southwestern division for vice director,
wayne overbeck, n6nb, 3064,
karl pagel, n6bvu, 490,
adrienne sherwood, wa6yeo, 420,
katherine f. schaffstein, wa6fah, 272.

the new directors and vice directors take office starting january 1, 1985. on that date the following candidates, previously declared elected, also take office for two year terms. central division director edmond a. metzger, w9prn. hudson division vice director stephen mendelsohn, wa2dhf. new england division vice director richard p. beebe, k1pad. roanoke division director gay e. milius, jr., w4ug, vice director john c. kanode, n4mx. rocky mountain division director lys carey, k0pgm. southwestern division director fried heyn, wa6wzo. west gulf division director raymond b. wangler, w5edz, vice director thomas w. comstock, n5tc ar

From -3755918307110100926
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d1104558b19aef,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-26 17:46:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 106 (more arrl election results)
Message-ID: <13821@mgweed.UUCP>
Date: Mon, 26-Nov-84 20:46:48 EST
Article-I.D.: mgweed.13821
Posted: Mon Nov 26 20:46:48 1984
Date-Received: Tue, 27-Nov-84 04:44:23 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 106 from arrl headquarters
newington ct november 20, 1984
to all radio amateurs bt

ballots for the section manager elections for new york city long island and western pennsylvania have been counted according to the prescribed rules. the following have been declared elected. new york city long island k2iz and western pennsylvania k3smb. their new terms begin january 1, 1985 ar

From 1378409210030419529
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,600ac466450b276b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-27 05:02:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!ecsvax!mjg
From: mjg@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: Last of the CR2021s ?
Message-ID: <3497@ecsvax.UUCP>
Date: Tue, 27-Nov-84 08:02:58 EST
Article-I.D.: ecsvax.3497
Posted: Tue Nov 27 08:02:58 1984
Date-Received: Thu, 29-Nov-84 06:06:00 EST
Lines: 21

A while ago there was a spate of articles on the Uniden CR 2021 radio.
Fantastic value at $89 or so. Well now it seems they are no longer
{ri Radio Center and tried to buy another yesterday. They told me they
were sold out and would not be getting any more. So I tried National
Tower - same story only they also told me they had bought a one time lot
of 3000 and they were now discontinued.

Speculation - since Uniden also makes the virtually identical DX400 which
sells for $300 in Radio Shack did they sign a deal which prohibits them
from importing any more 2021s into the US?.

Help ! does anyone know where 2021s are still available. I want to get
one for my daughter for Christmas.

Thanks in advance if you can help

Mike Gingell

...decvax!mcnc!ecsvax!mjg
?

From 1915159726243805503
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a45fe2d45ae36ed6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-27 07:16:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site uiucdcs.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!irwin
From: irwin@uiucdcs.UUCP
Newsgroups: net.ham-radio
Subject: Re: Amateur news

Message-ID: <9800006@uiucdcs.UUCP>
Date: Tue, 27-Nov-84 10:16:00 EST
Article-I.D.: uiucdcs.9800006
Posted: Tue Nov 27 10:16:00 1984
Date-Received: Thu, 29-Nov-84 02:42:39 EST
References: <182@isosvax.UUCP>
Lines: 8
Nf-ID: #R:isosvax:-18200:uiucdcs:9800006:000:238
Nf-From: uiucdcs!irwin   Nov 27 09:16:00 1984

>"Let's see, ten times 20 meters would be ten times about 3.3 feet or 300
> feet."

Given that a meter is about 3.3 feet, then 20 meters is 66 feet. Ten times
that would be 660 feet. This would be 9 square acres, not one acre!

                  W9LXP

From -9005798975999512995
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3ff541cb167f052d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-27 15:06:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: 800mhz. converter or scanner info?
Message-ID: <403@ihu1h.UUCP>
Date: Tue, 27-Nov-84 18:06:52 EST
Article-I.D.: ihu1h.403
Posted: Tue Nov 27 18:06:52 1984
Date-Received: Wed, 28-Nov-84 04:37:31 EST
References: <43300001@extel.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 19

   > Does anybody know of a converter or scanner which will allow
   > listening to the 800mhz. frequencies?

800 MHz converter:

     Hamtronics, Inc.
     65 Moul Road
     Hilton, NY 14468-9535
     tel: (716)392-9430

800 MHz scanner:

     None available at this time.

Watch for the Regency MX7000 (really an MX5000 with
a built in converter) in January 1985.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -6584874068910321005
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8b838ebbabce353b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-28 06:51:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: RIG FOR SALE
Message-ID: <657@inuxd.UUCP>
Date: Wed, 28-Nov-84 09:51:02 EST
Article-I.D.: inuxd.657
Posted: Wed Nov 28 09:51:02 1984
Date-Received: Thu, 29-Nov-84 04:02:45 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 13

I have a Heathkit HW101 for sale with power supply in
great condition. I am so sure of it's condition that
I will give a 30 day warranty to the buyer.

I am asking $300 but is negotiable if the warranty is
waivered. Some spare tubes (new no finals but they are
less than 1 yr old) and mike connectors are included.

Make me an offer I can't refuse! It would make an
excellent Christmas gift.

RICH KN9K

From 2929589280612932772
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,db4ba77daefda117,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-28 07:03:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/3/84; site aluxe.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!aluxe!richah
From: richah@aluxe.UUCP (ahrens)
Newsgroups: net.ham-radio
Subject: SOURCE OF SOUTH RIVER SS MOUNTS
Message-ID: <535@aluxe.UUCP>

Date: Wed, 28-Nov-84 10:03:16 EST
Article-I.D.: aluxe.535
Posted: Wed Nov 28 10:03:16 1984
Date-Received: Thu, 29-Nov-84 03:27:23 EST
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 18

I picked up the South River "Model 2002 All Stainless Steel
TV Antenna Y Type Chimney Mount" from:

COMM CENTER INC.
LAUREL PLAZA, ROUTE 198
LAUREL, MARYLAND 20707
WASH. 953-3340
BALT. 792-7373
800-638-4486

Cost in 1983 was $19.95 plus $1 tax. I have seen the model 2002
mounts in other TV supply houses......73, Rich Ahrens, W3WJC

****
Richard E. Ahrens, W3WJC, AT&T Bell Laboratories, mhuxi!aluxe!richah
Room 30-130, 2525 N. 12th St. Reading, Pa. 19604 (215)929-6174 Cornet 8+234-6174
****

From -3869852274948120762
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31f58cfbab9e9a4f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-28 09:04:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site trsvax.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Amateur.vs_CB
Message-ID: <52800037@trsvax.UUCP>
Date: Wed, 28-Nov-84 12:04:00 EST
Article-I.D.: trsvax.52800037
Posted: Wed Nov 28 12:04:00 1984
Date-Received: Sat, 1-Dec-84 05:53:23 EST
References: <176@isosvax.UUCP>
Lines: 13
Nf-ID: #R:isosvax:-17600:trsvax:52800037:000:536
Nf-From: trsvax!mikey Nov 28 11:04:00 1984

I believe that commercial use of the CB channels is limited to certain
channels. It may be off the book, but back in the 60's CB channels
were dedicated for specific uses. Certain channels could be used for

talking between different licenses, other channels were for talking
between unit of the same license, i.e. for a mobile to call HIS base rig,
and other channels were for commercial use. In practice, noone cares
about anyrule on the CB, but I don't know if the restrictions are still
on the books.

mikey at trsvax (KA5MJQ)

From -5886126725440960699
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31f58cfbab9e9a4f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-28 18:40:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!ecn-ee!wn9nbt
From: wn9nbt@ecn-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: Amateur.vs_CB
Message-ID: <2396@pur-ee.UUCP>
Date: Wed, 28-Nov-84 21:40:17 EST
Article-I.D.: pur-ee.2396
Posted: Wed Nov 28 21:40:17 1984
Date-Received: Fri, 30-Nov-84 04:43:18 EST
Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University
Lines: 16
Nf-ID: #R:isosvax:-17600:ecn-ee:14900011:000:714
Nf-From: ecn-ee!wn9nbt   Nov 28 11:42:00 1984

Also, Childrens Band (sorry, C.B.) was intended to be a "Business"
radio system at it's creation. Units could only talk to other
units under the same license, except for a few circumstances such
as asking directions, emergencies, /etc. Now CB licenses aren't
issued (or required) any longer, and a sizable number of CB'ers are
running considerably more than 5 watts, illegally of course.
Most Police cars with CB's listen to channel 19 (or the local
"highway" channel) to find out when their hiding places are
given away by "Bear" reports when running stationary radar.
Most other times they are off or squelched tight enough that
they don't have to listen to the constant garbage on the
channel.
.....Dave

From -4779253383731960004
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2f32bea6a8264a7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-29 11:05:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabsb.UUCP

Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!dual!amd!pesnta!hplabsb!turley
From: turley@hplabsb.UUCP (Rick Turley)
Newsgroups: net.ham-radio
Subject: Need info to recover Gel cell
Message-ID: <2647@hplabsb.UUCP>
Date: Thu, 29-Nov-84 14:05:43 EST
Article-I.D.: hplabsb.2647
Posted: Thu Nov 29 14:05:43 1984
Date-Received: Sat, 1-Dec-84 20:37:06 EST
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 12

I need information on how to recover a 12 Volt rechargeable power pack
that will only charge to 10 Volts. I believe it is a 'Gel' cell which
I understand to be a lead acid battery encased in a gel. Does this
2 Volt drop indicate a shorted cell? Is it possible to blast this
short by using a high voltage, high current supply? If so, how high and
for how long? It is a 48 Watt Hour battery.

Thanks in advance for your help.

Rick Turley
...hplabs!turley

From -8429035850610545328
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2e8930a94c7b36e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-29 12:07:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mit-eddie!genrad!wjh12!talcott!
harvard!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Commemorative callsigns
Message-ID: <6186@brl-tgr.ARPA>
Date: Thu, 29-Nov-84 15:07:51 EST
Article-I.D.: brl-tgr.6186
Posted: Thu Nov 29 15:07:51 1984
Date-Received: Sat, 1-Dec-84 06:52:04 EST
Distribution: net
Organization: Ballistic Research Lab
Lines: 25

I've seen several notices in this newsgroup, and also seen and heard
references in other ham publications and radio programs, referring to
the use and authorization of "commemorative" or "special-event" callsigns.
It seems that these are usually just a replacement of the normal prefix
of a callsign with some other prefix, and effective for a limited time.

My query is, basically, "why?" -- I understand a special callsign for
a special-purpose station, like one at a World's Fair, with a call
like "W85WF" or something for the "1985 World's Fair". But how does
letting hams use an extra letter "F" or something in their calls "honor"
or "commemorate" the sequicentennial of the invention of the combine,
or the state visit of the Maharajah of Ummagumma? Usually the special
prefix doesn't seem to be a mnemonic related to the event or occasion,
even.

Do those of you who are active hams ever use the special calls? I would think
that you are proud of your call as is, you have devised clever acronyms
or phonetic spellings related to it, and you have no real interest in
using a different one for a week or month. Am I right in this?

Are these things really worthwhile or just gimmicks?

Will Martin

USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

From 5231289910766049968
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a45fe2d45ae36ed6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-29 16:04:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site voder.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!nsc!voder!gino
From: gino@voder.UUCP (Gino Bloch)
Newsgroups: net.ham-radio
Subject: Re: Amateur news
Message-ID: <531@voder.UUCP>
Date: Thu, 29-Nov-84 19:04:37 EST
Article-I.D.: voder.531
Posted: Thu Nov 29 19:04:37 1984
Date-Received: Sun, 2-Dec-84 06:04:04 EST
References: <182@isosvax.UUCP> <9800006@uiucdcs.UUCP>
Organization: National Semiconductor, Santa Clara
Lines: 13

can the bug eat area?

> >"Let's see, ten times 20 meters would be ten times about 3.3 feet or 300
> > feet."
>
> Given that a meter is about 3.3 feet, then 20 meters is 66 feet. Ten times
> that would be 660 feet. This would be 9 square acres, not one acre!
                                          ^^^^^^^^^^^^
>   W9LXP

Square acres are the units of volume in four-space.
--

Gene E. Bloch (...!nsc!voder!gino)

From 4999758912188597979
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c3b16cf20f8cd9d4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-30 05:51:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!dual!decwrl!dec-rhea!dec-mred!
soomre
From: soomre@mred.DEC
Newsgroups: net.ham-radio
Subject: Uniden CR-2021
Message-ID: <100@decwrl.UUCP>
Date: Fri, 30-Nov-84 08:51:22 EST
Article-I.D.: decwrl.100
Posted: Fri Nov 30 08:51:22 1984
Date-Received: Sat, 1-Dec-84 20:38:27 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 14

Scanner World in Albany NY still has a few left. Cost is $94 plus $4
shipping. Their telephone number is (518)-436-9606. As far as I
know, they are the only dealer that has not sold out. Hope you can
still get one.

Does anyone know if Amateur Radio call books are available on microfiche ?

73's

Ed Soomre N1BFF
Digital Equipment Corp
200 Forest St
Marlboro, MA 01752

From 404666234627155853
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6cd060537054fecf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-30 06:53:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site whuxl.UUCP
Path: utzoo!watmath!clyde!cbosgd!cbdkc1!desoto!packard!hoxna!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)
Newsgroups: net.ham-radio
Subject: Re: Hams and CB'ers
Message-ID: <379@whuxl.UUCP>
Date: Fri, 30-Nov-84 09:53:29 EST
Article-I.D.: whuxl.379

Posted: Fri Nov 30 09:53:29 1984
Date-Received: Sat, 1-Dec-84 19:58:21 EST
Distribution: net
Organization: Bell Communications Research, Inc.
Lines: 59

<gulp,gulp,gulp, CHOMP>
I won't bore the readers of net.ham-radio with a repeat of what amateur (ham) radio is -- it would take too long to cover all the facets of this wide-ranging intersting national resource, which is also a fascinating hobby -- besides many of us are hams already. However, I'll be glad to discuss ham radio with anyone (including the licensing requirements) via email (address is {ihnp4|or your favorite gateway machine}!lcuxc!wjm).
I also won't repeat my general comments about CB ("Children's Band") since I don't use that kind of language either on the air (which is illegal) or on the Usenet.
Personally, I think the idea of CB was reasonable - provide the general public with a group of radio frequencies they could use for such things as calling for help when they break down on a deserted road, talking to other travellers to break the monotony of long trips -- certainly a boon for truckers, and telling ones boss/spouse that one will be late due to traffic jams. It also is useful for very small businesses (like one or two car taxi companies) who cannot afford and don't need the higher power and more elaborate equipment of land mobile VHF business band radio and for radio control hobbists.
The vast majority of law-abiding CB'ers who operate within the FCC rules for CB prove this point. Also, no discussion of CB would be complete without mention of REACT, an organization which uses CB for public service and emergency communications purposes. I'd like to take this opportunity to commend the REACT teams for a job well done, as well as invite them to join the ranks of the many hams who use the greater capabilities of ham radio for these purposes.
However, I think the implementation stinks. CB should have been put in a region

where skip is very rare, such as an unused UHF television channel (perhaps take over channel 70, just below the celluar mobile phone frequencies?) Admittedly, UHF equipment costs more than the 27Mhz gear, but the potential for much of the abuse is eliminated - it is less likely that illegally modified gear will even work, much less splatter QRM into TV's and audio gear (something we hams often get a bum rap for - and I sometimes get a CB'er in my stereo system to boot (usually due to front end overload as they're driving down the street)!).
However, 27 MHz CB exists, so what can we do about it?
Probably the two greatest abuses are 1) the characters who operate over power with illegally modified ham linear amplifiers and 2) the sewer-mouths who put all kinds of "air pollution" (4 letter words) on 27MHz, use Channel 9 for chit-chat, and generally sneer at the rules.
The cure for #2 is what we use on the ham bands - self policing. Law abiding CB'ers should set up somthing like the ARRL's OO teams (perhaps REACT could do this) and report violaters to the FCC. Peer pressure could be useful here, if no one talked to these clowns, they'd probably clean up their act.
My suggestion for #1 is that dealers refuse to sell radio equipment to anyone UNLESS the purchaser shows a valid license for said equipment from the FCC (or appropriate national licensing body). Therefore, you would have to

show the dealer a ham ticket in order to buy a linear.
In summary, there is a place for both ham radio and CB, although I'd like to see CB cleaned up. I also oppose any expansion of the current CB band unless it can be demonstrated that there is a clear need for more than 40 channels. Any expansion should take the form of moving the ENTIRE CB band to a UHF TV channel, even though this means the existing equipment is obsolete. The permanent gain would offset the temporary inconvenience.
I'd also like to see the use of AM terminated on CB -- SSB would provide 80 channels in the current frequency assignments, and relieve any congestion.
These are strictly my personal opinions, and not those of my employer.
Regards,
Bill Mitchell, WB2IAU ({ihnp4!}lcuxc!wjm}

From -6715511722778060540
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c3b16cf20f8cd9d4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-30 08:33:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site mordor.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!dual!mordor!wct
From: wct@mordor.UUCP (Bill Thompson)
Newsgroups: net.ham-radio
Subject: Uniden CR-2021
Message-ID: <730@mordor.UUCP>
Date: Fri, 30-Nov-84 11:33:26 EST
Article-I.D.: mordor.730
Posted: Fri Nov 30 11:33:26 1984
Date-Received: Sat, 1-Dec-84 20:37:38 EST
Distribution: net
Organization: S-1 Project, LLNL
Lines: 46

++
Fate of the Uniden CR-2021

From Monitoring Times, Dec. 84

"Uniden CR-2021 Fades Into History

Unquestionably, the Uniden CR2021 at its closeout price of under $100 was one of the greatest values ever made available to SWLs. Unfortunately, the stock is now depleted and only the Radio Shack DX400 (at $299) will continue to be made by Uniden. No replacement is expected."

For those of you who still want to try to find one--here's the suppliers who have advertised in Popular Communications [Dec. 84] and Monitoring Times [Dec. 84].

Electronic Equipment Bank, 516 Mill Street, N.E., Vienna, Va. 22180
800 368-3270   and 703 938-3350   ($99 in Pop Comm, $149 in Mon Times)

Universal Shortwave Radio 1280 Aida Drive Reynoldsburg, Ohio 43068
614 866-4267   (listed in their catalog at $129, I believe)

Galaxy Electronics, Box 1202, 67 Eber Ave., Akron, Ohio 44309
216 376-2402   ($124.50)

Presumably Grove Enterprises is out of them--since they publish
Monitoring Times and as posted to the net, Missouri Radio Center
and National Tower appear to be out of them also.

My suggestion for the next best deals in that price range would
be the Sony 6500W, currently being closed out by Spectronics,
1009 Garfield Street, Oak Park, Il 60304 312 848-6777
($96.50 down from a list of $179.95)

--
     William C. Thompson III (S-1 Project, Lawrence Livermore National Laboratory)
        U.S. Mail: LLNL, S-1 Project, P.O. Box 5503, L-276, Livermore, Ca., 94550
        Phone: (415) 422-0758
     MILNET: wct@s1-c or s1-a   UUCP: ...!decvax!decwrl!mordor!wct

From 1825747031137309349
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31f58cfbab9e9a4f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-30 14:50:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site uok.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!inuxc!pur-ee!uiucdcs!uok!mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: Amateur.vs_CB
Message-ID: <2800021@uok.UUCP>
Date: Fri, 30-Nov-84 17:50:00 EST
Article-I.D.: uok.2800021
Posted: Fri Nov 30 17:50:00 1984
Date-Received: Tue, 4-Dec-84 04:46:59 EST
References: <176@isosvax.UUCP>
Lines: 8
Nf-ID: #R:isosvax:-17600:uok:2800021:000:365
Nf-From: uok!mpackard   Nov 30 16:50:00 1984

>   MOST HAM RADIO OPERATORS BUILD THEIR OWN EQUIPMENT...
This should say 'SOME' as it is now way cheaper to buy a radio

and interface equipment, then to build it. MOST go this route
and spend all their time jamming each other or shooting the
breeze about antenna's (the only thing built anymore). When I
say jamming I mean overt and the things we call contests??

From 872196342129787583
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3ff541cb167f052d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-30 22:01:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ukma.UUCP
Path: utzoo!watmath!clyde!cbosgd!hasmed!qusavx!ukma!david
From: david@ukma.UUCP (David Herron)
Newsgroups: net.ham-radio
Subject: Re: 800mhz. converter or scanner info?
Message-ID: <340@ukma.UUCP>
Date: Sat, 1-Dec-84 01:01:05 EST
Article-I.D.: ukma.340
Posted: Sat Dec 1 01:01:05 1984
Date-Received: Tue, 4-Dec-84 07:16:44 EST
References: <43300001@extel.UUCP>
Organization: Univ. of KY Mathematical Sciences
Lines: 4

That bearcat scanner that can be hooked to an rs-232 port runs up
to the 800 mhz bands. (I don't remember the model number, but get
yerself a copy of "Consumer Electronics" catalog.....they have it
in there).

From -6099955032345942364
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,db4ba77daefda117
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-02 02:08:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!hplabs!hao!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: SOURCE OF SOUTH RIVER SS MOUNTS
Message-ID: <6283@brl-tgr.ARPA>
Date: Sun, 2-Dec-84 05:08:57 EST
Article-I.D.: brl-tgr.6283
Posted: Sun Dec 2 05:08:57 1984
Date-Received: Thu, 6-Dec-84 06:21:54 EST
References: <535@aluxe.UUCP>
Organization: Ballistic Research Lab
Lines: 5

I think the CommCenter has gone down hill recently. They don't have

any radio gear in the Store anymore and I don't know if they still keep
the mail order business alive. They are too busy selling Apples.

-Ron

From 4680739421555768940
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31f58cfbab9e9a4f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-02 07:12:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Amateur.vs_CB
Message-ID: <406@ihu1h.UUCP>
Date: Sun, 2-Dec-84 10:12:10 EST
Article-I.D.: ihu1h.406
Posted: Sun Dec 2 10:12:10 1984
Date-Received: Tue, 4-Dec-84 05:38:01 EST
References: <176@isosvax.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 52

> THOMAS A. BOZA
> WB7ASR
>
> HAM RADIO COMPAIRED TO CITIZEN BAND RADIO
>
>   THERE ARE TWO TYPES OF HOBBYIST SHORTWAVE COMMUNICATIONS RADIO OPERATORS,
> CITIZEN BAND AND AMATEUR "HAM."

     gut reaction: Ouch!

> RADIO STATIONS CAN BE
> OPERATED FROM MANY LOCATIONS, INCLUDING HOME, CAR, BOAT, AIR-PLANE, ETC., BUT
> THEY ARE USED SOLELY FOR PERSONAL SATISFACTION, NOT FOR COMMERCIAL PURPOSES.

     CB can and is used for business purposes.

>   FIRST OF ALL, LET'S CONSIDER CITIZEN BAND OPERATERS.   PEOPLE WHO ARE
> CITIZENS OF THE UNITED STATES OF AMERICIA CAN APPLY AND HOLD A LICENSE. ALL
> THEY HAVE TO DO IS JUST FILL OUT AN APPLICATION AND SEND IT TO THE FEDERAL
> COMMUNICATIONS COMMISSION. SEVERAL WEEKS LATER THEY HAVE THEIR LICENSE AND
> CALL SIGN. NEXT, THEY GO TO THE LOCAL RADIO SHACK OUTLET STORE AND PURCHASE
> A TWO-WAY RADIO WITH ANTENNA; THEN AWAY THEY GO.

     The FCC never licensed CB operators, only CB stations.
     A recent rule change eliminated CB station licenses completely.

> IT'S SO CONGESTED, YOU CAN'T EVEN TALK OVER ONE MILE AWAY.   ONE REASON FOR

> THIS IS THAT THERE ARE OVER FOURTY MILLION CITIZEN BAND LICENSES ISSUED, AS
> WELL AS ALL THE UNLICENSED OPERATORS.

     Again, there is/was no such thing as a "licenced CB operator",
     but there were "licensed CB stations."

>   HE [hams] CAN OPERATE AM, SSB, FM, FAST
> AND SLOW SCAN TELEVISION, SATELLITES, RADIOTELETYPE, FACSIMILE, AND COMPUTERS
> WITH OTHER HAM OPERATORS ALL OVER THE WORLD.

     Hams can use other modes, like morse code and pulse, transmit signals
     for the purpose of remote control (e.g. model aircraft, home control
     systems [home-made garage door openers], etc.), and construct
     repeaters.

>   MOST HAM RADIO OPERATORS BUILD THEIR OWN EQUIPMENT OR RESURRECT OLD
> SURPLUS JUNK.

     Not true any more; most hams purchase their equipment, although
     a few build receivers and transmitters.

                    73 de AJ9S
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6680254554897406903
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31f58cfbab9e9a4f
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-02 07:21:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Amateur.vs_CB - (nf)
Message-ID: <407@ihu1h.UUCP>
Date: Sun, 2-Dec-84 10:21:03 EST
Article-I.D.: ihu1h.407
Posted: Sun Dec 2 10:21:03 1984
Date-Received: Tue, 4-Dec-84 05:38:14 EST
References: <176@isosvax.UUCP>, <2800021@uok.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 20

   >#R:isosvax:-17600:uok:2800021:000:365
   >uok!mpackard   Nov 30 16:50:00 1984
   >
   >
   >>   MOST HAM RADIO OPERATORS BUILD THEIR OWN EQUIPMENT...

>This should say 'SOME' as it is now way cheaper to buy a radio
>and interface equipment, then to build it.

>MOST go this route
>and spend all their time jamming each other or shooting the
>breeze about antenna's (the only thing built anymore). When I
>say jamming I mean overt and the things we call contests??
>

Non-ham readers, please note that the above paragraph constitutes a flame
rather than a statement of fact.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 4406177028295901340
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3ff541cb167f052d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-03 04:58:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: 800mhz. converter or scanner info? (not Bearcat)
Message-ID: <409@ihu1h.UUCP>
Date: Mon, 3-Dec-84 07:58:37 EST
Article-I.D.: ihu1h.409
Posted: Mon Dec 3 07:58:37 1984
Date-Received: Tue, 4-Dec-84 19:25:50 EST
References: <43300001@extel.UUCP>, <340@ukma.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 17

> That bearcat scanner that can be hooked to an rs-232 port runs up
> to the 800 mhz bands. (I don't remember the model number, but get
> yerself a copy of "Consumer Electronics" catalog.....they have it
> in there).
>
Sounds like the Compuscan 1200, which was discontinued by Bearcat
when they were bought by Uniden. This radio covered up to 512 MHz, not
800 MHz, as the receiver circuit board was the same one used in
the Bearcat 350 (discontinued) and Bearcat 300.

Several years ago, Bearcat introduced a crystal controlled scanner
that covered 800 MHz (the only scanner to cover this range) but it flopped
and was withdrawn.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -4478991034879617361
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4e3ab2ddd5ec2c71,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-03 12:39:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hp-pcd!hplvle!chris
From: chris@hplvle.UUCP (chris)
Newsgroups: net.ham-radio
Subject: Want Westlink Report Address
Message-ID: <2800004@hplvle.UUCP>
Date: Mon, 3-Dec-84 15:39:00 EST
Article-I.D.: hplvle.2800004
Posted: Mon Dec 3 15:39:00 1984
Date-Received: Sun, 9-Dec-84 06:17:06 EST
Organization: Hewlett-Packard - Loveland, CO
Lines: 14
Nf-ID: #N:hplvle:2800004:000:363
Nf-From: hplvle!chris   Dec 3 12:39:00 1984

I am looking for the address for the Westlink Report. If this report is available on this electronic medium, can it be sent along without subscription? Otherwise, anyone with the address can send it to me, please, at:

    !hpfcla!hplvla!chris
    o
    Chris Kelly (wd5ibs)
    HP LID
    PO Box 301
    Loveland, Colorado 80537
    (303) 667-5000

Thank You,
-chris

From -569306249212128164
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5d6c5fbd56344d22,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-03 18:17:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: k9eui bulletin nr 14 (IL ARES net info)
Message-ID: <13974@mgweed.UUCP>
Date: Mon, 3-Dec-84 21:17:00 EST
Article-I.D.: mgweed.13974

Posted: Mon Dec 3 21:17:00 1984
Date-Received: Tue, 4-Dec-84 08:43:53 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

qst de k9eui
hr k9eui bulletin nr 14
december 3 1984
to all radio amateurs bt

the illinois amateur radio emergency service ares holds a net on the first and third sunday of each month in order to disseminate information of interest to amateur radio operators involved in public service and emergency communications. it also provides an opportunity to test equipment for readiness in case of an emergency. all interested persons are encouraged to participate in the net. it is conducted on 3915 khz plus or minus interference and also on 2 meters, 147.06 mhz simplex in the chicago area, and in southern illinois on the carbondale 146.04/64 repeater. time, 430 pm local illinois time, which at this time is cst. ar

From 3033156275567136941
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,530a12e104d1fe16,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-03 18:17:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: k9eui bulletin nr 15 (10 meter beacon station list)
Message-ID: <13975@mgweed.UUCP>
Date: Mon, 3-Dec-84 21:17:39 EST
Article-I.D.: mgweed.13975
Posted: Mon Dec 3 21:17:39 1984
Date-Received: Tue, 4-Dec-84 08:44:22 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 47

qst de k9eui
hr k9eui bulletin nr 15 from ed tilton, w1hdq
canton, ct. december 3, 1984
to all radio amateurs bt

the following is a list of ten meter beacon stations that were active as of november 1984:

frequency	call	location

28202	zb2vhf	natal s. africa
28205	dl0igi	s. germany
28210	3b8ms	mauritius
28212	zd9gi	gough island
28215	gb3sx	england
28220	5b4cy	cyprus
28222	hg2bha	hungary
28227	zl2mhf	new zealand
28230	bbc	(harmonic)
28233	vp9ba	bermuda
28237	la5ten	oslo, norway
28245	a92c	bahrain island
28247	zs1ctb	s. africa
28250	z21anb	zimbabwe
28254	lu1ug	la pampa, argentina
28257	dk0te	germany
28259	vk5wi	adelaide, australia
28261	vk2rsy	nsw, australia
28262	tu2abj	ivory coast
28263	tr8dx	libreville, gabon
28264	vk6rwa	perth, australia
28269	zs6pw	pretoria, s. africa
28270	vk4rtl	townsville, queensland
28273	9l1ftn	sierra leone
28277	df0aab	germany
28283	vp8ade	british antarctic
28290	vs6ten	hong kong
28295	w3vd	laurel, md
28298	py2ami	sao paulo, brazil
28300	zs1stb	s. africa

others heard on occasion are ea3vhf, ea6au, ea7aml, dj6vq, lu2ffv, lu4fm, lu4hh, lu8eb, oa4ck, ve2ten, ve3ten, vy5ayv, zs3hl, and zs6dn.
the ones listed by frequency are believed to be operating continuously. ar

From -633047068588915352
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fe64cdf037442b88,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-03 18:17:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 44
Message-ID: <13976@mgweed.UUCP>
Date: Mon, 3-Dec-84 21:17:59 EST
Article-I.D.: mgweed.13976
Posted: Mon Dec 3 21:17:59 1984

Date-Received: Tue, 4-Dec-84 08:44:44 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 44

qst de k9eui
hr dx bulletin nr 44 from arrl headquarters
newington ct november 30, 1984
to all radio amateurs bt

american samoa. nh6j/nh8 made over 3000 contacts in the cq ww contest. he is now qrt. his qsls go to je1jkl. he has left a 160 meter antenna with ah8a, who plans future 160 meter operation.

fernando de noronha. py0fj has been actpve on 7005 khz at 0330z. he is also in a net on 3787 khz ssb, and works 80 meter cw. qsl to py2ajk. py0fk has also been active.

crete. w0pu/sv9 is back in crete anb plans to have all his antennas up by the end of the week. he has been active around 0200 to 0300z on 3503 and 7004 khz. qsl via wb4tdb.

mongolia. jt0ape has been active on 3502 khz at 0000z, workable from europe.

prince patrick island. look for ve8mc around 14190 khz.

franz josef land. rz1owa has been active on 40 meter cw at 1200z with good short path openings from the u.s.

tanzania. 5h3bh will be active on all bands for one more week. qsl to sm0djz.

malagasy republic. 5r8al still does not have permission for 80 meter operation because the band is allocated to the military. he has been on 40 meter ssb regularly at his sunrise on saturday.

propagation. 20 meters has been superb to japan from north america over the north pole just at local sunset in north america.

madeira. ct3bz will be active through this weekend. qsl to sm0gmg.

malawi. 7q7lw has been worked on 7007 khz at 0400z ar

From -4775581045495510776
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8ce026a885c5f104,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-12-03 18:18:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 49
Message-ID: <13977@mgweed.UUCP>
Date: Mon, 3-Dec-84 21:18:27 EST
Article-I.D.: mgweed.13977
Posted: Mon Dec 3 21:18:27 1984
Date-Received: Tue, 4-Dec-84 08:45:03 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 31

qst de k9eui
hr propagation forecast bulletin nr 49 from arrl headquarters
newington ct december 3, 1984
to all radio amateurs bt

the gradual solar flux rise reported last week continued through november 26. its peak value, 86, the highest since early september, came a bit late in the autumn season to be of benefit, but it brought a welcome improvement in dx conditions on 21 and 28 mhz. two major active areas of the sun responsible for this new lease on life have moved around the west limb now, dropping the solar flux to 79. another area is due back this week, so a large decline is imminent.

it is unlikely that the solar flux will reach levels used for propagation charts appearing in qst for november and december, so look for maximum useable frequencies and duration of dx openings somewhat lower than predicted.

only moderate peaks of geomagnetic activity are expected until december 12, so propagation should be fair to good until then. of special interest to users of 28, 50 and 144 mhz is the annual gemenids meteor shower peaking december 10 through 14. short term ionization produced by these meteors burning up (garble) but large peaks in signal levels on these bands, at distances up to about 1200 miles.

american sunspot numbers for november 22 through 28 were between 17 and 43 for a mean of 31.1 ar

From -1127938187861099550
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58581c44029ed583,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-03 18:19:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 108 (a city files FOR PRB-1)
Message-ID: <13978@mgweed.UUCP>
Date: Mon, 3-Dec-84 21:19:03 EST
Article-I.D.: mgweed.13978
Posted: Mon Dec 3 21:19:03 1984
Date-Received: Tue, 4-Dec-84 08:45:20 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 20

qst de k9eui
hr arrl bulletin nr 108 from arrl headquarters
newington ct november 29, 1984
to all radio amateurs bt

the city of newport news, virginia, has filed comments with fcc in support of prb 1, the leagues request for preemptive relief from local antenna zoning ordinances. the city cites the emergency communication support it has received from amateurs and states that while the city can control its own local zoning, it has no control over other jurisdictions with which its radio operators might have to communicate in an emergency situation. the city concludes by asking the commission to issue a declaratory ruling prohibiting state and local restrictions on federally licensed radio facilities, except where clearly necessary to protect the health and safety of the local citizenry ar

From -8804493195301076663
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6bf34eab22be0e4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-03 18:19:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 109 (KP4AM files petition)
Message-ID: <13979@mgweed.UUCP>
Date: Mon, 3-Dec-84 21:19:48 EST
Article-I.D.: mgweed.13979
Posted: Mon Dec 3 21:19:48 1984
Date-Received: Tue, 4-Dec-84 08:45:37 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

qst de k9eui
hr arrl bulletin nr 109 from arrl headquarters
newington ct november 29, 1984
to all radio amateurs bt

kp4am has filed a petition with fcc asking the commission to allow phone operation on the frequencies 7075 to 7100 khz in puerto rico and other caribbean territories of the u.s. fcc amended part 97 to allow phone operation on these frequencies in alaska and hawaii as part of the phone band expansion. the petitioner now asks that part 97 be amended to allow similar phone operation south of 17 degrees north latitude. fcc has assigned rm number 4872 to the petition. details will appear in the arrl letter and qst ar

From -4985310014225443346
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,12b5192b9ec19d67,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-03 18:21:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 110 (ARRL files 2 petitions)
Message-ID: <13981@mgweed.UUCP>
Date: Mon, 3-Dec-84 21:21:09 EST
Article-I.D.: mgweed.13981
Posted: Mon Dec 3 21:21:09 1984
Date-Received: Tue, 4-Dec-84 08:45:53 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 16

qst de k9eui
hr arrl bulletin nr 110 from arrl headquarters
newington ct november 29, 1984
to all radio amateurs bt

the arrl has filed two petitions for rule making with fcc. the first petition asks the commission to authorize the use of f2 emissions on the 10 meter band from 29.5 to 29.7 mhz to allow 10 meter repeaters to identify using that mode. the second petition asks fcc to amend part 97 of the rules to allow amateur satellite operation on the frequencies allocated at warc 79 for that service. no rm numbers have been assigned to the petitions yet. details will be reported in the arrl letter and qst ar

From 3252060136537187107

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2164e55f402e0c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-12-03 20:13:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site dsd.UUCP
Path: utzoo!watmath!clyde!cbosgd!ihnp4!zehntel!dual!amdcad!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: News from the EASTNET network
Message-ID: <353@dsd.UUCP>
Date: Mon, 3-Dec-84 23:13:45 EST
Article-I.D.: dsd.353
Posted: Mon Dec 3 23:13:45 1984
Date-Received: Wed, 5-Dec-84 01:04:30 EST
Organization: AMPEX DSD, Redwood City, CA.
Lines: 121

M 12710 Tom Clark (W3IWI,2976) 11/27/84 11:30 PM L:20
KEYS:/VADGC DIGIPEATER INFO/
TO: (Group 95)

Last week I put out the announcement that we (AJ9X,W3GXT and I) believe that we know have the magic Cap'n Midnite Decoder Ring that makes bullet-proof digipeaters out of VADG TNC's. I have confirmed that AJ9X would be willing to supply the code on 8" SSSD CP/M disks for assembly with MAC.
Also, we have located a small stash (about 10) VADG bare boards (they were on consignment to Steve, W2FPY). This weekend, we took possesion of what we believe to be the last remaining stock on the east coast (including documentation). The cost is $25 (which has to find its way to Steve since he bought them out of his own pocket!) plus shipping. The person to contact is:
Mike Bruski, AJ9X
5488 Wild Lilac
Columbia, MD 21045
If you want Mike to clone the software, send a diskette and a postage contribution to the same address. I'm hoping that we will get W3GXT to write up his nifty watchdog timer and W3IWI will provide a hint on using 2716's as fast pseudo 2708's.
Tom

C2970 CC8 Tom Clark (W3IWI,2976) 11/27/84 11:34 PM L:55
KEYS:/EASTNET (MD-DC-VA-NJ-PA DIVISION) NEWS/

EASTNET News de W3IWI
Thought you all might be interested in recent activities from the MD-DC-VA-NJ-PA part of the East Coast packet radio network (a.k.a. EASTNET).
On Sunday, Nov. 25 about a dozen active packeteers from MD (Balto/Wash), southern NJ (Camden/Phila) and south-eastern PA (Harrisburg) met at a rest stop on Interstate 95 near the MD/DE border

(approximately equidistant from the three centers) for the purpose of coordinating EASTNET activities.

One of the major topics was a discussion of the various digipeaters we now have available. The critical "hub" of communications for inter-center communications is the WB4APR-6 digipeater located at Elk Neck, MD (at the head of Chesapeake Bay). This remote system has been a bit ill for the past few weeks (it's receiver was about 7 kHz high) but it is now back in full action following a freq-tweak party.

Reports were given on local digipeaters on the EASTNET 145.01 frequency in the 3 areas. W2FPY-7 is now operational from Hopewell, NJ to serve as a relay northward in NJ. A Camden,NJ location has been picked to serve the Philly area better. In Harrisburg PA, WA3KXG is now operational. In the Balto/Wash area, WB4JFI-5 (primarily for DC area) and W3VD-5 (near Columbia MD) are operational. W3GXT-5 is on experimentally in NE Balto. and K3JYD has plans for a southern MD digipeater that could link to Richmond.

The next topic of discussion concerned packet bulletin board systems (PBBS). WB2MNF (SNJ/Philly) and W3IWI (Balto/Wash) are running the latest W0RLI Xerox 820 PBBS software with automatic inter-BBS linking. In the Balto/Wash area, KS3Q provides backup to the W3IWI PBBS. WB4APR-5 serves as a gateway to 10 MHz, and occasionally W3IWI provides a TelePort gateway thru the AO-10 satellite. After sorting out PBBS user lists, considerable discussion ensued on efficient use of this linking capability.

It is becoming very obvious that 145.01 is becoming clogged in the major metropolitan areas. We decided to recommend that users QSY to 145.03 or 145.05 whenever they have simplex paths available. It was also decided that the PBBS's should continue to operate on the 145.01 "prime" frequency until such time as the PBBS software supports QSY on request.

The topic of beacon messages and CW ID's provoked a good discussion. Since the FCC has dropped the CW ID requirement for users, it was decided that we should recommend that ALL stations cease CW ID ASAP. There was some discussion (and an action item to review the FCC rules) to see if dedicated digipeaters really had to have CW ID's -- after all, their call is emplanted in each and every digipeated packet (albeit in HDLC). It was also agreed that all user beacons be discouraged except for PBBS/Gateways who need to send "Mail for:..." beacon messages periodically. It was further agreed that there is no need for digipeaters to send beacon messages at all.

A lot of hope was expressed that we soon begin implementing 220 MHz (or higher) links for the "backbone" communications. The long-haul links could profit from not having to contend with local area users and also from higher speed data transmissions.

All in all, it was a great way to spend a sunny Sunday afternoon. All agreed that it was well worth the 50-100 mile trip to get together and plan to do it again after the new year.

C2970 CC9 Tom Clark (W3IWI,2976) 11/27/84 11:36 PM L:35
KEYS:/PBBS LINKING/W0RLI KUDOS/

This is an unsolicited "attaboy" kudo for Hank Oredson, W0RLI. Most

of you know that Hank has taken on the task of writing a super packet bulletin board system (PBBS) which runs on a virgin Xerox 820 equipped with 8" disks with a TAPR TNC.

In the MD/DC/VA/NJ/PA area, we have 3 of RLI's PBBS on the air. Mine was the first (September) followed a few weeks later by Jon, WB2MNF (Philly/Camden area) and most recently by my neighbor Dick, KS3Q (who provides backup support for me when I have to be out of town).

Hank's latest software (release 7.2) is SUPER !!! In release 6.x Hank added a double TNC gateway capability (W0RLI and K7PYK have used the gateway extensively). After Jon and I got release 6.2 on, we realized the need to be able to forward messages between our PBBS's. After on-the-air discussions with Jon, he wrote a note to Hank which I forwarded via EIES after adding some additional comments. Jon's suggestion was for a scheme which would permit scheduled linking between PBBS's. During the time this link is enabled, all messages addressed to users of the other PBBS would be automatically forwarded (each PBBS would maintain a list of the other PBBS's users).

Last week (about 2 weeks after sending him our request) Hank told me via EIES that he had implemented our suggestions and a disk was in the mail. WB2MNF and I put the new system on the air over the weekend and it works!!! The W3IWI/WB2MNF/KS3Q PBBS (ab)users are enthralled!

Therefore thru the PBBS channels we now have a real network being built. Hank's scheme will work over any number of hops providing that each node knows the routing to the next node for each possible user. Thus if I were to send a message to W1AW and knew that a route via PBBS's A,B,C and D would get it there, and providing that A shows W1AW in his B user list, B shows W1AW in his C user list, etc, then the message will be forwarded completely automatically. We have already tried some triple links between Jon, Dick and I.

For those of you who want to get a PBBS on the air with no hassle and little cost, contact W0RLI (yes, he is on EIES) -- I think you will be as impressed as we are.

Thanks, Hank -- keep up the good work!

From 9150977057600431934
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fba096277afa11fd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-16 15:54:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 9/27/83; site hplabs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!hplabs!paull
From: paull@hplabs.UUCP (Rob KA6SFV)
Newsgroups: net.ham-radio
Subject: real meaning of DTMF and net.rec.rc (corrected spelling)
Message-ID: <974@hplabs.UUCP>
Date: Tue, 16-Oct-84 18:54:38 EDT
Article-I.D.: hplabs.974
Posted: Tue Oct 16 18:54:38 1984
Date-Received: Wed, 17-Oct-84 06:44:28 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 22

RE: Meaning of DTMF

I thought DTMF meant 'Dual Tone Multi-Frequency'. Contrary to popular usage, TOUCH-TONE and DTMF are not the same. TOUCH-TONE is what the keypad on your telephone produces. DTMF is used for sending call information from one central office to another.

I guess, since DTMF is used (incorrectly) so frequently to mean TOUCH-TONE, that DTMF will become another Q-tip or Kleenix.

By the way, the tones used for DTMF are not the same as the tones generated by your telephone 'dial'. (Check with you local phone-phreak)

RE: net.rec.rc

I would like to see a group for r/c people, but I would not like to lose contact with the radio/electronic aspects of r/c.

73 Rob Paull (KA6SFV)

From 7227236226404122827
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ae50d8312c1675b8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-16 20:37:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site smu.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!smu!neihart
From: neihart@smu.UUCP
Newsgroups: net.ham-radio
Subject: Packet Radio Vax access
Message-ID: <13200009@smu.UUCP>
Date: Tue, 16-Oct-84 23:37:00 EDT
Article-I.D.: smu.13200009
Posted: Tue Oct 16 23:37:00 1984
Date-Received: Sun, 21-Oct-84 09:14:48 EDT
Lines: 30
Nf-ID: #N:smu:13200009:000:1588
Nf-From: smu!neihart Oct 16 22:37:00 1984

Packet radio repeaters provide multiple 1200 baud virtual-channel data links between any two points within radio range simultaneously on a single frequency pair. If one end were connected to the Vax, the other end could be us with our 2-meter radios connected to our RS232C terminals by a packet assembler/disassembler. This would be preferable to the dial-up ports

since 1) several users could use the remote radio link simultaneously, 2) our home telephones wouldn't be tied up while we're on-line, 3) the valuable Vax dial-ups wouldn't be used by us, 4) it wouldn't be as necessary to log off if we were going to be idle for a few minutes since we are consuming merely a virtual channel, and 5) we could be on-line anywhere in the city, such as our vehicles, as long as we're in range of the repeater. The drawback (if you can call it that) is one would have to have an amateur radio license, class Technician or above, to utilize this radio link.

Does anyone know if it would be legal to use 2-meters or any ham band for this purpose? Ruling out business Vaxs, academic 4.2bsd Vaxs cannot be used for profitable purposes according to the Berkeley license agreement, so does this open the door for the above type of arrangement? Unfortunately, the telephone company has only business tariffs for their data links, so the opinion within Bell anyway is that any type of data communications traffic is business. I sure hope the FCC doesn't feel the same way! Please respond if you have any ideas or information.

Carl Neihart
Southern Methodist University
Dallas, Texas

From -2641240449910536103
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc1c09dc6bc665
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-17 07:08:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site infoswx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!infoswx!
jim
From: jim@infoswx.UUCP
Newsgroups: net.ham-radio
Subject: Re: CTCSS, DTMF, and PL tones??
Message-ID: <3200024@infoswx.UUCP>
Date: Wed, 17-Oct-84 10:08:00 EDT
Article-I.D.: infoswx.3200024
Posted: Wed Oct 17 10:08:00 1984
Date-Received: Sun, 21-Oct-84 09:14:16 EDT
References: <122@sask.UUCP>
Lines: 38
Nf-ID: #R:sask:-12200:infoswx:3200024:000:1735
Nf-From: infoswx!jim Oct 17 09:08:00 1984

Pete --

Here's a brief explanation of PL and CTCSS.

First of all, they are one in the same. CTCSS stands for 'Continuous Tone Coded Squelch System'. PL stands for 'Private Line' and is a registered

trademark of Motorola, Inc. Another name commonly used is 'Channel Guard'
which is a General Electric trademark.

Now for the technical details (I'll use the term PL 'cause it's short!) --

Basically PL is nothing more than a sub-audible, low amplitude tone that
is transmitted along with the normal speech audio. When heard by a receiver
that is equipped with a PL decoder, the sub-audible tone will be detected
and the receivers' audio output stage will be activated. If the transmitted
signal does not contain the proper PL tone (there are 37 of them), the
receiver squelch won't open, hence no audio thruogh the speaker. This
scheme is primarily used by commercial two-way and public service radio
services, and in fact is required by the FCC in those applications. PL is in
use by amateurs in the US to a small degree, mostly on repeaters in the 440-
450 MHz band to alleviate intermodulation problems. In commercial applications
another advantage is that a large number of users, i.e., Joe's Plumbing,
Speedy Courier, and Pink & Green Taxicab, can all share the same frequency
(repeater) with each using a different PL tone. With this scheme, Joe's base
station and his fleet of plumbing trucks will only hear calls from each
other and not be bothered by the other users of the repeater.
There are some details of actual operation that I
have not gone into here, but they are not really necessary in this basic
outline.

Hope this has helped.

73's,
Jim Gerke, KC5OA
Infoswitch Corp.
Richardson, TX
allegra!convex!infoswx!jim

From -7022478541780892641
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,838d3a2c334089e5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-17 15:44:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <182@mouton.UUCP>
Date: Wed, 17-Oct-84 18:44:49 EDT
Article-I.D.: mouton.182
Posted: Wed Oct 17 18:44:49 1984
Date-Received: Sun, 21-Oct-84 13:42:44 EDT
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9

```
Catalog number: 12888
Epoch time:      84285.10777685
   Thu Oct 11 02:35:11.919 1984 UTC
Element set:     694
Inclination:       97.6043 deg
RA of node:       261.6118 deg
Eccentricity:    0.0004174
Arg of perigee:    72.1862 deg
Mean anomaly:     287.9830 deg
Mean motion:   15.26485121 rev/day
Decay rate:      2.333e-05 rev/day^2
Epoch rev:           16722
Semi major axis:  6861.433 km
Anom period:     94.334362 min
Apogee:            505.196 km
Perigee:           499.468 km
Ref perigee:      2475.12088194
   Thu Oct 11 02:54:04.199 1984 UTC
Beacon:           145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time:      84285.31833048
   Thu Oct 11 07:38:23.753 1984 UTC
Element set:     135
Inclination:       25.7591 deg
RA of node:       173.7928 deg
Eccentricity:    0.6049373
Arg of perigee:   313.6483 deg
Mean anomaly:      10.0786 deg
Mean motion:    2.05851004 rev/day
Decay rate:       -1.2e-06 rev/day^2
Epoch rev:            1000
Semi major axis: 26105.978 km
Anom period:    699.535087 min
Apogee:          35522.428 km
Perigee:          3937.468 km
Ref perigee:      2475.30473030
   Thu Oct 11 07:18:48.697 1984 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84280.20292016
   Sat Oct  6 04:52:12.301 1984 UTC
Element set:     44
Inclination:       98.2309 deg
RA of node:       342.0040 deg
Eccentricity:    0.0012927
Arg of perigee:   304.0031 deg
Mean anomaly:      55.9938 deg
Mean motion:   14.61908483 rev/day
Decay rate:        1.2e-06 rev/day^2
```

```
Epoch rev:            3192
Semi major axis:  7062.232 km
Anom period:     98.501378 min
Apogee:            707.612 km
Perigee:           689.353 km
Ref perigee:      2470.19228076
   Sat Oct  6 04:36:53.57  1984 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84285.57856567
   Thu Oct 11 13:53:08.73  1984 UTC
Element set:     104
Inclination:       82.9553 deg
RA of node:        68.5280 deg
Eccentricity:    0.0059520
Arg of perigee:   104.1611 deg
Mean anomaly:     256.6081 deg
Mean motion:   12.15588820 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12507
Semi major axis:  7987.323 km
Anom period:    118.461109 min
Apogee:           1676.521 km
Perigee:          1581.440 km
Ref perigee:      2475.60219206
   Thu Oct 11 14:27:09.393 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84284.05952828
   Wed Oct 10 01:25:43.243 1984 UTC
Element set:     223
Inclination:       82.9551 deg
RA of node:        79.2329 deg
Eccentricity:    0.0017945
Arg of perigee:   193.4128 deg
Mean anomaly:     166.6446 deg
Mean motion:   12.06666672 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12394
Semi major axis:  8026.670 km
Anom period:    119.337016 min
Apogee:           1664.062 km
Perigee:          1635.255 km
Ref perigee:      2474.02116626
   Wed Oct 10 00:30:28.765 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      84285.10645860
   Thu Oct 11 02:33:18.23  1984 UTC
```

```
Element set:     195
Inclination:       82.9557 deg
RA of node:        80.2819 deg
Eccentricity:    0.0010000
Arg of perigee:   218.2204 deg
Mean anomaly:     141.8132 deg
Mean motion:   12.05051649 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12390
Semi major axis:  8033.848 km
Anom period:    119.496953 min
Apogee:           1671.799 km
Perigee:          1655.732 km
Ref perigee:      2475.07376908
   Thu Oct 11 01:46:13.648 1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84284.40990611
   Wed Oct 10 09:50:15.887 1984 UTC
Element set:     89
Inclination:       82.9554 deg
RA of node:        71.4106 deg
Eccentricity:    0.0050784
Arg of perigee:   125.8991 deg
Mean anomaly:     234.6805 deg
Mean motion:   12.13563561 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12469
Semi major axis:  7996.213 km
Anom period:    118.658803 min
Apogee:           1672.498 km
Perigee:          1591.282 km
Ref perigee:      2474.43859103
   Wed Oct 10 10:31:34.264 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      84283.01191041
   Tue Oct  9 00:17:09.59  1984 UTC
Element set:     175
Inclination:       82.9542 deg
RA of node:        77.4255 deg
Eccentricity:    0.0022519
Arg of perigee:   154.1281 deg
Mean anomaly:     206.0907 deg
Mean motion:   12.08687401 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12402
Semi major axis:  8017.719 km
Anom period:    119.137504 min
Apogee:           1661.640 km
Perigee:          1625.530 km
```

```
Ref perigee:      2473.04728149
   Tue Oct  9 01:08:05.121 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:       84285.41160872
   Thu Oct 11 09:52:42.993 1984 UTC
Element set:     294
Inclination:       82.9544 deg
RA of node:        82.3051 deg
Eccentricity:    0.0018446
Arg of perigee:   274.0515 deg
Mean anomaly:      85.8473 deg
Mean motion:   12.02948940 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12372
Semi major axis:  8043.213 km
Anom period:    119.705829 min
Apogee:           1700.863 km
Perigee:          1671.190 km
Ref perigee:      2475.39178537
   Thu Oct 11 09:24:10.256 1984 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:       84286.91496703
   Fri Oct 12 21:57:33.151 1984 UTC
Element set:     274
Inclination:       99.0620 deg
RA of node:       259.6448 deg
Eccentricity:    0.0013701
Arg of perigee:   121.3992 deg
Mean anomaly:     238.8525 deg
Mean motion:   14.13087785 rev/day
Decay rate:        9.2e-07 rev/day^2
Epoch rev:           17048
Semi major axis:  7224.146 km
Anom period:    101.904497 min
Apogee:            871.093 km
Perigee:           851.297 km
Ref perigee:      2476.93878160
   Fri Oct 12 22:31:50.730 1984 UTC
Beacon:           137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time:       84247.13108875
   Mon Sep  3 03:08:46.68  1984 UTC
Element set:     92
Inclination:       98.7036 deg
RA of node:       277.1751 deg
Eccentricity:    0.0016362
Arg of perigee:   185.1278 deg
```

```
Mean anomaly:     174.9735 deg
Mean motion:   14.22429264 rev/day
Decay rate:        3.8e-07 rev/day^2
Epoch rev:            7455
Semi major axis:  7192.440 km
Anom period:    101.235263 min
Apogee:            826.230 km
Perigee:           802.694 km
Ref perigee:      2437.09691921
   Mon Sep  3 02:19:33.819 1984 UTC
Beacon:           137.5000 MHz


From -4426896377445766904
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc1c09dc6bc665
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-18 00:23:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!ecn-ee!wn9nbt
From: wn9nbt@ecn-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: CTCSS, DTMF, and PL tones??
Message-ID: <2254@pur-ee.UUCP>
Date: Thu, 18-Oct-84 03:23:47 EDT
Article-I.D.: pur-ee.2254
Posted: Thu Oct 18 03:23:47 1984
Date-Received: Sun, 21-Oct-84 09:23:08 EDT
Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University
Lines: 14
Nf-ID: #R:sask:-12200:ecn-ee:14900009:000:332
Nf-From: ecn-ee!wn9nbt    Oct 17 10:14:00 1984

CTCSS  -  Continous Tone Coded Squelch System

DTMF  -  Dual Tone Multiple Frequency (touch tones, telephone-like)

PL  -  Private Line (Motorola's name for CTCSS)

Note -  CTCSS for General Electric is called "CG" or Channel Guard
        and RCA calls it "QC" or Quiet Channel.   All the same thing.


.....Dave Chasey -- wn9nbt


From -9309619841708515 79
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eea273bccbaf5b5c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-18 09:56:04 PST
```

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ncsu.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!mcnc!ncsu!rtn
From: rtn@ncsu.UUCP (Robert T. Neece)
Newsgroups: net.ham-radio
Subject: Quad Construction
Message-ID: <2703@ncsu.UUCP>
Date: Thu, 18-Oct-84 12:56:04 EDT
Article-I.D.: ncsu.2703
Posted: Thu Oct 18 12:56:04 1984
Date-Received: Sun, 21-Oct-84 12:46:35 EDT
Organization: N.C. State University, Raleigh
Lines: 25

I am considering building a quad antenna, and I have some questions I would like to ask the net:

- Where can I get fiberglass spreaders, and are they worth the extra expense over bamboo?

- I am considering mounting the antenna on a tripod on the roof of my two story house. What is a good tripod-rotator combination? I would like to locate the rotator below the top of the tripod to keep some of the stress off it.

- I can get a 2-element boomless spider locally. Are boomless quads sturdy?

- I am interested in anyones experience with quad construction, and the performance of the antenna.

- I hope to make a tri-bander, so I am interested in feed methods too.

I will appreciate your help. Please reply by mail, and I will post a follow-up article if there is interest.

Thanks in advance,
Robert T. Neece N4JEO

From 6489531566537082547
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 105955,70526287a145b1c4,start
X-Google-Attributes: gid105955,public
X-Google-Thread: 151e61,70526287a145b1c4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-18 11:07:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/3/84; site aluxz.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!aluxz!mrh
From: mrh@aluxz.UUCP (HUDOCK)
Newsgroups: net.ham-radio,att.ham-radio
Subject: HAM EQUIP. FORSALE
Message-ID: <185@aluxz.UUCP>

Date: Thu, 18-Oct-84 14:07:44 EDT
Article-I.D.: aluxz.185
Posted: Thu Oct 18 14:07:44 1984
Date-Received: Sun, 21-Oct-84 09:33:24 EDT
Distribution: net
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 22

FORSALE

DRAKE TR-3 TRANSCEIVER 10 THRU 80 MTRS
DRAKE AC-3 AC POWER SUPPLY
DRAKE RV-3 REMOTE VFO
DRAKE MS-4 SPEAKER
SHURE 444 MIC

325.00 TAKES IT ALL

CONTACT M. Hudock
(215) 770-2220
8-624-2220 ATT Bell Labs
Allentown
WA2DIE

From -5646924293706950839
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,10b7efeee9dbf111,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-18 13:20:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site infoswx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!infoswx!
jim
From: jim@infoswx.UUCP
Newsgroups: net.ham-radio
Subject: Re: YAESU HT TX DELAY
Message-ID: <3200025@infoswx.UUCP>
Date: Thu, 18-Oct-84 16:20:00 EDT
Article-I.D.: infoswx.3200025
Posted: Thu Oct 18 16:20:00 1984
Date-Received: Tue, 23-Oct-84 01:23:19 EDT
References: <12997@sri-arpa.UUCP>
Lines: 14
Nf-ID: #R:sri-arpa:-1299700:infoswx:3200025:000:467
Nf-From: infoswx!jim Oct 18 15:20:00 1984

If the VOX switch is off and it does it, it's broken just like mine! Yaesu service center in California has had it once and didn't fix the problem so it's going back via UPS tomorrow (10/19/84) to give them another shot at it. If it's repaired when it comes back this time, I'll post the fix to the net. Aside from this annoying problem, the radio seems to do a pretty good job.

73's,

Jim Gerke, KC50A
Infoswitch Corp.
Richardson, TX
allegra!convex!infoswx!jim

From -7932010228341074902
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b5612cb75a8ad542,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-19 03:41:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!uok!
mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: HAM vs SWL
Message-ID: <2800019@uok.UUCP>
Date: Fri, 19-Oct-84 06:41:00 EDT
Article-I.D.: uok.2800019
Posted: Fri Oct 19 06:41:00 1984
Date-Received: Tue, 23-Oct-84 01:45:15 EDT
Lines: 6
Nf-ID: #N:uok:2800019:000:94
Nf-From: uok!mpackard   Oct 19 05:41:00 1984

[burner on]

Will the snob elements of amatuer radio please restrain themselves

[burner off]

From -8126991735139799847
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,979e132d2f309059,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-19 05:44:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)

Newsgroups: net.ham-radio
Subject: Scan the Federal Correctional System (repost)
Message-ID: <375@ihu1h.UUCP>
Date: Fri, 19-Oct-84 08:44:07 EDT
Article-I.D.: ihu1h.375
Posted: Fri Oct 19 08:44:07 1984
Date-Received: Sun, 21-Oct-84 13:19:13 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 45

x
Federal Correctional System

Try scanning these frequencies:

1. 170.875 MHz
2. 170.650
3. 170.925

FEDERAL PENAL AND CORRECTIONAL INSTITUTIONS

-U.S. Penitentiaries-

Atlanta, GA	Lompoc, CA	Leavenworth, KS
Marion, IL	Lewisburg, PA	Terre Haute, IN

-Federal Correctional Institutions-

Alderson, WV	Morgantown, WV	Ashland, KY	Otisville, NY
Bastrop, TX	Oxford, WI	Butner, NC	Petersburg, VA
Danbury, CT	Pleasanton, CA	El Reno, OK	Ray Brook, NY
Englewood, CA	Sandstone, MN	Ft. Worth, TX	Seagoville, TX
La Tuna, TX	Talladega, AL	Lexington, KY	Tallahassee, FL
Memphis, TN	Terminal Island, CA	Milan, MI	Texarkana, TX

-Medical Center for Federal Prisoners-
Springfield, NO

-Federal Prison Camps-
Montgomery, PA
Elgin AFB, FL
Big Springs, TX
Maxwell AFB, AL
Boron, CA
Safford, AZ

-Metropolitan Correction Centers-
Chicago, Miami, New York,
San Diego, Tuscon

-Staff Training Centers-
Glynco, GA
Aurora, CO
Oxford, WI

This information provided by U.S. Government Printing

Office, RCMA, and listener friends.
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5609929831681020203
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ae50d8312c1675b8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-19 06:18:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!ecn-ee!wn9nbt
From: wn9nbt@ecn-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: Packet Radio Vax access
Message-ID: <2257@pur-ee.UUCP>
Date: Fri, 19-Oct-84 09:18:12 EDT
Article-I.D.: pur-ee.2257
Posted: Fri Oct 19 09:18:12 1984
Date-Received: Sun, 21-Oct-84 11:36:32 EDT
Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University
Lines: 17
Nf-ID: #R:smu:13200009:ecn-ee:14900010:000:728
Nf-From: ecn-ee!wn9nbt   Oct 18 20:24:00 1984

The problem that would create is that of security. Your password
could be picked out and/or any other "secure" information could
be obtained by any station in "watch all" mode. I had thought
of a gunplexer link between Purdue ECN systems and my home, as
they are quite directional and much less likely to be heard, but
still far from secure. I had thought of a scheme that you would
have a list of passwords, such that it would move to the next
password in the list after each login, but that would be pretty
kludgy, not to mention inefficient. If you attempted to use
an encryption scheme that wouldn't be legal for amateur radio.
Might be a neat idea for a public domain bull board though.

.....Dave Chasey - wn9nbt

From 6786192446627359327
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c69dd6f9f039ac0e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-19 07:19:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!

mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: real meaning of DTMF and net.rec-rc
Message-ID: <52800035@trsvax.UUCP>
Date: Fri, 19-Oct-84 10:19:00 EDT
Article-I.D.: trsvax.52800035
Posted: Fri Oct 19 10:19:00 1984
Date-Received: Tue, 23-Oct-84 01:27:47 EDT
References: <973@hplabs.UUCP>
Lines: 14
Nf-ID: #R:hplabs:-97300:trsvax:52800035:000:637
Nf-From: trsvax!mikey   Oct 19 09:19:00 1984

DTMF, as a term, could apply to both the long distance trunk control codes
as well as your local Touch-Tone (tm) telephone. But I seem to remember
seeing a document that called the long distance tones something else, and
relegated DTMF to the generic term. It was in a magazine called
Telephone Electronics Line or TEL for short. It was a shortlived
publication in the early 70's. Probably had something to due with the
fact that they published an article comparing the "new" proposed
digital control system to the DTMF control system, complete with
all frequencies, digital codes, and operator control codes.

mikey at trsvax

From -1269364515617120346
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11b3ac,403f031827f1c011
X-Google-Attributes: gid11b3ac,public
X-Google-Thread: 151e61,7eae0b77adcb985a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-19 10:14:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site rabbit.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!alice!rabbit!jj
From: jj@rabbit.UUCP
Newsgroups: net.ham-radio,net.flame
Subject: Re: Slander via netnews
Message-ID: <3248@rabbit.UUCP>
Date: Fri, 19-Oct-84 13:14:16 EDT
Article-I.D.: rabbit.3248
Posted: Fri Oct 19 13:14:16 1984
Date-Received: Sun, 21-Oct-84 11:53:54 EDT
References: <12836@mgweed.UUCP>, <1748@sun.uucp>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 20

All readers please be advised that I, rabbit!jj, did not have

any connection whatsoever with net.db. The article posted
by John Gilmore at the machine with the uucp name "Sun" is
incorrect in this regard.

This statement represents a formal notice of the incorrect
nature of the mentioned statement (sun.1748).

=======

On a related note, I believe that sun.1748 qualifys as a
crime under the Goldwater bill becaues of the reason above.
--
BE KIND TO SOFT FURRY CREATURES, THE
LIFE YOU SAVE MAY BE YOUR OWN!
"...How do you get this thing out of second gear? Beep Beep!"

(allegra,ihnp4,ulysses)!rabbit!jj

From 1856569985552115328
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c06d5ebf54f473,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-19 13:07:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin 97
Message-ID: <183@mouton.UUCP>
Date: Fri, 19-Oct-84 16:07:16 EDT
Article-I.D.: mouton.183
Posted: Fri Oct 19 16:07:16 1984
Date-Received: Sun, 21-Oct-84 11:57:19 EDT
Organization: Bell Communications Research, Inc
Lines: 123

**** UoSAT Bulletin-97 (Edited) 19th October 1984 ****

UoSAT Spacecraft Control Centre,   University of Surrey

** UoSAT-Oscar-9 Schedule **

This weeks schedule is as follows:
    Friday   - load Bulletin
    Saturday - Bulletin/DIGITALKER/1200 bps telemetry
    Sunday   - Bulletin/DIGITALKER/1200 bps telemetry
    Monday   - Bulletin/DIGITALKER/1200 bps telemetry
    Tuesday   - CCD Camera - next week Radiation data
    Wednesday - Whole orbit telemetry survey

Thursday - Computer check-summed telemetry

The 21 MHz Beacon will be in use this week.

** UoSAT-Oscar-11 Operations **

* Telemetry Channel No.13 *

The Telemetry Channel 13, which has previously been labelled as 'spare', has now been named and calibrated as:
13 435 MHz Downlink Transmitter VCO Control Voltage
(V = N/20)

This channel was kept free right up until final s/c checkout just in case there were any last minute demands, but none arose and it was allocated to the default - monitoring the 435 MHz transmitter VCO control voltage. Stored telemetry from the OBC has enabled us to confirm the allocation and its calibration.

* The 435 MHz downlink is functioning well with an output rf power of 1 watt, consuming 225 mA from the +14v unregulated bus.

* Experiments continue with the 9600 bps nrzi psk data on the 435 MHz downlink in preparation for DCE, CCD & Particle/Wave Experiments. The tests this week focussed on calibration of the modulation index and evaluation of a i.f. demodulator/decoder. The preliminary results look very encouraging, but more work needs still to be done before we feel happy about releasing all the details - we don't want to send you all on wild goose chases!

* Particle/Wave Experiments - UO-11 and the AMPTE spacecraft will be in conjunction for a couple of weeks around the beginning of November allowing the simultaneous measurement of P/W interactions with UO-11 and UKS. Preliminary tests were carried out on Monday 081084 to evaluate the P/W experiment and later analysis has shown it to have been most successful. These conjunctions occur only once every six months so we must get going! More details will be given soon.

* The spacecraft Z-spin rate continues to increase slowly of its own accord, due to cross-coupling of the libration energy into rotational energy, and de-spin manoeuvres have continued this week to keep the Z-spin rate slower than about 2 minutes per revolution - it seems that we need to despin about once every 5 days -

A daily account of UO-11 operations follows:

DAY	ORBIT	CHANNELS	RESET TIME
***	*****	********	**********

```
Saturday    whole orbit data & telemetry

Sunday      3310      1,2,3,52       08:54:47
(OBC told to change d/link from ODATA to TLM after 9.5hrs)

Monday      3325      13,45,46,47,52   09:29:28
                      435 MHz d/l 9600 bps psk test
            3226      Despin to 2 min 18 sec
            3327      back to ODATA dump
(OBC told to change d/link from ODATA to TLM after 8.5hrs)

Tuesday     3339      DSR data test
            3238      DSR 9600 bps test on 435 MHz
            3342      1,2,3,52       13:23:29
(OBC told to change d/link from ODATA to TLM after 7.5hrs)
            3346      Watch-Dog test.
            3347      Watch-Dog reset (21:18)
                      d/l back to ODATA
(OBC told to change d/link from ODATA to TLM after 6hrs)

Wednesday   3354      DSR test initialisation sequence.
            3355      DSR 9600 bps data test on 435 MHz
            3356      DSR 9600 bps data test on 435 MHz
                      1,2,3,52       12:29:20
(OBC told to change d/link from ODATA to TLM after 8.5hrs)

Thursday    3369      despin to 3 mins
            3370      DSR 9600 bps data test on 435 MHz
                      1,2,3,52       11:31:40
(OBC told to change d/link from ODATA to TLM after 9.5hrs)

Friday      3383      DSR 9600 bps nrzi psk tests
            3384      despin to 4.7 min
                      DSR 9600 bps nrzi psk tests
            3385      DSR 9600 bps nrzi psk tests
                      channel 2 only 12:09:00
                      (will collect z-field data
                       for 36 hrs, monitoring GG lock)



** Thanks for Reports & Questionnaire Returns **

G8VGQ, H.J.Meerza, GM4KZO (tnx for graphs), JE3MXU, DL7OU

This week:  DL7OU, W7AVE, V3CE, HB9RKR,

** Messages **

W7AVE DE G3YJO - Many thanks for the  hard  copy  of  the  UO-9
image, we are looking for the location of 301183 image data.
```

HB9RKR DE G3YJO - Thanks for the postcard and look forward to
receiving the CCD hard copy.

From -7415847634382788289
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c810ca14db98c0ed,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-19 13:07:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: MARCE post-mortem
Message-ID: <184@mouton.UUCP>
Date: Fri, 19-Oct-84 16:07:53 EDT
Article-I.D.: mouton.184
Posted: Fri Oct 19 16:07:53 1984
Date-Received: Sun, 21-Oct-84 11:56:47 EDT
Organization: Bell Communications Research, Inc
Lines: 10

The MARCE 007 STS-41G canister was removed from the shuttle cargo bay and checked
at KSC today. When power was applied the experime
nt came on and everything indicated nominal. Ed Stluka informed ARRL that it
appears there was an in-flight power up anomaly. This
 is good news because if further checks give the experiment in the canister a
clean bill of health there will be a possibility of a
future re-flight.
The Goddard Space Flight Center was assigned the task of finding the cause of the
power-up anomaly. The power up readings at turn o
n today were: Time 0000, Status 18, T1 081, T2 082, T3 082, T4 083, T5 082, T6
081, V1 202, I 023, P 247. All readings nominal.
During flight the APC controller was programed to turn the A, B and C relays ON.
Lights on the controller indicated that all relays
 had closed. At the end of the experiment period the APC controller was programed
to turn the relays off but it indicated that the
relays were already OFF. Kathryn Sullivan noted the anomaly in her in-flight log.
More news will be carried on the AMSAT nets and W1AW bulletins.

From 667553996530849480
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ae50d8312c1675b8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-19 15:41:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: Re: Packet Radio Vax access

Message-ID: <128@sask.UUCP>
Date: Fri, 19-Oct-84 18:41:34 EDT
Article-I.D.: sask.128
Posted: Fri Oct 19 18:41:34 1984
Date-Received: Sun, 21-Oct-84 15:16:29 EDT
References: <2257@pur-ee.UUCP>
Organization: U of Saskatchewan, Canada
Lines: 13

The password problem is a bit awkward but you should be able to circumvent
it by having the machine transmit a 'challenge' sequence to you which you
have to mangle in some specified way and send back. Since you are the only one
who knows how to mangle the sequence correctly it should be secure. But this
does not solve the problem of anyone being able to watch your entire session.
I assume that anything related to work that is done using amateur frequencies
would be illegal but how about doing an assignment? For that matter, would
it be illegal to do ham-related work (e.g. compute predictions for oscar-10)
on an amateur radio link into a machine for which you are paying commercial
rates for cpu time etc.?

pete ve5bel
ihnp4!sask!hardie

From -8470952543618236072
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b4d6730dd1653662
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,b4d6730dd1653662
X-Google-Attributes: gid13375c,public
X-Google-Thread: 12f221,b4d6730dd1653662
X-Google-Attributes: gid12f221,public
X-Google-Thread: 122486,b4d6730dd1653662
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1984-10-19 16:05:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site tekcae.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!cbosgd!ihnp4!zehntel!dual!amd!qumix!ittvax!
decvax!tektronix!tekchips!tekcae!mikem
From: mikem@tekcae.UUCP (Michael E. Meyer)
Newsgroups: net.news.group,net.aviation,net.ham-radio,net.misc
Subject: Re: New newsgroup for Radio Controlled Planes?
Message-ID: <115@tekcae.UUCP>
Date: Fri, 19-Oct-84 19:05:52 EDT
Article-I.D.: tekcae.115
Posted: Fri Oct 19 19:05:52 1984
Date-Received: Mon, 22-Oct-84 02:36:57 EDT
References: <881@opus.UUCP> <2191@hplabsc.UUCP>
Reply-To: mikem@tekcae.UUCP (Michael E. Meyer)
Distribution: net
Organization: Tektronix, Beaverton OR
Lines: 16

I too, support a newsgroup for RC [anything]...

_____
Michael E. Meyer
USENET: ...!tektronix!tekcae!mikem
  ARPA: tekcae!mikem.tek@CSNET-RELAY
USnail: TEKTRONIX, Inc
     P.O. Box 500, MS 50/560
     Beaverton, OR 97077 USA
     (503) 627-2628

From 4538283895208356963
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7cbd2d989ed8e55a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-19 16:11:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 92 (new oscar 10 sked)
Message-ID: <12929@mgweed.UUCP>
Date: Fri, 19-Oct-84 19:11:07 EDT
Article-I.D.: mgweed.12929
Posted: Fri Oct 19 19:11:07 1984
Date-Received: Sun, 21-Oct-84 15:12:02 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

qst de k9eui
hr arrl bulletin nr 92 from arrl headquarters
newington ct october 17, 1984
to all radio amateurs bt

amsat oscar 10 has the following new operating schedule, effective immediately. mean anomaly 0 to 99 will be mode b monday through saturday, mean anomaly 100 to 117 will be mode l monday through saturday, mean anomaly 118 to 218 will be mode b daily, mean anomaly 219 to 234 will be off daily and mean anomaly 235 to 256 will be mode b daily. mean anomaly 0 to 256 is one complete orbit, starting at perigee. apogee would be a mean anomaly of 128, or 1/2 an orbit. one complete orbit is 699.5 minutes ar

From 4362257721729111176
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cf128567b575422,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-10-19 16:11:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 32 (commemorative calls)
Message-ID: <12930@mgweed.UUCP>
Date: Fri, 19-Oct-84 19:11:54 EDT
Article-I.D.: mgweed.12930
Posted: Fri Oct 19 19:11:54 1984
Date-Received: Sun, 21-Oct-84 15:12:16 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

qst de k9eui
hr crrl bulletin nr 32 from crrl headquarters
london ont october 16, 1984
to all radio amateurs bt

to commemorate the centennial of the prime meridian conference
which established the worldwide use of greenwich mean time, and
to commemorate the work of sir sanford fleming, doc will allow
canadian amateurs to use the following prefixes from october 13
to december 13, xl1 and xl2 in newfoundland and labrador, xo1
in the yukon and xn1 through xn8 in the rest of canada ar

From -3596170206070695718
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a17e358177ad014f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-19 16:13:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 38
Message-ID: <12932@mgweed.UUCP>
Date: Fri, 19-Oct-84 19:13:23 EDT
Article-I.D.: mgweed.12932
Posted: Fri Oct 19 19:13:23 1984
Date-Received: Sun, 21-Oct-84 15:12:29 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 44

qst de k9eui
hr dx bulletin nr 38 from arrl headquarters
newington ct october 19, 1984
to all radio amateurs bt

thanks to k1xm, k1mm, w1trc and the southern new england dx association for the following dx information.

wallis and futuna. fw0bx, ron, has been active on 160 through 10 meters, both cw and ssb, operating around 21028 khz from 2130 to 2230z, on 14026 khz at 0200z, 7004 khz at 0900z, 3505 khz at 0700z, 3795 khz at 1130z and on 160 meters at 1030z. qsls go to zl1amo.

hong kong. vs6do has been active most days on 40 meters at 1000z on 7004 khz. qsl k4cia.

new caledonia. fk8ff, guy, has been active 0n 7009 khz at 1000z.

tuvalu. t2ade has been on 75 meters at 3795 khz at 1000z.

st. helena. zd7cw has been on 3798 khz at 0000z.

san felix. ce0aa continues to be active on most bands and is planning to spend october 21 through 25 on 10 meter cw exclusively.

crozet. fb8wk is still active frequently around 7008 to 7010 khz at 0300z. fb8wj and fb8wk will be leaving at the end of this month.

svalbard. jw0eq has been very active working the u.s. from 0100 to 0200z on 7004 khz.

mellish reef. operation is expected to take place from october 25 to november 6 on all bands, 160 through 10 meters under the call vk9mr. qsls go via vk2wu.

haiti. hh2vp, vic, will be in haiti for two more months. he has been active on 40 and 20 meter cw. qsl to w1fj. hh2mc has been worked on 3795 khz at 0230z ar

From 6131808859499343128
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ae50d8312c1675b8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-19 18:08:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: Packet Radio Vax access
Message-ID: <185@mouton.UUCP>
Date: Fri, 19-Oct-84 21:08:45 EDT

Article-I.D.: mouton.185
Posted: Fri Oct 19 21:08:45 1984
Date-Received: Sun, 21-Oct-84 14:07:50 EDT
References: <2257@pur-ee.UUCP>
Organization: Bell Communications Research, Inc
Lines: 34

I too have been thinking a lot about using packet radio for high speed
remote access to a Unix system. The problem of broadcasting your Unix
password all over two meters is a real one, but there are ways the
problem could be solved with public key cryptosystems. The current
sentiment among the legal eagles is that such a scheme would NOT violate
the prohibition against "codes and ciphers" in the amateur service
because it is intended as a authentication scheme and not to hide
information. There is ample precedent for authentication schemes, e.g.,
repeater autopatch and control codes.

The regular traffic would still have to be transmitted in the clear, of
course, and this would provide "spoofing" opportunities for a bad guy.
It would only take one spurious packet of the form "rm -rf *"
from some clown and even though the protocol might recover from the
unsolicited acknowledgement, the higher-level damage would obviously be done.
About the only thing that could prevent this would be a public key
authentication scheme on each and every packet.

Another clever (non-encryption) scheme for protecting radio communications
links is in use by the military. It works on the fact that the atmosphere
has widely varying attenuation with frequency, and in particular at
frequencies near 60 GHz the atmosphere is virtually opaque due to oxygen
absorption lines. Secure point-to-point radio systems use frequency-agile
transmitters which operate as high up on this absorption curve as possible
while still being received at the intended recipient. If an enemy tries
to intercept the beam somewhere farther along, atmospheric noise
and attenuation will make the signal useless.

You're probably best off using a laser (infrared, so to not attract
attention.) It has the additional advantage of not needing a license,
and not being subject to the amateur rule restrictions against business use.

Phil

From 6539955499239500070
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6ec6dc310f7c954f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-20 11:08:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: Lauren's comments on Wayne Green.

Message-ID: <129@sask.UUCP>
Date: Sat, 20-Oct-84 14:08:49 EDT
Article-I.D.: sask.129
Posted: Sat Oct 20 14:08:49 1984
Date-Received: Sun, 21-Oct-84 16:22:13 EDT
Organization: U of Saskatchewan, Canada
Lines: 16

Subject: Lauren's comments on Wayne Green.

100% agreement!!!! If there has ever been a force to destroy ham radio
it's good 'ol Wayne Green. All he is interested in is furthering his own
interests, which boil down to RTTY, himself and money (but not in that order).
The entire 'no-code' effort that he has been pushing was pretty well doomed
to failure because it attacked CW and CW operators rather than attempting
to boost a vhf-and-above license. If his efforts were directed at showing
the value of having a vhf license and then arguing that there was no need
for a code test for that license then he would have won. But he has done
many amateurs and prospective amateurs a huge disservice. And I would
write and tell him so except that he can't read letters that disagree
with him.
73
pete ve5bel
(mail via ihnp4!sask!hardie)

From 8478671144572085552
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ae50d8312c1675b8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-21 11:36:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site smu.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!smu!
neihart
From: neihart@smu.UUCP
Newsgroups: net.ham-radio
Subject: Re: Packet Radio Vax access
Message-ID: <13200010@smu.UUCP>
Date: Sun, 21-Oct-84 14:36:00 EDT
Article-I.D.: smu.13200010
Posted: Sun Oct 21 14:36:00 1984
Date-Received: Tue, 23-Oct-84 01:45:02 EDT
References: <13200009@smu.UUCP>
Lines: 9
Nf-ID: #R:smu:13200009:smu:13200010:000:499
Nf-From: smu!neihart   Oct 21 13:36:00 1984

    Of all the mail I've received on this idea, by far the most limiting
aspect is the password broadcast. Perhaps a landline could be dedicated to
receiving calls from people wishing to connect, and their password could be
dialed from their pushbutton phone. Of course, this begins to limit the

usuablitiy of the system. Disposable passwords or passwords which are a function of some variables known only by the user (such as time of day, number of times logged on, etc) is the only alternative.

From 964173176139914040
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f91d91fcaadd3987,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-21 12:13:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 8/7/84; site ucbvax.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!medin
From: medin@ucbvax.ARPA (Milo Medin)
Newsgroups: net.ham-radio
Subject: ISI Packet switched project
Message-ID: <2731@ucbvax.ARPA>
Date: Sun, 21-Oct-84 15:13:13 EDT
Article-I.D.: ucbvax.2731
Posted: Sun Oct 21 15:13:13 1984
Date-Received: Mon, 22-Oct-84 02:22:25 EDT
Distribution: net
Organization: University of California at Berkeley
Lines: 11

I havent gotten any response from my query on a net address for anyone in the ISI radio club (WB6MXZ). Does anyone here then know someone in club that I can call or write? I dont have a callbook (for shame!), so can someone help me out?

Thanks,
Milo Medin
...!ucbvax!medin
medin@ucbarpa

From 3674037049049820138
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c69dd6f9f039ac0e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-22 09:17:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!decvax!genrad!wjh12!harvard!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: real meaning of DTMF and net.rec-rc vote
Message-ID: <5415@brl-tgr.ARPA>
Date: Mon, 22-Oct-84 12:17:52 EDT
Article-I.D.: brl-tgr.5415
Posted: Mon Oct 22 12:17:52 1984
Date-Received: Tue, 23-Oct-84 06:03:20 EDT

References: <973@hplabs.UUCP>
Organization: Ballistic Research Lab
Lines: 7

>   RE: Meaning of DTMF

Touch Tone is a trademark of TPC.

-Ron

From 7378440345228159627
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,10b7efeee9dbf111
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-22 12:33:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxr.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihuxr!dmdoyle
From: dmdoyle@ihuxr.UUCP (Dan Doyle, WB9JXN)
Newsgroups: net.ham-radio
Subject: IC-2AT MODs
Message-ID: <1207@ihuxr.UUCP>
Date: Mon, 22-Oct-84 15:33:36 EDT
Article-I.D.: ihuxr.1207
Posted: Mon Oct 22 15:33:36 1984
Date-Received: Tue, 23-Oct-84 02:12:33 EDT
References: <12997@sri-arpa.UUCP> <3200025@infoswx.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 11

--
CQ de NB9S

     Does anybody have the modifications for larger freq
coverage for the IC-2AT.

                  tnx
--
==
Dan Doyle, AT&T Bell Laboratories - ihnp4!ihuxr!dmdoyle - (312)979-2946
  WB9JXN   Naperville, IL   *8-367-2946

From -1691578268692048590
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1bf357492f15d802,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-22 14:17:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Leaky CATV interferes with John Q. Public
Message-ID: <377@ihu1h.UUCP>
Date: Mon, 22-Oct-84 17:17:17 EDT
Article-I.D.: ihu1h.377
Posted: Mon Oct 22 17:17:17 1984
Date-Received: Tue, 23-Oct-84 02:17:48 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 67

Leaky CATV Equipment Interferes With Scanner User

A non-ham scanner friend from Westmont (Illinois) related this tale of grief caused by CATV signals (he is not a CATV subscriber):

> "In August 1984, a storm dropped several heavy branches onto the cable trunk line in my alley. New York channel 9 appeared on my channel 4. The UHF Atlanta superstation came in on channel 13. Manipulating the tuner controls on my (35 channel) cable ready VCR brought in HBO, Showtime, Cable News Network and other cable services with varying levels of snow and intermod. Worse yet, regular Chicago stations now had a ghost caused by the cable retransmission being microwaved around first thus being rebroadcast milliseconds behind the direct receptions. Finally, my scanner was being jammed all over the spectrum."
>
> "A call to the FCC brought a 'don't disturb my bureaucratic games, what do you want me to do, be a public servant?' attitude. I called the FAA as they have a remote control sight at nearby Downers Grove/Woodridge in case their system was getting interference. A call to the local cable company office confirmed my suspicion that employees were never trained about a closed circuit 'broadcasting'. Besides, a service call was rejected by their computer because I was not a subscriber."
>
> "I located the regional cable company office in a city it did not serve. From their operator, I found out the name of the Chief Engineer who did not return my call. I sent a certified letter to him citing chapter and paragraph of the FCC regulations. I established my right as a user of the electromagnetic spectrum as a broadcast watcher (scanner owners have no rights as

they are not the intended recipient normally) that could not watch non-local stations anymore as well as having regular channels ghosted..... That [registered letter] brought results, a call from the Construction and Repair Chief besides the Chief Engineer."

"I had prepared for this by walking several blocks in all directions with a portable scanner to find the point of highest signal strength. The cable company's sweeps were inconclusive because they used a wide band measuring device. Thus, they measured up to 6 MHz of a public safety/business band spectrum. About 100 police and fire departments and 1000 business users masked any meaningful meter reading. After replacing first the connectors, then the 4-drop couple and finally a 500 foot section of trunk cable, the interference cleared up."

"A nearby ham continued to suffer interference however. He is a subscriber" and "had added a section of coaxial cable to the cable connecting his TV set with his VCR. That cable purchased at a handy neighborhood national electronics chain store.....did not have a 100% shield...." [so it allowed CATV signals to radiate around his own house].

--

==========

Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6648941847070501302
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,440d5565df4b66ec,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-22 16:33:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 9/27/83; site hplabs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!hplabs!paull
From: paull@hplabs.UUCP (Rob KA6SFV)
Newsgroups: net.ham-radio
Subject: RE: Accessing computers via ham bands
Message-ID: <990@hplabs.UUCP>
Date: Mon, 22-Oct-84 19:33:18 EDT
Article-I.D.: hplabs.990
Posted: Mon Oct 22 19:33:18 1984
Date-Received: Tue, 23-Oct-84 01:37:13 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 31

The amateur radio service exists for several reasons:

- Establishment of a group of trained radio operators to facilitate communications during emergencies. (Public service type stuff)

- To advance the state of radio technology.

- To promote goodwill between amateurs of other nations. (DX work)

et al.

It seems to me that accessing a computer, via the ham bands, to do YOUR work on is not a valid use of amateur radio. FCC laws forbid one way broadcasting except for news of interest to all amateurs and code practice. I suppose you could consider a session with a machine some form of two-way communications, but I think this would be streching the spirit of amateur radio.

<all of the above is my personal opinion only>

TNX, 73 Rob Paull (KA6SFV)

PS: Why don't you get the FCC to give you a piece of unused spectrum and you could set up a business renting portable wireless terminals and computer time.

From -78618527687652970
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1bf357492f15d802
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-22 17:36:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: Leaky CATV interferes with John Q. Public
Message-ID: <189@mouton.UUCP>
Date: Mon, 22-Oct-84 20:36:51 EDT
Article-I.D.: mouton.189
Posted: Mon Oct 22 20:36:51 1984
Date-Received: Tue, 23-Oct-84 01:34:59 EDT
References: <377@ihu1h.UUCP>
Organization: Bell Communications Research, Inc
Lines: 10

Regarding leaky CATV systems...I have an item which should appear in QST
Hints & Kinks soon about a way of locating it.

A 2-meter SSB receiver is about the most sensitive device I know of for
detecting CATV leakage. I also found that the doppler shift caused by
vehicle motion is quite readily apparent on a mobile SSB transceiver
as you drive past the offending spot. Finally! A practical use
for all that Relativity Physics you learned in school.

Phil

From 5575386239862217366
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ce5fb69bfdc83953,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-22 21:22:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: TNC lockup
Message-ID: <130@sask.UUCP>
Date: Tue, 23-Oct-84 00:22:52 EDT
Article-I.D.: sask.130
Posted: Tue Oct 23 00:22:52 1984
Date-Received: Wed, 24-Oct-84 04:24:58 EDT
Organization: U of Saskatchewan, Canada
Lines: 7

Has anyone heard of a fix for the TAPR TNC lockup problem whereby the board
locks up when used in converse mode? A friend has one and the lockup is
occurring more and more frequently to the point that he can rarely transmit
any text now. He is using Version 3.0 and his board is SN #286.
Please mail replies to me at ihnp4!sask!hardie.
Tnx + 73
Pete ve5bel (or xn5bel if you need the prefix!)

From 3913422617607688847
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ae50d8312c1675b8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-23 06:48:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!ihnp4!inuxc!pur-ee!uiucdcs!
trsvax!mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Packet Radio Vax access
Message-ID: <52800036@trsvax.UUCP>

Date: Tue, 23-Oct-84 09:48:00 EDT
Article-I.D.: trsvax.52800036
Posted: Tue Oct 23 09:48:00 1984
Date-Received: Fri, 26-Oct-84 02:57:22 EDT
References: <13200009@smu.UUCP>
Lines: 21
Nf-ID: #R:smu:13200009:trsvax:52800036:000:1044
Nf-From: trsvax!mikey   Oct 23 08:48:00 1984

I don't think an encryption of your password would be illegal. As long as you ID'd yourself unencrypted anything else could be considered your "data" and as such wouldn't have to be in english. Besides, you don't want to have a password scheme on a radio system. You'd want a system that was interactive. The host would send a data stream to the terminal, the terminal would transform the data stream by an equation or algorithm that is unique to that terminal and known only to the terminal and the host, then transmit the modified data back to the host. The host would then check to see if it was the correct transformation. By using short data streams with complex algorithms the code would be virtually unbreakable. You could even have it "re-id" anytime the link is brought back from an idle state of say more than 2 minutes, and in any case, every few exchanges.

I think the only legal issue is the business use. You could use it for "notes", personal mail, and "home"projects but that would be it.

mikey at trsvax (KA5MJQ)

From -7627574097143208574
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cba105ac2d59cc3b,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13936f,cba105ac2d59cc3b,start
X-Google-Attributes: gid13936f,public
X-Google-ArrivalTime: 1984-10-23 08:16:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio,net.news
Subject: Gateway is broken
Message-ID: <5429@brl-tgr.ARPA>
Date: Tue, 23-Oct-84 11:16:59 EDT
Article-I.D.: brl-tgr.5429
Posted: Tue Oct 23 11:16:59 1984
Date-Received: Wed, 24-Oct-84 07:48:06 EDT
Distribution: net
Organization: Ballistic Research Lab
Lines: 11

FYI - The ARPANET-USENET gateway for net.ham-radio is broken at the moment. I am manually forwarding USENET-originated traffic to Info-Hams-Request at host Simtel20 as I can, but movement in the other direction doesn't seem to be feasible until the gateway is fixed. I believe that this breakage has also affected other lists, like Info-Micro, Info-CPM, and Info-UNIX, and their respective USENET counterparts. This seems to be due to problems at SRI-UNIX. Any fixes would be appreciated.

Will Martin

USENET: seismo!brl-bmd!wmartin or ARPA/MILNET: wmartin@almsa-1.ARPA

From -7646140025077878400
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,784749f77995f9f7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-23 08:19:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: More on the World of Radio schedule
Message-ID: <5430@brl-tgr.ARPA>
Date: Tue, 23-Oct-84 11:19:21 EDT
Article-I.D.: brl-tgr.5430
Posted: Tue Oct 23 11:19:21 1984
Date-Received: Wed, 24-Oct-84 07:48:27 EDT
Distribution: net
Organization: Ballistic Research Lab
Lines: 26

It seems that every time Glenn Hauser announces some change or revision in the World of Radio broadcast schedule, and I post it on the net, it gets changed again, or changed back, during the following week. So it is yet again! The following applies to the broadcasts via WRNO shortwave:

The previously-announced plan to move the (US time) Saturday evening broadcast to Friday evening, to avoid pre-emption by football, has been cancelled, due to WRNO's decision. Don't know why.

Here is the new schedule, effective 28 October with the change back to Standard Time. The World of Radio broadcasts will stay the same local time, but shift in GMT due to this change.

0530 GMT Saturdays (11:30 PM Fridays Central Time) on 6185 kHz

0230 GMT Sundays (8:30 PM Saturdays Central Time) on 7355 kHz

1400 GMT Sundays (8:00 AM Sundays Central Time) on 11965 kHz

Note that the broadcasts on 26/27 October will be on at the same local
time as listed, but one hour earlier by GMT, as the time will not have
changed yet. The 0230 GMT Sunday broadcast will probably be pre-empted
by football most weekends while the season drags on...

Will Martin

From 8043258246025163301
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,440d5565df4b66ec
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-23 10:01:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: RE: Accessing computers via ham bands
Message-ID: <190@mouton.UUCP>
Date: Tue, 23-Oct-84 13:01:34 EDT
Article-I.D.: mouton.190
Posted: Tue Oct 23 13:01:34 1984
Date-Received: Wed, 24-Oct-84 04:26:29 EDT
References: <990@hplabs.UUCP>
Organization: Bell Communications Research, Inc
Lines: 28

Regarding the legality of using ham radio to access your computer, this
would be a problem only if it was a "business use" of amateur radio. As
long as you're not doing work for which you are paid (or facilitating a
company's business), use of packet radio for remote computer access is
not only legal, it is encouraged. At this stage of the game, it certainly
falls under "advancing the state of radio technology", something that the
vast majority of (American, at least) amateurs seem uninterested in as
proven by their reaction to the no-code docket.

Here is a quote from 97.69:

"...an amateur radio communication may include digital codes which represent
alphanumeric characters, analogue measurements or other information.
These digital codes may be used for such communications as (but not limited
to) radio teleprinter, voice, facsimile, television, models and other
objects, transference of computer programs or direct computer-to-computer
communcations, and communications in various types of data networks
(including so-called "packet switching" systems); provided that such digital
codes are not intended to obscure the meaning of, but are only to facilitate,
the communications..." [goes on to describe transmission standards]

The only remaining legal grey area has to do with whether amateur packet
stations can be unattended. We have at least temporaily avoided
this problem by considering them to be repeaters (by placing them
within the repeater segments) and then using the "automatic control"

repeater provisions.

73, Phil

From -7642303579044210293
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,16ba326d2a411f48,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-23 10:14:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 33 (ham population/ham of the year)
Message-ID: <13020@mgweed.UUCP>
Date: Tue, 23-Oct-84 13:14:44 EDT
Article-I.D.: mgweed.13020
Posted: Tue Oct 23 13:14:44 1984
Date-Received: Wed, 24-Oct-84 04:02:47 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

qst de k9eui
hr crrl bulletin nr 33 from crrl headquarters
london, ont. october 22, 1984
to all radio amateurs bt

the current amateur population of canada, according to doc, is
22697. the amateur service is growing at a rate of 3 to 4
percent a year.

ve7apu was recently named 1984 crrl amateur of the year for his
pioneer work in amateur packet radio. ar

From -8691693714060143792
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1762578da954462e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-23 10:15:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 93 (teleport station STA)
Message-ID: <13021@mgweed.UUCP>
Date: Tue, 23-Oct-84 13:15:35 EDT
Article-I.D.: mgweed.13021
Posted: Tue Oct 23 13:15:35 1984

Date-Received: Wed, 24-Oct-84 04:02:59 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 19

qst de k9eui
hr arrl bulletin nr 93 from arrl headquarters
newington, ct. october 19, 1984
to all radio amateurs, bt

the federal communications commission has granted a 180 day special temporary authority, effective october 18 1984, to 21 amateur radio stations for teleport operation. teleports in this case act as automatic relay stations between packet radio networks on the ground and amateur satellites. stations covered by the sta are, wd4iwg, k1ksy, w3iwi, kd2s, n5ahd, w1hdx, ke6ze, wa9fmq, wb6ymh, wa6gxd, ka9q, wa2lqq, w1aw, ka6m, k0cy, nk6k, wd0etz, wb5yfu, n5brg, n2ekh and n6iiu.

these stations may use 144 to 146 mhz and 435 to 438 mhz to or from satellites and any amateur frequency at 50 mhz or above where digital communication is permitted. ar

From 7803118123091582638
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c3529f2af2dd1e8e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-23 10:16:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 94 (shuttle canister)
Message-ID: <13022@mgweed.UUCP>
Date: Tue, 23-Oct-84 13:16:12 EDT
Article-I.D.: mgweed.13022
Posted: Tue Oct 23 13:16:12 1984
Date-Received: Wed, 24-Oct-84 04:03:26 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr arrl bulletin nr 94 from arrl headquarters
newington ct october 22 1984
to all radio amateurs bt

the marce 007 sts 41g canister was removed from the shuttle cargo bay and checked. when power was applied the equipment came on and everything indicated nominal. it appears there was an inflight power up anomaly. this is good news, because if

further checks give the equipment in the canister a clean bill of health there will be a possibility of a future reflight. ar

From -2627432553355863058
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,78bc1ff1f3c12a1b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-23 10:16:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 95 (SSTV experiment)
Message-ID: <13023@mgweed.UUCP>
Date: Tue, 23-Oct-84 13:16:40 EDT
Article-I.D.: mgweed.13023
Posted: Tue Oct 23 13:16:40 1984
Date-Received: Wed, 24-Oct-84 04:03:39 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr arrl bulletin nr 95 from arrl headquarters
newington ct october 22 1984
to all radio amateurs bt

amateurs may be interested in a slow scan television experiment to be broadcast by radio australia on october 28 at 0210, 0810 and 1210 utc. eight second black and white pictures will be sent. frequencies will be 5995, 6045, 6060, 6080, 9580, 9710, 9770, 11720, 11880, 15160, 15320 and 17795 khz. radio australia would like to receive photographs of the pictures as received. ar

From 6751634884736308521
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c8a95e15d741f85e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-23 10:17:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 43
Message-ID: <13024@mgweed.UUCP>
Date: Tue, 23-Oct-84 13:17:04 EDT
Article-I.D.: mgweed.13024

Posted: Tue Oct 23 13:17:04 1984
Date-Received: Wed, 24-Oct-84 04:28:24 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 29

qst de k9eui
hr propagation forecast bulletin nr 43 from arrl headquarters
newington ct october 22 1984
to all radio amateurs bt

it would not have been front page news a few months ago, but substantial sunspot activity appearing on the eastern portion of the sun october 15 and 16 was welcome, indeed. for a few days, something more than north south dx was available on 28 mhz, for the first time since last spring, and 21 mhz was active almost worldwide for several days. then the flux fell back to 74, and action on both bands tapered off.

as usually happens, the solar outburst was followed in two days by rising geomagnetic activity, which tended to knock out propagation in the higher latitudes. cconditions for the forecast week are likely to be no better than fair in this respect, through the 23rd. solar flux values are expected to remain in the low seventies through about the 28th, but conditions will be improving after the 24th. a small solar flux rise is likely at the months end, with a move toward higher muf through about november 2. in general, november is expected to bring slightly better conditions than october has up to this bulletin issue date.

american sunspot numbers for october 11 through 17 were between 0 and 22 with a mean of 10.0. ar

From 7124610875511866671
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ce5fb69bfdc83953
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-23 12:02:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: TNC lockup
Message-ID: <191@mouton.UUCP>
Date: Tue, 23-Oct-84 15:02:45 EDT
Article-I.D.: mouton.191
Posted: Tue Oct 23 15:02:45 1984
Date-Received: Wed, 24-Oct-84 04:30:06 EDT
References: <130@sask.UUCP>
Organization: Bell Communications Research, Inc

Lines: 7

There was a problem in the earlier versions of TAPR code in which the board would crash whenever it received a frame with an excessive (> 3) number of digipeaters. The latest version of code (I'll have to go check the version number) seems quite robust; I've had it running for many months now with the only crashes due to things like power failures.

Phil

From 5494268335785779707
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a3f000e6fb3f13d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-24 08:38:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 Fluke 8/7/84; site fluke.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!vax135!cornell!uw-beaver!
microsoft!fluke!kelpie
From: kelpie@fluke.UUCP (Tony Garland)
Newsgroups: net.ham-radio
Subject: Kenwood 2600 HT
Message-ID: <775@vax1.fluke.UUCP>
Date: Wed, 24-Oct-84 11:38:26 EDT
Article-I.D.: vax1.775
Posted: Wed Oct 24 11:38:26 1984
Date-Received: Fri, 26-Oct-84 09:15:39 EDT
Organization: John Fluke Mfg. Co., Everett, WA
Lines: 35

I am trying to ascertain whether to purchase a kenwood 2600 HT. Previously, I have tended to stick with ICOM equipment and have found it work well, but I am intrigued about the 2600 DCS (digital controlled squelch) feature. My wife and I live in a situation where we have no phone and it would seem that DCS could be just the ticket for us to be able to communicate without one or the other of us having to monitor through bunches of unrelated chatter on the repeater. I myself have not been very active (up to now) on 2 meters, but a contact of mine pointed out the following two drawbacks with DCS.

(1) The tone burst which preceeds each transmission to open the squelch of the "target" receiver bothers other hams on the repeater.

(2) Many repeaters don't pull in fast enough. This results in the leading part of the tone burst getting dropped by the repeater thereby corrupting the code. This could be overcome by keying the repeater (without DCS on) to bring it up, then enabling DCS and re-keying to send the tone burst.

And now for the questions:

* Does a DCS tone burst really sound that obnoxious?

* Has anyone used the 2600 DCS and found drawback (2) to be the case?

* If so, how have you worked around it?

* Is there any way of delaying the tone burst after the HT is keyed to allow for the turn-on delay of a typical repeater?

Tony Garland, N7DX decvax\
John Fluke Mfg Co. ihnp4 >!uw-beaver\
PO Box C9090 allegra >!fluke!kelpie
Everett, WA 98206 USA ucbvax >!lbl-csam /
(206) 356-6213 hplabs/

From -1100755172851236927
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9d32f0798196aa4b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-24 20:34:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Trick for out of band reception on UHF receivers
Message-ID: <378@ihu1h.UUCP>
Date: Wed, 24-Oct-84 23:34:57 EDT
Article-I.D.: ihu1h.378
Posted: Wed Oct 24 23:34:57 1984
Date-Received: Thu, 25-Oct-84 04:21:04 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 59

x

TRICK FOR OUT OF BAND RECEPTION ON UHF RECEIVERS

Articles in "Monitoring Times" and "Popular Communications" have described how one may "trick" various scanner radios into receiving frequencies that they were not designed to receive. These tricks fell into 2 categories:

1. Tricking the microprocessor-based control element by making use of some bug in the firmware.

2. Listening to simple images (e.g. to listen to fre-
quency F, tune the radio to F + 2 * [the intermediate frequency]).

This article describes a third technique, which I discovered by accident.

My Radio Shack PRO30 scanner (10.7 MHz intermediate frequency) can receive the audio from TV channel 44 (655.75 MHz) when the radio is programmed for 510.4875 MHz.

I think this is what's happening:

- When the radio is set to 510.4875 MHz, the local oscillator is working at 510.4875 - 10.7 = 499.7875 MHz.

- This 499.7875 MHz signal is actually the output of a frequency tripler, whose input frequency is 166.5958 MHz (approx).

- In addition to this 3rd harmonic, there seems to be a 4th harmonic component present (666.3833 MHz), which when mixed with a signal on 655.6833 MHz, produces a 10.7 MHz IF (655.6833 MHz is close enough to ch 44's
  655.75 MHz)!

Owners of the Bearcat BC100 handheld scanner (10.8 MHz IF) have told me they can receive UHF TV signals on odd frequencies also. After checking the arithmetic, I've concluded that they are experiencing the same phenomena.

Here's the algorithm: to listen on an out-of-band UHF frequency U (in MHz), try tuning your radio to:

   [3*U - 7*(intermediate freq in MHz)] / 4

Conversely, if you hear a strange signal when your UHF radio is tuned to T MHz, you may be simultaneously listening to the frequency of:

   [4*T - 7*(intermediate freq in MHz)] / 3

I would be interested in hearing from those that have tried this on amateur 440 MHz receivers, or on other radios.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -2949585677572016742
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,440d5565df4b66ec
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-24 21:12:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!zehntel!dual!amd!decwrl!decvax!mcnc!ecsvax!cjl
From: cjl@ecsvax.UUCP

Newsgroups: net.ham-radio
Subject: Re: RE: Accessing computers via ham bands
Message-ID: <3403@ecsvax.UUCP>
Date: Thu, 25-Oct-84 00:12:07 EDT
Article-I.D.: ecsvax.3403
Posted: Thu Oct 25 00:12:07 1984
Date-Received: Fri, 26-Oct-84 03:31:07 EDT
References: hplabs.990
Lines: 14

RE "Unused Spectrum":

There is no such thing as "unused spectrum" in the practical frequency bands.
About the only thing available is line-of-sight 23 Ghz microwave...

We have begged, pleaded, and threatened the FCC for an HF, VHF, or UHF frequency
for local packet, and the only response is for all members "to get their
amateur licenses."

If anyone can find an available frequency band and service, PLEASE let me know!

Charles J. Lord
...!decvax!mcnc!ecsvax!cjl

From 7101079221591487423
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,61eebd8830b71a6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-25 06:00:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 96 (comment deadline on 84-874 extended)
Message-ID: <13075@mgweed.UUCP>
Date: Thu, 25-Oct-84 09:00:20 EDT
Article-I.D.: mgweed.13075
Posted: Thu Oct 25 09:00:20 1984
Date-Received: Fri, 26-Oct-84 08:45:33 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 24

qst de k9eui
hr arrl bulletin nr 96 from arrl headquarters
newington ct october 24 1984
to all radio amateurs bt

additional time has been made available for input by the public
concerning the 160 meter band docket 84-874. acting on a

request by arrl, fcc has extended the deadline for comments to january 24, 1985 and for reply comments to march 11, 1985. the docket proposes to amend fcc rules part 90 to permit radiolocation on a primary basis in 1900 to 2000 khz. warc 79 provided for this change to accomodate radiolocation stations displaced from 1605 to 1705 khz by the planned expansion of standard broadcasting. the u.s. table of frequency allocations, fcc rules part 2, has already been amended accordingly. footnote 290 provides for continued use of 1900 to 2000 khz by amateurs on a secondary basis until a further rulemaking proceeding. formal participation in docket 84-874 requires submission of an original and 5 copies, but the public may take part informally with submission of a single copy. materials should reach the secretary fcc, washington, d.c. 20554 by the close of business january 24. details will appear in qst ar

From 4880051042870661989
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,46d17dc7aa925840,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-25 09:36:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: "New" Regency scanners - 1 year later
Message-ID: <380@ihu1h.UUCP>
Date: Thu, 25-Oct-84 12:36:18 EDT
Article-I.D.: ihu1h.380
Posted: Thu Oct 25 12:36:18 1984
Date-Received: Fri, 26-Oct-84 08:48:50 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 49

x
THE "NEW" REGENCY SCANNERS - 1 YEAR LATER

On June 23, 1983, I posted an article describing some of the new scanners Regency announced. Here's an update:

- The HX1000 was supposed to be a 20 channel portable. The real HX1000 just became available a couple of months ago. It is built in the same case as the Azden 2m walkie-talkie, and contains 30 channels, not 20. The factory spec sheet boasted 2 watts of audio output, but the real HX1000 has only 0.2 watts! The two HX1000's my friends own have very good sensitivity.

  This unit being sold now at the Downers Grove (IL)
  McDade store! Regency doesn't have the facilities to

repair the HX1000 yet, so they are giving customers brand new ones in exchange for units sent in for repair under warrantee!

- The MX5000, a 20 channel scanner with continuous 25-550 MHz coverage, has become available during the last few months. It is built in Japan by AOR, the same company that produces the Tempo S5 walkie-talkie.

  Users appear happy with the good sensitivity and wide coverage, but the scanning rate comes nowhere near meeting advertised claims. To quote a recent "Monitoring Times" article: "The SLOW scan and search rate (11 seconds for 20 channels) earns the unit its first design Edsel. it's ridiculous, unnecessary and totally useless."

  Its high level of internally generated noise wipes out reception when using the supplied antenna: "on frequencies below 300 MHz - especially between 25 and 88 MHz - you'll find the unit almost unusable on this antenna."

- The MX7000, the first programmable scanner to cover the 800 MHz band is STILL not available. Current speculation is that this radio is really a Japanese MX-5000 with the additional 800 MHz converter components stuffed on the board. The factory spec sheet showed a completely different scanner (likely an early mockup of what was supposed to be an American built radio).

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 6600777699548388983
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,baed363ac856a08d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-25 10:02:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hound.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!hound!rfg
From: rfg@hound.UUCP (R.GRANTGES)
Newsgroups: net.ham-radio
Subject: Help? Electronics Self-Taught?
Message-ID: <694@hound.UUCP>
Date: Thu, 25-Oct-84 13:02:43 EDT
Article-I.D.: hound.694
Posted: Thu Oct 25 13:02:43 1984

Date-Received: Fri, 26-Oct-84 08:49:04 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 17

[]
My son, who is a Junior in CS at a school not on the net, is interested in learning electronics without going back to ground zero with engineering courses. He has asked me to recommend a/some book/s in the hope he could pick things up for himself.
I have always felt that the presentation of basics in "The Radio Amateur's Handbook" was one of the best I had ever seen. It has, however, been over 10 years since I last saw one and they are temporarily out of stock everywhere local pending a new issue.
Do you folks agree with me?
Would you recommend something else as a starter?
Heathkit has a lot of very expensive courses. Anyone recommend any of them in this case?
I will be happy to summarize replies if volume and interest so indicate.
Many thanks in advance.

It's the thought,if any, that counts. Dick Grantges   hound!rfgZ

From 415031579576551746
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,baa38d2d21c497db,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-25 15:38:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!hplabs!paull
From: paull@hplabs.UUCP (Rob KA6SFV)
Newsgroups: net.ham-radio
Subject: R/C Mix and Match (Until an R/C group is formed)
Message-ID: <1008@hplabs.UUCP>
Date: Thu, 25-Oct-84 18:38:48 EDT
Article-I.D.: hplabs.1008
Posted: Thu Oct 25 18:38:48 1984
Date-Received: Sat, 27-Oct-84 04:11:33 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 20

 Hi,fellow ham (or other) r/c nuts.

     Currently I am using an Airtronics XL6-FM system. (TX,RX & servos) What I'd like to know is if anyone has mixed and matched other manufacturers equipment. E.G., Airtronics with Futaba or Kraft or Ace or ???   What I'd like to do is have separate reciever/battery systems in each model to avoid pulling things apart too many times.

  Airtronics separate receivers seem to be unavailable right now, but Futaba is in ample supply. Since most of the modern systems use the Signetics

encoder/decoder chips I thought I might get a simple 2 channel receiver and
use it with the 6 channel transmitter (Thus saving lots-a-bux).

TNX 73 Rob Paull   (KA6SFV)

ps: My source for most R/C stuff is Sheldons in San Jose, CA. They seem
    to have the largest selection of hardware and software (planes Hi.Hi)

From 2655974672572823841
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a3f000e6fb3f13d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-25 17:49:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Kenwood 2600 HT
Message-ID: <381@ihu1h.UUCP>
Date: Thu, 25-Oct-84 20:49:53 EDT
Article-I.D.: ihu1h.381
Posted: Thu Oct 25 20:49:53 1984
Date-Received: Fri, 26-Oct-84 09:36:57 EDT
References: <775@vax1.fluke.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 15

I have more fun with my TR2600A than I've had with any HT since 1970.

  >   * Does a DCS tone burst really sound that obnoxious?

Yes.

  >   * Has anyone used the 2600 DCS and found drawback (2) to be the case?
I tried using the DCS once with a friend on simplex just to see
if it worked. It did. Never tried it through a repeater, but
a digital burst is sent both at the start AND the
end of the transmission, so if the opening burst didn't make it,
the closing one will.
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 8124348624492678687
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c69dd6f9f039ac0e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-26 15:01:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1+some 2/3/84; site dual.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!zehntel!dual!paul
From: paul@dual.UUCP (Baker)
Newsgroups: net.ham-radio
Subject: Re: real meaning of DTMF
Message-ID: <856@dual.UUCP>
Date: Fri, 26-Oct-84 17:01:06 EST
Article-I.D.: dual.856
Posted: Fri Oct 26 17:01:06 1984
Date-Received: Sun, 28-Oct-84 05:51:04 EST
References: <973@hplabs.UUCP> <5415@brl-tgr.ARPA>
Organization: Dual Systems, Berkeley, CA
Lines: 20

> I thought DTMF meant 'Dual Tone Multi-Frequency'. Contrary to
> popular usage, TOUCH-TONE and DTMF are not the same. TOUCH-TONE is
> what the keypad on your telephone produces. DTMF is used for sending
> call information from one central office to another.

> By the way, the tones used for DTMF are not the same as the tones
> generated by your telephone pad.

I'm afraid the above just isn't true. DTMF is the same as Touch-Tone (tm).
Look, for example at the EIA specification RS-470 describing Telephones.
It specifically states DTMF and gives frequencies.

The signalling method subject to being fooled by "Blue-boxes" is known
as MF. The publication which gave out the MF frequencies was apparently
hastily removed as soon as the implications were realized. These
frequencies are not produced by the DTMF or Touch-Tone (tm) pad in ones
telephone and certainly not by a dial phone !

Paul Wilcox-Baker.

From 9095700985835758433
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9d82759cbb2e3758,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-28 19:07:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: is ARPANET<->USENET bridge fixed yet?
Message-ID: <382@ihu1h.UUCP>
Date: Sun, 28-Oct-84 22:07:47 EST
Article-I.D.: ihu1h.382
Posted: Sun Oct 28 22:07:47 1984
Date-Received: Mon, 29-Oct-84 03:27:47 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 7

x
Is the bridge between ARPANET and USENET fixed yet so that
"net.ham-radio" articles can be shared among members of both
nets?
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -20744243206241410
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,baed363ac856a08d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-28 22:16:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!uok!
mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: Help? Electronics Self-Taught?
Message-ID: <2800020@uok.UUCP>
Date: Mon, 29-Oct-84 01:16:00 EST
Article-I.D.: uok.2800020
Posted: Mon Oct 29 01:16:00 1984
Date-Received: Thu, 1-Nov-84 03:37:14 EST
References: <694@hound.UUCP>
Lines: 8
Nf-ID: #R:hound:-69400:uok:2800020:000:409
Nf-From: uok!mpackard   Oct 29 00:16:00 1984

[]
Speaking of learning electronics, do not ever recommend the military
for this task. Recent graduates have what is known as the ability
to change cards. Back in the sixty's when I went through there was
substance but now only attempts to save money. That is, let the
gomer pull the card and throw it in the trash or send it back to the
manufacturer. I point this out as it used to be a desireable path.

From -8774513213137903829
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,405a51c8f00e14e1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-28 23:13:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: BBS up on AO-10
Message-ID: <199@mouton.UUCP>

Date: Mon, 29-Oct-84 02:13:06 EST
Article-I.D.: mouton.199
Posted: Mon Oct 29 02:13:06 1984
Date-Received: Tue, 30-Oct-84 00:27:31 EST
Organization: Bell Communications Research, Inc
Lines: 64

- - - - - - NEWS FLASH - - - - - -

On October 18th, the Federal Communications Commission granted a Special Temporary Authorization (STA) permitting 21 amateurs to operate TelePorts capable of automatically relaying digital (packet radio) communications between terrestrial packet radio networks using amateur satellites.

As a first phase of the new AMSAT/ARRL TelePort STA, a unique packet radio test was carried out on Sunday, October 28. An automatic packet radio bulletin board system (PRBBS) operated by Tom Clark (W3IWI) was placed in experimental operation on the AMSAT-OSCAR-10 satellite. The W3IWI PRBBS was sucessfully used by several amateurs across the U.S. and in Canada. Earlier this year, successful PRBBS tests thru the same satellite had involved "gateway" links to existing terrestrial PRBBS systems in California.

The following stations participated in this test and successfully logged onto the W3IWI PRBBS:

Randy Smith (VE1PAC/VE6), Medley, Alberta Wes Morris (K7PYK), Scottsdale, Arizona "Mac" Jordan (W4DAQ), Demopolis, Alabama Bob Diersing (N5AHD), Corpus Christi, Texas

A number of other stations were also monitoring and reported good copy.

Both VE1PAC and K7PYK sent and received several messages and files during their connections with the PRBBS. K7PYK maintained contact for about an hour and managed to acquire about 50 kilobytes of documentation from W3IWI. W3IWI and VE1PAC tested full-duplex PRBBS

operation thru the AMSAT-OSCAR-10 satellite and achieved sustained data thruput of about one kilobaud despite the 0.25 second round-trip propagation time to the satellite.

The packet radio hardware used at W3IWI is normally used as a local area PRBBS serving Baltimore-Washington. It consists of a Xerox 820 computer running W0RLI software and a TAPR BETA TNC. The packet radio links were running at 1200 baud data speeds and used 1000 Hz shift FSK modulation generated by "202A" style modems.

Both W3IWI and N5AHD are among the 21 amateurs approved for the TelePort STA.

From -2510339230310398893
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 122486,b4d6730dd1653662
X-Google-Attributes: gid122486,public
X-Google-Thread: 151e61,b4d6730dd1653662
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12f221,b4d6730dd1653662
X-Google-Attributes: gid12f221,public
X-Google-Thread: 13375c,b4d6730dd1653662
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1984-10-29 09:44:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!henry
From: henry@utzoo.UUCP (Henry Spencer)
Newsgroups: net.news.group,net.aviation,net.ham-radio,net.misc
Subject: Re: New newsgroup for Radio Controlled Planes?
Message-ID: <4550@utzoo.UUCP>
Date: Mon, 29-Oct-84 12:44:05 EST
Article-I.D.: utzoo.4550
Posted: Mon Oct 29 12:44:05 1984
Date-Received: Mon, 29-Oct-84 12:44:05 EST
References: <881@opus.UUCP> <2191@hplabsc.UUCP>, <481@voder.UUCP>
Organization: U of Toronto Zoology
Lines: 22

> ...An RC newsgroup is a good idea...

Only if it proves necessary. Look, folks, we've seen innumerable cases of "flash in the pan" newsgroups: lots of enthusiasm for their creation, lots of traffic at the start, rapid asymptotic decay to zero. While not wishing to insult the RC enthusiasts, there is no justification for an RC newsgroup until they can demonstrate sustained traffic on the subject.

We've seen a lot of "oh, wow, an RC newsgroup, how wonderful" articles...
but very little actual discussion of RC. Never mind how many people think
it's a great idea; how many of them will *participate*?

If you want to discuss RC, start discussing it. Where? Here, since it's
about the closest match of topic. The time will be ripe for a separate
RC newsgroup when (and *if*!) there's enough RC-related traffic, continuing
over a substantial period of time, that the rest of us start grumbling.
If there's never enough to make us unhappy, then there really isn't enough
to justify a separate newsgroup.

In other words, if you've got something to say, start saying it!
--
                    Henry Spencer @ U of Toronto Zoology
                    {allegra,ihnp4,linus,decvax}!utzoo!henry

From -4394362035136592995
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c4a3d3cf3eff5ac9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-29 21:53:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site mako.UUCP
Path: utzoo!linus!decvax!tektronix!orca!mako!jans
From: jans@mako.UUCP (Jan Steinman)
Newsgroups: net.ham-radio
Subject: FOR SALE: Icom O2AT.
Message-ID: <351@mako.UUCP>
Date: Tue, 30-Oct-84 00:53:54 EST
Article-I.D.: mako.351
Posted: Tue Oct 30 00:53:54 1984
Date-Received: Thu, 1-Nov-84 03:01:25 EST
Organization: Tektronix, Wilsonville OR
Lines: 12

Thinking about buying an O2AT? Offer me the best advertised price you can
find for a new O2AT and you can have the one I purchased from EEB in July
plus a Larsen 1/4 wave mag-mount, a 30 watt linear and a homebrew DC cord.

(Please reference said ads, or, yes, I think you should buy the one
 advertised by Murray's Midnight Radio Supply for $49.95.)

(Flames about misusing net.ham-radio to /dev/null. I also enjoy the SWL
 traffic on this newsgroup.)
--
:::::: Jan Steinman   Box 1000, MS 61-161   (w)503/685-2843 ::::::
:::::: tektronix!tekecs!jans   Wilsonville, OR 97070 (h)503/657-7703 ::::::

From -7269244414276740713
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 122486,b4d6730dd1653662

X-Google-Attributes: gid122486,public
X-Google-Thread: 12f221,b4d6730dd1653662
X-Google-Attributes: gid12f221,public
X-Google-Thread: 13375c,b4d6730dd1653662
X-Google-Attributes: gid13375c,public
X-Google-Thread: 151e61,b4d6730dd1653662
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-30 12:03:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!henry
From: henry@utzoo.UUCP (Henry Spencer)
Newsgroups: net.news.group,net.aviation,net.ham-radio,net.misc
Subject: Re: New newsgroup for Radio Controlled Planes?
Message-ID: <4555@utzoo.UUCP>
Date: Tue, 30-Oct-84 15:03:23 EST
Article-I.D.: utzoo.4555
Posted: Tue Oct 30 15:03:23 1984
Date-Received: Tue, 30-Oct-84 15:03:23 EST
References: <881@opus.UUCP> <2191@hplabsc.UUCP>, <481@voder.UUCP>,
<4550@utzoo.UUCP>
Organization: U of Toronto Zoology
Lines: 6

Wups, I hadn't noticed that my posting saying "if there's anything to
say about RC, start saying it" was going to four different newsgroups.
When I said "here is the right place", I meant net.ham-radio.
--
                  Henry Spencer @ U of Toronto Zoology
                  {allegra,ihnp4,linus,decvax}!utzoo!henry

From 1710481845454329846
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1fe7f6c5010193fc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-30 15:42:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 98 (board meeting summary)
Message-ID: <13200@mgweed.UUCP>
Date: Tue, 30-Oct-84 18:42:38 EST
Article-I.D.: mgweed.13200
Posted: Tue Oct 30 18:42:38 1984
Date-Received: Wed, 31-Oct-84 01:26:20 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 11

qst de k9eui

hr arrl bulletin nr 98 from arrl headquarters
newington ct october 29, 1984
to all radio amateurs bt

we regret that the qualifying run scheduled for october 28 at 2400 utc was inadvertently sent on october 27. the next qualifying runs will be on november 9 and december 8 at 0300 utc, on november 19 at 2100 utc and december 27 at 1400 utc ar

From 600951164227548686
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,547ff4722ae3e807,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-30 15:43:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 97 (qualifying run sked)
Message-ID: <13201@mgweed.UUCP>
Date: Tue, 30-Oct-84 18:43:30 EST
Article-I.D.: mgweed.13201
Posted: Tue Oct 30 18:43:30 1984
Date-Received: Wed, 31-Oct-84 01:26:36 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 119

qst de k9eui
hr arrl bulletin nr 97 from arrl headquarters
newington ct october 27, 1984
to all radio amateurs bt

the arrl board of directors met in hartford, ct on october 25 and 26. highlights of the actions taken follow.

there were several actions taken pertaining to packet radio, among them the approval of the ax.25 amateur packet radio link layer protocol.

the contest advisory committee was directed to study the feasibility of a more neutral geographical scoring system for at least one of the arrl sponsored uhf vhf contests.

the general manager was directed to develop a program designed to increase the number of u.s. amateur radio licensees by 50,000 per year for the next five years, and a program to increase arrl membership by 25,000 by the end of 1985 and by approximately 20 per cent each year thereafter.

it was unanimously voted that the general manager devise and

implement procedures to permit walk in examinations at arrl (garble) volunteer examiner exam sessions, as and to the extent that the particular ve team deems appropriate.

future vhf uhf repeater directories published by the arrl will include within the directory a designation to show the difference between a repeater that has been coordinated and one that has not.

it was unanimously voted that the technical excellence award for 1983 be presented to william sabin, w0iyh, for his article in july 1983 qst.

it was unanimously voted that counsel file a request for a 45 day extension of time in which to file comments in prb 1, arrls request for issuance of declaratory ruling to establish limited federal preemption over amateur antennas and supports.

the 23 cm band plan submitted to the board by the vuac and vrac at this meeting is to be returned to those committees for further study.

the management and finance committee is to study the desirability and feasibility of relocating headquarters from newington, ct to an alternate site, such study to consider all aspects, including the need and desirability of such a move, the costs, the impact on league staff, and the degree of increased effectiveness to be gained.

," band plan as proposed the 33 cm band plan as proposed by by the vuac was approved as the interim plan, and the vuac is directed to continue its study of the same involving all identifiable potential users interests.

the board directed that the fm/rpt column in qst be on a monthly basis.

the general manager was instructed to petition the federal communications commission to permit f2 emission on ten meters for identifying amateur radio repeaters.

the arrl will file with the fcc a petition for rulemaking to permit an applicant who has failed an amateur radio examination test element to retake that test element 27 days thereafter.

the general manager was instructed to prepare a paper on the status of the vienna international center, and the dx advisory committee is to reconsider the 4u1vic question no later than january 20, 1985.

the arrl will request that the fcc issue a public notice advising manufacturers of their obligations with regard to rf shielding and filtering.

a draft petition to permit automatic control of amateur digital communications above 30 was approved in substance.

the vrac was requested to study the band plan for 420 to 450 mhz with the intent of recommending a standard for repeater in out frequency relationships.

there is to be a study to determine what existing and or new dxcc awards if any should apply to the 24 mhz band.

the general manager was directed to determine means by which the advanced class license holder could have a more involved role in the volunteer examiner program. the board unanimously voted to honor mr. e. merle glunt, w3okn, for his contributions to the successful outcome at the 1979 world administrative radio conference for the amateur radio service.

there is to be a survey of u.s. arrl members concerning the feeling about ssb mode operation in the 40 meter band below 7.1 mhz.

the board unanimously resolved to extend special recognition to wa2nnt, wa6qqq, wa6qzy, wa6mrz, kn6h, w6pgm, k6lea, wa6nrb, and n6iiu, for their outstanding service to amateur radio in support of the games of the xiii olympiad, los angeles, 1984.

there is to be a study of the feasibility of arrl offering its assistance to fcc in the area of maintaining amateur licensing records in general but especially in the administration of special call sign requests of clubs and individuals.

the league is to file a petition requesting that the fcc amend the rules governing the amateur satellite service to add the new frequency allocations granted at warc 79.

the board also voted to recognize the district of columbia as a separate multiplier from that of maryland for annual arrl dx contests and the annual arrl ten meter contest.

the full minutes will appear in qst ar

From -8413098734369757415
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9e60dde6bb760ecd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-30 15:44:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: arrl propagation forecast nr 44
Message-ID: <13202@mgweed.UUCP>
Date: Tue, 30-Oct-84 18:44:35 EST
Article-I.D.: mgweed.13202
Posted: Tue Oct 30 18:44:35 1984
Date-Received: Wed, 31-Oct-84 01:26:50 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 32

qst de k9eui
hr propagation forecast bulletin nr 44 from arrl headquarters
newington ct october 29, 1984
to all radio amateurs bt

on october 23 the solar flux dropped steadily, to 70 on the 26th, remaining there as this bulletin was written. the high for october was only 77. unless solar activity markedly increases, the october flux average will be just under 74. the most recent month at this level was september 1976, less than 3 months into the present solar cycle.

solar flux records for cycles 18 through 20 show monthly statistics similar to those for october recorded at times averaging only ten months from the ends of the cycles. this is not to say that we have less than a year from the end of cycle 21, but it will have to follow a very different course from its 3 predecessors, if it is to approach the long term average cycle length of 11.2 years.

at bulletin time the flux was coasting at 70, and should rise this week, but probably not above 75. the solar calm has made for good conditions on 14 mhz and lower frequencies but with more muf than given in any long range predictions, such as the charts in recent issues of qst.

no major propagation change is likely before early november. then higher geomagnetic activity will bring lower signal levels and increased fading in high latitude circuits much of the time through about november tenth ar

From 8023583605254984550
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e4189d868b143d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-31 13:46:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Hams here getting blame for commercial TVI

Message-ID: <13220@mgweed.UUCP>
Date: Wed, 31-Oct-84 16:46:26 EST
Article-I.D.: mgweed.13220
Posted: Wed Oct 31 16:46:26 1984
Date-Received: Fri, 2-Nov-84 06:28:51 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 21

After receiving many calls from people in various parts of Batavia
and Geneva, IL., concerning TVI to channel 5 (Chicago's NBC outlet)
I started searching with a spectrum analyzer. I saw the interference
at my tv also. The problem turns out to be a 30 watt paging link
transmitter on a tower next to our county sheriff's office. The
paging transmitter is on 75.8 MHz. I have contacted both the tower
owner and the FCC, so we shall see what happens. The system has been
on the air for 6 months and the local hams have been getting the blame
for it all along. We are about 40 miles West of the channel 5 transmitter
and the paging signal is about 10dB stronger than the tv signal at my
house, about 3 miles away.......

Apparently, this spectrum has just recently been authorized for this
type of service. Wonder what we are in for!!!!!! I have beeen told that
these stations first go on the air as a developmental station and they
must determine that they are not causing interference. Looks like these
guys didn't care.....

Bob K9EUI

From 6155359472899610114
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c4a3d3cf3eff5ac9
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-31 19:59:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihuxx!ndsss
From: ndsss@ihuxx.UUCP (Al R. Zantow)
Newsgroups: net.ham-radio
Subject: need equipment or plans for 2M to 6M/220MHz transverters
Message-ID: <867@ihuxx.UUCP>
Date: Wed, 31-Oct-84 22:59:48 EST
Article-I.D.: ihuxx.867
Posted: Wed Oct 31 22:59:48 1984
Date-Received: Thu, 1-Nov-84 07:47:25 EST
References: <351@mako.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 26

    Currently the ACL repeater club, of which I am a member, has
started to express intrest in getting a 6 Meter repeater on the air

in addition to our 147.585 IN/146.985 OUT and 222.98 IN/224.58 OUT repeaters. I currently have a ICOM IC-25A and ICOM 2AT, which gives me plenty of 2M coverage, but no 6M or 220 coverage. What I am looking for is equipment and/or plans for a transverter to go from 2M to 6M, and from 2M to 220MHz. This would allow me to use all the features of the ICOM IC-25A (memory, scaning, ect) on two other bands. I have wanted to get on 220MHz and 6M, but I do not want to spend megabucks to do it [I would also like a receiver that covers D.C. to light for under $200 too :-)]. I know there are other hardware freaks like me out there, I think this could be a nice challenge. If I can get plans, I would like to make a dual band transverter with a 2M input jack and outputs for 6M, 2M, and 220MHz. Please send me mail, or if you think this is of general intrest, post it on the net.

TNX,
KA9OST
!ihuxx!ndsss
312-979-0458 work

Al Zantow
1151 S. State St.
Aurora, I.L. 60505

From -6910995406963287648
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c4a3d3cf3eff5ac9
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-01 05:08:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!inuxg!wheatley
From: wheatley@inuxg.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Re: need equipment or plans for 2M to 6M/220MHz transverters
Message-ID: <347@inuxg.UUCP>
Date: Thu, 1-Nov-84 08:08:41 EST
Article-I.D.: inuxg.347
Posted: Thu Nov 1 08:08:41 1984
Date-Received: Fri, 2-Nov-84 06:08:56 EST
References: <351@mako.UUCP>, <867@ihuxx.UUCP>
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 6

followups on transverters, both 2 meter and HF rig transverters, are indeed of interest to me also. Please either post or send me a copy. Thanks

Steve Wheatley, KU9C
inuxg!wheatley

From -3576082182237463022

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e4189d868b143d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-01 10:22:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sdchema.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdchema!lbv
From: lbv@sdchema.UUCP (Gordon Schlesinger)
Newsgroups: net.ham-radio
Subject: Re: Hams here getting blame for commercial TVI
Message-ID: <270@sdchema.UUCP>
Date: Thu, 1-Nov-84 13:22:23 EST
Article-I.D.: sdchema.270
Posted: Thu Nov 1 13:22:23 1984
Date-Received: Sat, 3-Nov-84 05:19:51 EST
References: <13220@mgweed.UUCP>
Organization: U.C. San Diego Chemistry Dept
Lines: 21

This sort of problem is nothing too new, Bob. Private Land Mobile
has used the 72-76 MHz "gap" between TV Channels 4 & 5 for
point-to-point links for a number of years. Check Part 90 of the
FCC Rules for the requirements for the PLMRS not to cause interference
to Channels 4 & 5; they exist, but I can't quote them from memory.
Of course, these same requirements won't apply to paging, which
comes under the Common Carrier rules, but the PLMRS rules will give you a clue
as to what standards exist. I wouldn't be too optimistic about
getting the FCC to do something about the problem, given their
budget-driven low visibility status. What might do some good would
be to complain to Chicago's TV 5 management; they have a vested
interest in seeing their signal "get through" and may be able to
get both the network and the National Association of Broadcasters
to lean on the FCC. Good luck, and post a follow-up with the
(successful) resolution.

Gordon Schlesinger, WA6LBV
.....!ucb!sdcsvax!sdchema!lbv

"Better things.....for better living.....through chicanery"

From 7565300405284279977
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,84f4f5862f76dc95,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-01 12:05:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site homxa.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!homxa!nd2k
From: nd2k@homxa.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: NG84O

Message-ID: <468@homxa.UUCP>
Date: Thu, 1-Nov-84 15:05:43 EST
Article-I.D.: homxa.468
Posted: Thu Nov 1 15:05:43 1984
Date-Received: Fri, 2-Nov-84 06:22:32 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 6

Could somebody tell me what the QSL information is for the Olympic Station NG84O this past summer? I think it's the W6 QSL bureau but I'm not too sure.

From -2646758490807256240
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2aaa01ec4e263777,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-01 13:41:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/3/84; site aluxe.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!aluxe!mpivls
From: mpivls@aluxe.UUCP (IANNUZZI)
Newsgroups: net.ham-radio
Subject: RTTY and microcomputers
Message-ID: <480@aluxe.UUCP>
Date: Thu, 1-Nov-84 16:41:01 EST
Article-I.D.: aluxe.480
Posted: Thu Nov 1 16:41:01 1984
Date-Received: Fri, 2-Nov-84 06:48:54 EST
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 15

Interested in information related to the software/hardware requirements for the reception of RTTY, AMTOR, and MORSE CODE using Kenwood R-2000 and TI-99/A computer.

Preliminary plans include the purchase of TI Terminal Emulator II, CorComp stand alone RS-232 interface, and Kantronics UTU.

Any advice would be appreciated.

M. Iannuzzi
AT&T BL
30-134
2525 N. 12thh St.
Reading, Pa. 19604
215-929-6093
!aluxe!mpivls

From -922857578957145368

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,48c5b49497aefe30,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-01 15:37:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Gateway V1 #6
Message-ID: <201@mouton.UUCP>
Date: Thu, 1-Nov-84 18:37:45 EST
Article-I.D.: mouton.201
Posted: Thu Nov 1 18:37:45 1984
Date-Received: Fri, 2-Nov-84 07:02:05 EST
Organization: Bell Communications Research, Inc
Lines: 401

Gateway, The ARRL Packet-Radio Newsletter
October 23, 1984
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TELEPORT STA GRANTED

The FCC has granted the joint AMSAT/ARRL request for a special temporary authorization (STA) permitting operation of automatic digital teleport stations. (For complete discussion of this request, and a list of stations involved, see Gateway issues 1 and 5.) The FCC "concluded that the automatic relaying of digital messages between amateur stations on earth and amateur satellites via intermediary stations (stations in teleport operation) may contribute to the advancement of the technical and communication aspects of the art of radio."

The following sections of the Amateur Radio Service rules have been waived for authorized stations:

> "97.126 (a) is waived to permit an amateur station engaged in teleport operations to retransmit automatically the radio signals of other amateur radio stations.
>
> "97.126 (b) is waived to permit a remotely-controlled amateur station engaged in teleport operations to communicate with stations which are not shown on such a station's network diagram.
>
> "97.79 (b) is waived to permit an amateur station engaged in teleport operations to be operated under automatic control without the presence of a control operator at a control point of the station; provided that devices are installed and procedures implemented to ensure compliance with the the

Commission's rules at all times; and, provided further that upon notification by the Commission of improper operation of a teleport station under automatic control, such automatic control shall be discontinued immediately until all deficiencies have been corrected."

Authorized stations may operate satellite uplinks and downlinks on 144-146 MHz and 435-438 MHz. Terrestrial inputs and outputs may be on any amateur frequency at or above 50 MHz where digital communications is permitted.

This STA expires 180 days from October 18, 1984. Good luck to all stations involved.

PACKET RADIO TELECONFERENCE RADIO NET

"Packet Radio Overview and Prospective" will be the subject of the December 2nd North American Teleconference Radio New (TRN). This net, heard on over 150 gateway stations (mostly VHF repeaters) across the U.S. and Canada and on the OSCAR 10 satellite, will explain what packet radio is, describe how to get started in it, point out the benefits to you, and outline the pitfalls to be avoided by the beginner and expert alike. The speakers on this TRN will be none other than Lyle Johnson, WA7GXD, and Harold Price, NK6K.

Lyle is President of the Tucson Amateur Packet Radio Corporation (TAPR) and was one of the primary developers of the TAPR terminal node controller (TNC) hardware. For his work in developing the TAPR TNC, Lyle was awarded the 1984 Technical Excellence Award at Dayton. Looking to the future, Lyle is responsible for the processor design for the upcoming amateur packet satellite (PACSAT). He became active in packet radio in 1981, the pioneer days for this new technology.

Harold is a Director of TAPR and was on the team that designed the software for the TAPR TNC. He is also the AMSAT Project Manager for PACSAT. Harold is another packet-radio pioneer, having first become active in that technology in 1982.

Packet radio offers opportunities for both the traditional communicator and for the experimenter. Learn about packet radio from two of its leading developers by tuning into TRN, Sunday, December 2, 1984, at 6:00 PM CST (0000Z). For a complete list of gateway station locations and frequencies, write the TRN Manager, c/o Midway Amateur Radio Club, P.O. Box 1231, Kearney, NE 68847-1231 (S.A.S.E. please, Canada excepted). Those of you on Compuserve HAMNET can find this list in the XA4 data base.

From Midway Amateur Radio Club

GATEWAYS "DOWN UNDER."

On September 1, from 2000Z to 0000Z, VK2BVD and ZL1AOX maintained a fully "connected" 1200-bit/s data link between Sydney, Australia, and Auckland, New Zealand, on the 20-meter band. Propagation conditions were excellent, and there was little multi-path over the 2650-km, one-hop path. Substantial files were transferred in each direction.

The following day, at the same time, an HF/VHF packet gateway was established using store-and-forward techniques with link-level acknowledgments. A total of 5 terminal node controllers (TNCs) and two computers were linked via 2-meter and 20-meter packet radio. Both ZL1AOX, in Auckland, and ZL3QL, in Cristchurch, were able to access the 2-meter local-area network (LAN) in Sydney.

The gateway was in operation again on September 3, with a VHF beam orientation problem solved. ZL1AOX was able to connect to a host computer at VK2ZRQ and interactively operate the machine for over an hour. Both the HF and the VHF ports of the VK2BVD gateway functioned as expected.

Other stations monitoring these activities included ZL3THJ, VK2AQG, VK2AYD, VK2XY, VK2ZXQ, and VK2KFJ. Via VK2BVD

TRANSLATION OF GATEWAY

As part of its continuing effort to promote digital communication modes, the Radio Club of Chile has been translating Gateway into Spanish. We received a photocopy of the Spanish edition of the premier issue of Gateway, including an excellent translation of Jon Bloom's "Introduction to Packet Radio." If you need the Spanish edition of Gateway, contact

Radio Club De Chile
Departamento De Comunicaciones
Centro De Documentacion
Nataniel Cox 1054 - Santiago De Chile
CHILE

RF DESIGN TEAM

A few Motorola engineers, members of the Florida Amateur Digital Communications Association (FADCA), want to design radios for amateur digital operation around 900 MHz (there will soon be an amateur assignment in this band). This group, chaired by Tom Kneisel, K4GFG, is looking for individuals to help them define the interface between their radio hardware and network controller hardware that is under development elsewhere. These are

competent and interested engineers, just looking for a little more coordination and information. If you can help, contact

Tom Kneisel, K4GFG
1600 S.W. 115th Ave.
Davie, FL 33325.

Via FADCA>BEACON

DEMONSTRATION IDEA

If you want to demonstrate amateur radio to the public, why not try a shopping mall? The South Brevard (Florida) Amateur Radio Club set up a booth in a local shopping mall, and generated considerable interest in amateur radio. Packet radio played a part in this demonstration, with forty-two third-party messages handled via packet. Twelve of the messages were delivered by the SOUTHNET packet-radio network, and the rest were passed along to the All Florida CW Net, part of the National Traffic System.

If you plan a packet demonstration (at a mall or anywhere else) remember to bring along plenty of backup equipment. The South Brevard group ran into strong electrical noise on their primary frequency, but since they had a couple of portable digipeaters in the mall parking lot, they were able to maintain solid connections to their message system. Via FADCA>BEACON

TSRAC PACKETS

In keeping with the feeling that Special Service Clubs (SSCs) should keep up with state-of-the-art technology, several members of the Triple-States Amateur Radio Club (TSRAC) have been experimenting with packet radio. Don Knollinger, WB8ZTV, and Jay, KD8GL, have been communicating via packet, and prompting their fellow club members to join the "digital communications wave of the future." TSRAC serves the area where Ohio, West Virginia, and Pennsylvania meet. Via TSRAC BNT

NEWS FROM ROCHESTER

Fred Cupp, W2DUC, sent us a note giving the details of packet-radio activity in the Rochester, NY area. Fred says that there is now an active Rochester packet group with 7 stations on the air. Thursday night is packet activity night. Look for stations on the standard EASTNET frequency, 145.01 MHz.
Via W2DUC

MT. ASCUTNEY PACKET CLUB

Another new packet club is the Mt. Ascutney Packet Radio Association (MAPRA), which serves the area around Mt. Ascutney, NH. The group's wide-coverage digipeater on 3,000-foot Mt. Ascutney is now a vital part of the growing EASTNET. For more information on MAPRA, contact

Carl Breuning, N1CB
54 Myrtle St.
Newport, NH 03773.

Via NEPRA PACKETEAR

NETWORKING IN CALIFORNIA

Packets from Sunnyvale (near San Francisco) were received in Los Angeles and San Diego this week via several linked UHF repeaters. The path started on 146.58, went through two UHF hops (duplex audio repeaters), then out on 144.76, the alternate LA/SD packet channel. Packets from Oliver Barrett, KB6BA were heard by Harold Price, NK6K and Sumner Hansen, WB6YMH in Los Angeles, and by Mike Brock, WB6HHV in San Diego. More experiments are planned for the near future, including getting some packets up the other direction. From NK6K

UNIX ON EASTNET

Phil Karn, KA9Q, has connected an IBM PC-XT, running UNIX System III, to his packet-radio station. UNIX is a powerful, multiuser, multitasking operating system, and Phil's computer can be accessed simultaneously via telephone, packet radio, and operator console. Programs currently available include a satellite tracking program, mail programs, and a PBBS-style message facility. In the future, Phil hopes to connect the system to a TNC capable of supporting several level-2 connections, allowing simultaneous computer access to more than one packet-radio station. To use the system as a guest, simply type "guest" in response to the "login:" prompt, and type return when asked for a password.

From KA9Q.

MORE INFORMATION ON GRAPES

We have received some more information on the Georgia Radio Amateur Packet Enthusiast Society (GRAPES). The group is currently using a 146.13/.73 full-duplex digital repeater located on Sweat Mountain. The call of the repeater is KD4NC-1. A PBBS is in the works. GRAPES is running a packet net on 145.54 at 8 P.M., Sundays. The club's address is:

GRAPES
PO Box 223
Conyers, GA 30208.

Via GRAPEVINE

CAPRA MEETING

At its November meeting, the Chicago Area Packet Radio Association (CAPRA) will present a video tape on level-3 linking. The video tape was produced by members of the Central Iowa Technical Society (CITS), following the Iowa Section Technical Seminar. Lyle Johnson, president of TAPR, and Jeff Ward, ARRL computer engineer, were the featured speakers at that seminar, and the video tape should be interesting to those looking forward to a true amateur packet-radio network. The CAPRA meeting is at 2:00 PM, November 10, in the Glenside Public Library, Glenside Hts., IL.

Via HAMNET

SOFTWARE AVAILABLE

One of the reasons that packet radio has been able to grow very quickly is that many technically-skilled individuals have been willing to donate the fruits of their labors to the packet-radio community. One of the results of this nonprofit atmosphere is that packet bulletin board software and TNC software is available from several sources. Most of this software is in the public domain, and "sells" for the price of disks or PROMs. Whenever possible, Gateway will print notes on the availability of public-domain software for packet radio.

Lynn Taylor, WB6UUT, has written and debugged a very versatile packet bulletin board system (PBBS) program that runs on Apple II computers. Lynn's software was designed to be as self-maintaining as possible and to squeeze every drop of storage out of two disk drives. It runs under UCSD Pascal, and requires a TAPR TNC, a Thunderware Thunderclock, a CCS 7710 serial port and two disk drives. The software is believed to be robust and bug-free. (As with all free software, however, the user is asked not to complain if bugs are found.) Lynn is willing to give the software to anyone who sends him 3 disks and sufficient postage to return them. Send them to:

Lynn Taylor, WB6UUT
463 Myrtle Street
Laguna Beach, CA, 92651.

If you have a program that you would like to make available to the packet-radio community, send Gateway a description of the program.

PACKET RADIO WITH THE XEROX 820

One of the decisions reached at the recent meeting of the ARRL Ad Hoc Committee on Amateur Radio Digital Communications was that the Xerox 820 computer would be used as a benchmark and a testbed for packet-radio networking software. While it is possible to send and receive packets using the serial I/O (SIO) on the 820, this job can be done more easily if a high-level data-link controller (HDLC) chip is added to the computer. In a recent issue of FADCA>BEACON, Howard Goldstein, N2WX, outlined his design for such a modification to the 820. After the Digital committee meeting, Howard and some members of TAPR went to work producing a kit for this modification. The kit, now called the "FAD board," is nearing completion; several prototype circuit boards will be finished by the time you read this. After Howard tests these first units, the circuit board will be made generally available. The FAD board is a "piggyback" board that replaces the Xerox 820 SIO with an 8530 HDLC chip, giving the user two RS-232-C or TTL HDLC ports. If you are interested in this circuit board, contact TAPR for ordering information.

From G@WB9FLW

ABSTRACTS

"How Good is Your Network Routing Protocol?," by Hsieh and Gitman, Data Communications, May, 1984. This article investigates one of the most important aspects of packet-network design -- packet routing. There are many routing procedures under consideration for amateur packet networks, and it is interesting to read about what the professionals do. The article addresses route generation, link cost, packet ordering, and packet-forwarding operation. Two charts detail the routing strategies used by ARPANET, TYMNET, SNA, DATAPAC, and TELENET, and the effects that the chosen routing strategies have on those networks.

"Implementing X.25 Communications Protocol," by Eric L. Beser, Microsystems, June, October and November, 1984. This series of articles is a tutorial on X.25, the CCITT packet protocol on which the AX.25 amateur standard is based. The first article reviews layered network architecture, and introduces state machines and their use in protocol implementation. The second article discusses the design of Pascal software to implement X.25 with the Intel HDLC chips. The third article will discuss implementation of X.25 using the Western Digital WD2511. If you are interested in designing a TNC, or just finding out how your TNC works, read this series of articles.

"RF Modems," by Hatchett and Howell, R. F. Design, September/October, 1984. This article is the first in a series

of articles covering design and construction of RF modems. Several amateur groups are currently working on such modems, so this is a timely article. From the ground up, this first article addresses the basics of RF modems, system design trade-offs, types of modulation, and FSK transmitters. It then finishes off with a discussion of integrated circuits that are useful in RF modem design. For the experimenter, there is a block diagram and schematic for a 1.5 Kbits/s FSK modem.

HOW IS GATEWAY DOING?

As this issue of Gateway goes to print, there are more than 200 paying subscribers to the newsletter. Although I have no firm figures, I am sure that many other packeteers are receiving Gateway via electronic mail services or amateur packet-radio networks. I would like to thank you for your support, while reminding you that Gateway would like to hear from you about packet activity in your area.

Jeff Ward, K8KA

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Jeffrey W. Ward, K8KA
Editor

Larry E. Price, W4RA
President

David Sumner, K1ZZ
General Manager

From 5386539554832335821
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c96930fa6b302ecc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-01 16:05:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: packet help
Message-ID: <202@mouton.UUCP>
Date: Thu, 1-Nov-84 19:05:16 EST
Article-I.D.: mouton.202
Posted: Thu Nov 1 19:05:16 1984
Date-Received: Fri, 2-Nov-84 07:04:30 EST
References: <168@zps.UUCP>
Organization: Bell Communications Research, Inc
Lines: 17

Packet repeaters are actually fairly easy to build, as they can be much
simpler than full TNCs. Many of the current TNCs can also function
simultaneously as digipeaters, and in many areas the "local digipeater"
is just the personal TNC of a ham who happens to be in a good location
and makes a point to leave his rig on.

If you want to build a "dedicated" digipeater, you can make do with
less $$. All a digipeater has to do is receive HDLC frames, check
the address, set a bit and retransmit. The old VADCG boards, which
without the upgrade kit have too little memory to be truly useful
as TNCs, can perform this job easily; the software has been written by
KE3Z and WB4JFI, and is available from AMRAD.

Many other "ad-hoc" digipeaters have been constructed, but the VADCG
board will probably be the easiest route for most people.

Phil

From 3362401665869577147
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b4d6730dd1653662
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12f221,b4d6730dd1653662
X-Google-Attributes: gid12f221,public
X-Google-Thread: 122486,b4d6730dd1653662
X-Google-Attributes: gid122486,public
X-Google-Thread: 13375c,b4d6730dd1653662
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1984-11-01 21:23:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site voder.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!zehntel!dual!amd!decwrl!sun!
qubix!ios!oliveb!hplabs!nsc!voder!kevin
From: kevin@voder.UUCP (Greasy Scum)
Newsgroups: net.news.group,net.aviation,net.ham-radio,net.misc
Subject: Re: New newsgroup for Radio Controlled Planes?
Message-ID: <481@voder.UUCP>
Date: Fri, 2-Nov-84 00:23:05 EST
Article-I.D.: voder.481

Posted: Fri Nov 2 00:23:05 1984
Date-Received: Mon, 29-Oct-84 02:37:17 EST
References: <881@opus.UUCP> <2191@hplabsc.UUCP>
Distribution: net
Organization: National Semiconductor, Santa Clara
Lines: 11
Xref: sun net.news.group:2038 net.aviation:962 net.ham-radio:1776 net.misc:5828

(watch me buzz the kid on the 10-speed)

   An RC newsgroup is a good idea, but I don't think it should be limited
to aircraft. Some of us haven't quite worked up the nerve for planes, yet.

--

Kevin Thompson   {ucbvax,ihnp4!nsc}!voder!kevin

"It's sort of a threat, you see. I've never been very good at them
  myself but I'm told they can be very effective."

From -4299431494917766830
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36f3838d8a1254d1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-02 05:29:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site houxn.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!alice!houxn!jak
From: jak@houxn.UUCP (J.KUTSCH)
Newsgroups: net.ham-radio
Subject: Drake twins for sale
Message-ID: <579@houxn.UUCP>
Date: Fri, 2-Nov-84 08:29:20 EST
Article-I.D.: houxn.579
Posted: Fri Nov 2 08:29:20 1984
Date-Received: Sat, 3-Nov-84 03:30:09 EST
Lines: 12

For sale:
Drake T4XB, R4B, MS4, and AC4.
They have had a good home and have been cared for well.

If interested, contact:
Jim Kutsch KY2D
ATTIS Freehold, NJ
houxn!jak
(201) 577-5374 ... work
(201) 530-0548 ... home

73, Jim

From -966020808153520341
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cbf2218c084edb3e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-02 06:07:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ncsu.UUCP
Path: utzoo!linus!decvax!mcnc!ncsu!rtn
From: rtn@ncsu.UUCP (Robert T. Neece)
Newsgroups: net.ham-radio
Subject: TS520S
Message-ID: <2714@ncsu.UUCP>
Date: Fri, 2-Nov-84 09:07:28 EST
Article-I.D.: ncsu.2714
Posted: Fri Nov 2 09:07:28 1984
Date-Received: Sat, 3-Nov-84 22:24:12 EST
Organization: N.C. State University, Raleigh
Lines: 21

>

I have a TS-520S which has been a good rig for me, but there is one thing about it that I have always wondered about. The carrier level control is scaled from 0 to 10, but to obtain the correct plate current level, the control is always set to about 1. Since the useful range of this control is so limited, it is very touchy. Is this a characteristic of all TS-520S's, or should I look for some problem with mine? If this is common to all, why design a control like this?

I have been tempted to make a change in the rig, but it has performed perfectly since I got it used a year ago. I would like to be sure there is not some reason the control is like this before I risk messing up a good thing.

Thanks,
Robert Neece N4JEO

From -5252038114925709721
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 122486,4cb885dc72e2645c,start
X-Google-Attributes: gid122486,public
X-Google-Thread: 151e61,4cb885dc72e2645c,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12f221,4cb885dc72e2645c,start
X-Google-Attributes: gid12f221,public
X-Google-Thread: 13375c,4cb885dc72e2645c,start
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1984-11-02 09:03:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.2 9/17/84; site opus.UUCP
Path: utzoo!linus!decvax!genrad!mit-eddie!godot!harvard!seismo!hao!cires!nbires!
opus!scott
From: scott@opus.UUCP (Scott Wiesner)
Newsgroups: net.news.group,net.aviation,net.ham-radio,net.misc
Subject: Radio Controlled (anything) discussion --> net.ham-radio
Message-ID: <927@opus.UUCP>
Date: Fri, 2-Nov-84 12:03:06 EST
Article-I.D.: opus.927
Posted: Fri Nov 2 12:03:06 1984
Date-Received: Sun, 4-Nov-84 04:47:58 EST
Distribution: net
Organization: NBI,Inc, Boulder CO
Lines: 23

[]
About 3 weeks ago I suggested a newsgroup for radio controlled airplanes.
The response has been fairly favorable, with comments that the discussion
should not be limited to just airplanes.

Because no previous discussion relating to RC has taken place on the net,
several people expressed concern that this would just be a "flash-in-the-
pan" newsgroup, with interest dying soon after formation. To test this
idea, we will post our discussions in net.ham-radio for awhile to see just
how much hard-core interest there really is. If discussion continues for
an extended period of time, we will be able to form our own group.

If anyone (especially the regulars in net.ham-radio) objects to this plan,
speak now or forever (till we get our own group) hold your peace.

Anyone with an interest in RC or modeling in general is encouraged to take
part in these discussions. With over 100,000 people involved worldwide in
RC aircraft, I expect good results on our net.

--

Scott Wiesner
{allegra, ucbvax, cornell}!nbires!scott

From -7855480510463957642
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2b9a8542732ac87e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-02 10:39:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hound.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!hound!rfg
From: rfg@hound.UUCP (R.GRANTGES)
Newsgroups: net.ham-radio
Subject: Old ham needs grounding advice
Message-ID: <728@hound.UUCP>
Date: Fri, 2-Nov-84 13:39:11 EST

Article-I.D.: hound.728
Posted: Fri Nov 2 13:39:11 1984
Date-Received: Sat, 3-Nov-84 06:49:09 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 14

My approx. 80 yr old mom in Belleair Beach Florida is a ham. I am not,
but I have always done her technical work for her. We have a problem:
She has a multi-band trap vertical working against a fine ground plane.
However, because this is lightning country with a vengeance, I have
the vertical grounded with a battery cable clamp biting the vertical.
Mom can't open the clamp anymore (weak hands). Does anyone know of a
good antenna grounding relay suitable for such an application.
Antenna is about 4 ft from salt water bay. Has to withstand salt water
corrosion, fungus, etc. - all the tropical stuff. Prefer 110 vac coil.
THanks in advance.
Dick Grantges   hound!rfg 201-949-4341
--

"It's the thought, if any, that counts." Dick Grantges hound!rfg

From -1846839989151349930
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,292c3b270e16cbde,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-02 10:58:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site opus.UUCP
Path: utzoo!linus!decvax!genrad!mit-eddie!godot!harvard!seismo!hao!cires!nbires!
opus!scott
From: scott@opus.UUCP (Scott Wiesner)
Newsgroups: net.ham-radio
Subject: RC introductory message
Message-ID: <928@opus.UUCP>
Date: Fri, 2-Nov-84 13:58:07 EST
Article-I.D.: opus.928
Posted: Fri Nov 2 13:58:07 1984
Date-Received: Sun, 4-Nov-84 04:48:16 EST
Distribution: net
Organization: NBI,Inc, Boulder CO
Lines: 37

It's been decided that this group is most appropriate for use
in discussion of radio controlled modeling. (planes, boats, cars,
helicopters, etc)

I think it would be nice if we could get our cast of characters
established initially. Later, we can move on to kit/engine/radio
reviews, flying experiences, club activities, etc. To get the ball
rolling, here's a profile of myself. I've tried to include things
I thought I'd be interested in learning about other people in the hobby.

Name: Scott Wiesner
Home: Boulder, Colorado
Age: 22
Years in RC: A tougher one to answer. During junior high, I was
     a member of the Mid Missouri RC Association. I flew for
     about a year and a half, but when my family moved, I never
     got involved in the local activity. Having just recently
     graduated from college, I thought I'd get back into the
     hobby to fill up my spare time. I spent a month deciding
     what to get, a month building, and soloed at the end of August
     during my 8th flight. I guess it's like riding a bike.
     My instructer never had to take the transmitter away from me.

Current equiptment: At the moment, I'm still flying the plane I
     re-learned on. I've got a Futaba FG7-K FM radio, Great Planes
     Trainer 40, with a K&B .40. I'm working on a Windfree sailplane,
     a New Era 40, and have a Cap 21 in the closet for a winter
     project.

Flying field description: We (the Boulder Aeromodeling Society) have
     2 paved runways, 30x350 (NS) and 30x300(EW). Prevailing winds
     are out of the South.

--

Scott Wiesner
{allegra, ucbvax, cornell}!nbires!scott

From 2256267825364264988
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,baa38d2d21c497db
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-02 12:40:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site opus.UUCP
Path: utzoo!linus!decvax!genrad!mit-eddie!godot!harvard!seismo!hao!cires!nbires!
opus!scott
From: scott@opus.UUCP (Scott Wiesner)
Newsgroups: net.ham-radio
Subject: Re: R/C Mix and Match (Until an R/C group is formed)
Message-ID: <929@opus.UUCP>
Date: Fri, 2-Nov-84 15:40:07 EST
Article-I.D.: opus.929
Posted: Fri Nov 2 15:40:07 1984
Date-Received: Sun, 4-Nov-84 04:48:30 EST
References: <1008@hplabs.UUCP>
Organization: NBI,Inc, Boulder CO
Lines: 18

The problem I see with your particular mix and match is that your
base system is FM. Will you be able to get an FM 2 channel receiver?
Seems to me that most companies only provide FM on their higher end

models. I doubt you'd have trouble as long as you get the receiver tuned to the transmitter.

One thing for you to check on is whether Airtronics makes radios for hobby shops like Futaba does. Hobby Shack now sells FM versions of their radio, which I'm sure is a Futaba in a different box. This would probably be the cheapest route to get a flight pack.

If you do get a 2 channel receiver, open it up and see if it is really a 6 or 7 channel without the extra connectors. I've heard they do this so they only have to have one board line in manufacturing.
--

Scott Wiesner
{allegra, ucbvax, cornell}!nbires!scott

From -8961692965814493899
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d86f5fe2dddfd9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-02 23:49:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin #99
Message-ID: <204@mouton.UUCP>
Date: Sat, 3-Nov-84 02:49:32 EST
Article-I.D.: mouton.204
Posted: Sat Nov 3 02:49:32 1984
Date-Received: Tue, 6-Nov-84 04:36:16 EST
Organization: Bell Communications Research, Inc
Lines: 156

**** UoSAT Bulletin-99 (Edited) 2nd November 1984 ****

UoSAT Spacecraft Control Centre,   University of Surrey

** GENERAL NEWS **

* UoSAT-OSCAR-11 QSL *

The first printing of these QSL cards was rejected but relacements are promised for next week! Patience will be rewarded!

* UoSAT-OSCAR-9 Competition *

We should like to remind schools etc. that the Department of Electronic Engineering of the University of Surrey has offered

a prize of 100 pounds, or equivalent, to the student group it considers to have been the most successfully active utilising the telemetry and experiments from the UO-9 spacecraft. The competition was announced in the UoSAT School's Booklet, 'UoSAT - A Guide to its Capabilities, Operation & Usage', published by UoS in 1982 and is open to all student groups from educational establishments world-wide. Submissions for the competition, which is intended to encourage the educational usage of the spacecraft, should be in the form of a detailed report showing clearly the experimental programme development, receiving & display equipment, computer software and the results of the experiments carried out. Particular notice will be taken of examples showing the use of the spacecraft in demonstrating space technolgy in the class-room. Photographs, where appropriate should be included, as well as examples of graphical plots and computer displays of data. The closing date for the competition is 31st December 1984.

* SECOND ANNUAL AMATEUR RADIO SATELLITE SYMPOSIUM *
AND 1984 AMSAT ANNUAL MEMBERSHIP MEETING

G3YJO and G8NOB (Martin & Neville) will be attending the Meeting and it is likely that an additional item on UoSAT will be included in the Programme.

* Meteorological Spacecraft News **

* NOAA-9 *

The launch of NOAA-F (9) is now set for the 8th of November.

** UoSAT-Oscar-9 Schedule **

This weeks schedule is as follows:

Friday	-	load Bulletin
Saturday	-	Bulletin/DIGITALKER/1200 bps telemetry
Sunday	-	Bulletin/DIGITALKER/1200 bps telemetry
Monday	-	Bulletin/DIGITALKER/1200 bps telemetry
Tuesday	-	CCD Camera - next week Radiation data
Wednesday	-	Whole orbit telemetry survey
Thursday	-	Computer check-summed telemetry

The 21 MHz Beacon will be in use this week.

** UoSAT-Oscar-11 Operations **

* Digital Communications Experiment *

NK6K and LSK have spent much time this week preparing for activation of the DCEby carrying out digital communication calibration tests using the 435 MHz beacon in 1200 bps afsk.

The UO-11 DCE will be a major topic of discussion (2days!) following the AMSAT Meeting in LA next week with G3YJO & G8NOB.

* The 435 MHz downlink is functioning well with an output rf power of 750mW to 1 watt, consuming around 225 mA from the +14v unregulated bus. Very strong signals are received from this beacon, 1200 bps afsk telemetry has been copied at UoS without difficulty using an IC471, no preamp and a linear polarised yagi.

* Experiments continue with the 9600 bps nrzi psk data on the 435 MHz downlink in preparation for DCE, CCD & Particle/Wave Experiments.

* Particle/Wave Experiments - UO-11 and the AMPTE spacecraft are in conjunction for two weeks allowing the simultaneous measurement of P/W interactions with UO-11 and UKS. A number of regular P/wave surveys over the North polar regions have been carried out using the OBC and the DSR this week. Most of the data was dumped using the 145 MHz downlink whilst work continues on the 435 MHz psk downlink system. These conjunctions occur only once every six months so we must make the most of it!

A daily account of UO-11 operations follows:

DAY	ORBIT	CHANNELS	RESET TIME
***	*****	********	**********
Friday	3488	1,2,3,52	13:17:25
	3491	435 MHz DCE 1200 bps afsk test	
	3492	435 MHz DCE 1200 bps asfk test	
		OBC switched back to 145 MHz after 1hr25m	
Saturday	3502	45,52	12:15:50
		435 MHz DCE 1200 bps afsk test	
		OBC switched back to 145 MHz after 6hrs	
Sunday	3516	P/wave survey	11:18:45
	3517	DSR P/wave dump	
		OBC switched back to Tlm after 9hrs	
Monday	3530	Spacecraft despin to 3m50s	
	3531	Spacecraft despin to 5m	
		P/wave survey	11:56:40
		435 MHz DCE 1200 bps afsk test	
		OBC switched back to Tlm after 9hrs	
	3538	45,52	23:04:45
		435 MHz DCE 1200 bps afsk test	
		OBC switched back to 145 MHz after 7hrs	
Tuesday	3544	P\wave survey	09:23:15
	3545	1,2,3,52	10:51:02

```
                    DSR P/wave dump
            3551    Tlm
                    435 MHz DCE 1200 bps afsk test
                    OBC switched back to 145 MHz after 11hrs

Wednesday   3558    ODATA dump
            3559    435 MHz 9600 bps psk tests
            3560    ODATA dump
            3561    435 MHz 9600 bps psk tests
                    1,2,3,52        13:11:00
            3565    45,52           19:26:40
                    435 MHz DCE 1200 bps afsk test
                    OBC switched back to 145 MHz after 12hrs

Thursday    3573    P\wave survey  08:56:35up
                    ODATA dump
            3574    P/wave data dump on 435 MHz at 9600 bps
            3575    same as 3574
                    145 MHz Tlm
            3579    45,52           18:34:20
                    435 MHz DCE 1200 bps afsk test
                    OBC switched back to 145 MHz after 12hrs

Friday      3487    DSR 9600 bps nrzi psk tests


** Thanks for Reports & Questionnaire Returns **

W7AVE, V3CE, HB9RKR, ZS1BI, DL7OU,  H.J.Meerza,  G4BBH,  JA2WO,
HB9RJV, VK2AVH, HB9RKR,

This week:  ZL2AHK, VE3CIE,


From 6582358705777066192
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 14023a,a990d0a244a09aaa,start
X-Google-Attributes: gid14023a,public
X-Google-Thread: 11c2e7,a990d0a244a09aaa,start
X-Google-Attributes: gid11c2e7,public
X-Google-Thread: 151e61,a990d0a244a09aaa,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 140f6b,a990d0a244a09aaa,start
X-Google-Attributes: gid140f6b,public
X-Google-Thread: 12745e,a990d0a244a09aaa,start
X-Google-Attributes: gid12745e,public
X-Google-Thread: 15c702,a990d0a244a09aaa,start
X-Google-Attributes: gid15c702,public
X-Google-ArrivalTime: 1984-11-03 11:43:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site whuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)
```

Newsgroups: net.audio,net.ham-
radio,net.railroad,net.music.classical,net.consumers,net.invest
Subject: Moving Day
Message-ID: <325@whuxl.UUCP>
Date: Sat, 3-Nov-84 14:43:28 EST
Article-I.D.: whuxl.325
Posted: Sat Nov 3 14:43:28 1984
Date-Received: Mon, 5-Nov-84 08:25:59 EST
Distribution: net
Organization: Bell Communications Research, Inc.
Lines: 11

To all my friends in USENET-land
I've moved to a new Bell Communications Research building in Livingston, NJ.
Hence my new net address is lcuxc!wjm. You can reach lcuxc through
ihnp4 or whuxl or via one of the Piscataway UNIX systems.
I'll be submitting articles from there as soon as we get netnews up on the
new system.

Regards,
Bill Mitchell ({ihnp4|whuxl!}lcuxc!wjm

From -2606864579805174671
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f83685fe5dd589b4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-04 19:30:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Pirate Broadcaster WMTV on 7435 kHz
Message-ID: <388@ihu1h.UUCP>
Date: Sun, 4-Nov-84 22:30:33 EST
Article-I.D.: ihu1h.388
Posted: Sun Nov 4 22:30:33 1984
Date-Received: Tue, 6-Nov-84 04:40:21 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 29

x
       PIRATE BROADCASTER - "ALTERNATIVE RADIO/WMTV"

On November 3rd, I monitored the weak 7435 kHz AM signals of
a pirate broadcast station from about 11:30 PM (CST) through
0130 (CST) the next morning. The male disc jockey played
rock music and identified the station as "Alternative
Radio", using the call letters of WMTV (assigned to a telev-
ision station in Milwaukee).

The disk jockey said he was taking music requests, and gave
two phone numbers: (305)936-1812/1813. I called both. Cal-
ling one produced some strange "telephone company type" tone
burst noises (phone loop?). The other number was connected
to a telephone answering machine, which played a short mes-
sage and allowed one to leave a message.

Listeners were directed to write for more station informa-
tion to John, at:

    P. O. Box 1945
    Del Rae (Ray?) Beach
    Florida

This station was monitored using an ICOM R-71A receiver and
an MFJ 1020 indoor active antenna.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -210068781669834161
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,71fb814b36006e26,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-05 06:43:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!hogpc!houxe!drutx!ihnp4!inuxc!
inuxd!rcf
From: rcf@inuxd.UUCP
Newsgroups: net.ham-radio
Subject: TEMPO S-1 info request
Message-ID: <649@inuxd.UUCP>
Date: Mon, 5-Nov-84 09:43:10 EST
Article-I.D.: inuxd.649
Posted: Mon Nov 5 09:43:10 1984
Date-Received: Tue, 6-Nov-84 06:42:17 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 4

    I need a shematic for a TEMPO S-1 2M HT. If anyone
    can help please contact me via this net.

    Thanks in advance!   Rich, KN9K

From -575454749184900835
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,baa38d2d21c497db
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-05 10:11:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site uiucdcs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!irwin
From: irwin@uiucdcs.UUCP
Newsgroups: net.ham-radio
Subject: Re: R/C Mix and Match (Until an R/C grou
Message-ID: <9800001@uiucdcs.UUCP>
Date: Mon, 5-Nov-84 13:11:00 EST
Article-I.D.: uiucdcs.9800001
Posted: Mon Nov 5 13:11:00 1984
Date-Received: Wed, 7-Nov-84 06:36:14 EST
References: <1008@hplabs.UUCP>
Lines: 10
Nf-ID: #R:hplabs:-100800:uiucdcs:9800001:000:513
Nf-From: uiucdcs!irwin   Nov 5 12:11:00 1984

Yes, it is possible to mix systems. A highly proven lowcost rcvr, two
channel expandable to 4 channel is available from Tech RC (formerly
Royal Electronics) in Denver 303-757-4082. You can get it in kit form
and it is available in the various channels. They also have good buys
on servos and servo kits.

Yes I am a ham (W9LXP) and an R/C nut also. In trying to find a notes
net to discuss this sort of thing, it has been pointed out that net.rec
is the likely place, why don't we continue this discussion there?

From -2409561304324729092
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,af3c26776ac2a673,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-05 10:53:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site smu.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!smu!
neihart
From: neihart@smu.UUCP
Newsgroups: net.ham-radio
Subject: Re: packet help
Message-ID: <13200011@smu.UUCP>
Date: Mon, 5-Nov-84 13:53:00 EST
Article-I.D.: smu.13200011
Posted: Mon Nov 5 13:53:00 1984
Date-Received: Fri, 9-Nov-84 06:06:22 EST
References: <168@zps.UUCP>
Lines: 12
Nf-ID: #R:zps:-16800:smu:13200011:000:784
Nf-From: smu!neihart   Nov 5 12:53:00 1984

The easiest way to proceed is to find a local voice repeater which is not

being used very much and convincing the owner to switch it over to a packet repeater. In most cities there are enough (if not too many!) voice repeaters, but rarely any packet repeaters. A plain old repeater can be used for a packet repeater, since the intelligence is in the PADs (packet assemblers/disassemblers) which are located at the terminal/radio equipment. The repeater just gives one the standard advantage of a repeater -- being able to talk farther than on simplex. The repeater itself is oblivious to the fact that it is retransmitting data. In fact, a repeater could double as a voice and packet repeater during different hours of the day, although I wouldn't suggest this as good practice.

From -5412376700286845286
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134300,2f72fdff10e9a9be
X-Google-Attributes: gid134300,public
X-Google-Thread: 151e61,e1cc6142ca9dc958,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-05 12:59:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site opus.UUCP
Path: utzoo!linus!decvax!decwrl!amd!fortune!hpda!hplabs!hao!cires!nbires!opus!scott
From: scott@opus.UUCP (Scott Wiesner)
Newsgroups: net.rec,net.ham-radio
Subject: Re: RC modes
Message-ID: <932@opus.UUCP>
Date: Mon, 5-Nov-84 15:59:18 EST
Article-I.D.: opus.932
Posted: Mon Nov 5 15:59:18 1984
Date-Received: Thu, 15-Nov-84 00:54:57 EST
References: <287@haddock.UUCP>
Organization: NBI,Inc, Boulder CO
Lines: 35

> ... [I] have a preference for mode I as what little flying I did
> ten years ago was of that variety. It seems quite a bit more natural to
> me when it came to coordinating turns and the like. ...

I know exactly how you feel. I flew about 10 years ago for a couple of summers, and learned an even more obscure "mode". We called it reverse mode one. Left stick was throttle/aileron, and right stick was rudder/elevator. The argument for the seperation was not too great. Seems the "best" flier in the club (the one who taught everyone else) started out with a powered glider and a four channel radio. Of course the glider was rudder/elevator control, and when he looked at the diagram that explained how the controls were set up, he put his rudder on the left stick. Later when he graduated to a 4 channel powered plane, he realized he'd have to put his turning control, the ailerons on the left stick, and that's how we all ended up with reverse mode one.

I just got restarted in RC a few months ago, and was concerned that old habits would creep in as I was trying to learn mode 2. I only ran into

a problem once. I was flying along, straight and level, and decided to
do a roll. The plane did this VERY strange maneuver, which scared the
!*&% out of me. (I was lower than I should have been to start out with).
I managed to recover, thought about it as I was trying to relax, and finally
realized I'd reverted to old instincts for a moment, and had managed to
do a RUDDER roll. My plane does not do graceful rudder rolls.

Anyway, I still think separating ailerons and elevator makes a lot of sense,
and if I get up the nerve, I'll give it a try. The drawback is that
I'll be "incompatible" with the rest of the world.

(We need to figure out whether net.rec is more appropriate than net.ham-radio
for these discussions until we get our own group.)
--

Scott Wiesner
{allegra, ucbvax, cornell}!nbires!scott

From 4247513143786435400
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1be78036b7526e9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-05 17:25:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site frog.UUCP
Path: utzoo!linus!decvax!genrad!mit-eddie!cybvax0!frog!die
From: die@frog.UUCP (Dave Emery)
Newsgroups: net.ham-radio
Subject: Some white house circuits still in clear
Message-ID: <128@frog.UUCP>
Date: Mon, 5-Nov-84 20:25:21 EST
Article-I.D.: frog.128
Posted: Mon Nov 5 20:25:21 1984
Date-Received: Thu, 8-Nov-84 19:28:43 EST
Organization: Charles River Data Systems, Framingham MA
Lines: 53

    Recently some further information on current Air Force One
communications has been passed to me. It appears that only some
of the previously open circuits have been secured. Specifically :

1. The uhf-nbfm single channel duplex system code
named "nationwide" is still in use from AT&T microwave towers with traffic
in the clear on 415.700 mhz. from AF-1 and 407.850 mhz. from the ground.

2. The vhf-nbfm single channel duplex system code named "Yankee-Zulu" is
still in use from portable ground sites set up at presidential destinations.
It has been reported that it seems to be used for mostly for traffic from the
aircraft and may be in only limited use as a channel to reach presidential
automobiles. Recent reports suggest that this channel is being used for
traffic out to the limits of the ground site coverage rather than just until

the aircraft is in line of sight to a 'nationwide' ground site. Traffic is in the clear on 171.2875 mhz from AF-1 and 162.6875 mhz from the ground.

3. The hf ssb circuits ("Mystic Star") continue to be used occasionally for phone patch traffic to the aircraft, and are still in the clear. However, propagation being what it is these days, transmitting traffic over hf (both clear voice and secure tty) hasn't always been easy.

4. The nbfm full duplex circuit over the Fltsatcom spacecraft continues to be used, with 260.845 and 260.860 used for downlinks to AF-1 and the ground station at Andrews repectively. Data is occasionally exchanged (secure voice or fax ?) but most of the time the circuit carries a holding tone. One report says this circuit is used for occasional clear voice com coordination traffic also.

5. Many of the secret service channels are still used in the clear. I am told that presidential protective traffic in the clear has been observed on secret service channels "Oscar" - 164.8875, "Sierra" - 166.5125, "November" - 167.025, "Tango" 164.650, and the national channel "Charlie"- 165.375. One observer noted keyed carriers on "Mike" 165.2125 that may or may not be some form of digital voice (not however classical DVP with an audible preamble pattern), but as spectrum signature equipment was not available it wasn't possible to certainly identify the nature of this signal. Another observer reported what may be amplitude compandered ssb in use on "Baker" 165.787 (I think this may just be an image from 2 meter ssb).

6. Recent tv coverage of the presidential vehicles in a motorcade showed the same old high band vhf whips as the secret service has always used, which would tend to confirm (5) or at least suggest that no new rf frequencies have been assigned in some other portion of the

--

David I. Emery
Charles River Data Systems
983 Concord St.
Framingham, MA 01701
Tel: (617) 626-1102
uucp: ...!decvax!frog!die

From -6007135661985775320
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4fb39dd8149f8955,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-05 17:35:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site frog.UUCP
Path: utzoo!linus!decvax!genrad!mit-eddie!cybvax0!frog!die
From: die@frog.UUCP (Dave Emery)
Newsgroups: net.ham-radio
Subject: Some White House circuits still in clear
Message-ID: <129@frog.UUCP>
Date: Mon, 5-Nov-84 20:35:32 EST

Article-I.D.: frog.129
Posted: Mon Nov 5 20:35:32 1984
Date-Received: Thu, 8-Nov-84 19:28:58 EST
Reply-To: !decvax!frog!die
Organization: Charles River Data Systems, Framingham MA
Lines: 65

<line eater meat>

Recently some further information on current Air Force One communications has been passed to me. It appears that only some of the previously open circuits have been secured. Specifically :

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2. The vhf-nbfm single channel duplex system code named "Yankee-Zulu" is still in use from portable ground sites set up at presidential destinations. It has been reported that it seems to be used for mostly for traffic from the aircraft and may be in only limited use as a channel to reach presidential automobiles. Recent reports suggest that this channel is being used for traffic out to the limits of the ground site coverage rather than just until the aircraft is in line of sight to a 'nationwide' ground site. Traffic is in the clear on 171.2875 mhz from AF-1 and 162.6875 mhz from the ground.

3. The hf ssb circuits ("Mystic Star") continue to be used occasionally for phone patch traffic to the aircraft, and are still in the clear. However, propagation being what it is these days, transmitting traffic over hf (both clear voice and secure tty) hasn't always been easy.

4. The nbfm full duplex circuit over the Fltsatcom spacecraft continues to be used, with 260.845 and 260.860 used for downlinks to AF-1 and the ground station at Andrews repectively. Data is occasionally exchanged (secure voice or fax ?) but most of the time the circuit carries a holding tone. One report says this circuit is used for occasional clear voice com coordination traffic also.

5. The Autovon uhf-fdm mux signals seem no longer to be used, at least in areas far from ground stations. I have received no reports of traffic on these channels, and would appreciate hearing from anyone who can verify that these links are no longer used. I would especially appreciate hearing from someone who knows (and can say) what has replaced these links.

6. Many of the secret service channels are still used in the clear. I am told that presidential protective traffic in the clear has been observed on secret service channels "Oscar" - 164.8875, "Sierra" - 166.5125, "November" - 167.025, "Tango" 164.650, and the national channel "Charlie"-165.375. One observer noted keyed carriers on "Mike" 165.2125 that may or may not be some form of digital voice (not however classical DVP with an audible preamble pattern), but as spectrum signature equipment was not

available it wasn't possible to certainly identify the nature of this signal. Another observer reported what may be amplitude compandered ssb in use on "Baker" 165.787 (I think this may just be an image from 2 meter ssb).

7. Recent tv coverage of the presidential vehicles in a motorcade showed the same old high band vhf whips that the secret service has always used, which would tend to confirm (6) or at least suggest that no new rf frequencies have been assigned in some other portion of the spectrum.

--

David I. Emery
Charles River Data Systems
983 Concord St.
Framingham, MA 01701
Tel: (617) 626-1102
uucp: ...!decvax!frog!die

From -8181754347719830498
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c11de72575ad6c3d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-05 19:17:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 45
Message-ID: <13342@mgweed.UUCP>
Date: Mon, 5-Nov-84 22:17:40 EST
Article-I.D.: mgweed.13342
Posted: Mon Nov 5 22:17:40 1984
Date-Received: Tue, 6-Nov-84 05:44:59 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 29

qst de k9eui
hr propagation forecast bulletin nr 45 from arrl headquarters
newington ct november 5, 1984
to all radio amateurs bt

during the last 5 days of october, the solar flux varied between 69 and 73 , a range characteristic of months close to the end of the 3 previous cycles for which flux records are available. despite the low solar flux, the period was marked by generally good propagation on 14 mhz and lower frequencies. 21 mhz was open over much of the world at times, but only for short periods. 28 mhz was active mainly on north south and low

latitude circuits.

the solar flux rose after october 29, but geomagnetic indices also rose, and propagation in the higher latitudes suffered markedly. conditions are expected to continue erratic through november tenth, becoming more stable november 11 to 15th. slightly higher flux readings should increase activity on 21 and 28 mhz at this time. degraded conditions are likely november 15 through 20. for several days after about november 21, we may have some of the best propagation of the autumn dx season. more on this possibility will be given in later bulletins.

american sunspot numbers for october 25 through november 2 were between 0 and 9 with a mean of 3.6 ar

From 8965665434985463023
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,92187f2f4d067817,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-05 19:18:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 99 (AMSAT symposium Nov. 10)
Message-ID: <13343@mgweed.UUCP>
Date: Mon, 5-Nov-84 22:18:22 EST
Article-I.D.: mgweed.13343
Posted: Mon Nov 5 22:18:22 1984
Date-Received: Tue, 6-Nov-84 05:45:18 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 99 from arrl headquarters
newington ct november 1, 1984
to all radio amateurs bt

the amsat space symposium convenes november 10 in los angeles. it will feature talks on geosynchronous oscars, packet radio, ascb and computers. events begin at 8 am at the amfac hotel near lax airport. contact w6sp at 213 544 2543 for information
ar

From -7383931975048836243
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31d0cb58d430960c,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-11-05 19:18:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 35/36
Message-ID: <13344@mgweed.UUCP>
Date: Mon, 5-Nov-84 22:18:44 EST
Article-I.D.: mgweed.13344
Posted: Mon Nov 5 22:18:44 1984
Date-Received: Tue, 6-Nov-84 05:45:36 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 23

qst de k9eui
hr crrl bulletin nr 35/36 from crrl headquarters
london, ont november 5, 1984
to all radio amateurs bt

the ares canada net meets on 14,115 khz at 2000z on sundays.
everyone involved with or interested in emergency
communications is invited to check in.

crrl is conducting a survey on three important issues,
expansion of the canadian 75 metre phone band, deregulation of
mode subbands and the concept of some form of communicators
license.

thanks to the efforts of the radio society of ontario, call
letter licence plates for ontario amateurs will soon be
reduced.

crrl members in the atlantic, ontario and prairies regions are
reminded that the deadline for returning ballots in the crrl
director elections is november 20 ar

From 947966443601128341
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cce06048df37a5e8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-05 23:07:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 (Tek) 9/12/84; site tektronix.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!zehntel!tektronix!robertj
From: robertj@tektronix.UUCP (Robert Jaquiss)
Newsgroups: net.ham-radio
Subject: RC newsgroup
Message-ID: <4067@tektronix.UUCP>
Date: Tue, 6-Nov-84 02:07:51 EST
Article-I.D.: tektroni.4067

Posted: Tue Nov 6 02:07:51 1984
Date-Received: Thu, 8-Nov-84 00:23:58 EST
Organization: Tektronix, Beaverton OR
Lines: 4

Hello out there:
I would like to see a group on RC stuff. I want to do things related to aids for the handicacped.
Since I am blind planes would be a real smash.
Robert Jaquiss

From 9207594398416513557
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,97a8c82eeffee4c5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-06 10:56:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 40
Message-ID: <13356@mgweed.UUCP>
Date: Tue, 6-Nov-84 13:56:08 EST
Article-I.D.: mgweed.13356
Posted: Tue Nov 6 13:56:08 1984
Date-Received: Thu, 8-Nov-84 00:17:02 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 58

qst de k9eui
hr dx bulletin nr 40   from arrl headquarters   newington ct
november 2 1984   to all radio amateurs   bt

mellish reef. the down under dxers club dxpedition headed by vk2wu apparently left mellish reef last monday, five days ahead of schedule. vk9mr was worked thhroughout north america on 15, 20 and 40 meters during the contest last weekend, and by a lucky few on 80 and 160 meters. qsl to vk2wu.

160 meters. several rare stations showed up last weekend and are still active this week on top band. watch for d44bc, 5w1ej, wb0miv/8r1 and kj9w/kh2. also, the excellent transequatorial conditions experienced for the last six weeks are beginning to deteriorate.

china. by4aa has been trying 80 meter ssb on a regular basis. look for operators john and chou on 3795 khz, especially on thursdays in the company of du9rg.

propagation. 160 and 80 meters have been very quiet lately,

and many weak signals are copyable. 40 and 20 meters still appear to be suffering from recent solar storms, as many signals have unusual flutter. good long path openings have been experienced at both sunrise and sunset on 40 meters, with many zone 17 and 18 stations worked by east coast u.s. stations on the long path around 11 to 1200z. the solar flux continues to decrease as we head toward the bottom of cycle 21.

sao tome. our latest rumor says that ps7abt/s9 was in sao tome but was asked to qrt by local authorities. no official word.

papua new guinea. jim, p29js, continues active three or four days per week on 40 meters from 11 to 1300z. after conditions fade, jim tries 80 or 160 meters. jim plans to be active for one more year.

philippines. karl, k4yt, was last heard as k4yt/du9 during the cq ww contest. qsl to ke3a.

taiwan. another expedition to taiwan is planned for late november, this time by a group from washington, dc. organized by barry goldwater, k7uga. the group hopes for an 80 meter ((garble)). operation will probably be as bv0bg and will include the cq ww cw contest.

south sandwich. several rumors have been heard about operation this month or next from south sandwich in the atlantic ocean. watch for either 4k1i or vp8asr or g4ghp/vp8. no confirmation has been received about any of these operations. more information will be available in future bulletins as we receive it.

salvador. members of the radio club ysdx will operate hu1dx and hu11fi from november 2 through 11 in conjunction with the xi international fair being held in san salvador. ar

From 5641378869819974351
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 134300,3e590cac5be18fc2,start
X-Google-Attributes: gid134300,public
X-Google-Thread: 151e61,3e590cac5be18fc2,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 122486,3e590cac5be18fc2,start
X-Google-Attributes: gid122486,public
X-Google-ArrivalTime: 1984-11-06 12:36:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site opus.UUCP
Path: utzoo!linus!decvax!genrad!mit-eddie!godot!harvard!seismo!hao!cires!nbires!
opus!scott
From: scott@opus.UUCP (Scott Wiesner)
Newsgroups: net.news.group,net.ham-radio,net.rec
Subject: RC discussion changes groups (already!)

Message-ID: <936@opus.UUCP>
Date: Tue, 6-Nov-84 15:36:07 EST
Article-I.D.: opus.936
Posted: Tue Nov 6 15:36:07 1984
Date-Received: Thu, 8-Nov-84 19:24:46 EST
Distribution: net
Organization: NBI,Inc, Boulder CO
Lines: 17

Ok, I goofed. There were some initial comments that net.ham-radio
was a good place to carry on the RC discussion until we can show
a need for our own group. I posted a note saying net.ham-radio was
the place to be, but the slow network propogation caught me by
suprise. A few comments had been posted in net.aviation saying
net.rec was probably most appropriate. I agree with this completely,
so if you're interested in Radio Controlled anything, we'll now
be in net.rec.

This will be our final resting place until we get our own group or
die from lack of interest. I'm sure we'll have notes in the ham
group, and perhaps net.aviation for the next week or so until everyone
gets the word. Be patient. We're trying to do it right.
--

Scott Wiesner
{allegra, ucbvax, cornell}!nbires!scott

From 6765983387951423993
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,22d1e373bf217b69,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-06 12:38:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 7/17/84; site hlexa.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!hlexa!lare
From: lare@hlexa.UUCP (Larry eckenorde)
Newsgroups: net.ham-radio
Subject: IBM-PC and RTTY
Message-ID: <3369@hlexa.UUCP>
Date: Tue, 6-Nov-84 15:38:51 EST
Article-I.D.: hlexa.3369
Posted: Tue Nov 6 15:38:51 1984
Date-Received: Thu, 8-Nov-84 00:24:40 EST
Distribution: net
Organization: AT&T Bell Laboratories
Lines: 10

I have recently obtained an IBM-XT and sold my TRS-80. I would like to
know what RTTY setups are availble for the XT.
I was using the Crown Micro-products system on the TRS-80 and a Flesher
TU-170. Both are availble. The Crown has the standard RTTY and CW programs,
alsothe MAILBOX Version.

Any info would help.
Thanks in advance,
Larry Eckenrode, WA2KRZ
AT&T Bell Labs,
Short Hills, NJ 201-564-2212

From 910469409046764303
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8fab6ed9c1636de4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-06 21:16:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 8/7/84; site ucbvax.ARPA
Path: utzoo!linus!decvax!decwrl!amd!dual!ucbvax!medin
From: medin@ucbvax.ARPA (Milo Medin)
Newsgroups: net.ham-radio
Subject: Adding a 2M antenna
Message-ID: <3103@ucbvax.ARPA>
Date: Wed, 7-Nov-84 00:16:06 EST
Article-I.D.: ucbvax.3103
Posted: Wed Nov 7 00:16:06 1984
Date-Received: Thu, 8-Nov-84 07:47:43 EST
Distribution: net
Organization: University of California at Berkeley
Lines: 8

Folks, I just bought a new '85 Toyota Celica Hatchback and I want
to put in a 2M rig. But I would prefer not to ruin its clean lines.
I was wondering if anyone out there has done something similar...

Milo

From 2873383820316607789
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b8166c342cdc66ec,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-07 14:18:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerians
Message-ID: <218@mouton.UUCP>
Date: Wed, 7-Nov-84 17:18:12 EST
Article-I.D.: mouton.218
Posted: Wed Nov 7 17:18:12 1984
Date-Received: Fri, 9-Nov-84 06:42:33 EST

Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84303.92059508
   Mon Oct 29 22:05:39.414 1984 UTC
Element set: 701
Inclination: 97.6074 deg
RA of node: 280.7706 deg
Eccentricity: 0.0003245
Arg of perigee: 30.4330 deg
Mean anomaly: 329.7059 deg
Mean motion: 15.26578081 rev/day
Decay rate: 2.461e-05 rev/day^2
Epoch rev: 17009
Semi major axis: 6861.153 km
Anom period: 94.328618 min
Apogee: 490.625 km
Perigee: 486.172 km
Ref perigee: 2493.92610743
   Mon Oct 29 22:13:35.681 1984 UTC
Beacon: 145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84302.80544058
   Sun Oct 28 19:19:50.66 1984 UTC
Element set: 139
Inclination: 25.8950 deg
RA of node: 170.9852 deg
Eccentricity: 0.6043569
Arg of perigee: 318.3303 deg
Mean anomaly: 8.8986 deg
Mean motion: 2.05849013 rev/day
Decay rate: -9.3e-07 rev/day^2
Epoch rev: 1036
Semi major axis: 26106.133 km
Anom period: 699.541853 min
Apogee: 35507.212 km
Perigee: 3952.369 km
Ref perigee: 2492.79343259
   Sun Oct 28 19:02:32.575 1984 UTC
Beacon: 145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time: 84294.64465474
   Sat Oct 20 15:28:18.169 1984 UTC
Element set: 45
Inclination: 98.2291 deg
RA of node: 356.3783 deg
Eccentricity: 0.0012301

```
Arg of perigee:   256.2334 deg
Mean anomaly:     103.7499 deg
Mean motion:   14.61913264 rev/day
Decay rate:       1.28e-06 rev/day^2
Epoch rev:            3403
Semi major axis:  7062.219 km
Anom period:     98.501056 min
Apogee:            712.522 km
Perigee:           695.148 km
Ref perigee:      2484.62494125
   Sat Oct 20 14:59:54.923 1984 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84291.01063423
   Wed Oct 17 00:15:18.797 1984 UTC
Element set:     105
Inclination:       82.9576 deg
RA of node:        65.5152 deg
Eccentricity:    0.0059450
Arg of perigee:    92.8891 deg
Mean anomaly:     267.8951 deg
Mean motion:   12.15588892 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12573
Semi major axis:  7987.323 km
Anom period:    118.461102 min
Apogee:           1677.673 km
Perigee:          1582.704 km
Ref perigee:      2481.03168139
   Wed Oct 17 00:45:37.272 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84303.37803156
   Mon Oct 29 09:04:21.926 1984 UTC
Element set:     230
Inclination:       82.9612 deg
RA of node:        68.7066 deg
Eccentricity:    0.0018422
Arg of perigee:   154.8385 deg
Mean anomaly:     205.3581 deg
Mean motion:   12.06671512 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12627
Semi major axis:  8026.651 km
Anom period:    119.336537 min
Apogee:           1667.100 km
Perigee:          1637.527 km
Ref perigee:      2493.41363038
   Mon Oct 29 09:55:37.664 1984 UTC
```

```
Satellite: rs-5
Catalog number: 12999
Epoch time:      84299.38650714
   Thu Oct 25 09:16:34.216 1984 UTC
Element set:     198
Inclination:       82.9551 deg
RA of node:        72.5190 deg
Eccentricity:    0.0010157
Arg of perigee:   189.2433 deg
Mean anomaly:     170.8426 deg
Mean motion:   12.05048895 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12562
Semi major axis:  8033.860 km
Anom period:    119.497226 min
Apogee:           1664.418 km
Perigee:          1648.098 km
Ref perigee:      2489.34712593
   Thu Oct 25 08:19:51.680 1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84291.00522427
   Wed Oct 17 00:07:31.376 1984 UTC
Element set:     91
Inclination:       82.9561 deg
RA of node:        67.7672 deg
Eccentricity:    0.0050792
Arg of perigee:   112.2176 deg
Mean anomaly:     248.4234 deg
Mean motion:   12.13563502 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12549
Semi major axis:  7996.213 km
Anom period:    118.658809 min
Apogee:           1676.734 km
Perigee:          1595.506 km
Ref perigee:      2481.03076352
   Wed Oct 17 00:44:17.968 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      84290.37879109
   Tue Oct 16 09:05:27.550 1984 UTC
Element set:     177
Inclination:       82.9551 deg
RA of node:        73.3917 deg
Eccentricity:    0.0022547
Arg of perigee:   138.7338 deg
Mean anomaly:     221.5393 deg
Mean motion:   12.08686113 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12491
```

```
Semi major axis:  8017.724 km
Anom period:    119.137631 min
Apogee:           1666.820 km
Perigee:          1630.664 km
Ref perigee:      2480.41061185
   Tue Oct 16 09:51:16.863 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      84294.06109772
   Sat Oct 20 01:27:58.843 1984 UTC
Element set:     297
Inclination:       82.9555 deg
RA of node:        77.6208 deg
Eccentricity:    0.0018504
Arg of perigee:   255.2468 deg
Mean anomaly:     104.6575 deg
Mean motion:   12.02950215 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12476
Semi major axis:  8043.207 km
Anom period:    119.705702 min
Apogee:           1699.643 km
Perigee:          1669.876 km
Ref perigee:      2484.03693086
   Sat Oct 20 00:53:10.826 1984 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84301.00540280
   Sat Oct 27 00:07:46.801 1984 UTC
Element set:     275
Inclination:       99.0641 deg
RA of node:       273.9106 deg
Eccentricity:    0.0014173
Arg of perigee:    83.5555 deg
Mean anomaly:     276.7229 deg
Mean motion:   14.13089800 rev/day
Decay rate:        7.2e-07 rev/day^2
Epoch rev:           17247
Semi major axis:  7224.139 km
Anom period:    101.904352 min
Apogee:            876.825 km
Perigee:           856.347 km
Ref perigee:      2491.02177298
   Sat Oct 27 00:31:21.185 1984 UTC
Beacon:           137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84298.55101124
   Wed Oct 24 13:13:27.371 1984 UTC
Element set:     93
```

```
Inclination:       98.6977 deg
RA of node:       327.9170 deg
Eccentricity:    0.0017666
Arg of perigee:    41.5455 deg
Mean anomaly:     318.7062 deg
Mean motion:   14.22435164 rev/day
Decay rate:        3.1e-07 rev/day^2
Epoch rev:            8186
Semi major axis:  7192.420 km
Anom period:    101.234843 min
Apogee:            836.172 km
Perigee:           810.760 km
Ref perigee:      2488.55907523
   Wed Oct 24 13:25:04.99  1984 UTC
Beacon:           137.5000 MHz


From -7360579549498672400
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4fd76b6d1e33b553,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-07 16:12:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1     9/27/83; site hplabs.UUCP
Path: utzoo!linus!decvax!hplabs!paull
From: paull@hplabs.UUCP (Rob KA6SFV)
Newsgroups: net.ham-radio
Subject: Novice R/C nut
Message-ID: <1075@hplabs.UUCP>
Date: Wed, 7-Nov-84 19:12:01 EST
Article-I.D.: hplabs.1075
Posted: Wed Nov  7 19:12:01 1984
Date-Received: Thu, 8-Nov-84 08:24:13 EST
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 28


   Hi fellow r/c nuts, I'm fairly new at the hobby (< 3 mo.). Here is the
equipment I started with:

     R/C gear : Airtronics XL6 FM  transmitter and receiver
              : Airtronics standard servos


     Planes   : Airtronics Olympic 650
                 : Bob Martin - Katie II  (almost done)
              : ?? Silent Squire (just begun)

   So far I've only flown the 650 but am enthusiastic about getting the others
in the air. I would be interested to hear about others planes, first flying
experiences, etc.

   I and a friend are looking into a couple of areas related to equipment.
```

One is a good charger for the nicad packs. (found a pretty good one in
OCT '81 QST) Also we are considering the possibility of constructing
receiver modules. (Receivers seem to be very expensive items and I don't
particularly like to keep moving the one I have from plane to plane)
Another posibility is constructing transmitters and receivers that operate
in some obscure section of the ham VHF bands (legal if under 1 Watt).
I welcome all comments, information or any correspondence.

TNX, 73 Rob Paull (KA6SFV) (AMA-144145)

From 4140412722229230489
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c1884fb72e46f05,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-07 19:36:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!ihnp4!inuxc!inuxg!wheatley
From: wheatley@inuxg.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: RTTY/AMTOR on the IBM PC
Message-ID: <348@inuxg.UUCP>
Date: Wed, 7-Nov-84 22:36:17 EST
Article-I.D.: inuxg.348
Posted: Wed Nov 7 22:36:17 1984
Date-Received: Fri, 9-Nov-84 08:09:55 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 11

Is anyone doing anything with amtor and their IBM pc? If so, please
send me mail, as i am interested in doing same.

I have two public domain RTTY software packages for the IBM pc.
Both are in basic, and i got them off of a bulletin board. If you
are interested, i have them on unix, or can provide disk copies
(your disk)

73, ku9c
steve wheatley
inuxg!wheatley

From -9114288874392760377
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,288baf2e73365618,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 105955,288baf2e73365618,start
X-Google-Attributes: gid105955,public
X-Google-ArrivalTime: 1984-11-08 05:37:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbdkc1.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!cbosgd!cbdkc1!cly

From: cly@cbdkc1.UUCP (Carl Yaffey)
Newsgroups: net.ham-radio,att.ham-radio
Subject: want info on R3 vertical
Message-ID: <793@cbdkc1.UUCP>
Date: Thu, 8-Nov-84 08:37:53 EST
Article-I.D.: cbdkc1.793
Posted: Thu Nov 8 08:37:53 1984
Date-Received: Sat, 10-Nov-84 07:36:39 EST
Organization: AT&T Bell Laboratories, Columbus
Lines: 7

Cushcraft has a 1/2 wave multiband vertical called the R3.
Anyone have any experience with it? It seems awfully expensive
for what it is.
Carl K8NU
--
Carl Yaffey at AT&T Bell Laboratories Columbus, Ohio
614-860-3399 cbosgd!cbdkc1!cly

From 8311506875830620792
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8fab6ed9c1636de4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-08 13:52:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site umd5.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!umcp-cs!cvl!umd5!louie
From: louie@umd5.UUCP
Newsgroups: net.ham-radio
Subject: Re: Adding a 2M antenna
Message-ID: <249@umd5.UUCP>
Date: Thu, 8-Nov-84 16:52:10 EST
Article-I.D.: umd5.249
Posted: Thu Nov 8 16:52:10 1984
Date-Received: Sat, 10-Nov-84 06:19:40 EST
References: <3103@ucbvax.ARPA>
Reply-To: louie@umd5.UUCP (Louis Mamakos)
Distribution: net
Organization: U of Md, CSC, College Park, Md
Lines: 50
Summary: IC-25A installation in 1982 Toyota Celica

In article <3103@ucbvax.ARPA> medin@ucbvax.ARPA (Milo Medin) writes:
>
>Folks, I just bought a new '85 Toyota Celica Hatchback and I want
>to put in a 2M rig. But I would prefer not to ruin its clean lines.
>I was wondering if anyone out there has done something similar...
>
>
>   Milo

I installed a 2m rig in my 1982 Toyota Celica; I'm not sure how similar

the interiors of the cars are, but this may give you a few ideas.

First the antenna: I have a Larson NMO antenna mount that I installed in the center of the roof of the Celica. If it's a new car you may not like the idea, but the alternatives that I tried didn't work out for me. I tried to use a through-the-glass antenna on the hatch, but that didn't work worth a damn for me. The Larson mag-mount that I used for a while worked, but I always had to take it off the car whenever I parked it. With the NMO mount on the car, I usually use a quarter wave whip (unobtrusive) normally, and screw on a 5/8 wave for trips and such. It works great for me. To install the antenna on the roof, remove the dome light from the inside of the car to get a look at the space between the headliner and the steel roof. For the NMO, a 3/4" hole is required; the best way to do this is to drill a 3/8" pilot hole, and use a hole punch. Makes for a real clean hole. Remove the trim along the edge of the headliner near the door, and fish the coax cable out and along the door edge and down the column near the windshield. I was able to install my antenna in about an hour.

The rig: This is the hard part.   I've got an ICOM IC-25A, which is a pretty small radio. I'm sure you've noticed that there are no really good places to install it inside the Celica that will look good. A simple place to install it is on the side of the transmission hump, but that looks asymmetric and beside, you can't slide the seat up all the way anymore. I finally decided to hang it under the dash, just to the left of the steering wheel column. I was able to use two existing screws in the dash assembly, so I didn't have to drill any holes in the dash, just get longer screws. It was necessary to redrill holes in the mounting bracket of the radio. It is difficult to explain exactly how to install it, but is is tucked as far to the right (towards the steering column) as possible. It doesn't interfere with my feet or legs while driving, but you must be a just a little carefull when entering or exiting the car.   The ICOM bracket is a quick relase type, so the radio can be removed if you're worried about it walking off. Power comes from the fuse panel just below the radio. Simple. (Well, fairly simple, anyway). Radio installation took about 2 hours, mostly measuring and drilling the bracket for the radio.

Louis A. Mamakos WA3YMH
Computer Science Center - Systems Programming
Univ. of Maryland.

From 2833926906529695275
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4fd76b6d1e33b553
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-08 15:41:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site uiucdcs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!irwin
From: irwin@uiucdcs.UUCP
Newsgroups: net.ham-radio
Subject: Re: Novice R/C nut

Message-ID: <9800005@uiucdcs.UUCP>
Date: Thu, 8-Nov-84 18:41:00 EST
Article-I.D.: uiucdcs.9800005
Posted: Thu Nov 8 18:41:00 1984
Date-Received: Sat, 10-Nov-84 09:27:00 EST
References: <1075@hplabs.UUCP>
Lines: 2
Nf-ID: #R:hplabs:-107500:uiucdcs:9800005:000:57
Nf-From: uiucdcs!irwin   Nov 8 17:41:00 1984

We are moving R/C discussions to net.rec, see you there!

From 8042225335518130835
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fd3c6cf83d3e04ab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-08 18:36:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 102 (extension on PRB-1 comments)
Message-ID: <13410@mgweed.UUCP>
Date: Thu, 8-Nov-84 21:36:34 EST
Article-I.D.: mgweed.13410
Posted: Thu Nov 8 21:36:34 1984
Date-Received: Sat, 10-Nov-84 08:07:14 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

qst de k9eui
hr arrl bulletin nr 102 from arrl headquarters
newington ct november 8, 1984
to all radio amateurs bt

fcc has granted an arrl request for an extension of comment
time on prb1, arrls request for a declatory ruling preempting
local zoning bodies from enacting overly restrictive antenna
ordinances. the new deadline for filing is december 24. the
leagues original filing and instructions for filing your
comments is available from arrl hq for an sase with 88 cents
postage. ask for prb1 material. send one original and four
copies of your comments to the secretary, fcc, washington, d.c.
20554. the first page of your comments should include the
heading, comments in response to prb1 ar

From -1942913220908572285
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d236ee16c761285,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-08 18:37:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 41
Message-ID: <13411@mgweed.UUCP>
Date: Thu, 8-Nov-84 21:37:06 EST
Article-I.D.: mgweed.13411
Posted: Thu Nov 8 21:37:06 1984
Date-Received: Sat, 10-Nov-84 08:07:29 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 45

qst de k9eui
hr dx bulletin nr 41 from arrl headquarters
newington ct november 9, 1984
to all radio amateurs bt

algeria. driss, 7x4md, has been active at about 14099 khz, using rtty, at about 1400z, and 7x4ls was heard recently near 3795 khz at about 0230z.

el salvador. hu1dx and hu11fi will be active with eleven operators from the international fair in el salvador until november 20.

norfolk island. vk9nl has been heard on 7007 khz at 1200z.

kirghiz. six stations signing the un8 prefix were worked on 40 meters at about 1200z.

republic of zaire. 9q5rn, operator roger, is frequently on 14200 khz. qso to po box 12646, kinshasa, republic of zaire.

san andres. hk0eku is currently working north american stations, using 1835 khz at 0300z.

tadzhik. uj8jx has been recently active on 7006 khz at about 1200z.

republic of cape vedre. d44bc has been on daily evenings at 1823 khz.

guyana. 8r1rbf was recently active evenings about 0200z on 3794 khz.

republic of guinea. 3x4ex is on daily from 2200z to 2300z, transmitting at 1828 khz and listening ten khz up.

papua new guinea. jim, p29js, is currently active on 7005 khz
at 1200z.

heard and worked. 3d6an, a22me and numerous africans have been
worked on 40 meters, some cw and mostly ssb at around 0300z to
0400z ar

From -3467116899245832818
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,af3c26776ac2a673
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-08 22:43:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: packet help
Message-ID: <220@mouton.UUCP>
Date: Fri, 9-Nov-84 01:43:04 EST
Article-I.D.: mouton.220
Posted: Fri Nov 9 01:43:04 1984
Date-Received: Sat, 10-Nov-84 07:42:55 EST
References: <168@zps.UUCP> <13200011@smu.UUCP>
Organization: Bell Communications Research, Inc
Lines: 51

Regarding the suggestion to use voice repeaters for packet, I have some
comments.

1. Voice repeaters are usually not designed for fast, bursty transmissions
such as those produced by packet boards. Keyup delays can involve quite
a bit of overhead, particularly if mechanical relays are involved. The
constant "kerchunking" involved in packet can cause quite a bit of wear
and tear on these relay-switched machines (and on their tech-committee
chairmen.)

2. Voice and packet users simply cannot coexist peaceably on the same
repeater. The "racket radio" users drive the human listeners to distraction
(mainly because they can't understand what's being said about them!), and
the long-winded voice users can bring data traffic to a standstill.

3. Because of carrier hang timers on most voice repeaters, the TNCs cannot
use RF carrier detect for CSMA (not that many people do, even on simplex),
but must use modem subcarrier detect. This also has the effect of infuriating
the voice users, since they get stepped on by the packet boxes.

4. A voice repeater is very expensive in comparison to a single
frequency "digipeater", since it requires cavities and isolation to
run in full duplex.

5. The one advantage of using a voice repeater over a single frequency digipeater is that collisions due to one station's inability to hear all others on the channel can be avoided. However, working against this is the fact that a wide-coverage repeater forgoes the possibility of "frequency reuse", in which two pairs of stations who are far enough apart could communicate simultaneously on the same frequency without interference, given enough of a signal-to-interference ratio to get good capture.

There is an opportunity for a research project here that would be of real use to amateur packet radio. Do an analysis to find, given an actual set of user stations and antenna QTHs, the optimal power level for each station to make maximum utilization of a channel, considering the effects of digipeating, collisions, etc, and to compare the results to the efficiency of a wide-area duplex analog repeater. One might start by looking at the work of Kleinrock and others and seeing how it might be applied to a practical situation. I remember one paper of his in which he showed that a packet radio network did not have to be "disconnected" (i.e., have pairs of stations that could not directly communicate) to a very great degree before the channel throughput degenerated to the Aloha level. It would be interesting to see how this bears out in an actual situation.

In any event, my practical advice is to put up a single-channel digipeater in a good location if you want to provide a utility service to the local packet radio community.

73, Phil, KA9Q

From 8681076040331098985
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69e6c1a6ba2828a2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-11-09 07:42:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 5/3/83; site ukc.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!mcvax!ukc!ali
From: ali@ukc.UUCP (A.L.Ibbetson)
Newsgroups: net.ham-radio
Subject: Harmonic mixing in diode rings
Message-ID: <4570@ukc.UUCP>
Date: Fri, 9-Nov-84 10:42:21 EST
Article-I.D.: ukc.4570
Posted: Fri Nov 9 10:42:21 1984
Date-Received: Sat, 10-Nov-84 06:32:54 EST
Organization: Computing Laboratory, U of Kent at Canterbury, UK
Lines: 22

On 14MHz, my Ten-Tec Omni transceiver suffers from breakthrough from strong European broadcast stations in the 49M band. The spurious response is due to harmonic mixing: 3 * LO - IF, where LO = 5+MHz and IF = 9MHz. It is at a level of -75dB relative to the wanted signal.

On a 100ft G5RV-type multiband dipole fed via a bandpass tuner and 600 ohm

line, the unwanted broadcast stations are about 10dB above the receiver noise floor. The Omni only has a 2 pole preselector, so I guess this performance is reasonable. I could fix the problem by using an external high pass filter but this makes band changing inconvenient.

Since the Omni looks as though it's been designed by direct application of the Hayward & DeMaw book "Solid State Design for the Radio Amateur", I wrote to Ten-Tec asking whether replacing the 1N4148 diodes in the ring mixer with hot carrier types would reduce the spurious resonse. They replied that in their experience there is no improvement. This conflicts with Hayward & DeMaw's findings.

Do any of you electronics gurus out there have any comments, before I start hacking at my Omni and destroying its resale value?

Alan Ibbetson G3XAQ. mcvax!ukc!ali

From -1541396481190702990
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f4f38bcc831086e6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-08 10:48:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: Re: swl list comments
Message-ID: <114@sask.UUCP>
Date: Mon, 8-Oct-84 13:48:29 EDT
Article-I.D.: sask.114
Posted: Mon Oct 8 13:48:29 1984
Date-Received: Tue, 9-Oct-84 04:04:38 EDT
References: <12832@mgweed.UUCP>
Organization: U of Saskatchewan, Canada
Lines: 4

There seem to be several articles here referring to things I haven't seen on Usenet. Is the arpa ham radio list leaking into this group?
I haven't seen anything that would have started the replies referring to ham vs. swl. Can we get the arpa list in its entirety here?

From -1671468219443503602
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8facd6754b242a7c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 06:01:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site houxn.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!hogpc!houxn!jak
From: jak@houxn.UUCP

Newsgroups: net.ham-radio
Subject: Re: ICOM HT TX DELAY
Message-ID: <567@houxn.UUCP>
Date: Tue, 9-Oct-84 09:01:05 EDT
Article-I.D.: houxn.567
Posted: Tue Oct 9 09:01:05 1984
Date-Received: Wed, 10-Oct-84 04:10:37 EDT
References: <167@zps.UUCP>
Organization: AT&T Information Systems, Holmdel NJ
Lines: 5

The Icom xmit to rcv delay only happens when the Touch Tone[tm] pad is used.
The idea is that when dialing, you don't have to hold the PTT buttin in
after you have pressed the first number. Thus, the remaining digits can be
entered easier. I suppose this feature could be defeated.
73, Jim KY2D

From 7587623756989044364
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7eae0b77adcb985a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 06:47:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: more dope on Goldwater's interference bill
Message-ID: <12836@mgweed.UUCP>
Date: Tue, 9-Oct-84 09:47:27 EDT
Article-I.D.: mgweed.12836
Posted: Tue Oct 9 09:47:27 1984
Date-Received: Wed, 10-Oct-84 04:22:29 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 92

senator barry goldwater, k7uga, introduced legislation into congress on september 11, 1984, that will make it a federal offense to willfully and malciously interfere with radio communicaions. the bill prohibits jamming by any person and authorizes the fcc to prevent continued interference while proceeding against the perprerator. senate bill 2975 also clarifies and reaffirms existing law.

goldwater, in addressing the senate, said "recently the federal communications commission has noted a significant increase in the number of complaints concerning willful or malicious interference to radio signals. i have personally listened to some of this malicious interference. just one individual can prevent effective communications by many other persons wishing to use a channel.

"there is only a limited amount of radio spectrum available, so we must ensure it is wisely used in the public interest. unfortunately this errant behavior is increasingly preventing such use in a number of different services." goldwater said such objectional interference is created by intentionally transmitting on a channel already in use or by "whistles, tapes, records or other types of obnoxious noises... transmitted for the sole purpose of interrupting or preventing other uses of the frequency."

while noting that this type of interference is prevalent on the amateur, citizens, and marine band, goldwater said that it is also creeping into the private land mobile, public safety... (and even the) government communications networks such as those of the faa and department of defense.

"the increase in willful interference to authorized communications simply must be stopped in order to ensure the reliability of the authorized public interest and safety uses of the radio spectrum."

"the purposes of this bill are to clarify that such activities are absolutely prohibited, to provide mechanisms by which such interference can be stopped in a timely fashion and to authorize significant penalities for such behavior. if this proves insufficient, i am prepared to introduce even tougher legislation to further increase the penalties for violation and include, for example, mandatory disqualification of those convicted from being licensees in the future." goldwater said he hoped that this would not be necessary.

at this point, goldwater referred to several amateur radio cases of willful and malicious interference including:

- transmission of unmodulated carriers, recorded material music and threats, made directly over the ongoing transmissions of other operators (harold r. claypoole, n6bii, 1983)

- long, continuous transmission of computer voice synthesized audio signal or ticking clock on repeater input frequency (henry c. armsrong, wa6cgi, 1983).

- initiation of transmissions when others were already using the frequency, including changes in frequency which coincided with changes made by parties attempting to evade the interference (kenneth l. gilbert, kb6tg, 1982)

- whistling on frequency for a long period of time for jamming purposes (donald e. miller, callsign unknown, 1978)

these cases illustrate examples of the type of purposeful

interference which this bill prohibits." goldwater said that he didn't intend to limit the definition of the bill's terms to these activities "but rather to explain the type of behavior to which the bill is addressed."

interference to home electronic entertainment equipment was not addressed in the bill. goldwater said he recognized that some interference is suffered by stereo amplifiers, television sets and telephones when they are operating near an operaing radio transmitter. he cautioned that he did not want s.2975's provisions to be construed as applying to interference caused by susceptibility of equipment to rf energy. "more often than not the problem is caused by the improper design of equipment experiencing he interference," goldwater said.

s.2975 will elevate willful and malicious interference to a criminal offense pursuant to section 501 of the communications act. this section provides for both a fine of up to $10,000 and imprisonment of up to 1 year for a first offense and the same fine and up to 2 years imprisonment for repeated offenses.

(from gateway)

From -8889621502613105043
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a661642d56f33aca,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 06:49:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: "73" will continue publication
Message-ID: <12837@mgweed.UUCP>
Date: Tue, 9-Oct-84 09:49:02 EDT
Article-I.D.: mgweed.12837
Posted: Tue Oct 9 09:49:02 1984
Date-Received: Wed, 10-Oct-84 04:23:06 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 43

"73 magazine" to continue publication

contrary to what you may have heard, "73 magazine" is alive and well and its financial future is secure. it is a well known fact, however, that amateur radio is not the direction that cw communications (73's new parent) is moving toward. when wayne green, w2nsd/1, sold out his publishing empire for 60 megabucks, it included "73 magazine" one of the pioneer amateur

radio publications.

cw communications did indeed try to unload "73 magazine" it even offered it back to wayne green but wayne has so many irons in the fire now with his wayne green enterprises, that he said he just didn't have time to get further involved. he still writes his famous "never say die" monthly editorial. right now wayne is on his way to asia to a computer show in japan with a side trip to the caroline islands.

cw communications has now made a strong commitment to 73 magazine and we are told that we can look forward to some exciting things from them. the publication received a very positive letter from debra weatherbee a cw communications/peterborough vice president...

next year will be 73 magazine's 25th anniversary and i understand that there will be "some surprises." editor perry donham, kk2y, would not say exactly what. "i'm pledged to secrecy," he said. 73's publisher , jack burnet, is a non-ham, although he has a solid background in publishing. perry is the same age as the publication.

two of peterough's magazines are ceasing pudlication, however. these are "pc jr world" and "microcomputing". cw communications published 52 computer publications in 19 major countries and is, by far, the world's largest publisher of computer related information. only "73 magazine" remains ouside the computer field.

(from gateway)

From -8039527708568718027
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e5fcc5582dbd7068,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 07:36:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 85 (6 meters is for races)
Message-ID: <12838@mgweed.UUCP>
Date: Tue, 9-Oct-84 10:36:59 EDT
Article-I.D.: mgweed.12838
Posted: Tue Oct 9 10:36:59 1984
Date-Received: Wed, 10-Oct-84 04:23:52 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

qst de k9eui
hr arrl bulletin nr 85 from arrl headquarters
newington ct october 3, 1984
to all radio amateurs bt

fcc released a memorandum opinion and order today that will expand the races wartime frequencies to include the six meter repeater subband, 52 to 54 mhz. these changes result from petitions filed by wb6hug and the southern california repeater and remote base association and become effective november 15, 1984. details in the arrl letter and qst ar

From -7254338266805652372
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bc190cacdcb81ce5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 07:37:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 86 (space shuttle dope)
Message-ID: <12839@mgweed.UUCP>
Date: Tue, 9-Oct-84 10:37:47 EDT
Article-I.D.: mgweed.12839
Posted: Tue Oct 9 10:37:47 1984
Date-Received: Wed, 10-Oct-84 04:24:10 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

qst de k9eui
hr arrl bulletin nr 86 from arrl headquarters
newington ct october 4, 1984
to all radio amateurs bt

the marshall space flight center amateur radio club station wa4nzd will be active during the space shuttle 41g mission. launch is scheduled for 1103 utc on october 5. operating frequencies are 3.840, 7.255, 14.270, 21.355 and 28.610 mhz. see september qst, page 46, for information about the amateur radio experiment onboard this mission ar

From 7852072241910339910
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a9dd5e3d5e90daae,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 07:38:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 87 (weird satellite sigs heard)
Message-ID: <12840@mgweed.UUCP>
Date: Tue, 9-Oct-84 10:38:49 EDT
Article-I.D.: mgweed.12840
Posted: Tue Oct 9 10:38:49 1984
Date-Received: Wed, 10-Oct-84 04:24:27 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr arrl bulletin nr 87 from arrl headquarters
newington ct october 8, 1984
to all radio amateurs bt

paul wilson, w4hhk, of collierville, tn, reports receiving
satellite signals on 2301.0 mhz on several occasions. during a
two hour period on october 5, he heard a steady carrier with
doppler on 2304.0 mhz. the signals were heard again later in
the day. if you are integested in these mysterious signals,
please call w4hhk at 901 853 7373 or write c/o box 73,
collierville, tn 38017 ar

From -835928027025954752
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fd86adf50c78f744,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 07:39:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 31 (exam sked for '85)
Message-ID: <12841@mgweed.UUCP>
Date: Tue, 9-Oct-84 10:39:49 EDT
Article-I.D.: mgweed.12841
Posted: Tue Oct 9 10:39:49 1984
Date-Received: Wed, 10-Oct-84 04:24:39 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

qst de k9eui
hr crrl bulletin nr 31 from crrl headquarters
london ont october 8, 1984
to all radio amateurs bt

doc will hold amateur examinations across canada on february 13, april 17, june 19 and october 16, 1985. submit applications to doc by january 16, march 20, may 22 and september 18.

manitoba section manager ve4pg will retire from his post in january, after serving for seven years. ve4aje will complete the term. nominations are now being received for the post of ontario section manager ar

From 1262233732353228530
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5fd76288d3443f55,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 07:40:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 36
Message-ID: <12842@mgweed.UUCP>
Date: Tue, 9-Oct-84 10:40:39 EDT
Article-I.D.: mgweed.12842
Posted: Tue Oct 9 10:40:39 1984
Date-Received: Wed, 10-Oct-84 04:24:52 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 52

qst de k9eui
hr dx bulletin nr 36 from arrl headquarters
newington ct october 5, 1984
to all radio amateurs bt

san felix. ce0aa is still active on 80 through 15 meters, both ssb and cw. watch for operators fernando and max on 21030 khz at 1600z, 14236 khz at 2300z, 7085 khz at 0800z and 3795 khz at 0530 and 0930z. qsls should go only to box 700, santiago, chile.

chad. tt8cw, henri, formerly fb8zq, is now reported to be signing tt8cw. he was first reported at 2300z on 14010 khz on wednesday. henri also promises 10, 15 and 40 meter cw. watch for him on 40 meters between 0430 and 0500z.

guinea bissau. j5wwd has been heard lately between 14230 and 14240 khz around 0200z. qsl to home callsign ub5wad.

macquarie island. graeme, vk0gc, is reported to be back on macquarie and plans all band activity for the next year. qsl as before.

zone 23. a new station, ua0yo, has been heard and worked on the east coast of north america, long path, at 1130z on 7006 khz.

contest expeditions. a large number of expeditions are being planned for the cq ww phone contest to be held october 27 and 28. listen to subsequent dx bulletins for further updates.

cambodia. sxu1ss is still appearing every sunday at 1200z on 14245 khz. signals have been getting stronger each week and have been well over s9 throughout most of north america. qsl to ja1hqg.

ecuador. a special event station from quito, hc1a, is scheduled to operate during the 24 hour period october 13 only. operations are scheduled full time on 160 through 10 meters, both phone and cw.

propagation. with winter nearing in the northern hemisphere, static levels have dropped and activity has resumed on 80 and 160 meters. this season is the best time for working transequatorial dx, such as australia and south africa, from north america on the low bands. also watch for long path openings on 40 meters at both local sunrise and sunset.

160 meters. stations heard within the last two weeks on 160 meters include kj9w/kh2, hb0nl and 9j2tj ar

From -8414704117983997369
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,baa89f71e201fe9d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 07:41:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 41
Message-ID: <12843@mgweed.UUCP>
Date: Tue, 9-Oct-84 10:41:16 EDT
Article-I.D.: mgweed.12843
Posted: Tue Oct 9 10:41:16 1984
Date-Received: Wed, 10-Oct-84 04:25:22 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 32

qst de k9eui
hr propagation forecast bulletin nr 41 from arrl headquarters
newington ct october 8, 1984
to all radio amateurs bt

solar flux and sunspot numbers were well below predicted levels since early may, and the sun has been all but devoid of spots for the past four weeks. this has changed all aspects of the dx picture, at a time of year that normally brings some of our best propagation. it is possible that a shift to higher solar activity will develop before winter, but there is no credible evidence on which to base a prediction at this time.

there were brief spurts of dx on 28 mhz in recent days, and 21 mhz has been fairly lively for short periods, but both bands are far below what had been expected for the northern u.s. and adjacent areas of canada.

during the forecast week, propagation is expected to improve gradually up to the middle of october. fairly severe disturbances will return about october 17 through 25. the month will close with generally better propagation on all frequencies, but with 28 and 21 mhz not performing up to earlier expectations for this autumn. for more than a month the sun has looked very much like it did at the beginning of the current solar cycle in the summer of 1976. dx on the higher bands has suffered markedly as a result.

american sunspot numbers for september 27 through october 3 were between 0 and 7, with a mean of 1.3 ar

From -3838237668459356817
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4663c666deac6bb8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 09:43:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <175@mouton.UUCP>
Date: Tue, 9-Oct-84 12:43:06 EDT
Article-I.D.: mouton.175
Posted: Tue Oct 9 12:43:06 1984
Date-Received: Wed, 10-Oct-84 04:15:05 EDT
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84273.37377839
   Sat Sep 29 08:58:14.452 1984 UTC
Element set: 690
Inclination: 97.6040 deg

```
RA of node:       249.6657 deg
Eccentricity:    0.0004284
Arg of perigee:   101.7517 deg
Mean anomaly:     258.4210 deg
Mean motion:   15.26432330 rev/day
Decay rate:      2.403e-05 rev/day^2
Epoch rev:           16543
Semi major axis:  6861.590 km
Anom period:     94.337625 min
Apogee:            506.524 km
Perigee:           500.645 km
Ref perigee:      2463.39226358
   Sat Sep 29 09:24:51.573 1984 UTC
Beacon:           145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time:      84277.06052018
   Wed Oct  3 01:27:08.943 1984 UTC
Element set:     133
Inclination:       25.7678 deg
RA of node:       175.2081 deg
Eccentricity:    0.6053937
Arg of perigee:   311.3032 deg
Mean anomaly:      10.5933 deg
Mean motion:    2.05844218 rev/day
Decay rate:        1.2e-06 rev/day^2
Epoch rev:             983
Semi major axis: 26106.554 km
Anom period:    699.558148 min
Apogee:          35535.433 km
Perigee:          3925.946 km
Ref perigee:      2467.04622498
   Wed Oct  3 01:06:33.838 1984 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84265.21359828
   Fri Sep 21 05:07:34.891 1984 UTC
Element set:     43
Inclination:       98.2318 deg
RA of node:       327.0799 deg
Eccentricity:    0.0013527
Arg of perigee:   351.4789 deg
Mean anomaly:       8.6131 deg
Mean motion:   14.61903966 rev/day
Decay rate:       1.08e-06 rev/day^2
Epoch rev:            2973
Semi major axis:  7062.246 km
Anom period:     98.501682 min
Apogee:            694.114 km
Perigee:           675.008 km
```

```
Ref perigee:      2455.21196170
   Fri Sep 21 05:05:13.490 1984 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:       84271.42223535
   Thu Sep 27 10:08:01.134 1984 UTC
Element set:     103
Inclination:       82.9542 deg
RA of node:        76.3816 deg
Eccentricity:    0.0059111
Arg of perigee:   133.3157 deg
Mean anomaly:     227.2857 deg
Mean motion:   12.15588595 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12335
Semi major axis:  7987.323 km
Anom period:    118.461131 min
Apogee:           1667.542 km
Perigee:          1573.115 km
Ref perigee:      2461.45256229
   Thu Sep 27 10:51:41.381 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:       84264.57512763
   Thu Sep 20 13:48:11.27  1984 UTC
Element set:     220
Inclination:       82.9547 deg
RA of node:        89.8654 deg
Eccentricity:    0.0017040
Arg of perigee:   235.7929 deg
Mean anomaly:     124.1516 deg
Mean motion:   12.06664240 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12159
Semi major axis:  8026.684 km
Anom period:    119.337257 min
Apogee:           1676.623 km
Perigee:          1649.268 km
Ref perigee:      2454.54654756
   Thu Sep 20 13:07:01.708 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:       84270.16226739
   Wed Sep 26 03:53:39.902 1984 UTC
Element set:     191
Inclination:       82.9532 deg
RA of node:        88.4127 deg
Eccentricity:    0.0009736
Arg of perigee:   254.2730 deg
```

```
Mean anomaly:     105.7276 deg
Mean motion:   12.05054867 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12210
Semi major axis:  8033.833 km
Anom period:    119.496634 min
Apogee:            1683.026 km
Perigee:           1667.382 km
Ref perigee:      2460.13789607
   Wed Sep 26 03:18:34.220 1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84268.49867713
   Mon Sep 24 11:58:05.704 1984 UTC
Element set:     88
Inclination:       82.9545 deg
RA of node:        80.2048 deg
Eccentricity:    0.0050224
Arg of perigee:   158.5927 deg
Mean anomaly:     201.7256 deg
Mean motion:   12.13563013 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12276
Semi major axis:  7996.210 km
Anom period:    118.658857 min
Apogee:            1661.031 km
Perigee:           1580.711 km
Ref perigee:      2458.53490525
   Mon Sep 24 12:50:15.813 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      84275.14840318
   Mon Oct  1 03:33:42.34  1984 UTC
Element set:     173
Inclination:       82.9545 deg
RA of node:        81.7359 deg
Eccentricity:    0.0021848
Arg of perigee:   169.3424 deg
Mean anomaly:     190.8136 deg
Mean motion:   12.08686423 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12307
Semi major axis:  8017.723 km
Anom period:    119.137600 min
Apogee:            1657.816 km
Perigee:           1622.781 km
Ref perigee:      2465.18728524
   Mon Oct  1 04:29:41.445 1984 UTC

Satellite: rs-8
Catalog number: 12998
```

```
Epoch time:      84271.02350192
   Thu Sep 27 00:33:50.565 1984 UTC
Element set:     293
Inclination:       82.9545 deg
RA of node:        90.0971 deg
Eccentricity:    0.0019055
Arg of perigee:   307.1710 deg
Mean anomaly:      52.7595 deg
Mean motion:   12.02947950 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12199
Semi major axis:  8043.217 km
Anom period:    119.705927 min
Apogee:           1693.773 km
Perigee:          1663.120 km
Ref perigee:      2461.01131900
   Thu Sep 27 00:16:17.961 1984 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84268.00965680
   Mon Sep 24 00:13:54.347 1984 UTC
Element set:     273
Inclination:       99.0574 deg
RA of node:       240.5074 deg
Eccentricity:    0.0013124
Arg of perigee:   173.6948 deg
Mean anomaly:     186.4389 deg
Mean motion:   14.13083789 rev/day
Decay rate:       1.23e-06 rev/day^2
Epoch rev:           16781
Semi major axis:  7224.158 km
Anom period:    101.904785 min
Apogee:            855.746 km
Perigee:           836.784 km
Ref perigee:      2458.04377468
   Mon Sep 24 01:03:02.131 1984 UTC
Beacon:           137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84247.13108875
   Mon Sep  3 03:08:46.68  1984 UTC
Element set:     92
Inclination:       98.7036 deg
RA of node:       277.1751 deg
Eccentricity:    0.0016362
Arg of perigee:   185.1278 deg
Mean anomaly:     174.9735 deg
Mean motion:   14.22429264 rev/day
Decay rate:        3.8e-07 rev/day^2
Epoch rev:            7455
Semi major axis:  7192.440 km
```

```
Anom period:    101.235263 min
Apogee:            826.230 km
Perigee:           802.694 km
Ref perigee:      2437.09691921
   Mon Sep  3 02:19:33.819 1984 UTC
Beacon:           137.5000 MHz


From 6563210317795431054
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,10564bc89e1a17ac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 09:46:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!wd9get
From: wd9get@pur-ee.UUCP (Brandt)
Newsgroups: net.ham-radio
Subject: STS-41G Orbital Elements
Message-ID: <2224@pur-ee.UUCP>
Date: Tue, 9-Oct-84 12:46:09 EDT
Article-I.D.: pur-ee.2224
Posted: Tue Oct  9 12:46:09 1984
Date-Received: Wed, 10-Oct-84 04:40:01 EDT
Organization: Electrical Engineering Department , Purdue University
Lines: 28

[]

Here are the latest set of orbital elements from Goddard Space Flight
Center for STS-41G.  The epoch rev is an estimate, but should not make
any difference in the orbital calculations.

--Keith E. Brandt
  pur-ee!wd9get


Satellite: sts-41g
Catalog number: 0
Epoch time:      84282.91736111
dtime(): GMT.....
   Mon Oct  8 22:00:59.100 1984 GMT
Element set:     4
Inclination:       56.9810 deg
RA of node:        64.0750 deg
Eccentricity:    0.0007547
Arg of perigee:   301.5250 deg
Mean anomaly:     169.7580 deg
Mean motion:   16.21621622 rev/day
Decay rate:           0.08 rev/day^2
Epoch rev:              56
Semi major axis:  6592.929 km
Anom period:     88.800000 min
```

Apogee: 230.684 km
Perigee: 220.733 km

From -3748444702657126160
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2415d63645276ec5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 11:36:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: NASA freq in use currently
Message-ID: <368@ihu1h.UUCP>
Date: Tue, 9-Oct-84 14:36:00 EDT
Article-I.D.: ihu1h.368
Posted: Tue Oct 9 14:36:00 1984
Date-Received: Wed, 10-Oct-84 04:43:30 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 8

     freq   call   who
     ------- -------- --

h   20.1983 ?   US: NASA, "Seagreen 0" and "Seagreen 12" adjusting comm
ckts, lsb
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 3002979160654085938
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,df3afec641317bf3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 13:27:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!linus!decvax!genrad!mit-eddie!godot!harvard!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Ham transceivers for SWL use
Message-ID: <5153@brl-tgr.ARPA>
Date: Tue, 9-Oct-84 16:27:52 EDT
Article-I.D.: brl-tgr.5153
Posted: Tue Oct 9 16:27:52 1984
Date-Received: Thu, 11-Oct-84 04:19:06 EDT
Organization: Ballistics Research Lab
Lines: 33

There has been some discussion (in places like Review of International Broadcasting's Radio Equipment Forum or other SWL club newsletters) of the advantages of an non-ham SWL owning a ham transceiver which has a general-coverage receiver section and using this as an SWL receiver. Some advantages claimed are things like having the transmitter available in a future survivalist scenario, gaining the advantage of the advanced technology that goes into the transceivers before it is implemented in receiver-only hardware, easy migration if you get a ham ticket, etc.

This sounds nice, but I always wondered about a couple things:

Are ham transceivers made in such a manner that the transmitter section can be totally switched off and the unit used for receive-only operation? I wonder about the transmitter being accidentally triggered when a non-resonant antenna is connected, thereby damaging the transmitter circuitry. Another danger is having receive-only equipment (preamps, active antennas, tuners, whatever) connected to the antenna circuit, and then suddenly sending many watts of RF out through them, frying them crisply. Another concern is power supply wiring. A transmitter is a heavy-load device, usually requiring its own special power circuit direct from the fuse or breaker panel (except for QRP models, of course); but a receiver usually gets plugged into the ordinary house wiring in your bedroom or whereever. If the transmitter section cannot be completely shut down, would not you have to provide the special power wiring for this box, even if you used it for receive only?

Having never fiddled with a transceiver, I am in the dark about this. Comments and explanations are welcomed.

Will Martin

seismo!brl-bmd!wmartin or wmartin@almsa-1.ARPA

From -3595267481874021288
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a25058f0e9c548f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-09 20:53:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pittvax.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!harvard!wjh12!genrad!decvax!mcnc!idis!pitt!pittvax!hoffman
From: hoffman@pittvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Why is 250 Hz filter CHEAPER than 500 Hz? (ICOM R71A)
Message-ID: <606@pittvax.UUCP>
Date: Tue, 9-Oct-84 23:53:58 EDT
Article-I.D.: pittvax.606
Posted: Tue Oct 9 23:53:58 1984
Date-Received: Sat, 13-Oct-84 01:10:16 EDT
References: <ihu1h.363>

Reply-To: hoffman@pitt.UUCP (Bob Hoffman)
Organization: Dept. of Computer Science, University of Pittsburgh
Lines: 11

I have an R71A with the 250 Hz filter and find that it performs very
well. Between that filter, the passband tuning, and the notch, I
can isolate even the most crowded of CW signals. Now, if only I
were more proficient in CW! :-) It even does an acceptable job of
picking those 85-hz shift RTTY stations out of the multiplexed
transmissions.

---N3CVL
--
Bob Hoffman
Pitt Computer Science

From -1193824311413981360
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4b53aa6ba8554928,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-10 07:58:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site umd5.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!umcp-cs!cvl!umd5!louie
From: louie@umd5.UUCP (Louis Mamakos)
Newsgroups: net.ham-radio
Subject: ISI Amateur Radio Group / Packet Radio
Message-ID: <165@umd5.UUCP>
Date: Wed, 10-Oct-84 10:58:54 EDT
Article-I.D.: umd5.165
Posted: Wed Oct 10 10:58:54 1984
Date-Received: Fri, 12-Oct-84 05:08:44 EDT
Distribution: net
Organization: U of Md, CSC, College Park, Md
Lines: 38

I recently saw this little excerpt from one of the GATEWAY newsletters
posted to this newsgroup. Is there anyone on from the ISI Amateur Radio
Group? I'd like to get more information on this hardware:

> We received the following letter from Richard Bisbey II, NG6Q:
>
> "The Information Sciences Institute Amateur Radio Group (WB6MXZ) has
> been on the air with a 56 Kb packet radio system since December, 1983.
> The equipment consists of 8088-based controllers using the Zilog 8530
> SCC chip and frequency agile 10-watt FSK transmitters and receivers.
> The controller supports serial, parallel, and Ethernet connected
> devices. Assembled controllers cost approximately $650. The system
> uses standard INTERNET (IP/TCP) protocol, and in addition to
> supporting simple link level connections, supports internetworking as
> well as numerous high-level protocols such as TELNET, File Transfer
> (FTP), Mail (SMTP), Multi-Media Mail (MMM,MPM), Graphics (GP), Packet

> Voice (NVP), and Remote Virtual Disk (RVD). The hardware and software can support data rates as high as 1 Mb, well in excess of the current amateur limit of 56 Kb.
>
> "Previous packet radio accomplishments by ISI amateurs include a March 1982 demonstration of transcontinental packet radio internetworking between an aircraft flying above Los Angeles and a fixed station in Virginia, and a November, 1982, demonstration of intercontinental internetwork packet radio communications between Los Angeles, California and The Hague, Netherlands using Intelsat-4A. The ISI group is currently developing a low-cost spread-spectrum system with capabilities similar to the current non-spread system."

This sure sounds like some serious packet radio work to me...

Louis A. Mamakos WA3YMH
Computer Science Center - Systems Programming
Univ. of Maryland.

uucp: ..!seismo!umcp-cs!cvl!umd5!louie
arpa: louie@umd5.arpa

From -1271602207905674841
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a661642d56f33aca
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-10 08:21:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 SMI; site sun.uucp
Path: utzoo!linus!decvax!decwrl!sunny
From: sunny@sun.uucp (Sunny Kirsten)
Newsgroups: net.ham-radio
Subject: Re: "73" will continue publication
Message-ID: <1737@sun.uucp>
Date: Wed, 10-Oct-84 11:21:54 EDT
Article-I.D.: sun.1737
Posted: Wed Oct 10 11:21:54 1984
Date-Received: Tue, 16-Oct-84 05:35:42 EDT
References: <12837@mgweed.UUCP>
Organization: Sun Microsystems, Inc.
Lines: 17

{73 packets of bits on the net, 73 packets of bits...}

> "73 magazine" to continue publication
>
> cw communications
> published 52 computer publications in 19 major countries and
> is, by far, the world's largest publisher of computer related
> information. only "73 magazine" remains ouside the computer
> field.

>
     It sounds like 73 would be the perfect vehicle for a publication whose
focus would be: Amatuer Packet Radio. How about all subscribers (and anyone
who can get 73's address through the net here) mail a postcard to 73 requesting
they utilize the talents of their parent organization in the computer area
to apply to rapid developments in Packet Radio.
--
{ucbvax,decvax,ihnp4}!sun!sunny (Sunny :-> Kirsten of Sun Microsystems Inc.)

From -8132198905788131960
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d4d8b25d9b3c866e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-10 12:27:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2g.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!whuxlm!whuxl!houxm!hou2g!stekas
From: stekas@hou2g.UUCP (J.STEKAS)
Newsgroups: net.ham-radio
Subject: License Exams ??
Message-ID: <341@hou2g.UUCP>
Date: Wed, 10-Oct-84 15:27:47 EDT
Article-I.D.: hou2g.341
Posted: Wed Oct 10 15:27:47 1984
Date-Received: Thu, 11-Oct-84 07:52:01 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 16

I'd like to get a ticket again but the exam procedure has changed
since I last visited Varick, St.   Specifically-

1) How/where does one make arrangements to take the exam from a HAM as opposed
   to waiting for a quaterly FCC exam.

2) Also, is 2 years of experience at General or Advanced still required
   for the Extra? Could that experience have occured long ago??

                                                Tnx,
                                                    Jim ihnp4!hou2g!stekas

P.S.- I vote to keep SWL discussions here.   The community of radio
       enthusiasts is small enough already without fragmenting it.
       Should we also have net.ham-radio.[vhf,dx,cw,80am, ...] ?

From -1336877025670273300
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fe0718a9a7fec43f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-10 18:06:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: yet another SWL freq list
Message-ID: <371@ihu1h.UUCP>
Date: Wed, 10-Oct-84 21:06:11 EDT
Article-I.D.: ihu1h.371
Posted: Wed Oct 10 21:06:11 1984
Date-Received: Fri, 12-Oct-84 08:03:01 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 221

```
   0.0250    KA4043     Seiscom Delta United, petroleum industry (USA-wide)
   0.0251    KA4043     Seiscom Delta United, petroleum industry (USA-wide)
   0.0252    KA4043     Seiscom Delta United, petroleum industry (USA-wide)
   0.0253    KA4043     Seiscom Delta United, petroleum industry (USA-wide)
   0.0848    KTS332     Decca Survey Systems, radiobeacon (USA-wide)
   0.1131    KTS332     Decca Survey Systems, radiobeacon (USA-wide)
   0.1272    KTS332     Decca Survey Systems, radiobeacon (USA-wide)
   0.2155    WRLB2889   Mobil Oil Telcom Ltd, aerobeacon (USA-wide)
          several   Mobil Oil Telcom Ltd, aerobeacon (USA-wide)
   0.2255    WRLB2095   Exxon Communications, aerobeacon (USA-wide)
   0.2385    WRLB2486   Marathon Oil Company, aerobeacon (USA-wide)
   0.2815    WRLB2858   Shell Communications, aerobeacon (USA-wide)
          WRLB3129  Shell Communications, aerobeacon (USA-wide)
   0.3595    WRLB3154   Shell Communications, aerobeacon (USA-wide)
          WRLB3155  Shell Communications, aerobeacon (USA-wide)
   0.3665    WRLB2628   Penrod  Drilling Company, aerobeacon (USA-wide)
          WRLB3047  Penrod  Drilling Company, aerobeacon (USA-wide)
   0.3880    WRLB2940   Union Oil Company of..., aerobeacon (USA-wide)
   0.3895    WRLB2937   Shell Communications, aerobeacon (USA-wide)
   2.0000    KNEV670    W5UNY Co (USA-wide)
   2.0664    KYH210     Exxon Communications (USA-wide)
          WDJ331    Ocean Technology Ltd (USA-wide)
          WDS  Exxon Communications (USA-wide)
   2.0804    KA2XTH     Harris  Corp, experimental (USA-wide)
   2.0874    KA2XTH     Harris  Corp, experimental (USA-wide)
   2.0979    KA2XTH     Harris  Corp, experimental (USA-wide)
          WXF700    Houston Oil & Mineral (USA-wide)
   2.1594    KA2XTH     Harris  Corp, experimental (USA-wide)
   2.1674    KA2XTH     Harris  Corp, experimental (USA-wide)
   2.1834    KYH210     Exxon Communications (USA-wide)
          WDJ331    Ocean Technology Ltd (USA-wide)
          WDS  Exxon Communications (USA-wide)
          WXF700    Houston Oil & Mineral (USA-wide)
   2.1994    KA2XTH     Harris  Corp, experimental (USA-wide)
   2.2398    KJ5586     Zapata  Communication, petro ind (West Delta B,
     Gulf of  Mex)
   2.2764    KB24174    Eastern Sierra    Natio...., public safety (USA-wide)
          KB24178   Bay Area Region Nati...., public safety (USA-wide)
   2.2904    KA42364    Georex  Inc (USA-wide)
```

KH4434 Marlin Drilling Company (USA-wide)
2.2920 KA2899 Western Geophysical (USA-wide)
KA2976 Mobil Oil Telcom Ltd (USA-wide)
KJ5586 Zapata Communication, petro ind (West Delta B, Gulf of Mex)
KKJ750 Mobil Oil Telcom Ltd (USA-wide)
KN2907 Penrod Drilling Company (USA-wide)
2.2934 KA2120 Geophysical Service (USA-wide)
KA2307 Offshore Navigation (USA-wide)
KA3485 Rogers Explorations (USA-wide)
KA7257 King Fisher Marine S... (USA-wide)
KA7758 Brown & Root Inc (USA-wide)
KA87200 Goldston Company Inc (USA-wide)
KJ5586 Zapata Communication, petro ind (West Delta B, Gulf of Mex)
KKQ217 Offshore Navigation (USA-wide)
KNCK293 Geophysical Service (USA-wide)
KTG973 McDermott Inc (USA-wide)
2.3964 KA42364 Georex Inc (USA-wide)
KH4434 Marlin Drilling Company (USA-wide)
2.3980 KA2899 Western Geophysical (USA-wide)
KA2976 Mobil Oil Telcom Ltd (USA-wide)
KJ5586 Zapata Communication, petro ind (West Delta B, Gulf of Mex)
KKJ750 Mobil Oil Telcom Ltd (USA-wide)
KN2907 Penrod Drilling Company (USA-wide)
2.3990 KA2120 Geophysical Service (USA-wide)
2.3994 KA2307 Offshore Navigation (USA-wide)
KA3485 Rogers Explorations (USA-wide)
KA7257 King Fisher Marine S... (USA-wide)
KA80947 Wilderness Tree Service (USA-wide)
KA87200 Goldston Company Inc (USA-wide)
KKQ217 Offshore Navigation (USA-wide)
KNCK293 Geophysical Service (USA-wide)
KTG973 McDermott Inc (USA-wide)
2.3995 KM2XLF Rockwell International, experimental (USA-wide)
2.4220 KM2XET SRI International, experimental (USA-wide)
2.7260 KF2364 North East Surf Patrol, public safety (USA-wide)
2.7274 KQ2XKM National Ski Patrol, experimental (USA-wide)
KQ2XYZ National Ski Patrol, experimental (USA-wide)
2.7394 KA2XTH Harris Corp, experimental (USA-wide)
2.7420 KC2XGD Woods Hole Oceanographic, experimental (USA-wide)
2.7705 KB2XXP Federal Electric Corp, experimental (USA-wide)
2.7720 KB2XXP Federal Electric Corp, experimental (USA-wide)
2.7834 KA2XTH Harris Corp, experimental (USA-wide)
2.8315 KK2XHJ Lamont Doherty Geo O..., experimental (USA-wide)
2.9790 KA5280 Georgia Kraft Company, forestry (USA-wide)
3.1900 KK2XHJ Lamont Doherty Geo O, experimental (USA-wide)
3.2024 KQ2XKM National Ski Patrol, experimental (USA-wide)
KQ2XYZ National Ski Patrol, experimental (USA-wide)
3.2825 KM2XLF Rockwell International, experimental (USA-wide)
3.2844 KJS459 Teledyne, Inc (USA-wide)

3.2934 KFR241 Teledyne, Inc (USA-wide)
3.2935 KFR241 Teledyne, Inc (USA-wide)
3.3012 KTU370 Offshore Navigation (USA-wide)
3.3016 KTU370 Offshore Navigation (USA-wide)
3.3024 KFR241 Teledyne, Inc, radiobeacon (USA-wide)
KJS459 Teledyne, Inc, radiobeacon (USA-wide)
3.3025 KFR241 Teledyne, Inc, radiobeacon (USA-wide)
3.3044 KJS459 Teledyne, Inc, radiobeacon (USA-wide)
3.3054 KFR241 Teledyne, Inc, radiobeacon (USA-wide)
3.3055 KFR241 Teledyne, Inc, radiobeacon (USA-wide)
3.3064 KRJ260 Teledyne, Inc, radiobeacon (USA-wide)
3.3074 KJS459 Teledyne, Inc, radiobeacon (USA-wide)
KRJ260 Teledyne, Inc, radiobeacon (USA-wide)
3.3084 KRJ260 Teledyne, Inc, radiobeacon (USA-wide)
3.3094 KRJ260 Teledyne, Inc, radiobeacon (USA-wide)
3.3104 KJS459 Teledyne, Inc, radiobeacon (USA-wide)
3.3134 KJS459 Teledyne, Inc, radiobeacon (USA-wide)
3.3154 KFR241 Teledyne, Inc, radiobeacon (USA-wide)
3.3155 KFR241 Teledyne, Inc, radiobeacon (USA-wide)
3.3164 KJS459 Teledyne, Inc, radiobeacon (USA-wide)
KRJ260 Teledyne, Inc, radiobeacon (USA-wide)
3.3184 KFR241 Teledyne, Inc, radiobeacon (USA-wide)
KRJ260 Teledyne, Inc, radiobeacon (USA-wide)
3.3185 KFR241 Teledyne, Inc, radiobeacon (USA-wide)
3.3194 KJS459 Teledyne, Inc, radiobeacon (USA-wide)
3.3224 KJS459 Teledyne, Inc, radiobeacon (USA-wide)
3.9914 KGA57 Continental Air Lines, aero/fixed (Agana, Gulf of Mex)
3.9915 KGA57 Continental Air Lines, aero/fixed (Agana, Gulf of Mex)
4.1245 KPB540 Casamar Inc, maritime/coast (Barrigada He..., Gulf of Mex)
4.1264 KPB540 Casamar Inc, maritime/coast (Barrigada He..., Gulf of Mex)
4.5514 KOH83 Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
KOR79 Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
4.5515 KOH84 Aeronautical Radio Inc, aero/fixed (Gulf of Mex)
KTS88 Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
KXP4 Aeronautical Radio Inc, aero/fixed (Gulf of Mex)
KXP99 Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
KYB33 Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
4.6375 KJ5586 Zapata Communication, petro ind (West Delta B, Gulf of Mex)
4.6389 KJ5586 Zapata Communication, petro ind (West Delta B, Gulf of Mex)
5.5500 ? h ICAO, in-flight aircraft wrkg "New York" JFK , usb (New York,
6.2200 KPB540 Casamar Inc, maritime/coast (Barrigada He..., Gulf of Mex)
6.2230 KPB540 Casamar Inc, maritime/coast (Barrigada He..., Gulf of Mex)
6.5233 KPB540 Casamar Inc, maritime/coast (Barrigada He..., Gulf of Mex)

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   7.9364    KGA57  Continental Air Lines, aero/fixed (Agana, Gulf
     of Mex)
   7.9365    KGA57  Continental Air Lines, aero/fixed (Agana, Gulf
     of Mex)
   8.0714    KOH83  Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
         KOR79     Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
   8.0715    KOH84  Aeronautical Radio Inc, aero/fixed (Gulf of Mex)
         KTS88     Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
         KXP4 Aeronautical Radio Inc, aero/fixed (Gulf of Mex)
         KXP99     Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
         KYB33     Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
   8.1150    KNHQ155    Travel  Unlimited Corp (Garapan Village, Gulf of Mex)
   8.2925    KPB540     Casamar Inc, maritime/coast (Barrigada
     He..., Gulf of Mex)
   8.2926    KPB540     Casamar Inc, maritime/coast (Barrigada
     He..., Gulf of Mex)
   8.8420    COL      h USSR: Aeroflot, commercial flights to Cuba, cw
     (Cuba)
   8.9929    6WW      h France: Navy, Dakar Naval, cw (Senegal)
   8.9930    ?          h   US: Air Force,    Albrook  AFB, in-flight aircraft,
usb (Panama Ca
   9.0140    ?          h   US: Air Force,    Scott AFB, in-flight aircraft, usb
(Illinois)
   9.0230    ?          h   US: Air Force,    NORAD, usb (Co Springs CO/North
     Bend OR/Hamilto
  10.3400    WFK50    h Associated Press, fax (New York, NY)
  10.5097    RIW      h USSR: Navy, Khiva Naval, cw (Uzbek SSR)
  11.1820    ?          h   US: Air Force,    Scott AFB, in-flight aircraft, usb
(Illinois)
  11.2040    ?          h   Great Britain:    RAF Strike Cmd,
     in-flight aircraft (Belize)
  11.2140    ?          h   US: Air Force,    TAC, usb
  11.2430    ?          h   US: Air Force,    SAC, freq Alpha
     , "skybird"/"skyking", usb
  11.2460    ?          h   US: Air Force,    MacDill  AFB, in-flight aircraft,
usb (Florida)
  11.2490    ?          h   US: Air Force,    Air Force 2 wkg
     Andrews  AFB, usb (Washington DC
  11.3813    KGA57  Continental Air Lines, aero/fixed (Agana, Gulf
     of Mex)
  11.4024    KGA57  Continental Air Lines, aero/fixed (Agana, Gulf
     of Mex)
  11.4025    KGA57  Continental Air Lines, aero/fixed (Agana, Gulf
     of Mex)
  11.4714    KOH83  Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
  11.4715    KOH84  Aeronautical Radio Inc, aero/fixed (Gulf of Mex)
         KTS88     Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
         KXP4 Aeronautical Radio Inc, aero/fixed (Gulf of Mex)
         KXP99     Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
         KYB33     Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
  12.1945    KNHQ155    Travel  Unlimited Corp (Garapan Village, Gulf of Mex)
  12.3641    WLO      h ship-to-shore radiotelephone, ship, usb (Mobile, AL)
  12.4306    KPB540     Casamar Inc, maritime/coast (Barrigada
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    He..., Gulf of Mex)
  12.4337    KPB540     Casamar Inc, maritime/coast (Barrigada
    He..., Gulf of Mex)
         KWH66     United  Micronesia De..., maritime/coast (Susupe, Gulf of Mex)
  12.4368    KPB540     Casamar Inc, maritime/coast (Barrigada
    He..., Gulf of Mex)
  13.1163    WOM      h AT&T ship-to-shore radiotelephone, wx,
    usb (Ft  Lauderdale, FL)
  13.1349    WLO      h ship-to-shore radiotelephone, shore, usb (Mobile, AL)
  13.7924    KOH83  Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
  13.7925    KOH84  Aeronautical Radio Inc, aero/fixed (Gulf of Mex)
         KTS88     Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
         KXP4 Aeronautical Radio Inc, aero/fixed (Gulf of Mex)
         KXP99     Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
         KYB33     Aeronautical Radio Inc, aero/fixed (offshore, Gulf of Mex)
  13.8125    KGA57  Continental Air Lines, aero/fixed (Agana, Gulf
    of Mex)
  14.4600    Y7L36    h East Germany: embassy, cw (Havana, Cuba)
  14.6410    EBA      h Spain:  Navy, cw (Madrid, Spain)
  14.8490    ?          h   unidentified: piccolo mode, encoding into musical
tones
  15.0240    COL      h USSR: Aeroflot, commercial flights to Cuba, cw
    (Cuba)
  15.0310    ?          h   US: Air Force,   McClellan AFB, in-flight aircraft,
usb (Califor
  15.0350    ?          h   Canada: Military Aeronautical Comm Sys, wx, usb
(Edmonton)
  15.9200    CFH      h Canada: Canadian Forces Maritime Radio, cw (Halifax, NS)
  16.5885    KPB540     Casamar Inc, maritime/coast (Barrigada
    He..., Gulf of Mex)
  16.5916    KPB540     Casamar Inc, maritime/coast (Barrigada
    He..., Gulf of Mex)
  16.5947    KPB540     Casamar Inc, maritime/coast (Barrigada
    He..., Gulf of Mex)
  17.5350    KYS583     Lorac Service Corp (USA-wide)
  17.7000    KM2XET     SRI International, experimental (USA-wide)
  17.9859    KYS583     Lorac Service Corp (USA-wide)
  17.9865    KYS583     Lorac Service Corp (USA-wide)
  20.1983    ?          h   US: NASA, "Seagreen 0/12" adjusting ckts, lsb,
    shuttle  mission
  21.4500    KM2XET     SRI International, experimental (USA-wide)
  21.7285    KM2XLF     Rockwell International, experimental (USA-wide)
  22.0000    KM2XRR     Navidyne Corp,   experimental (USA-wide)
  22.1254    KA2XTH     Harris  Corp, experimental (USA-wide)
         KPB540    Casamar Inc, maritime/coast (Barrigada
    He..., Gulf of Mex)
  22.1285    KA2XTH     Harris  Corp, experimental (USA-wide)
         KPB540    Casamar Inc, maritime/coast (Barrigada
    He..., Gulf of Mex)
         KYQ835    Brown & Root Inc (USA-wide)
         KYQ836    Brown & Root Inc (USA-wide)
         KYQ837    Brown & Root Inc (USA-wide)
  22.1316    KA2XTH     Harris  Corp, experimental (USA-wide)
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          KPB540    Casamar Inc, maritime/coast (Barrigada
     He..., Gulf of Mex)
          KXR992    Santa Fe International (USA-wide)
  22.1347    KA2XTH     Harris  Corp, experimental (USA-wide)
          KPB540    Casamar Inc, maritime/coast (Barrigada
     He..., Gulf of Mex)
  22.1378    KA2XTH     Harris  Corp, experimental (USA-wide)
          KPB540    Casamar Inc, maritime/coast (Barrigada
     He..., Gulf of Mex)
  24.1500    KA60648    Godwin  Chris (USA-wide)
          KA91095   SPS Enterprises (USA-wide)
  24.9285    KB2XXP     Federal Electric Corp, experimental (USA-wide)
  24.9300    KB2XXP     Federal Electric Corp, experimental (USA-wide)
  27.4900    KE5043     Gulfcoast Transmit C... (West Delta B,
     Gulf of  Mex)
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -2224562150404537095
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bc190cacdcb81ce5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-11 07:10:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin )
Newsgroups: net.ham-radio
Subject: Re: arrl bulletin nr 86 (space shuttle dope)
Message-ID: <5182@brl-tgr.ARPA>
Date: Thu, 11-Oct-84 10:10:00 EDT
Article-I.D.: brl-tgr.5182
Posted: Thu Oct 11 10:10:00 1984
Date-Received: Fri, 12-Oct-84 06:01:59 EDT
References: <12839@mgweed.UUCP>
Organization: Ballistics Research Lab
Lines: 16

The base posting of these different shuttle audio relay frequencies did not
arrive here until 10 or 11 October; I've been trying (and failing, of course!)
to hear the ham-radio-club-relayed shuttle
audio on the frequencies I had listed from the last several flights. As I
recall, these frequencies stayed the same over a number of flights; why were
they changed for this one? There didn't seem to be any more interference
than usual on the old frequencies, and, since it is one frequency per band
anyway, there can't be any propagational reasons for moving within
the band. Anybody have any information about this? Can we get the current
set of frequencies announced a week or so PRIOR to the scheduled lift-off?

Seeing them around the end of the mission isn't much use, after all...
```

Will Martin

seismo!brl-bmd!wmartin or wmartin@almsa-1.ARPA

From -7705896190520562745
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e78f766ce0184031,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-11 08:27:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!linus!decvax!tektronix!tekchips!teklabs!haldenf
From: haldenf@teklabs.UUCP (Halden Field)
Newsgroups: net.ham-radio
Subject: Need battery for Wilson Mark IV 2m transceiver
Message-ID: <2952@teklabs.UUCP>
Date: Thu, 11-Oct-84 11:27:25 EDT
Article-I.D.: teklabs.2952
Posted: Thu Oct 11 11:27:25 1984
Date-Received: Sat, 13-Oct-84 02:14:20 EDT
Organization: Tektronix, Beaverton OR
Lines: 17

Does anyone know where and how I can get a battery for my Wilson
Mark IV 2m HT? The model # is BP-4, 11 Volts, 500 maH.
I've tried Wilson Co in Las Vegas but they don't answer my
mail.
Thanks in advance.
     -Halden

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::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
:                        :                                                 :
: Why do we kill people :  UUCP:  {allegra, decvax, ihnp4, orstcs, ucbvax,  :
:    who kill people    :               zehntel, ogcvax, reed, uw-beaver,   :
:     to show people    :               hplabs}!tektronix!teklabs!haldenf   :
:  that killing people  :  CSnet: haldenf@tek                               :
:       is wrong?       :  ARPAnet: haldenf.tek@rand-relay                  :
:                        :                                                 :
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
```

From 5013613018861070823
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,df3afec641317bf3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-11 10:18:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!tektronix!uw-beaver!cornell!
vax135!houxm!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio

Subject: Re: Ham transceivers for SWL use
Message-ID: <115@sask.UUCP>
Date: Thu, 11-Oct-84 13:18:47 EDT
Article-I.D.: sask.115
Posted: Thu Oct 11 13:18:47 1984
Date-Received: Sat, 13-Oct-84 03:37:55 EDT
References: <5153@brl-tgr.ARPA>
Organization: U of Saskatchewan, Canada
Lines: 6

A major problem for an SWL who owns a ham transceiver, at least in Canada,
is that it is illegal to own an unlicensed transmitter, whether you ever
transmit with it or not is irrelevant. I assume this is also true in the U.S.
(This has never stopped CB'ers though).

Pete ve5bel

From 3662146629310382416
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c0e8e1cd25ba0e30,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-11 11:11:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabs.UUCP
Path: utzoo!linus!decvax!hplabs!paull
From: paull@hplabs.UUCP (Rob KA6SFV)
Newsgroups: net.ham-radio
Subject: Radio controlled models
Message-ID: <936@hplabs.UUCP>
Date: Thu, 11-Oct-84 14:11:12 EDT
Article-I.D.: hplabs.936
Posted: Thu Oct 11 14:11:12 1984
Date-Received: Sat, 13-Oct-84 03:16:37 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 12

   Hi, I was wondering if any of the hams on the net were into radio
control models? I recently built a r/c sailplane using one of the
no license channels ~72Mhz.
   I am curious if anyone uses the 6 meter (53.X Mhz) r/c frequencies
and if any interference problems were encountered?

   Also, does anyone have further info on the ARRL 6M band plan for
moving r/c freqs. from 53.X to 50.X Mhz?

                     TNX   73   Rob Paull   (KA6SFV)

From 141921114568560247
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 122486,b4d6730dd1653662,start

X-Google-Attributes: gid122486,public
X-Google-Thread: 151e61,b4d6730dd1653662,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12f221,b4d6730dd1653662,start
X-Google-Attributes: gid12f221,public
X-Google-Thread: 13375c,b4d6730dd1653662,start
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1984-10-11 12:42:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site opus.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!cires!nbires!opus!scott
From: scott@opus.UUCP (Scott Wiesner)
Newsgroups: net.news.group,net.aviation,net.ham-radio,net.misc
Subject: New newsgroup for Radio Controlled Planes?
Message-ID: <881@opus.UUCP>
Date: Thu, 11-Oct-84 15:42:54 EDT
Article-I.D.: opus.881
Posted: Thu Oct 11 15:42:54 1984
Date-Received: Sat, 13-Oct-84 02:21:35 EDT
Distribution: net
Organization: NBI,Inc, Boulder CO
Lines: 13

Does anyone have interest in either a new newsgroup, or possibly
just a mailing list (if there is little response) for the discussion
of radio controlled planes? (and boats, cars, etc) Kit reviews,
flying experiences, and club activities would be possible topics
of conversation.

I would never expect this to be as popular as net.micro or net.singles,
but if we have enough rc people on the net, it would be worth a try.
Sugggested name is: net.rec.rc
--

Scott Wiesner
{allegra, ucbvax, cornell}!nbires!scott

From -8115137411742370698
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3838a3b4fb472852,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-11 15:01:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabs.UUCP
Path: utzoo!linus!decvax!hplabs!spuhler
From: spuhler@hplabs.UUCP (Tom Spuhler)
Newsgroups: net.ham-radio
Subject: looking for ICOM R 70
Message-ID: <943@hplabs.UUCP>
Date: Thu, 11-Oct-84 18:01:19 EDT
Article-I.D.: hplabs.943
Posted: Thu Oct 11 18:01:19 1984

Date-Received: Sat, 13-Oct-84 03:16:52 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 21

Posted for Ian Walton:
From ucbvax!ucscc!igw@ucscd.ucscc.UUCP Sun Sep 23 03:15:21 1984

Could you please send out the following on Net.Ham-Radio

Help Wanted !!

I'm trying to locate a used ICOM R 70

Can any of you out there suggest a likely source. Or , even better,
do you have one that you'd like to sell. Contact me by mail, or
US Snail to Ian Walton, 430 Hampstead Way, Santa Cruz, CA 95062.

Thanks a lot !
                      ucbvax!ucscc!d:igw
--
                         Tom Spuhler
                         UUCP: hplabs!spuhler
                         CSNET: spuhler@hp-labs
                         HPMAIL: tom spuhler/hp1900/01

From 3433598535636516332
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb563263d696cf90,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-11 17:39:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: ICOM IC290H question
Message-ID: <116@sask.UUCP>
Date: Thu, 11-Oct-84 20:39:54 EDT
Article-I.D.: sask.116
Posted: Thu Oct 11 20:39:54 1984
Date-Received: Sat, 13-Oct-84 06:25:39 EDT
Organization: U of Saskatchewan, Canada
Lines: 6

Can someone please tell me if the IC290H multimode has the ability to
transmit and tune at the same time .. i.e. can it be used effectively
as the uplink for Mode A into the russian satellites?
Tnx + 73
Pete ve5bel
(Please mail replies to ihnp4!sask!hardie)

From 7098090473883002863
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,61613484ed537547,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-12 01:26:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 (MC830713); site ulcs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!vax135!ukc!edcaad!hwcs!ulcs!
csxmdw
From: csxmdw@ulcs.UUCP (M D Waller)
Newsgroups: net.ham-radio
Subject: Questions for the Ham
Message-ID: <144@ulcs.UUCP>
Date: Fri, 12-Oct-84 04:26:57 EDT
Article-I.D.: ulcs.144
Posted: Fri Oct 12 04:26:57 1984
Date-Received: Tue, 23-Oct-84 00:41:04 EDT
Organization: DCS, University of Leeds.
Lines: 65

CQ DX CQ DX CQ DX DE G6OKF G6OKF G6OKF

Does anyone know how to modify a Yeasu FT-290 (bought in the U.K.) so that it will cover the frequency range 144 - 148 MHz, instead of the normal 144 - 146 MHz.

Also, does anyone know the rules and regulations that cover Packet Radio, both in England and the United States because the English licence makes no reference to it.

73s from the Amateur at Leeds University

Martin D Waller
...!vax135!ukc!edcaad!hwcs!ulcs!csxmdw

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 ..../._/..._/.
 ._
 _./../_._./.
 _../._/_.__
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From -8100800894348334097
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4eddb67a08f26046,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-12 12:55:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn

From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin 96
Message-ID: <179@mouton.UUCP>
Date: Fri, 12-Oct-84 15:55:55 EDT
Article-I.D.: mouton.179
Posted: Fri Oct 12 15:55:55 1984
Date-Received: Sat, 13-Oct-84 07:43:25 EDT
Organization: Bell Communications Research, Inc
Lines: 153

**** UoSAT Bulletin-96   12th October 1984 ****
(Edited Version)

UoSAT Spacecraft Control Centre,   University of Surrey

** Improved UoSAT Answerphone Service **

At long last, we have an operational second telephone line and two answering machines that work - or at least are reputed to! The original telephone number (0483-61202) will carry UO-11 bulletins and data whilst the new number (0483-61707) will carry information on UO-9. Each bulletin will announce which spacecraft it is covering and give the number for the alternate line. We shall commence this expanded service on Monday Oct.15 - please bear with any teething troubles (we have come to expect them now!). We hope that the improved service will be able to provide a greater amount and more useful information than was previously possible with the limited tape time.

** GENERAL NEWS **

** Oscar-10 PSK Telemetry Decoder **

A new Oscar-10 PSK demodulator by G3RUH is featured in the October and November 1984 issues of the British electronics magazine 'Wireless World'. This design is the most robust to date, and has no tuned circuits. Data outputs are RS232 style serial and 8-bit parallel, pin compatible with the popular BBC microcomputer (Acorn). A printed circuit board has been produced and is available direct from G3RUH or via AMSAT-UK. Other support includes a full colour display program for the BBC (Acorn), alignment test tape, Oscar-10 handbook including telemetry definition and decoding equations. See 'Wireless World' to obtain full details. Non-UK residents unable to see this magazine can write, enclosing return postage (essential) to G3RUH (QTHR) or to: AMSAT-UK, LONDON, E12 5EQ, ENGLAND

** METEOROLOGICAL SPACECRAFT NEWS **

* A good publication for those with an interest in 'weather satellites' has become established over the last year - 'The Journal of the Environmental Satellite Amateur Users Group' published by R.J.Alvarez, WD4MRJ, details available from:

2512, Arch Street,
Tampa, Florida 33607, USA

The journal appears quarterly, last issue 22 pages and includes station construction details, WX satellite status reports, meteorological studies, data receiving tips, Soviet wx satellite report & UoSAT status reports.

* NOAA-9

The launch of NOAA-F (9) has been set for the 12th of November. The nominal orbit parameters will give it a northbound equator crossing time of 1430z with an 870 km orbit at an inclination of 98.86 degrees and period of 102.12 mins.

* NOAA-7

This spacecraft appears to have a serious power regulation problem caused by the loss of power supply shunt loads. All systems, however, appear to be operating normally with APT signals on 137.62 MHz and HRPT on 1707 MHz.

* GOES-EAST

The imaging capability of GOES-EAST(5) failed on 29 July 1984 attributed to the burning out of the redundant encoder lamp following the failure of the primary lamp only one week earlier.

* METEOR 2-11

A new Meteor 2 class spacecraft was launched from Plesetsk on 5 July 1984 into a 974 X 954 km, period of 104.1464505 min, inclination of 82.5 deg and is transmitting on 137.5, 137.85 and 137.3 MHz.

** UoSAT-Oscar-9 Schedule **

The 2.4 GHz Beacon will be in use this week.

** UoSAT-Oscar-11 Operations **

* The telemetry real-time frame clock has gained about 4 seconds since it was reset on 28 Sept, it is now running at gmt + 9 seconds.

* The spacecraft Z-spin rate continues to increase slowly of its own accord, due to cross-coupling of the libration energy into rotational energy, and de-spin manoeuvres have continued this week to keep the Z-spin rate slower than about 2 minutes per revolution. The occasional de-spin manoeuvres will continue, but repeated whole-orbit surveys indicate that the GG-lock remains very stable.

A daily account of UO-11 operations follows:

DAY	ORBIT	CHANNELS	RESET TIME
***	*****	********	**********
Saturday	3194	1,2,3,52	10:19:37
(OBC told to change d/link from ODATA to TLM after 19hrs)			
Sunday	Telemetry		
Monday	3223	Particle/Wave Experiment Test	
	3224	Particle/Wave Data dump (CCD format)	
	3229	1,2,3,52	19:30:05
	3230	1,2,3,52	21:07:30
(OBC told to change d/link from ODATA to TLM after 7.5hrs)			
Tuesday	3237	DSR data test	
	3238	DSR 9600 bps test on 435 MHz	
	3243	1,2,3,52	18:32:29
	3244	HP encoder test (ok!)	
		DCE rf test (VHF up/UHF down)	
	3245	double check HP encoder!	
(OBC told to change d/link from ODATA to TLM after 6hrs)			
Wednesday	3252	DSR 9600 bps data test on 435 MHz	
	3253	DSR 9600 bps data test on 435 MHz	
	3254	1,2,3,52	12:55:13
	3258	DSR 9600 + DCE rf test on 435 MHz	
	3259	despin to 2min 40 sec	
		1,2,3,52	20:53:47
(OBC told to change d/link from ODATA to TLM after 7.5hrs)			
Thursday	3272	1,2,3,52	18:16:17
(OBC told to change d/link from ODATA to TLM after 7.5hrs)			
Friday	3281	DSR data set-up test	
	3282	despin to 2m40s - weak field!	

** Thanks for Reports & Questionnaire Returns **

N6CSI, ZL1GGZ, ZL1PK, ZL1BHX, ZL1UJT, ZL1MO, JE3MXU, F6BVP, G6AAL, WB9ANQ, W7AVE, JA2WO

This week: G8VGQ, H.J.Meerza, GM4KZO (tnx for graphs), JE3MXU, DL7OU

From 914563491892491822
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d052aafd6b664d7c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-12 13:04:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Gateway V1 No5
Message-ID: <180@mouton.UUCP>
Date: Fri, 12-Oct-84 16:04:19 EDT
Article-I.D.: mouton.180
Posted: Fri Oct 12 16:04:19 1984
Date-Received: Sat, 13-Oct-84 07:44:33 EDT
Organization: Bell Communications Research, Inc
Lines: 423

Gateway: The ARRL Packet-Radio Newsletter
Volume 1, Number 5
Oct. 10, 1984
Electronic Edition

IOWA SECTION TECHNICAL SEMINAR

There was not enough room in Gateway #4 for a report on my trip to Iowa, September 21 and 22, for the Central Iowa Technical Society's Iowa Section Technical Seminar. The seminar covered many technical topics, but concentrated on packet radio.

Lyle Johnson, WA7GXD, president of Tucson Amateur Packet Radio (TAPR), gave a well-received presentation on packet-radio linking and the outcome of the ARRL Digital Committee meeting. One of Lyle's points bears repitition: We have begun to experience an unfortunate problem in packet radio. People who would otherwise be experimenting with protocols, or modems, or TNCs are not, because they have heard that "TAPR is going to do it." Lyle is worried that the success of the TAPR TNC project is keeping others from experimenting in packet radio. It must be stressed that packet radio needs experimentation. The question of what networking protocol is best for amateur packet radio is not going to be answered by the Digital Committee, TAPR or any other single organization. The question is going to be answered by experimentation. If you want to experiment, do it. Who knows? It might be your software or hardware that answers a critical packet-networking question.

While I was in Iowa, I got to look at the CITS club station that

is taking part in packet meteor-scatter experiments. It is interesting to note that there was no expensive equipment used in the station. A crew from CITS salvaged an old, surplus Motorola VHF rig, built and erected a six-meter beam, and interfaced it all to a TAPR TNC. The only parts that had to be purchased for the project were six-meter crystals. That is ham radio.

VHF AND UHF EXPERIMENTATION

Giving a talk at the Mid-Atlantic States VHF Conference, I was reminded that packet radio, while it makes heavy use of digital technology, has a lot to offer amateurs who are not interested in computers. If you are a VHF or UHF experimenter, you will find that packet radio is fertile ground for VHF and UHF applications. In many parts of the country, the two-meter band is full, and the 220-MHz band is not far behind. This crowding, and transmission speed restrictions on the lower VHF bands, will force packet radio into the UHF and microwave spectrum. So, if you are interested in VHF and UHF design, maybe your local packet group can give you some project ideas.

EASTNET KEEPS GROWING

The east-coast packet radio link has taken one more step toward reality. The MD/DC/VA to Philadelphia link is improving by the day. Joe Fisher, KC2TN, should get a new antenna up this weekend which will make the path as solid as a rock. We have been linking the packet bulletin board systems (PBBSs) at W3IWI and WB2MNF almost nightly. Until we get Level 3 protocols up and running, it looks like linked PBBSs will provide a store-and-forward capability not unlike what we will have with PACSAT. Both Tom Clark, W3IWI and Jon Pearce, WB2MNF, are running PBBSs with Xerox 820 computers and W0RLI PBBS software. From W3IWI

NETWORKING IN THE MIDWEST

In late September, Chicago, IL, and St. Louis, MO were connected by VHF packet radio. The path is in excess of 300 miles, and there are no mountain tops to take advantage of. Congratulations to the more than half-dozen stations involved in the digipeating. Via WB9FLW

UO-11 DATA COMMUNICATIONS EXPERIMENT

During the week of October 1, the UoSat command station in Surrey, England conducted tests and experiments on the data communications experiment (DCE) aboard UO-11. Tests of the VHF uplink and UHF downlink for the DCE culminated with successfull reception of 9600-bit/s data on Friday, October 5. Congratulations to the team at Surrey and the rest of the crew

responsible for the DCE! We also would like to wish UoSat-OSCAR 9 a happy third birthday. UO-9 was launched on October 6, 1981, and is still in service.

PACKET RADIO FOR EMERGENCY COORDINATORS

The new ARRL Emergency Coordinator's Handbook, with a 20-page chapter on packet radio, is available for $5.00 from the ARRL. This book is "intended to help you acquire, develop and refine the skills which you need to function effectively in serving the public through Amateur Radio communications." The chapter on packet radio should make those in the Amateur Radio Emergency Service (ARES) aware of the traffic handling and organizing capability of packet radio. If your packet club is looking for somewhere to put on a demonstration, try an ARES meeting. If you are an ARES organization looking for an interesting meeting program, contact a nearby packet club.

MORE ON A POSSIBLE PACKET WEATHER NET

Fred W. Decker, W7ANX, U.S. Deputy Assistant Secretary for Education, has said previously that he believes packet radio and amateur meteorology can be united to form a packet-radio weather network [See Gateway #3.]. Such a network would provide some users for the growing amateur packet network, and perhaps generate some interest in amateur radio among amateur meteorologists. In a paper delivered at the First International Conference on School and Popular Meterological Education, Dr. Decker goes on to say:

"(1) Packet radio communication has emerged for amateur use as new manufacturers offer equipment enabling amateurs to communicate using their computers and [VHF radio equipment]. (2) Repeaters have recently carried packet signals 400 miles in 5 repeater jumps. This opens the possibility of local networks exchanging data at substantial distances. (3) Weather sensors feeding computers and thereby archiving data for interrogation by packet radio have come on the market from at least two firms seeing the potential in computerized popular meteorology (Heath Co. and Vaisala). (4) The drive to "Save 220" among radio amateurs seeks to populate the allocated 220-MHz amateur radio band and thereby fend off commercial intrusion, and the belief grows that weather amateurs and schools can help this cause by adopting this band (1 1/4 meters) for packet radio exchange of computerized school and amateur weather station data. With basic technical innovation completed, it remains necessary only to adopt conventions...to maximize the ease of data intergchange..."

This is an interesting project, and the fact that Dr. Decker has been discussing it with his colleagues has undoubtedly brought packet radio to the attention of many people in academia. Dr.

Noel Petit, WB0VGI, of Augsburg College, has proposed to build a computerized weather network that would communicate via telephone. The cost of his weather stations, including computer, sensors and modem, is about $300. Perhaps, with the help of some packet-radio enthusiasts, Dr. Petit's weather network can use packet radio.

If you are interested in this project, or in giving an educational demonstration of packet radio, contact:

Dr. Noel Petit
Suite 220-B
511 11th Ave. S.
Minneapolis, MN 55415,

or

Dr. Fred W. Decker
Deputy Assistand Secretary for Education
Suite 722, Brown Bldg.
1200 19th Streed, NW
Washington, DC, 20208.

SOFTNET NEWS

We recently received an issue of Softnet News, the newsletter of the Softnet Users Group (S.U.G.). S.U.G. is a group experimenting with packet radio in Linkoping, Sweden. "The main concept behind SOFTNET is that all packets are considered to be programs in a network language. These programs are interpreted in the nodes as soon as they arrive... This approach makes it possible for a user to define his own high level services like datagrams, virtual calls, file transfers and mailboxes." [From "SOFTNET - An Approach to High Level Packet Communication", Second ARRL Computer Networking Conference.]

The SOFTNET approach could be used, with the AX.25 link protocol, to provide network services in the growing North American packet network.

SOFTNET nodes are currently implemented on four PC boards, a SOFTNODE computer board, a SOFTMEM memory board, a SOFTLINK link and modem board, and a radio board. S.U.G. is now selling PC boards, PROMS, and software for SOFTNET nodes. The builder must supply the other components needed to populate the boards. Total cost is about $600 per node. Of particular interest to those of us who operate on 1200 bit/s local networks is the fact that SOFTLINK radios/modems run at 100 Kbit/s.

The SOFTNET concept is primarily concerned with network and internetwork functions. The SOFTNET News contains two articles on network routing, searching and addressing. S.U.G. is a

growing group, moving forward quickly with packet-radio network experimentation. Their progress is sure to help packet experimenters worldwide.

For information, contact: SOFTNET Users Group
Dept. of E.E.
Linkoping University,
S-581 83 Linkoping
SWEDEN

Via SOFTNET News

TELEPORT STA INFORMATION

The waiver for automatic teleport operation requested jointly by the ARRL and AMSAT should be issued about October 17. This special temporary authority (STA) allows the operation of unattended digital gateway stations for store-and-forward or real-time satellite links. For a complete description of the STA, see Gateway issue 2. Two more stations, N2EKH and Theodore Harris, N6IIU, have been added to the list of participants, bringing the total number of authorized stations to 21. From W1UED

TECHNICAL COORDINATORS AND PACKET

The ARRL Technical Coordinators (TCs) answer technical questions, put on technical talks, and perform many technical functions within their ARRL section. Several notes in the fall issue of the Technical Coordinator newsletter indicate that many TCs are interested in packet radio. Richard Regent, K9GDF, editor of the newsletter, has received the following comments from other TCs: "[Our] greatest successful TC program is talking about data communications," and "[we have been] getting packet radio started by helping hams assemble and operate kits, and holding 2-meter packet nets."

If you are interested in finding out more about packet radio, contact the ARRL to get the name of your section's TC. Via Technical Coordinator.

NEBRASKA PACKET GROUP?

Lyman Nelson, WB0IEN, is interested in forming a state-wide packet radio group in Nebraska. Contact:

Lyman Nelson, WB0IEN
Rt. 2
Hooper, NE, 68031.

Via Technical Coordinator.

MODEM FILTER FROM EXAR

"Preliminary" data from the EXAR IC company about the XR-2103 FSK modem filter has just arrived at the ARRL. The device is designed to "perform the complete filtering function necessary for a Bell 103 compatible modem." The chip uses switched-capacitor technology to implement two 6-pole band-pass filters. One of the filters is centered at 1170 Hz, and one centered at 2125 Hz. This chip might prove useful to those using the Bell 103 protocol for packet radio on HF. Perhaps, by changing the time-base crystal, the passbands could be moved to other frequencies. If you experiment with this chip, send us a letter describing your results. Via W4RI.

PACKET FREQUENCY COORDINATION

We have received word from AMRAD president, Terry Fox, WB4JFI, that The Middle Atlantic Amateur FM and Repeater Council (TMARC), on September 24, designated the frequencies 145.01, 145.03 and 145.05 MHz for primary coordination as packet-radio channels in their jurisdiction. TMARC covers Maryland, Delaware and Northern Virginia.
Via W4RI

PACKET DISCUSSION AT THE TROPICAL HAMBOREE

If you are going to be in Florida this spring (planning ahead?), be sure to attend the 1985 Southeastern Division Convention/25th Annual Tropical Hamboree in Miami, Florida on February 2 and 3. An all-day Packet Radio Seminar is tentatively planned for Sunday, the 3rd. Paul Rinaldo, W4RI, Manager of the ARRL Technical Department, and Lyle Johnson, WA7GXD, president of Tucson Amateur Packet Radio, are scheduled to attend the seminar. More information, and a firm schedule for the seminar will be available in December. Via Dade Radio Club, Inc.

DATA BASE OF PACKET USERS

Dear Packet Radio Enthusiasts;

Several local Amateurs and I, representing Central Illinois Packet Radio User Society (CIPRUS) have started a to compile a directory of all stations who are also active on this fantastic new mode. After great acceptance and encouragement from the midwest as well as other areas, what initially was to be only a regional effort has been expanded to include the entire country.

After giving a great deal of thought as to what the best method would be to compile such a data base, we decided to contact you, the packet radio clubs and other leaders in the area of packet radio. Most of what we have compiled to date has come through direct contact with individual stations. We learned that this method involved a lot of unnecessary paper work and correspondence that could be eliminated by contacting large organizations and groups.

In order to contact as many stations as possible and to keep the costs down as much as practical we would like to propose the following: If you would send us a listing with all of the required information concerning your member stations along with a large manila s.a.s.e (several stamps please), we will, in turn, send out a compiled listing of active packet stations that you can photocopy and distribute to your membership. If you have your membership list in an IBM PC or compatible data base you can submit a diskette with the required information and have the compiled list returned on diskette. The data base is being maintained on an IBM XT in a dBase II file that can use data from nearly any standard ASCII or WordStar text file (comma delimited prefered).

Since many of us are not able to offer our services to the technical aspect of packet development, we view this project as one that will allow us to make a small contribution to the field of packet radio. We do not wish to become involved in the publishing business but rather to act only as a central point to compile and distribute data from you. We have been in contact with TAPR and have discussed the possiblity of enclosing a preprinted post card with every TAPR TNC shipped. This would allow the individual station to merely fill out the necessary blanks and return the card to us for inclusion in the directory. If you are aware of any other manufacturer of who would like to help this project, please have them contact us.

In closing I would like to present the following points for your consideration and comment:

1. This project is still in its infancy, with only about 250 stations listed to date; therefore we are open to suggestions as to what you feel should be included in such a directory. Speak up now while it is still relatively easy to modify the data base!

2. We are not aware of any other group or individual who has decided to attempt a similar venture. If you know of such a group, please put them in contact with us so that we do not duplicate efforts. We don't care who does it, just so long as it gets done by someone!

3. The directory is currently being printed on a letter quality printer and duplicated on a photocopier. As the directory

continues to grow so do the costs involved -- we are already making over 50 copies per month, with over 20 pages each. Professional printing is just around the corner. Therefore, since we are a nonprofit amateur radio club, we will not turn down any donations that you would like to make toward paper costs.

4. The format that we are using is flexible but is being currently printed as follows:

   Listing #1 -- Alphabetic, by callsign:

   Callsign; Name; Address; Misc. Info(1)
   City, State, Zip; Misc. Info(2).

   Listing #2 -- Numeric, by zip code:

   Callsign; Name; City; State; Zip Code

   The "Misc. Info" columns may contain any items (approx. 15 characters) of special information that you may wish to include. Some ideas that have been used: frequency, OSCAR, mailbox, digipeater, 24-hour operation, grid square, and gateway operation.

Thank You

Gregory L. Smith - N9AGC
c/o CIPRUS
P.O. Box 4143
Peoria, Illinois 61607

[The above letter has been reproduced in full. Send any comments to Mr. Smith, and Gateway.]

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From -116221294760007841
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4b53aa6ba8554928
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-13 13:54:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 8/7/84; site ucbvax.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!medin
From: medin@ucbvax.ARPA (Milo Medin)
Newsgroups: net.ham-radio
Subject: Re: ISI Amateur Radio Group / Packet Radio
Message-ID: <2516@ucbvax.ARPA>
Date: Sat, 13-Oct-84 16:54:33 EDT
Article-I.D.: ucbvax.2516
Posted: Sat Oct 13 16:54:33 1984
Date-Received: Sun, 14-Oct-84 08:34:58 EDT
References: <165@umd5.UUCP>
Distribution: net
Organization: University of California at Berkeley
Lines: 7

Right, is there an electronic mail address for anyone at isi who is involved with this? I have a project in mind that this would be very useful with...

Milo

From 10279930120809357 45

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cc17de26ad32bcee,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-13 13:57:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 8/7/84; site ucbvax.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!ucbvax!medin
From: medin@ucbvax.ARPA (Milo Medin)
Newsgroups: net.ham-radio
Subject: Re: RTTY and morse decoder wanted
Message-ID: <2517@ucbvax.ARPA>
Date: Sat, 13-Oct-84 16:57:57 EDT
Article-I.D.: ucbvax.2517
Posted: Sat Oct 13 16:57:57 1984
Date-Received: Sun, 14-Oct-84 08:35:14 EDT
References: <12912@sri-arpa.UUCP>
Organization: University of California at Berkeley
Lines: 7

This brings up an old interest of mine. Does anyone here know
the frequencies and recieving parameters of UPI and AP and other
news services? I'd like to be able to have my computer read them
in and scan them for stories of interest....

Milo

From 1213686586774775655
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bebcc15787bc68dd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-14 20:49:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some SWL rtty press freqs
Message-ID: <372@ihu1h.UUCP>
Date: Sun, 14-Oct-84 23:49:05 EDT
Article-I.D.: ihu1h.372
Posted: Sun Oct 14 23:49:05 1984
Date-Received: Tue, 16-Oct-84 04:56:01 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 32

          -- Assorted RTTY Press Freqs --

sources: f - FCC records (Feb 1984)
         p - Grove's "Shortwave Directory" - 2nd edition
==
p   14.9740 GBW34B   AP, rtty 50 bd 425Hz rev (London) 0030-2142Z

```
p    10.6490 GIC30B   AP, rtty 50 bd 425Hz rev (London) 1509-0732Z
p     6.9840 GIC26B   AP, rtty 50 bd 425Hz rev (London) 1758-0605Z
p     6.9930 CVK69    AP, rtty 50 bd rev (Montevideo, Uruguay) 2307-0028Z
f    15.9080 WEY35    ITT World Comm, press, rtty 50 bd 425Hz norm (New York)
1000-1300, 1315-2300, 2310-0100Z
f    15.9080 WEY35    ITT World Comm, press, rtty 50 bd 425Hz norm (New York)
1000-1300, 1315-2300, 2310-0100Z
f    23.7166 WFG83    ITT World Comm, press, rtty 50 bd 425Hz norm (New York)
1315-2300Z
f    23.7700 WFG93    ITT World Comm, press, rtty 50 bd 425Hz norm (New York)
1630-2052Z
f    18.5425 WFK48    ITT World Comm, USIA press, rtty 75 bd 425Hz norm (New York)
1517-2213Z
p    18.6750 ISX87    Press, rtty 50 bd 425Hz (Rome) 1100-1400Z
p    18.1930 CLN603   Press, rtty 50 bd 425Hz norm (Havana) 2140-0040Z
p    18.6707 FTS67H3  Press, rtty 50 bd 425Hz norm (Paris) 0700-1700Z
p    14.7957 FT079AH1 Press, rtty 50 bd 425Hz norm (Paris) 1515-1930Z
p    20.1400 CNM91    Press, rtty 50 bd 425Hz rev (Rabat, Morocco)
p    20.3118 FTU31BH1 Press, rtty 50 bd ?Hz norm (Paris)  0700-1700Z
p    20.5600 ?        Press, rtty 50bd 425Hz rev (Tripoli, Libya) 1629-1840Z
p    18.3340 GPE38B   Reuters, rtty 50 bd 425Hz rev (London) 0708-1813Z
p    16.1896 RGW26    Tass, rtty 50 bd 425Hz norm (Moscow) 0552-1820Z
p    18.4050 RCT57    Tass, rtty 50 bd 425Hz norm (Moscow) 0554-1743Z
p    20.6147 RCC75    Tass, rtty 50 bd 425Hz rev (Moscow) 0510-1447, 1715Z
p    22.7820 RDD73    Tass, rtty 75 bd 425Hz norm (Moscow)
p    20.6223 RCC75    Tass, rtty 75 bd 425Hz rev (Moscow)
p    19.5200 ZEO94    UPI, rtty 50 bd 425Hz rev (Victoria Is, Hong Kong) 0745,
0933, 1031, 1726Z
--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From 4377690148234453663
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,22689fcc04da415c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-15 01:19:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbneb.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!cbosgd!cbsck!cbscc!cbneb!adm
From: adm@cbneb.UUCP
Newsgroups: net.ham-radio
Subject: Re: Need battery for Wilson Mark IV 2m t
Message-ID: <1495@cbneb.UUCP>
Date: Mon, 15-Oct-84 04:19:13 EDT
Article-I.D.: cbneb.1495
Posted: Mon Oct 15 04:19:13 1984
Date-Received: Tue, 16-Oct-84 06:33:45 EDT
Sender: adm@cbneb.UUCP
Organization: AT&T Bell Laboratories, Columbus, OHIO
Lines: 13
Nf-ID: #R:teklabs:-295200:cbnap:14800008:000:279
```

Nf-From: cbnap!gws   Oct 13 12:56:00 1984

Halden;

     Several of the Wilson HT use the same battery backs as
     the YEASU ft204/207/208/708's do. The Yeasu batterys are
     10.8 volts at 500 maH. The number is FNB-2. hope that
     can help you out.....

                    73
                    Gary W. Sanders N8EMR
                    ihnp4!cbnap!gws
                    Bell Labs Columbus

From -5456118058870076251
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e78f766ce0184031
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-15 06:30:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site infoswx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!infoswx!
jim
From: jim@infoswx.UUCP
Newsgroups: net.ham-radio
Subject: Re: Need battery for Wilson Mark IV 2m t
Message-ID: <3200023@infoswx.UUCP>
Date: Mon, 15-Oct-84 09:30:00 EDT
Article-I.D.: infoswx.3200023
Posted: Mon Oct 15 09:30:00 1984
Date-Received: Wed, 17-Oct-84 05:41:01 EDT
References: <2952@teklabs.UUCP>
Lines: 10
Nf-ID: #R:teklabs:-295200:infoswx:3200023:000:244
Nf-From: infoswx!jim   Oct 15 08:30:00 1984

Some of the Wilson HT's used the same battery pack as the
Yaesu FT-207/208/708 series radios. Don't know if this applies
to yours but it might be worth a try.

73's,
Jim Gerke, KC5OA
Infoswitch Corp.
Richardson, TX
allegra!convex!infoswx!jim

From -9128831835634440298
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aa6b4c51f95c6da0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-15 10:51:33 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site x.UUCP
Path: utzoo!linus!decvax!genrad!mit-eddie!cybvax0!frog!x!die
From: die@x.UUCP (Dave Emery)
Newsgroups: net.ham-radio
Subject: Do Navy UHF satcom broadcasts carry AP, UPI or Weather ?
Message-ID: <213@x.UUCP>
Date: Mon, 15-Oct-84 13:51:33 EDT
Article-I.D.: x.213
Posted: Mon Oct 15 13:51:33 1984
Date-Received: Wed, 17-Oct-84 19:25:35 EDT
Reply-To: ...!decvax!frog!die
Organization: Charles River Data Systems, Framingham MA
Lines: 90

Does anybody know if any of the 1200 baud diphase psk Navy fleet broadcasts from the geosynchronous UHF fltsatcom spacecraft carry UPI, AP or weather channels in some format that an ordinary mortal (very far from NSA level as a cryptanalyst) can recover with a suitable computer program ?

In the old days (late 60's to mid 70's) the Navy fleet broadcasts on hf (and lf) 85 hz shift 16 channel fsk fdm ssb used to carry 100 wpm weather circuits; sometimes special fdm transmissions to particular fleet units could be found with AP or UPI broadcast wires (from either Baltimore Md. or Norfolk Va.) on at least one tone. From time to time the UPI low speed A newspaper wire would be included also. In all cases these channels would be 7.42 (or 7.50 for AP) unit baudot code start stop at the same baud rate as they are on the wire services themselves. More recently it has been reported that certain hf fdm mux tty transmissions carry a 100 wpm AFRTS circuit which retransmits national news from both the AP and UPI radio wires slightly delayed.

It is presumably true that the signals were transmitted on hf just as they came off the wire so as not to compromise crypto security by broadcasting an encipherment of a known text. Perhaps if the Navy supplies the same stuff to it's (larger) fleet of ships these days it also sends it in the clear on the fleetsatcom psk broadcasts that are now the primary method of transmitting to ships at sea ?

I've always assumed that nothing else on the Navy fleet transmissions including the most routine UNCLAS stuff was breakable by an amateur (or even most governments), as I suppose it is enciphered by more or less the same crypto as used for high security stuff but set up from another key list. It is true, however that US low speed tty crypto systems use a start-stop to synchronous transceiver (more properly isochronous as no separate clock is transmitted) and it is at least remotely possible that certain very routine unclassified traffic is transmitted in synchronous format without benefit of a real key from the key generator (perhaps some simple sequence is used simply to keep transition density high for the clock pll). (If anyone knows, and can say anything about low security modes for unclassified traffic I would appreciate hearing from them.)

The uhf satellite transmissions are relatively high power (nearly whole transponder) signals on various frequencies between 249 and 261 mhz, they carry a 24 hour a day 15 channel time division multiplexed stream of mostly crypto circuits. The multiplexing is straight tdm with a 16 bit wide frame, each frame consists of a framing bit and one sample (bit) of each channel sent sequentially starting with channel 1. Frame sync is obtained by detecting and locking onto a continuously repeating pattern in the 16th bit position of each frame. 1200 baud divided by 16 yeilds a channel bit rate of 75.0 baud which is the standard rate for 100 wpm enciphered baudot tty traffic. It appears that the 1200 baud rate is exactly that (out to several places) so no bit stuffing is being done (understandably enough).

The modulation is differential diphase mark (phase shift of 180 degrees for every mark (one bit) and 0 degrees (no shift) for every space (zero bit)). Recovery of the data requires little more than a simple Costas loop to recover the bit stream, and a bit clock recovery circuit to regenerate the 1200 baud clock. TDM frame and bit clock recovery could be easily implemented using a Zilog 8530 SCC chip which incorperates a transition tracking digital phase lock loop. The 8530 SCC chip could be fed data directly from the phase detector on the Costas loop, as it has a NRZI mode which will allow it to recover data as it would appear at that point. Obviously the 8 bit data coming out of the SCC would represent alternate halves of the 16 bit frame, and would not necessarily be in frame sync.

The signals are powerful enough so a modified scanner (or one of the new scanners which cover the military uhf band) ought to suffice as a receiver, although the best reception might be had with a down converter and a hf receiver with medium (say 4 or 8 khz) if bandwidth. The Costas loop would connect to the receiver at it's low IF (455 khz for most receivers and scanners) after the selectivity to reduce the noise bandwidth. Antenna requirements are pretty minimal, but a small crossed yagi or helix aimed at the right point in the sky for the particular satellite of interest would be ideal.

Has anyone explored these signals ? Are there any other military satcoms (say the X-band DSCS spacecraft) which carry readable traffic ? Please reply by either US mail or posting to the net (net.ham-radio on usenet for those who may see this via gateways to other nets), as I have had no luck whatsoever in receiving email.

--

David I. Emery
Charles River Data Systems
983 Concord St.
Framingham, MA 01701
Tel: (617) 626-1102
uucp: ...!decvax!frog!die

From 8404954781646888314
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc1c09dc6bc665,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-15 11:10:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: CTCSS, DTMF, and PL tones??
Message-ID: <122@sask.UUCP>
Date: Mon, 15-Oct-84 14:10:57 EDT
Article-I.D.: sask.122
Posted: Mon Oct 15 14:10:57 1984
Date-Received: Tue, 16-Oct-84 06:27:53 EDT
Organization: U of Saskatchewan, Canada
Lines: 9

Can someone please enlighten me as to what the three abbreviations stand for.
And what is the difference in function between the three. One (DTMF) is the
touchtone frequencies, but I am not sure of the other two.

MAIL replies to me at IHNP4!SASK!HARDIE and I'll summarize if I am not the
only ham who doesn't know!

Tnx + 73
Pete ve5bel

From -3238655226741253700
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6f353260b88a279d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-15 12:39:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: reposting: English lang. RTTY press stations (long)
Message-ID: <12859@mgweed.UUCP>
Date: Mon, 15-Oct-84 15:39:55 EDT
Article-I.D.: mgweed.12859
Posted: Mon Oct 15 15:39:55 1984
Date-Received: Tue, 16-Oct-84 06:32:04 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 373

The following is a list of frequencies where English language press
stations can be found on HF. This list is from personal monitoring

over the last 10 years and is not copied from any other lists.

These press stations all transmit in English, some all the time, others just occasionally.

The "SB" column indicates USB or LSB to be selected for normal copy. The apostrophe next to the L or U indicates that the station is still on the air as of the last 12 months. (I don't drop any from the list unless I am sure they are no longer on).

The "SH" column indicates the shift (Mark to Space frequency difference) used. Note that most use 425Hz shift.

The "BD" column indicates the baud rate, not words per minute. This is standard Baudot rtty code. Most foreign stations use "FIGS J" as the bell and "FIGS S" as apostrophe, which is the reverse of American machines.

The "M" in the "BD" column indicates that the station is a frequency division multiplex transmission, usually with 16 subcarriers. The shift is usually 85 Hz and many terminal units will not copy this. Receiving these fdm stations with the bfo off sounds like a buzz-saw. These stations are the best source of AP/UPI news, quite similar in format to the wire line press service sent to radio stations. The best way to tune these in is to select USB, tune onto the station from the high frequency side to the upper-most subcarrier. This subcarrier is usually the one carrying the news.

The "SVC" column shows the abbreviation of the news service.

The "CALL" column is obvious. Not all stations give identify with a call sign. Some use the same call sign on all frequencies at once, and some have calls for each frequency in use, but do not indicate which call is for which transmitter.

Not all stations of a particular service carry the same text. The VOA, for example carries as many as 4 different "programs" at the same time. the ARF, however, has the same text on all 4 frequencies at once.

I have not given times of transmissions. That is too difficult to pin down accurately. Many stations are on continuously.

The frequencies given are within 2 kHz. Some stations do slide up or down a little, reverse their mark and space frequencies on occasion, and my receiver readout does not include the amount of bfo offset (about 1.5 kHz).

Later this year, when the list is updated, I will send the complete HF rtty list, including utility stations (weather, military, embassy, etc).

Happy tuning de K9EUI

FREQ	SB	SH	BD	SVC	CALL
2024	U	85	50M	AP/UPI	AFRTS
4045	U'	85	50M	AP/UPI	AFRTS
4515	U'	85	50M	AP/UPI	AFRTS
4620	U'	85	50M	AP/UPI	AFRTS
5435	L'	425	74	VOA	VOA
5460	L'	425	74	VOA	VOA
6834	U'	85	50M	AP/UPI	AFRTS
6853	U	425	50	REUTER	GPE26
6941	U'	170	74	VOA	VOA
6983	U'	425	50	AP	GIC26B
6992	U'	85	50M	AP/UPI	AFRTS
7442	U'	425	74	VOA	VOA
7478	U'	425	74	VOA	VOA
7534	U'	85	50M	AP/UPI	AFRTS
7784	U'	85	50M	AP/UPI	AFRTS
7970	L	425	50	PL	
8000	U'	85	50M	AP/UPI	AFRTS
8022	L'	425	50	AFP	
8029	U'	85	50M	AP/UPI	AFRTS
8148	U	85	50M	AP/UPI	AFRTS
8182	L	425	50	UPI	PDK68
8192	L'	425	50	PAP	SOI31
8506	U'	85	50M	AP/UPI	AFRTS
9050	U'	85	50M	AP/UPI	AFRTS
9053	L'	425	50	ANSA	ISX90
9070	U	425	50	REUTER	
9080	U	425	50	REUTER	
9102	U	425	50	REUTER	
9120	U'	425	50	REUTER	GPN29
9214	U'	85	50M	AP/UPI	AFRTS
9259	U'	85	50M	AP/UPI	AFRTS
9285	U'	85	50M	AP/UPI	AFRTS
9349	U'	425	50	AP	GIC29B
9381	U'	85	50M	AP/UPI	AFRTS
9397	L'	425	50	AFP	FTJ39A
9405	U'	85	50M	AP/UPI	AFRTS
9855	L'	425	74	VOA	VOA
10134	U'	85	50M	AP/UPI	AFRTS
10185	L	425	50	AFP	FPK8
10410	L'	425	74	VOA	VOA

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10413 U'  85 50M AP/UPI  AFRTS
10460 U' 425 74  U.N.    4UZ
10543 L' 425 50  ADN
10598 U' 425 50  VNA     VNA25
10616 L' 425 50  AFP     FTK61
10648 U' 425 50  AP      GIC30B
10785 L' 425 50  ADN     Y2V43B
10879 U' 425 50  TASS
10880 U' 425 74  VOA     VOA
10882 L' 425 50  REUTER
10905 U'  85 50M AP/UPI  AFRTS
10958 U' 425 50  REUTER  GPE30B
10960 U' 425 50  REUTER  GPE30
10972 L' 425 74  VOA     VOA
10985 U  425 50  BAK     RCB53
11004 U'  85 50M AP/UPI  AFRTS
11048 U'  85 50M AP/UPI  AFRTS
11170 L' 425 50  KCNA
11539 U'  85 50M AP/UPI  AFRTS
11540 L  425 50  REUTER  GPE30B
11599 U'  85 50M AP/UPI  AFRTS
11622 U' 425 50  PAP     SOL36
12085 U  425 50  BAK     RCB55
12128 L' 425 50  ANSA    IRJ31
12185 U' 425 50  JANA
12224 L' 425 74  VOA     VOA
12280 U  425 50  AP      GBU32
13238 U   85 50M AP/UPI  AFRTS
13410 L  425 50  VNA     VNA16
13438 L' 425 50  DPA
13460 U' 425 50  VNA     VNA16
13487 L' 425 50  ANSA    ISX35
13490 U  425 50  BAK     RCG77
13493 U  425 50  TASS    RCG77
13504 L  425 50  KCNA    MVS19
13563 U' 850 50  CNA     3MA22
13580 L' 425 50  KCNA    MVS19
13598 L  425 50  CETEKA
13612 U  425 50  REUTER
13623 U' 425 50  REUTER
13625 U' 425 50  REUTER
13626 U' 425 50  REUTER
13628 U  425 50  REUTER
13648 L' 425 50  CETEKA
13652 U' 425 50  MENA    SUA50
13676 U'  85 50M AP/UPI  AFRTS
13730 L' 425 50  AFP
13770 L' 425 74  VOA     VOA
13895 L' 425 50  ADN     Y2V47
13898 L  425 50  ANSA
13975 L' 425 50  ANSA    ISX19
13995 L' 425 74  VOA     VOA
14360 U  425 50  PAP
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14366 U' 425 50  XINHUA
14387 U'  85 50M AP/UPI  AFRTS
14420 U'  85 50M AERO    AFRTS
14420 U'  85 50M AP/UPI  AFRTS
14469 U' 425 50  TASS
14490 U  425 50  TASS    RNK36
14513 U  425 50  REUTER  GPN34
14523 U  425 50  REUTER  GPN34
14525 L' 425 74  VOA     PRS
14547 L  425 50  KYODO   JAL44
14562 U'  85 50M AP/UPI  AFRTS
14565 U' 425 50  PL
14568 L  425 50  KCNA    HML61
14572 U' 425 50  JANA
14631 L' 425 50  ANSA
14638 L' 425 74  ARF     WFK54
14698 U' 425 50  TASS    REB24
14718 U' 425 50  KYODO
14720 U  425 50  BAK     RKB58
14762 U  425 50  GNA
14796 L' 425 50  AFP
14800 L  425 50  ADN     DMV24
14825 L' 425 50  ADN     Y2V25
14832 U  425 50  KUNA
14901 L' 425 50  PL      CLN450
14901 L' 425 50  TASS
14928 L' 425 50  PL      CLN452
14974 U' 425 50  AP      GBW34B
15462 L' 425 50  JANA
15480 L' 425 50  KCNA
15482 L' 425 50  APS
15506 L' 425 50  CETEKA
15693 L' 425 50  ANSA    ISX56
15694 L' 425 50  ANSA    ISX56
15743 L' 425 50  VNA     VNA5
15749 U'  85 74  VOA     VOA
15750 U'  85 74  VOA     VOA
15865 U  425 50  BAK     RBK79
15865 U' 425 50  TASS    RRG26
15875 L' 425 74  VOA     VOA
15896 U'  85 50M AP/UPI  AFRTS
15898 L' 425 50  CETEKA
15930 U  425 50  BAK     RBI78
15977 L' 425 50  AFP
15980 L' 425 50  AFP
15992 U' 425 50  INDFO   WER26
15996 L' 425 50  DPA
16055 U  425 50  INDFO   WER45
16092 U'  85 50M AP/UPI  AFRTS
16108 L' 425 50  AFP
16133 U'  85 50M AP/UPI  AFRTS
16135 U' 425 50  XINHUA  BZP54
16149 U  425 50  NEWS
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16223 U  850 50  CNA     3MA35
16247 U' 425 50  PL
16336 U' 425 50  PL
16342 U' 425 50  TANJUG  YZJ4
16347 U' 425 50  TASS
16348 U' 425 50  PL
16348 U' 425 50  TASS
16380 U' 425 50  PL
16384 U  425 50  VNA     VNA30
16403 L' 425 50  ADN     Y2V57
16415 L  425 50  ADN
17210 L  170 74  AFRTS
17210 U  425 50  XINHUA
17370 U  425 50  BAK     RBI73
17390 U  425 50  PL
17393 L' 425 50  PL      CLN565
17415 L  425 50  PL
17475 L  425 50  PL
17509 U  425 50  TASS    RFD53
17519 U  425 50  TASS
17525 L  425 50  CETEKA  OLV3
17545 L' 425 50  AFP
17552 U   85 50M AP/UPI  AFRTS
17555 U' 425 50  MAP     CNM73
17564 U'  85 50M AP/UPI  AFRTS
17565 U  425 50  AP      GIW37B
18005 L  425 50  PL      CLN603
18012 U  425 50  PL
18050 U' 425 50  TASS
18101 U' 425 50  REUTER  GPU30
18159 U  425 50  TASS    RTU47
18193 U' 425 50  PL      CLN603
18198 U' 425 50  PL
18205 U'  85 50M AP/UPI  AFRTS
18245 U   85 50M AP/UPI  AFRTS
18261 L' 425 50  KUNA
18272 U   85 74  VOA     VOA
18292 U  425 50  PL
18307 L' 425 50  KUNA
18331 U  425 50  REUTER
18333 U' 425 50  REUTER  GPE38B
18335 U' 425 50  REUTER  GPE38
18384 U  425 50  TASS    REB24
18392 U'  85 50M AP/UPI  AFRTS
18434 U'  85 50M AP/UPI  AFRTS
18519 L'  85 50  AFP
18540 U  425 50  PL
18543 L' 425 74  ARF     WFK48
18547 U  425 50  AP      GIY38B
18671 L' 425 50  AFP     FTS67
18675 L  425 50  IINA
18682 U  425 50  REUTER
18700 L' 425 50  DPA
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18787 U' 425 50  SUNA
18824 L' 425 50  ADN     Y2V38A
18835 U' 425 50  TASS    RWN74
18871 U  425 50  XINHUA
18988 L  425 50  CETEKA
19148 U  425 50  XINHUA  BAJ29
19162 U'  85 50M AP/UPI  AFRTS
19171 U' 425 50  MAP     CNM85
19280 L' 425 74  UN      4UZ
19395 U  425 50  JIJI
19525 L  425 50  CETEKA  OLD4
19565 L' 425 50  ANA
19818 U'  85 50M AP/UPI  AFRTS
19825 L  425 50  OANA
19865 U' 425 74  TANJUG  YZJ4
19975 U  425 50  LPS
19981 U  425 50  PARS
20008 U' 425 50  BAKTAR
20080 L' 425 50  AFP
20085 L' 425 50  ANSA    ISX20
20100 L  425 50  REUTER
20105 L' 425 50  DIPLO   HSF212
20110 L  425 50  AFP
20152 U   85 50M AP/UPI  AFRTS
20155 L' 425 50  KUNA
20204 U  425 50  TANJUG  YZJ
20312 L' 425 50  AFP
20386 U' 425 50  REUTER
20420 L' 425 50  ADN     Y2V20A
20421 L' 425 50  ADN
20430 L' 425 50  ANSA    IRS24
20483 L' 425 74  VOA     PRS
20494 U  425 50  PAP     SOV249
20506 U  425 50  KUNA
20559 U' 425 50  JANA
20625 U'  85 50M AP/UPI  AFRTS
20728 L' 425 50  ANSA    IRS27
20776 U' 425 50  INDINFO
20804 U  425 50  KUNA
20837 U   85 50M AP/UPI  AFRTS
21784 L' 425 50  KUNA
21787 U' 425 50  KUNA
21801 L   85 74  VOA     VOA
21839 U  425 50  TASS
22760 U' 425 50  AP      DZK79
22781 U  425 50  TASS    RDD73
22782 L' 425 74  ARF     WFN62
22790 U' 425 50  TASS
22813 L' 425 50  ADN     Y2V29
22885 L' 425 50  ADN
22909 U  425 50  KUNA
22918 U'  85 50M AP/UPI  AFRTS
22955 L  425 50  ANSA
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23315 U'  85 50M AP/UPI  AFRTS
23499 U'  85 50M AP/UPI  AFRTS
23542 U' 425 50  REUTER  GLF43
23751 L  425 50  AFP
23770 L' 425 74  ARF     WFG93
24029 U'  85 50M AP/UPI  AFRTS
24089 U   85 50M AP/UPI  AFRTS
24790 L  425 50  ANSA    ISX24
25377 L' 425 50  ANSA    IRX23
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SVC Abbreviations

AA	Turkey press	KCNA	N. Korea press
AAP	Australian press	KUNA	Kuwait press
ADN	E. German press (DDR)	KYODO	Japan press
AFP	French press	LPS	London Press
AFRTS	U.S. Armed Forces Svc	MAP	African press
AGER	Rumanian press	MENA	Egypt press
ANA	Yemen press	MFA	E. German diplo
ANGOP	Angolan press	MINREX	Cuban embassy
ANS	Argentine press	MON	Mongolian press
ANSA	Italian press	MTI	Hungary press
ANT	Indonesia press	NA	Argentina press
AP	Associated Press	NSF	Nat. Science Found.
APA	Austrian press	PAP	Polish press
APN	USSR press	PET	Jordan press
APS	Algerian press	PL	Latin Press (Cuba)
ARF	U.S. State Dept.	PTI	India press
ATA	Albanian press	REUTER	British press
AZAP	Zaire press	SANA	Syrian press
BAK	USSR press	SAP	Algerian press
BTA	Bulgarian press	SLBC	Sri Lanka press
CETEKA	Czech. press	SPA	Saudi press
CNA	China press	SUNA	Sudan press
DIPLO	diplo/embassy	TANJUG	Yugoslavia press
DPA	W. German press (FRG)	TAP	Tunisia press
DYN	Argentina press	TASS	USSR press
EFE	European file	TELAM	Argentina
FRC	Firestone Co.	U.N.	United Nations
GNA	Ghana press	UPI	United Press Int'l.
IINA	Italian press	USCG	Coast Guard
INA	Iraq press	VENPRES	Venezuela press
INDINFO	India press	VNA	Vietnam press
IRNA	Iran press	VOA	Voice of America
JANA	Libya press	WX	Weather
JIJI	Japan press	XINHUA	China press
JNA	Jordan press	YONHAP	S. Korea press

JUEGOS Latin America ZANA Zambia press

From 3676272471438444156
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b4d6730dd1653662
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12f221,b4d6730dd1653662
X-Google-Attributes: gid12f221,public
X-Google-Thread: 122486,b4d6730dd1653662
X-Google-Attributes: gid122486,public
X-Google-Thread: 13375c,b4d6730dd1653662
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1984-10-15 13:23:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 9/27/83; site hplabsc.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sdcsvax!sdcrdcf!hplabs!hplabsc!labelle
From: labelle@hplabsc.UUCP (WB6YZZ La Belle)
Newsgroups: net.news.group,net.aviation,net.ham-radio,net.misc
Subject: Re: New newsgroup for Radio Controlled Planes?
Message-ID: <2191@hplabsc.UUCP>
Date: Mon, 15-Oct-84 16:23:17 EDT
Article-I.D.: hplabsc.2191
Posted: Mon Oct 15 16:23:17 1984
Date-Received: Wed, 17-Oct-84 06:18:08 EDT
References: <881@opus.UUCP>
Distribution: net
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 8
Xref: 1962 1053 2047 5981

I vote YES for an RC newsgroup.

(Thank God I'm an atheist) GEORGE hplabsc!labelle

From 7361284487866951713
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,46df31ef722659c4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-15 15:40:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 42
Message-ID: <12862@mgweed.UUCP>
Date: Mon, 15-Oct-84 18:40:46 EDT
Article-I.D.: mgweed.12862

Posted: Mon Oct 15 18:40:46 1984
Date-Received: Tue, 16-Oct-84 07:48:39 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 30

qst de k9eui
hr propagation forecast nr 42 from arrl headquarters
newington ct october 15, 1984
to all radio amateurs bt

the solar flux has been below predicted levels for more than four months, and it has run close to minimum values since early september. currently, flux numbers are more than 20 points below the 96 used for the prediction charts in october qst. thus, when 21 and 28 mhz are normally at their best, 28 mhz is useful only on transequatorial or other low latitude paths, and 21 mhz is behaving more like 28 mhz was expected to be. unless solar activity increases markedly, the rest of this year will be very different from the printed predictions, which are prepared far in advance of their appearance in qst.

as for the week ahead, geomagnetic activity was headed downward at bulletin time. dx conditions were fair to good, and will continue so through about the 16th. higher geomagnetic field activity is expected most of the time through the 25th, but the months end should be the best of the entire autumn dx season, especially on high latitude paths. if sunspot activity rises, the effects on dx in late october could be very favorable. if current flux levels continue, 14 mhz and lower frequencies will be the dx mainstays for october and early november in all but the southern tier of states.

american sunspot numbers for october 4 through 10 were between 0 and 15 with a mean of 5.9 ar

From -5293878164967363602
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2962f2d98c8b3d30,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-15 15:44:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site houxt.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!hogpc!houxt!wa2sff
From: wa2sff@houxt.UUCP
Newsgroups: net.ham-radio
Subject: RC models on six meters
Message-ID: <481@houxt.UUCP>
Date: Mon, 15-Oct-84 18:44:38 EDT
Article-I.D.: houxt.481
Posted: Mon Oct 15 18:44:38 1984
Date-Received: Tue, 16-Oct-84 06:33:10 EDT
Organization: ATT Information Systems, Holmdel NJ

Lines: 15

I use the 53.X frequency band for my radio controlled models and have not had any interference over the past two years.
The members of the club I am in use all of the the 53.X frequencies with no problems.

I have not bothered to switch my equipment to 50.X since I have no interference problems.

I am in Monmouth County N.J.

I can't speak for any other part of the country.

Joe Wilkes

From 849483057284939828
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a32a0ac66fee2bbc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-15 15:45:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: corrected arrl bulletin nr 91 (NPRM = new ham freqs)
Message-ID: <12863@mgweed.UUCP>
Date: Mon, 15-Oct-84 18:45:01 EDT
Article-I.D.: mgweed.12863
Posted: Mon Oct 15 18:45:01 1984
Date-Received: Tue, 16-Oct-84 07:49:13 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 42

qst de k9eui
hr arrl bulletin nr 91 from arrl headquarters
newington ct october 11, 1984
to all radio amateurs bt

fcc released a notice of proposed rulemaking , pr docket 84 960, on october 10 proposing the allocation of additional frequencies to the amateur service as follows:

the entire 10.100 to 10.150 mhz segment would be available to generals and above, on a primary basis subject to the condition that no interference is caused to fixed services outside the u.s., and no special power limit is proposed. fcc has announced that during the pendency of this proceeding, the entire 10.100 to 10.150 mhz band is temporarily available to u.s. amateurs,

a1 and f1 modes, with a 200 watt p.e.p. output limit.

fcc has proposed the arrl plan for a1 and f1 on 24.890 to 24.930 mhz, and a1, a3, a4, a5, f3, f4, f5 on 24.930 to 24.990 mhz, general and above, on a primary basis subject to the condition that no interference is caused to fixed and mobile services outside the u.s.. amateurs will also be sharing the 24.890 to 14.990 mhz band with some u.s. government fixed operations over the next several years.

fcc has proposed to make 902 to 928 mhz available to u.s. amateurs, technician and above, except for those amateurs in colorado, wyoming, and u.s. possessions in region 3.

fcc has also stated that certain government fixed operations on 18 mhz precludes amateur access to this band prior to 1989.

other matters, including 420 to 430 mhz operation along the canadian border are addressed in the nprm.

see the arrl letter and december qst for further details. comments on this proposal are due at fcc on december 17, 1984, reply comments january 16, 1985.

ar

From -4030544181858999154
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a661642d56f33aca
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-15 18:52:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT3.4 8/17/84; site vortex.UUCP
Path: utzoo!linus!decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: "73" will continue publication
Message-ID: <419@vortex.UUCP>
Date: Mon, 15-Oct-84 21:52:39 EDT
Article-I.D.: vortex.419
Posted: Mon Oct 15 21:52:39 1984
Date-Received: Wed, 17-Oct-84 19:15:09 EDT
References: <1737@sun.uucp>
Organization: Vortex Technology, Los Angeles
Lines: 5

If Wayne gets involved packet radio will go right down the tubes.
"73" has been a joke for years and has been going steadily downhill,
thanks mainly to Wayne's "talents." Just my opinion, of course.

--Lauren--

From 2995897845839725542
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11b3ac,403f031827f1c011,start
X-Google-Attributes: gid11b3ac,public
X-Google-Thread: 151e61,7eae0b77adcb985a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-15 22:59:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84 SMI; site sun.uucp
Path: utzoo!linus!decvax!decwrl!sun!gnu
From: gnu@sun.uucp (John Gilmore)
Newsgroups: net.ham-radio,net.flame
Subject: Re: the dark side of Goldwater's interference bill
Message-ID: <1748@sun.uucp>
Date: Tue, 16-Oct-84 01:59:50 EDT
Article-I.D.: sun.1748
Posted: Tue Oct 16 01:59:50 1984
Date-Received: Wed, 17-Oct-84 09:03:45 EDT
References: <12836@mgweed.UUCP>
Organization: Sun Microsystems, Inc.
Lines: 58
Xref: sun net.ham-radio:1703 net.flame:6165

In case you can't tell, much of what follows is sarcasm.

It's a good thing Netnews isn't transmitted by radio; I'm certain
that some sorehead somewhere would use Goldwater's bill (if passed)
to terminate net.jokes in favor of more traffic in net.ham-radio.

> i have personally listened to
> some of this malicious interference. just one individual can
> prevent effective communications by many other persons wishing
> to use a channel.
Remember rabbit!jj and net.db?

> while noting that this type of interference is prevalent on the
> amateur, citizens, and marine band, goldwater said that it is
> also creeping into the private land mobile, public safety...
> (and even the) government communications networks such as those
> of the faa and department of defense.
Does he mean the ARPANET?

> - transmission of unmodulated carriers, recorded
> material music and threats, made directly over the ongoing
> transmissions of other operators (harold r. claypoole, n6bii,
> 1983)
Net.flame

> - long, continuous transmission of computer voice
> synthesized audio signal or ticking clock on repeater input
> frequency (henry c. armsrong, wa6cgi, 1983).
All those nonsense header lines output by malicious mailers...automatic

reports of how much news went thru what sites...who posted the most stuff
this week...what all the site names are and who they talk to...

> - whistling on frequency for a long period of time for
> jamming purposes (donald e. miller, callsign unknown, 1978)
Ever listened to a modem?

> these cases illustrate examples of the type of purposeful
> interference which this bill prohibits." goldwater said that he
> didn't intend to limit the definition of the bill's terms to
> these activities "but rather to explain the type of behavior to
> which the bill is addressed."
In other words, it's open ended and can be used against anybody.
Even you, if we don't like you.

> interference to home electronic entertainment equipment was not
> addressed in the bill.
Of course not! No ham would ever maliciously jam his/her neighbors.
They'd only maliciously jam other hams. This bill is not aimed at
protecting TV-watching citizens, only hams, of course. Hams deserve
more protection than ordinary citizens, since they've been using the
free public airwaves by exclusive license for decades now.

> s.2975 will elevate willful and malicious interference to a
> criminal offense pursuant to section 501 of the communications
> act. this section provides for both a fine of up to $10,000 and
> imprisonment of up to 1 year for a first offense and the same
> fine and up to 2 years imprisonment for repeated offenses.
Certainly the penalty fits the crime.

From 8044533788802849731
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,50ddf74542982b9a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-16 09:32:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: AMTORSOFT question
Message-ID: <12866@mgweed.UUCP>
Date: Tue, 16-Oct-84 12:32:49 EDT
Article-I.D.: mgweed.12866
Posted: Tue Oct 16 12:32:49 1984
Date-Received: Wed, 17-Oct-84 06:42:44 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 6

A ham friend is interested in any comments on the "AMTORSOFT" for the
Commodore 64. Has anyone out there got any???

Thanks, Bob K9EUI

From -4119302107429573434
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5d8df742d0adc88,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-16 09:37:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: uniden 2021 questions
Message-ID: <12867@mgweed.UUCP>
Date: Tue, 16-Oct-84 12:37:28 EDT
Article-I.D.: mgweed.12867
Posted: Tue Oct 16 12:37:28 1984
Date-Received: Wed, 17-Oct-84 06:43:05 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 19

I am interested in the performance of the Uniden CR-2021. I see that
some of you have it.

1) How stable is it?

2) What is the dial resolution?

3) What provisions are there for external antenna(s) ?

4) Does it have a product detector, or if you don't know, does it
   reproduce SSB signals without distortion?

5) How good is the AGC and is it fast or slow?

I would appreciate any info.

     Thanks   Bob K9EUI

From -8284556765698695344
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d061fb28ea4d525f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-16 10:04:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: Late ARRL bulletin comments
Message-ID: <12868@mgweed.UUCP>
Date: Tue, 16-Oct-84 13:04:15 EDT
Article-I.D.: mgweed.12868
Posted: Tue Oct 16 13:04:15 1984
Date-Received: Wed, 17-Oct-84 06:43:26 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 56

Sorry for the late posting of the last shuttle dope.

I usually get the bulletins twice a week off the air, Monday
and Friday nights (local time). I prefer those nights because
the propagation forecast is there on Mon., and the DX bulletin
is only on on Fri.

Because of lousy propagation, at times, and QRM, I have to do
quite a bit of editing to get "clean" copy. At times I copy
all three modes (Baudot, ASCII, and AMTOR) and still miss some
major words or info in a bulletin. Then I have to wait to get
the stuff from another source.

Quite often, the DX bulletin has stuff that is obsolete by the
time I get it on the net. THis is especially true if you can't
access the system from home and have to wait til the following
Monday. The same is true on some other bulletins, like the NASA
one. It could also be that that may have been the only new bulletin
to appear that time and I didn't feel like logging on just to
work on that one. (I get lazy at times). It does take some effort
to get this stuff out, since I have to convert from either AMTOR
or Baudot to ASCII. (Sure, our computer can do that, but I would
still have to convert the baud rate).

I do try and get the "important" stuff out as fast as I can.

A recent article in RTTY JOURNAL confirmed what a lot of us knew
all the time: Slower baud rates get thru better !!!!!!!!!!

Copy is ALWAYS better at 60wpm Baudot than the 110 baud ASCII or
AMTOR!!!!!

I never know from one day to the next which band is gonna be better
to copy W1AW on, 20 or 40 meters. Fortunately with the memories
in the 930, I can check all their freqs in a few seconds. But
usually 40 meters is clobbered by foreign SSB, and 20 may be too
weak.

I think we should start a letter campaign to the station manager
of W1AW to:

1) Move the W1AW rtty bulletin frequencies to the extreme bottom
   of the bands to minimize qrm.

2) Start transmitting on 30 meters too! This may fill in the gap
   when propagation is bad on other bands.

I am going to try diversity one of these days. Frequency diversity
is the best but it takes at least 2 copyable freqs to do it and often
there are not 2.

Bob K9EUI

From -2362525808816921710
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5204b8165ddfe9dd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-16 11:45:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!inuxg!wheatley
From: wheatley@inuxg.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Re: OSCAR-10 use, future of amateur satellites
Message-ID: <343@inuxg.UUCP>
Date: Tue, 16-Oct-84 14:45:44 EDT
Article-I.D.: inuxg.343
Posted: Tue Oct 16 14:45:44 1984
Date-Received: Wed, 17-Oct-84 06:08:48 EDT
References: <12980@sri-arpa.UUCP>
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 26

Well, another interesting statistic would be to look at oscar-8/7
and the RS bird usage. It seems to me that it is much easier for
the average ham to experiment with a two meter up/ten meter down
situation than it is the oscar 10 bird. I have successfully worked
several states with the oscar 8 and rs satellites using 25 watts, my
magnet mount vertical, and a piece of wire on my hf rig for a
receive antenna. Sure, there are lots of nulls in the flyby, but i
can still work them.

I realize the need, and fully support the "geostationary" or at
least the original intent of oscar 10, which permits long period of
operations. Certainly, after listening to a maximum of half hour of
the rs/oscar 8 birds, or trying to chase rare dx on the low orbit birds,
one can appreciate this philosophy. However,
i contend that, based on my experience, it is a lot easier to take
the initial plunge, using the RS birds, with no or little
expenditure, before spending much more, either in hard earned bucks
or building time, to build/acquire the directional antennas, and
high frequency gear required to operate oscar 10.

This argument may be all wet, but, i would like to see the oscar
7,8, or RS usage statistics (anyone got friends at box 88 moscow??)
to see how they are used.

steve, ku9c
inuxg!wheatley

From -350063556077327853
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b3252659b96814d6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-16 14:20:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2(pesnta.1.2) 9/5/84; site pesnta.UUCP
Path: utzoo!linus!decvax!decwrl!sun!idi!pesnta!jiml
From: jiml@pesnta.UUCP (Jim Livingston)
Newsgroups: net.ham-radio
Subject: Thanks to all.
Message-ID: <2584@pesnta.UUCP>
Date: Tue, 16-Oct-84 17:20:18 EDT
Article-I.D.: pesnta.2584
Posted: Tue Oct 16 17:20:18 1984
Date-Received: Thu, 18-Oct-84 07:44:52 EDT
Distribution: net
Organization: Perkin-Elmer DSG, Santa Clara, Calif.
Lines: 29

<2584@pesnta.UUCP> cancelled from rn.

From 449258506546510067
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8cc15060fca334a0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-16 14:26:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2(pesnta.1.2) 9/5/84; site pesnta.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!pesnta!jiml
From: jiml@pesnta.UUCP (Jim Livingston)
Newsgroups: net.ham-radio
Subject: Re:Novice Questions - Thank You
Message-ID: <2588@pesnta.UUCP>
Date: Tue, 16-Oct-84 17:26:31 EDT
Article-I.D.: pesnta.2588
Posted: Tue Oct 16 17:26:31 1984
Date-Received: Wed, 17-Oct-84 06:24:04 EDT
Distribution: net
Organization: Perkin-Elmer DSG, Santa Clara, Calif.
Lines: 28

I would like to thank everyone listed below for taking the time

to answer my question about how to get started in ham radio.

ihnp4!mgnetp!mgw
ihnp4!inuxc!inux
hplabs!ucbvax!DA
petsd!vax135!tim
hplabs!sri-unix!larson
hplabs!ucbvax!jh
hplabs!ucbvax!GA
hplabs!ucbvax!Ha
hplabs!ucbvax!Ca

Thanks again.

regards,
Jim

Jim Livingston, Perkin-Elmer Data Systems Group - Santa Clara, Calif.
UUCP: ..!hplabs!pesnta!jiml
(408) 727-5540

From 4108005916719014229
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c69dd6f9f039ac0e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-16 15:47:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 9/27/83; site hplabs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!hplabs!paull
From: paull@hplabs.UUCP (Rob KA6SFV)
Newsgroups: net.ham-radio
Subject: real meaning of DTMF and net.rec-rc vote
Message-ID: <973@hplabs.UUCP>
Date: Tue, 16-Oct-84 18:47:28 EDT
Article-I.D.: hplabs.973
Posted: Tue Oct 16 18:47:28 1984
Date-Received: Wed, 17-Oct-84 06:43:46 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 22

RE: Meaning of DTMF

I thought DTMF meant 'ual Tonne Multi-Frequency'. Contrary to

popular usage, TOUCH-TONE and DTMF are not the same. TOUCH-TONE is what the keypad on your telephone produces. DTMF is used for sending call information from one central office to another.

I guess, since DTMF is used correctly)ly) so frequently to mean TOUCH-TONE, that DTMF will become another Q-tip or Kleenix.

By the way, the tones used for DTMF are not the same as the tones generated by your telephone 'dial'. (Check with you local phone-phreak)

RE: net.rec.rc

I would like to see a group for r/c people, but I would not like to lose contact with the radio/electronic aspects of r/c.

73 Rob Paull (KA6SFV)

From -7531936613418502072
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,45b70ff16066abc7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-24 16:24:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 78 (ARRL qso party coming)
Message-ID: <12543@mgweed.UUCP>
Date: Mon, 24-Sep-84 19:24:58 EDT
Article-I.D.: mgweed.12543
Posted: Mon Sep 24 19:24:58 1984
Date-Received: Wed, 26-Sep-84 19:55:25 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr arl bulletin nr 78 from arrl headquarters
newington ct september 21, 1984
to all radio amateurs bt

ar members are reminded of the arrl qso party scheduled for
october 6 and 7 for cw and october 13 and 14 for phone.
exchange is status and arrl section. complete rules appear on
page 78, september qst. log forms are available from arrl hq
for an sase ar

From -6677363986571726128
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,782146d69bba0466,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-24 16:25:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 77 (balloonist is ham?)
Message-ID: <12544@mgweed.UUCP>
Date: Mon, 24-Sep-84 19:25:38 EDT
Article-I.D.: mgweed.12544
Posted: Mon Sep 24 19:25:38 1984
Date-Received: Wed, 26-Sep-84 19:55:53 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 77 from arrl headquarters
newington ct september 20, 1984
to all radio amateurs bt

we have information that leads us to believe that balloonist
joseph w. kittinger, of altamonte springs, florida, is an
amateur, n4hdp. kittinger sailed the rosie ogradys balloon of
peace on an eighty four hour, 3550 mile journey, from maine to
italy, which ended on september 18 ar

From 8810660369794294373
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,74ff37cd77bfda17,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-24 16:26:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 76 (FCC dismisses order)
Message-ID: <12545@mgweed.UUCP>
Date: Mon, 24-Sep-84 19:26:15 EDT
Article-I.D.: mgweed.12545
Posted: Mon Sep 24 19:26:15 1984
Date-Received: Wed, 26-Sep-84 19:56:16 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr arrl bulletin nr 76 from arrl headquarters
newington ct september 19, 1984

to all radio amateurs bt

fcc has dismissed by a september 18 order a petition seeking elimination of all rule mandated band plans and emission restrictions in all frequency bands in the amateur radio service, except the 30 meter band. details in the arrl letter and november qst ar

From -4909833069535100364
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a7ebb5e5783b0eaa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-24 16:27:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 28/29 (exams, phone expansion, convention)
Message-ID: <12547@mgweed.UUCP>
Date: Mon, 24-Sep-84 19:27:36 EDT
Article-I.D.: mgweed.12547
Posted: Mon Sep 24 19:27:36 1984
Date-Received: Thu, 27-Sep-84 02:30:00 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 20

qst de k9eui
hr crrl bulletin nr 28/29 from crrl headquarters
london ont september 20, 1984
to all radio amateurs bt

doc will hold amateur exams across canada on october 17. the next date for examinations is february 13, 1985.

crrl has written to doc, advising of recent u.s. phone band expansion and that there appears to be considerable support among canadian amateurs for some downward epansion of canadian phone bands, particularly on 80 metres. crrl asked doc to issue a gazett notice on the subject, soliciting opinions on the matter. crrl also plans some surveys on the matter.

canadas largest amateur radio gathering, the annual radio society of ontario convention will be held in ottawa on october 5 and 6 ar

From 2300231239366442708
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7ef3aa34b5cf444b,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-09-24 16:28:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 39
Message-ID: <12548@mgweed.UUCP>
Date: Mon, 24-Sep-84 19:28:02 EDT
Article-I.D.: mgweed.12548
Posted: Mon Sep 24 19:28:02 1984
Date-Received: Thu, 27-Sep-84 02:30:15 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 30

qst de k9eui
hr propagation forecast bulletin nr 39 from arrl headquarters
newington ct september 24, 1984
to all radio amateurs bt

solar flux levels of 75 or lower september 13 to 20 almost exactly duplicate a significant low in april 1977, less than a year from the end of cycle 20. looking back to september 1975 shows flux high, low and average values to have been very similar to those of september 1984 thus far.

these comparisons suggest that cycle 21 could be shorter than the 11.2 year average, but flux records available (garble) show that cycles 18, 19 and 20 all had brief periods of substantial sunspot activity in their final two years of life.

we may be on the verge of such a burst. though visible sunspot activity has been very low for the last two weeks, there is action on the sun currently. a major geomagnetic storm, in progress as this bulletin was being prepared, narrowed the useable frequency spectrum severely. things may be better soon. the solar region now facing us brought a flux rise to 93 four weeks ago. such levels in late september and in early october could work wonders for 21 and 28 mhz which could last through about october 5.

american sunspot numbers for september 13 through 19 were between 0 and 1 with a mean of 0.1 ar

From -663571758698517292
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f6de9a4e338002a4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-25 05:51:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: want mods for ICOM R71A receiver
Message-ID: <353@ihu1h.UUCP>
Date: Tue, 25-Sep-84 08:51:02 EDT
Article-I.D.: ihu1h.353
Posted: Tue Sep 25 08:51:02 1984
Date-Received: Wed, 26-Sep-84 19:41:35 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 25

Having replaced my ICOM R70 receiver with an R71A, I am interested in learning what modifications other owners have made to their R71A's.

As a contribution, I shall relate my own failed experiment. I replaced a 220K resistor on the logic board with a 47K resistor and sped up the scan rate. At this higher speed, however, the memory scan became useless, because when a signal was detected on a channel, the receiver didn't stop scanning until the next channel. In the SSB/CW/AM modes, the squelch is AGC driven, so I assume that this behavior is due to the finite AGC attack time.

The logic board in the R71A may be used in other ICOM products, because there are holes for another IC, another connector, and several other components. Maybe there are some "undocumented features" waiting to be discovered.

My R71A's noise blanker seems more effective than the one in my R70. I've also got the infrared remote control, speech synthesizer, and FM board. Anyone have any mods?
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 2184944713882770488
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ac7881a4e8f027cd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-25 10:36:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1.chuqui 4/7/84; site voder.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!nsc!voder!gino
From: gino@voder.UUCP (Gino Bloch)
Newsgroups: net.ham-radio
Subject: Re: some questions about UNIDEN CR2021

Message-ID: <380@voder.UUCP>
Date: Tue, 25-Sep-84 13:36:40 EDT
Article-I.D.: voder.380
Posted: Tue Sep 25 13:36:40 1984
Date-Received: Sat, 29-Sep-84 09:27:09 EDT
References: <12290@sri-arpa.UUCP>
Organization: National Semiconductor, Santa Clara
Lines: 9

[if this line is present please report to the office]

Re schematics with electronic gear: the Shack DX-400 comes with a
schematic and costs $300; the essentially identical Uniden CR-2021
comes without one and costs $90 or $100. Take your choice.
I chose the latter; I'm trying to find out if a service manual is
available. If it's under $200, I'll probably buy it.
--
Gene E. Bloch (...!nsc!voder!gino)

From -5843346137823765458
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,66b861cc5d67d126,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-25 13:12:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbdkc1.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!mhuxj!cbosgd!cbdkc1!cly
From: cly@cbdkc1.UUCP (Carl Yaffey)
Newsgroups: net.ham-radio
Subject: DX contest simulator
Message-ID: <725@cbdkc1.UUCP>
Date: Tue, 25-Sep-84 16:12:54 EDT
Article-I.D.: cbdkc1.725
Posted: Tue Sep 25 16:12:54 1984
Date-Received: Thu, 27-Sep-84 04:21:30 EDT
Organization: AT&T Bell Laboratories, Columbus
Lines: 32

Some company is advertising a dx contest simulator package
that runs on a Commodore 64. When I read about it, I thought
it very funny. Imagine sitting down to your computer and
working dx all weekend without a transmitter, receiver, or antenna!
How dumb!
But after thinking some more, it sounded like fun. It supposedly
does a very good job of simulating band conditions, operator
calls, etc. As you "tune" the band (by pressing a key on the
Commodore keyboard) you encounter the "hot" operators at the
low end (the package is CW only), and the slower folks as you move up.
As time goes by, the "band"
changes appropriately. The different bands are realistic also.
A transceiver is drawn on the monitor screen.
The part that intrigued me the most was that you could enter your

location and have the whole thing be appropriate for that place.
For instance, you could find yourself on a rare island and
in the middle of constant pileups. The package constantly
displays statistics so you can see "how you're doing"
and so you can compete against others. In fact the company
is going to give "awards"! Another feature is
realistic responses from the "stations" you work. They
respond to QRS and requests for repeats, etc.
Has anybody out there actually tried this thing? I'd like
to know if it is as realistic as it is supposed to be.
It might be fun, and could certainly be used as a tool
to train oneself for contest operating or to just "brush up"
on skills.

Carl Yaffey   K8NU   cbosgd!cbdkc1!cly
--
Carl Yaffey at AT&T Bell Laboratories Columbus, Ohio
614-860-3399 cbosgd!cbdkc1!cly

From -4096592442244671709
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e245180817488041,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-25 19:20:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbneb.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!ihnp4!cbosgd!apr!cbneb!adm
From: adm@cbneb.UUCP
Newsgroups: net.ham-radio
Subject: Contest/Special Event
Message-ID: <1381@cbneb.UUCP>
Date: Tue, 25-Sep-84 22:20:54 EDT
Article-I.D.: cbneb.1381
Posted: Tue Sep 25 22:20:54 1984
Date-Received: Thu, 27-Sep-84 04:29:55 EDT
Sender: adm@cbneb.UUCP
Organization: AT&T Bell Laboratories, Columbus, OHIO
Lines: 70
Nf-ID: #N:cbnap:14800007:000:3082
Nf-From: cbnap!gws   Sep 25 22:24:00 1984

Sep 25,1984

CONTEST

The Columbus (Ohio) Amateur Radio association will be having
their second annual "Columbus Day Special Event". This
event is open to amateurs worldwide. Please see inclosed
rules. Hope to see you on the air..... 73 gws N8EMR

COLUMBUS DAY SPECIAL EVENT
OFFICIAL RULES (1984)

1) Eligibility:

Open to all amateur radio operators worldwide, divided into two separate groups.
1> Columbus, Ohio amateurs (including area suburbs)
2> All other amateurs worldwide

2) Objective:

The overall objective is to promote the explorer Christopher Columbus, the city of Columbus,Ohio and amateur radio operators worldwide.

Columbus hams are to work Columbus hams and non-Columbus hams in a relaxed manner.

Non-Columbus hams are to work Columbus hams as required for a certificate.

3) Date/Time:
Band/Freq

1> Saturday, October 06,1984
1400z to 2400z
15 Meters Phone @ 21.375Mhz +- 10Khz
2> Sunday, October 07,1984
1400z to 2400z
40 Meters Phone @ 7.240Mhz +- 10Khz

4) Exchange:

A valid exchange shall be Name, QTH and RST. Columbus hams, should include info on certificate.

5) Scoring:

1> One point for each contact (excluding W8TO)
2> Six points for a W8TO contact

6) Final Score:

A final score of TEN (10) must be submitted to be eligible for certificate. Scores must be submitted within 120 days to be valid.

7) Certificate:

Certificates will be issue to all qualifying amateurs who include an SASE (SAE, 3 IRC's ok for DX.) SWL's may receive the certificate on station heard basis.

8) Awards:

A mini contest will be in operation during the event period; The highest score from a Columbus amateur. will receive a plaque for their effort.

9) Address:

All requests for certificates and correspondence should be sent to:

EMAIL ihnp4!cbnap!gws
US SLOW MAIL Amateur Radio Station W8TO
Attn. "Special Event Coordinator"
280 East Broad St.
Columbus,Ohio 43215

From 1616379600389797357
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,66b861cc5d67d126
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-26 09:27:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: DX contest simulator
Message-ID: <161@mouton.UUCP>
Date: Wed, 26-Sep-84 12:27:14 EDT
Article-I.D.: mouton.161
Posted: Wed Sep 26 12:27:14 1984
Date-Received: Thu, 27-Sep-84 06:13:44 EDT
References: <725@cbdkc1.UUCP>
Organization: Bell Communications Research, Inc
Lines: 14

The product you're referring to is called "Dr. DX" and is sold by
AEA. I learned about this wonderful little gimmick during a visit
to ARRL HQ the other week.

It turns out that the AEA people love to play practical jokes with
this thing, and it is remarkable how many people they had absolutely
fooled at Dayton. One Japanese amateur radio company representative's
eyes almost popped out when he apparently saw the AEA guy working
a DX pileup using a ball-point-pen as the "antenna".

Perhaps this says something about the intellectual challenge level
of working CW DX?

Phil

From -3805457268283661336
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,42e88616cd0637a5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-27 10:15:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: arrl bulletin nr 71 (160 meter docket / repeat)
Message-ID: <12652@mgweed.UUCP>
Date: Thu, 27-Sep-84 13:15:56 EDT
Article-I.D.: mgweed.12652
Posted: Thu Sep 27 13:15:56 1984
Date-Received: Fri, 28-Sep-84 07:14:45 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 16

qst de k9eui
hr arrl bulletin nr 71 from arrl headquarters
newington ct. september 14, 1984
to all radio amateurs bt

fcc has proposed to reallocate half of the 160 meter band, from 1900 to 2000 khz, to nongovernment radiolocation because of an anticipated expansion of the am broadcast band that would force the radiolocation stations to move. although the timing of the september release of docket   84 874 came as a surprise to the amateur radio community,   arrl acted swiftly. arrl today filed a motion to hold this nprm in abeyance pending the resolution of an arrl petition filed to study the mf band needs of non-government radiolocation stations. details in the september 13 arrl letter ar

From 3477536775385825823
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,723d229a756afb6d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-27 13:00:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!kk9w
From: kk9w@pur-ee.UUCP (Andersen)
Newsgroups: net.ham-radio
Subject: Dr. DX
Message-ID: <2190@pur-ee.UUCP>
Date: Thu, 27-Sep-84 16:00:27 EDT
Article-I.D.: pur-ee.2190
Posted: Thu Sep 27 16:00:27 1984
Date-Received: Fri, 28-Sep-84 07:09:35 EDT
Organization: Electrical Engineering Department , Purdue University
Lines: 13

UB 40

I think the Dr. DX thing sounds like a neat thing too. In the summertime, I always get rusty, I know. I'm sure that it does say something about the intellectual challenge of working CW DX, but then, I am pretty satisfied about the intellectual challenge of my job, and CW DX is a nice way to relax. Sort of like those

who are members of the Society for Creative Anachronism. Not
too intellectual, but I've never talked to one of those guys who
didn't love getting beat over the head by Sir Lancelot.

Dave

From -8921447861318462274
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a0605d89cc2e602
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-27 13:36:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site alice.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!alice!danny
From: danny@alice.UUCP (Dan Kahn, K1DK)
Newsgroups: net.ham-radio
Subject: Re: Antenna Tuners on Receivers
Message-ID: <3011@alice.UUCP>
Date: Thu, 27-Sep-84 16:36:46 EDT
Article-I.D.: alice.3011
Posted: Thu Sep 27 16:36:46 1984
Date-Received: Fri, 28-Sep-84 06:21:40 EDT
References: <239@whuxl.UUCP>, <52800034@trsvax.UUCP>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 14

Re KA5MJQ's reference to technical lit on broadcast-band auto radio
antenna matching and possible applicability to HF rcvrs:

The front-end design in broadcast-band car radios is completely
different from that in HF rcvrs. This is due to the fact that in a car
you're using a 3-foot long antenna to rcv signals whose quarter-wavelength
is several hundred feet. In a car radio, the capacitance of the antenna
coax (coax mandatory for noise shielding) and of the antenna itself is
part of the RF-stage tuned circuit; that large amount of fixed C is why
the radio must be inductively tuned and why proper front-end tuning
(i.e. setting trimmer cap) is critical.

                        Dan, K1DK

From 4701714213106345264
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,97266ebe4e35f172,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-27 21:36:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!hao!seismo!brl-tgr!jcp

From: jcp@brl-tgr.UUCP
Newsgroups: net.ham-radio
Subject: Re: some questions about UNIDEN CR2021
Message-ID: <4806@brl-tgr.ARPA>
Date: Fri, 28-Sep-84 00:36:51 EDT
Article-I.D.: brl-tgr.4806
Posted: Fri Sep 28 00:36:51 1984
Date-Received: Wed, 26-Sep-84 06:31:17 EDT
References: <12141@sri-arpa.UUCP>
Organization: Ballistics Research Lab
Lines: 20

The Antenna Adjust knob on the CR2021 probably does what most antenna
tuners do, control a variable capacitor or inductor (probably the latter),
forming 'transformer' which is used to match the input impedance of the
radio, (probably 30-50 ohms) front end, to the impedance of the antenna
(which varies with frequency, and for a short whip is probably several
 hundred ohms).

From comparing the 'sound' of the filter on the CR2021 with my McKay
Dymek DR-101, I would suspect 4Khz/8Khz as the filter widths, although
it could be 3/6 as well. The 'narrow' is definetely less than 5Khz,
which is a standard 'station spacing' on shortwave.

The RF attenuator acts like about 10db per step, (which is pretty
standard for attenuators).

The 'fine tune' knob controls the frequency of the BFO, which is totally
divorced from the IF tuning frequency generated by the digital synthesizer.
I suspect getting it to act as fine tuning on AM is difficult.

                              -JCP-

From -2441183026795431581
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,de3c091291267bf1,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,de3c091291267bf1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-28 17:18:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio,net.columbia
Subject: Challenger orbital elements
Message-ID: <164@mouton.UUCP>
Date: Fri, 28-Sep-84 20:18:34 EDT
Article-I.D.: mouton.164
Posted: Fri Sep 28 20:18:34 1984
Date-Received: Sat, 29-Sep-84 09:39:07 EDT
Organization: Bell Communications Research, Inc

Lines: 32

Here is a predicted element set for orbit 23 of the upcoming Challenger
mission. Note, however, that it was based on an October 1 launch and needs
to have its RA (right ascension) of the ascending node adjusted for the
actual launch time, which I believe is currently scheduled for October 4.

```
Epoch time:      84276.85138889
   Tue Oct  2 20:26:00.0   1984 UTC
Inclination:       57.2007 deg
RA of node:        68.7538 deg
Eccentricity:    0.0010544
Arg of perigee:   346.2766 deg
Mean anomaly:      14.1415 deg
Mean motion:   15.97849766 rev/day
Decay rate:          0.046 rev/day^2 [incredibly high! -- prk]
Epoch rev:              23
Semi major axis:  6658.131 km
Anom period:     90.121113 min
Apogee:            287.857 km
Perigee:           273.816 km
Ref perigee:      2466.84893045
   Tue Oct  2 20:22:27.590 1984 UTC
```

The high inclination of this mission will make the orbiter visible at much
higher latitudes than most shuttle missions. It will also make it possible
for more amateurs to receive the 435 mhz transmissions of a Getaway Special
experiment that will be mounted in the cargo bay. Tracking the shuttle,
however, has always proven to be extremely difficult due to the unpredictable
drag effects of the low orbit and the constant perturbations of maneuvering
rockets. As we found with STS-9, predictions made from element sets which
were only a day old could be off by minutes.

Phil Karn


```
From -6905298029482786741
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bcb8fb52947fd7e2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-28 22:52:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Gateway V1 #4
Message-ID: <165@mouton.UUCP>
Date: Sat, 29-Sep-84 01:52:05 EDT
Article-I.D.: mouton.165
Posted: Sat Sep 29 01:52:05 1984
Date-Received: Sat, 29-Sep-84 10:20:19 EDT
Organization: Bell Communications Research, Inc
```

Lines: 413

Gateway: The ARRL Packet-Radio Newsletter
Electronic Edition
Volume 1, Number 4
September 25, 1984.

ARRL DIGITAL COMMITTEE MEETING

The ARRL Ad Hoc Committee on Amateur Radio Digital Communication met in Newington, Connecticut on September 14, 15 and 16. [See issue 3 of Gateway for background on the Digital Committee.] Twenty packet-radio enthusiasts (committee members and observers) were present for the meeting. The group addressed the state of amateur packet radio; link-layer protocols; and approaches to packet-radio networking.

The following items summarize the results of the weekend's meetings.

DIGITAL COMMITTEE APPROVES AX.25 SPECIFICATION

During its meeting on September 15, the ARRL Ad Hoc Committee on Amateur Radio Digital Communication approved a specification of the AX.25 link-level protocol. This clears the way for submission of the protocol to the ARRL Board of Directors for their approval.

The approved specification of AX.25 was written by Terry Fox, WB4JFI. The protocol is essentially the same as that implemented on all of the TNCs now on the air. Major changes from previous versions of AX.25 concern the poll/final (P/F) bit and multiple digipeaters. The specification includes the P/F bit resolution proposed by Phil Karn, KA9Q [See July, 1984 QEX]. The use of multiple digipeaters, as permitted on most available TNCs, is now part of the "official" protocol. Neither of these changes will make the specified protocol incompatible with existing implementations.

The ARRL Board of Directors will consider AX.25 at its next meeting, in October of this year. Board of Directors' approval will create a published, international standard protocol for amateur packet radio. With such a standard in existence, commercial manufacturers will be able to design products for packet radio, confident that their products will be compatible with others'.

23-CM BAND PLAN COMMENTS

The Digital Committee also considered the matter of UHF band plans. After some discussion, the committee endorsed the ARRL VHF/UHF Advisory Committee (VUAC) band plans for both 23 cm and 33 cm. The committee noted that the Southern California Repeater and Remote Base Association (SCRRBA) 23-cm band plan also includes sufficient

frequency allocations for digital communication. The digital allocation in the SCRRBA band plan is not on the same frequency as that in the ARRL band plan, but this should only cause slight problems on links going into and out of Southern California.

PACKET-RADIO NETWORKING

The next step in the development of amateur packet radio is the specification and implementation of a network-layer protocol. The network layer is responsible for routing packets from their originator to their addressee through a number of intermediate stations. There are currently two network protocols being proposed for amateur packet radio. To help decide which of these protocols is better for amateurs, the Digital Committee had a "brainstorming" session. The session provided an interesting look at the future of amateur packet radio. Some of the points made during the discussion follow:

- A user should need only a TNC to access the network.
- The network should be easy to operate.
- The network should support a wide variety of media (HF, VHF, microwaves, meteor scatter, etc.).
- The network should remain amateur in spirit.
- The network should work when commercial networks are down; in the event of emergency, the network should still be available.
- Network users should be able to specify their needs (for example, a choice of speed over reliability).
- The network should be able to resist jammers.
- The network should be able to take advantage of new stations when they come on the air, and should not be crippled by stations leaving the air.
- The network should support traditional amateur operating modes, rather than forcing amateurs to change their habits.
- Both real-time and store-and-forward operation should be supported.
- Controlled broadcast, or alert should be

available.

- Roundtable operation should be supported.

- There should be a network directory available on the air.

- Fault detection and isolation should be easy.

- The network should function well in various geographical regions.

- There should be a mechanism for monitoring the performance of the network.

- There should be no user "passwords" or other "authentication."

- The network should be data transparent; whatever data is sent from the source should be received unchanged by the destination.

- The network should be global.

- The goals set for the network should be attainable within the limited, amateur resources available.

This is an ambitious set of goals. The Digital Committee feels that, given the proper approach and efficient use of available resources, these goals are attainable.

After the brainstorming session, the committee heard tutorials on the two proposed network approaches, datagrams and virtual circuits. A very brief summary of each approach follows.

Each packet sent through a datagram network is routed independently of any preceding or following packets. This routing system is very robust; if stations join the network, they can be immediately taken advantage of. If stations leave the network (as long as a path exists from the source station to the destination station) communications will not be interrupted. There is a price which must be paid for this robustness: each packet must contain extensive information needed for routing. The datagram protocol being advanced for amateur packet radio is the Defense Advanced Research Projects Agency (DARPA) Internet Protocol (IP).

In a virtual-circuit network, a route is established between the calling station and the called station at the beginning of a QSO. This route is called a virtual circuit or a virtual connection, and is used by all of the packets in the QSO. Only the first or call-setup packet must contain complete routing information. Once the virtual circuit is established, subsequent packets need only include a

virtual-circuit number. If one of the stations in the virtual circuit becomes unable to handle traffic, another call-setup packet must be sent, and another virtual circuit set up. Note that most packets will not be call-setup packets, and will contain minimal routing information. This is one of the advantages of the virtual-circuit approach to networking. The virtual circuit protocol proposed for amateur use is called AX.25, and is set forth by Terry Fox, WB4JFI, in the Third ARRL Amateur Radio Computer Networking Conference proceedings.

These descriptions do not fully describe the protocols under consideration, nor do they capture the scope of the discussions that took place during the Digital Committee meeting. After almost two days of discussion, there were still proponents of virtual circuits, proponents of datagrams, and a number of undecided individuals.

The Digital Committee has no desire to force a protocol upon any group. Because of the number of people in the undecided camp and the number of points in favor of each type of protocol the committee decided that the packet community would best be served by a period of experimentation, during which both datagrams and virtual circuits would be implemented and tested.

Several members of the committee stressed the importance of implementing the protocols in a transportable high-level computer language. This would allow the programs that are developed to be run on many computers. The people who are going to be doing the programming decided to use the "C" programming language. In order to test the two protocol implementations, they must operate in the same environment. The test environment chosen by the committee is the Xerox 820 computer, modified to use an HDLC chip and run at 4 MHz. These decisions are not meant to stifle network protocol experiments. They were intended to foster program transportability, and to provide a common environment for testing protocol performance.

The identification of network objectives, the discussion of protocols, and the formulation of an experimental approach are the first steps toward the implementation of a world-wide packet-radio network. If you are interested in the network protocol experiments, contact a member of the ARRL Digital Committee [See Gateway #3.] and get started!

EUROPEAN PACKET ACTIVITY

Several European observers were present for the ARRL Digital committee meeting. They were: Hanspeter Kuhlen, DK1YQ, from AMSAT-DL; Ian Wade, G3NRW, from the British Amateur Radio Teleprinter Group (BARTG); John Sager, G8ONH from the RSGB; and Alan Jones, G8WJM, from the Cambridge Computer Labs. The primary duty of these observers was to learn about the state of amateur packet radio in the U.S., but they also provided us with some news about packet radio overseas.

Germany: In West Germany, several TAPR TNCs have made it through customs into the hands of the new Bavarian Packet Radio Group. There should be twenty or more packet stations on in West Germany by the time you read this. Unfortunately, there are some German regulations that will slow the development of packet networks; no two repeaters may be linked together, and no third-party traffic may be passed. Hanspeter was confident that these hurdles could be overcome. For more information on the Bavarian Packet Radio Group, contact:

Thomas Kieselbach, DL2MDE
Narzissenweg 10
D-8031 WESSLING
W-Germany.

England: The RSGB, in conjunction with BARTG, has formed a Packet Radio Working Party. The aims of the group, chaired by Dr. Dain Evans, G3RPE, are : to clarify what is meant by Packet Radio in the amateur context; to determine what form Packet Radio is likely to take in the UK, and to compare this with activity in other countries; to determine how packet repeater proposals are to be handled; and to determine the requirements for possible changes of the license regulations to exploit the capabilities of Packet Radio to the full. The Working Party has held two meetings, and adopted AX.25 as a standard for the UK. The BARTG newsletter Datacom is a good source of information on packet radio in the UK. Write:

Ian Wade, G3NRW
7 Daubeney Close
Harlington
Dunstable
Bedfordshire
LU5 6NF
UK.

There are already thirteen stations running AX.25 packet radio in the UK, and several dozen others are actively interested. Expect to hear UK packet stations on Oscar-10 or HF any day now.

Via DATACOM

PACKET RADIO ON JAPANESE SATELLITE

Sometime between 1985 and 1987, the Japan Amateur Radio League (JARL) and JAMSAT will be launching the first all-Japanese amateur satellite, JAS-1. Along with a Mode-J transponder, JAS-1 will carry a store-and-forward packet-radio transponder. The packet-radio transponder will operate at 1200 bauds, FSK, with an uplink in the 2-meter band, and a downlink in the 70-cm band. The designers of the satellite have agreed to use the AX.25 link-layer protocol, strengthening the protocol's standing as an international standard.

PHASE III C AND PACKET RADIO

If the amateur satellite fraternity is able to fund the launch of a Phase-III C satellite, that satellite might carry a packet radio

transponder. The ability of the satellite to carry such a transponder will be regulated by three factors: kick motor capacity, space available, and power available. If the proposed steam-propelled kick motor is used, there should be both the motor capacity and space available to launch a digital transponder. The power-consumption limits placed on the design of the transponder would make most of the existing technology useless, since existing high-level data link control (HDLC) chips draw too much current for satellite application. The use of software to transmit and receive packets through CMOS serial I/O devices is under consideration. A packet transponder for Phase-III C is not a high-priority item for AMSAT-DL, but it is under consideration. Via DK1YQ

PACKET COLUMN IN RADIOSPORTING

Yuri Blanarovich, VE3BMV is hoping to start a new amateur-radio magazine called Radiosporting. He plans to make it "for active radioamateurs, filled with timely information that would be of interest to many involved in operating and competitive aspects of amateur radio." One of the columns in Radiosporting will be devoted to RTTY, AMTOR and packet radio. If you are interested in subscribing to Radiosport, or contributing to its packet column, contact:

RADIOSPORTING
Box 65
Don Mills, ON, M3C 2R6
CANADA.

MORE NEWS ON HIGH-SPEED PACKETS

We received the following letter from Richard Bisbey II, NG6Q:

"The Information Sciences Institute Amateur Radio Group (WB6MXZ) has been on the air with a 56 Kb packet radio system since December, 1983. The equipment consists of 8088-based controllers using the Zilog 8530 SCC chip and frequency agile 10-watt FSK transmitters and receivers. The controller supports serial, parallel, and Ethernet connected devices. Assembled controllers cost approximately $650. The system uses standard INTERNET (IP/TCP) protocol, and in addition to supporting simple link level connections, supports internetworking as well as numerous high-level protocols such as TELNET, File Transfer (FTP), Mail (SMTP), Multi-Media Mail (MMM,MPM), Graphics (GP), Packet Voice (NVP), and Remote Virtual Disk (RVD). The hardware and software can support data rates as high as 1 Mb, well in excess of the current amateur limit of 56 Kb.

"Previous packet radio accomplishments by ISI amateurs include a March 1982 demonstration of transcontinental packet radio internetworking between an aircraft flying above Los Angeles and a fixed station in Virginia, and a November, 1982, demonstration of intercontinental internetwork packet radio communications between Los Angeles, California and The Hague, Netherlands using Intelsat-4A. The ISI

group is currently developing a low-cost spread-spectrum system with capabilities similar to the current non-spread system."

SEATTLE, WA PACKET CLUB

The Seattle-Tacoma area packet radio users recently decided to become a formal organization. The actual formation of the club will take place October 13, 1984, at 1300 Pacific Time in the Boeing Employees' Amateur Radio Society meeting house. The club constitution will be a slightly modified version of the NEPRA constitution. The first large-scale goal of the club will be linking of the Seattle-Tacoma-Everett area to Vancouver, BC; Portland, OR; Spokane, WA; and Moscow, ID. Via KD7UW

PACKET RADIO IN GEORGIA

The Georgia Radio Amateur Packet Enthusiasts (GRAPES) club was formed on September 14. Their network name? GRAPEVINE, of course. They are interested in setting up repeaters to link Georgia with the Carolinas, Florida, Alabama and Tennessee. They would like to hear from packeteers in those areas. One possibility that they are examining is a repeater location on Brasstown Bald, a 4,784-ft mountain on the northern Georgia border. For information, contact:

Dennis Barrow, WB4GQX
Rte 7 Heard Road
Cumming, GA 30130. Via W4RI

ABSTRACTS

As space permits, and interesting articles come to our attention, Gateway will print abstracts of articles found in other journals and newsletters. If you know of an article that should be abstracted, drop us a note and a copy of the article.

"HF Packet Frequency Specification," by John Langner, WB2OSZ; NEPRA Packetear, Issue 14. This one-pager addresses the problem of frequency specification for FSK stations on HF. It proposes that the radio frequency midway between the mark and space frequencies be used when discussing the operating frequency of such stations.

"Routing Strategies in Computer Networks," by Hsieh and Gitman; Computer, June, 1984. This article addresses the question of routing. It sets forth some algorithms for determining the best route from one node to another, and discusses the application of these algorithms to various types of computer networks. Since it addresses routing in both datagram and virtual-circuit

networks, this article is particularly interesting to people concerned with amateur packet-radio networking.

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From 6530513967661468278
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fa1cd6b72d3df50,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,fa1cd6b72d3df50,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1984-09-29 19:46:02 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 (MC840302); site ttds.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!zehntel!hplabs!hao!seismo!
mcvax!enea!ttds!klemets
From: klemets@ttds.UUCP (Anders Klemets)
Newsgroups: net.ham-radio,net.wanted
Subject: RTTY and morse decoder wanted
Message-ID: <605@ttds.UUCP>
Date: Sat, 29-Sep-84 22:46:02 EDT
Article-I.D.: ttds.605
Posted: Sat Sep 29 22:46:02 1984
Date-Received: Thu, 27-Sep-84 04:36:32 EDT
Organization: The Royal Inst. of Techn., Stockholm
Lines: 7

I'm looking for some kind of device to connect to my computers RS232C
interface so I can decode RTTY and (or) morse signals from my radio.
Is there anybody who knows something about such things?

Anders Klemets
...mcvax!enea!ttds!klemets

From -6138060078938647 68
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d7bd657b6e52a27e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-30 00:54:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!cbosgd!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some interesting SWL loggings
Message-ID: <362@ihu1h.UUCP>
Date: Sun, 30-Sep-84 03:54:20 EDT
Article-I.D.: ihu1h.362
Posted: Sun Sep 30 03:54:20 1984
Date-Received: Mon, 1-Oct-84 03:52:30 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 39

During the last week of playing with a new ICOM
R71A
receiver, an MFJ active indoor antenna, and 25' of wire
wrapped around the inside bedroom window frame, I've logged
the following stations (all frequencies in MHz):

- Russian Aeroflot Airlines 15.024 CW (commercial flights
to Cuba)

- Ship-to-Shore duplex radiotelephone stations WOM (13.1163/12345.5 USB) and WLO (13.1349/12.3641 USB)

- MacDill AFB (FL)- 11.243 USB

- USAF Strategic Air Command - 11.243 USB

- USAF Tactical Air Command - 11.214 USB

- USAF Global Command & Control System Stations - AFCC/ATOS:

  o+ Albrook AFB (Panama Canal Zone) 8.993 USB

  o+ Scott AFB (IL) 9.014 USB

  o+ McClellan AFB (CA) 15.031 USB

- North American Aerospace Defense Command (NORAD) 9.023 USB

- Canadian Military Aeronautical Communications System (MACS) wx broadcasts from Edmonton 15.035 USB

- Dozens of cordless telephones, some as far as 2 miles distant: 1.660 - 1.830 FM

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -2885554612959243024
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,de3c091291267bf1
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,de3c091291267bf1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-30 17:42:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site sol1.UUCP
Path: utzoo!watmath!clyde!bonnie!akgua!sol1!s170
From: s170@sol1.UUCP (s170)
Newsgroups: net.ham-radio,net.columbia
Subject: Re: Challenger orbital elements
Message-ID: <201@sol1.UUCP>
Date: Sun, 30-Sep-84 20:42:00 EDT
Article-I.D.: sol1.201
Posted: Sun Sep 30 20:42:00 1984
Date-Received: Mon, 1-Oct-84 05:07:05 EDT
References: <164@mouton.UUCP>
Organization: THE SOLUTION, Lincoln, NE
Lines: 45

> Here is a predicted element set for orbit 23 of the upcoming Challenger
> mission. Note, however, that it was based on an October 1 launch and needs
> to have its RA (right ascension) of the ascending node adjusted for the
> actual launch time, which I believe is currently scheduled for October 4.
>
> Epoch time: 84276.85138889
>   Tue Oct 2 20:26:00.0   1984 UTC
> Inclination: 57.2007 deg
> RA of node: 68.7538 deg
> Eccentricity: 0.0010544
> Arg of perigee: 346.2766 deg
> Mean anomaly: 14.1415 deg
> Mean motion: 15.97849766 rev/day
> Decay rate: 0.046 rev/day^2 [incredibly high! -- prk]
> Epoch rev: 23
> Semi major axis: 6658.131 km
> Anom period: 90.121113 min
> Apogee: 287.857 km
> Perigee: 273.816 km
> Ref perigee: 2466.84893045
>   Tue Oct 2 20:22:27.590 1984 UTC
>
> The high inclination of this mission will make the orbiter visible at much
> higher latitudes than most shuttle missions. It will also make it possible
> for more amateurs to receive the 435 mhz transmissions of a Getaway Special
> experiment that will be mounted in the cargo bay. Tracking the shuttle,
> however, has always proven to be extremely difficult due to the unpredictable
> drag effects of the low orbit and the constant perturbations of maneuvering
> rockets. As we found with STS-9, predictions made from element sets which
> were only a day old could be off by minutes.
>
> Phil Karn

*** REPLACE THIS LINE WITH YOUR MESSAGE ***
<obligatory line-eater sacrifice>

In reference to the orbital element state-vector, does someone have an
easily transportable algorithm (or program, even) that will give longitude/
latitude predictions, visibility/altazimuth, etc? I know I'm asking a lot,
but it sure would be neat. I know the ham elements out there must have some
such thing, but I haven't subscribed to QST in some time, now. Anybody seen
anything like it? I have a PC-compatible, Turbo Pascal, and even (choke, gag!)
MS Basic.
   Thanx for listening (reading?).
         Russ Schnapp (...akgua!sol1!s170)

From -9077490754191241974
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,675cdbce41cd9d0f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-01 07:44:40 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!houxf!signal
From: signal@houxf.UUCP (J.BODDIE)
Newsgroups: net.ham-radio
Subject: VXOs
Message-ID: <801@houxf.UUCP>
Date: Mon, 1-Oct-84 10:44:40 EDT
Article-I.D.: houxf.801
Posted: Mon Oct 1 10:44:40 1984
Date-Received: Wed, 3-Oct-84 05:54:25 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 41

Thanks to everyone who responded to my question about VXOs. Here are
some results:

First, I added a series inductor with the xtal and variable capacitor.
This did not help at all. In fact, the FT-243 xtals seemed to be have
trouble oscillating at the extreme tuning range (still about 1 KHz).

Following a recommendation to try xtals in the HC6/U package, I called
JAN Crystals Co. Their "technical person" said that there was no difference
in the cut of xtals in either package and could not guarantee that one would
work better than the other for this application.

I decided to see for myself by ordering two xtals in an HC17/U package
(same as HC6/U but with pin dimensions compatible with the F-243 socket).
Success! These xtals could be pulled about 4 KHz without a series inductor.
I am hopeful that the inductor will extend this somewhat.

For your information, my QRP rig is based on a series of articles in 73
Magazine. I would recommend this circuit to anyone interested in building
such rigs because it is simple, has fairly high output power (8-10 W), and
all of the parts except for xtal and variable capacitor are available from
Radio Shack. The inductors are made by removing turns from R.S.10 and 100 uH
chokes.

The articles are as follows:

Feb. 81 - 80 & 40 m VXO transmitter.
Feb. 82 - VFO for above. I tried this, but it was chirpy and coupled power
              supply ripple very well.
May 82 - 20 W amplifier. Probably not worth the effort for only 3 dB.
Jan. 83 - 20 & 15 m versions.
July 81 - Companion receiver. I don't know anything about this.
Mar 83 - VERY IMPORTANT. Corrections to procedure for making the inductors from
R.S. chokes.

Even with the limited tuning (1 KHz) and a dipole, I have worked about 15 states
and the U.K. over a 1-2 month period.

Thanks again,
Jim Boddie NG2J
houxf!signal

From -2858420696720917473
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a209a07af9dd4b52,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-01 10:17:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Matchboxes, antenna height, etc
Message-ID: <12788@mgweed.UUCP>
Date: Mon, 1-Oct-84 13:17:35 EDT
Article-I.D.: mgweed.12788
Posted: Mon Oct 1 13:17:35 1984
Date-Received: Wed, 3-Oct-84 07:35:27 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 29

To answer W3IKG, sorry, I don't know where there is a Matchbox for sale at this time. I have seen some at hamfests recently, mostly the smaller 275 watt version.

I have the smaller one and use it with a 1000 watt (dc input) amp all the time with no smoke or arcing. Of course I tune up with just the 100 watt exciter first. The only real difference between the Matchbox and the balanced tuners in the handbook is Johnson's use of the dual differential capacitor which is an unavailable item. Without this cap, you have to tap down on the coil for proper loading and also be able to select series or parallel feed, but the handbook circuits work just as well.

I don't know too many people using vertical dipoles but that is a good way to go. That reminds me of my experience with my low freq antenna which is a 40 meter inverted v fed with open wire line. The antenna works much better on 75 and 160 meters when the feeders are tied together and the system is fed like a single wire. It then becomes a top capacity hat loaded vertical. Naturally it is better if you have radials, or like they used to do in the old days, a counterpoise wire.
A horizontal dipole just does not work well if it is under a quarter wave above ground.

I remember an article in a 1920's QST that used a 3-wire open line feeder. The tuner also was used to shift the current point to different locations on the antenna to optomize the angle of radiation. I hope to find that article again and try it out.

Bob K9EUI

From -5531416102234400294
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c89161508acea22e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-01 16:05:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 35
Message-ID: <12801@mgweed.UUCP>
Date: Mon, 1-Oct-84 19:05:55 EDT
Article-I.D.: mgweed.12801
Posted: Mon Oct 1 19:05:55 1984
Date-Received: Wed, 3-Oct-84 08:25:47 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 31

qst de k9eui
hr arrl dx bulletin nr 35 from arrl headquarters
newington ct
to all radio amateurs bt

south shetland. 4k1gag has been heard on 7002 khz at 0250z,
and on 7081 khz at 0400z, working split. qsl to uq2oc.

rtty. tom, od5ng, has been worked on 14085 khz at 1150z.

san felix. ce0aa has been heard consistently on 21245 khz at
2200z. on most days they can be found on 14236 khz, and on
wednesdays they have been worked on 7085 khz at 0400z. they
are also on 75 meter ssb at 0800z.

fiji. 3d2mo has been worked on 3795 khz at 1100z

mauritius. 3b8db can be found on 7006 khz at 0300z9

congo. tn8ee is active on 14030 khz at 1930z.

guam. kj2w/kh2, dave, has been heard on 3795 khz at 1130z.

ceuta and melilla. ea9kq has been worked on 7004 khz at 0020z.

gabon. tr8dm has been on 21030 khz at 1830z. qsl to f3cy

tuvalu. t2ade is on friday and saturday every week on 21290
khz at 2000z ar

From 4312954168806687221
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5138f0f0530c37c5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-01 16:06:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 84 (PART OF 13cm BAND LOST!)
Message-ID: <12802@mgweed.UUCP>
Date: Mon, 1-Oct-84 19:06:55 EDT
Article-I.D.: mgweed.12802
Posted: Mon Oct 1 19:06:55 1984
Date-Received: Wed, 3-Oct-84 08:26:04 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 20

qst de k9eui
hr arrl bulletin nr 84 from arrl headquarters
newington ct september 28, 1984
to all radio amateurs bt

at the fcc open agenda meeting on september 26, a segment of
the amateur 13 cm band was assigned to the aviation services
for flight test telemetry stations. the fcc adopted a report
and order in general docket number 84 186 that will assign 2310
to 2390 mhz to test flight telemetering stations under part 87
of the commissions rules.

part 97 of the amateur radio rules, has not yet been affected.
however, this action is one of several in a string of
procedural assaults on continued amateur occupancy of the 2310
to 2390 mhz segment. arrl will continue to oppose any
elimination of amateurs secondary status in this segment.
details will appear in qst ar

From -8710120063678729515
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f265ddff9561f29f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-01 16:07:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 83 (oscar 10 users please read)
Message-ID: <12803@mgweed.UUCP>
Date: Mon, 1-Oct-84 19:07:53 EDT

Article-I.D.: mgweed.12803
Posted: Mon Oct 1 19:07:53 1984
Date-Received: Wed, 3-Oct-84 08:26:22 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 10

qst de k9eui
hr arrl bulletin nr 83 from arrl headquarters
newington ct september 28, 1984
to all radio amateurs bt

potential users of the amsat oscar 10 satellite are reminded
that only cw, teleprinter and single sideband modes may be used
to communicate through the satellites transponders ar

From 2229406042804734549
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,268273e33bcdf891,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-01 16:08:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 81 (ham in space news)
Message-ID: <12804@mgweed.UUCP>
Date: Mon, 1-Oct-84 19:08:35 EDT
Article-I.D.: mgweed.12804
Posted: Mon Oct 1 19:08:35 1984
Date-Received: Wed, 3-Oct-84 08:26:40 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

qst de k9eui
hr arrl bulletin nr 81 from arrl headquarters
newington ct september 26, 1984
to all radio amateurs bt

nasa hq. has forwarded to johnson space center, jsc, the joint
arrl/amsat proposal to have astronaut tony england, w0ore,
carry amateur equipment with him in his flight scheduled for
next april, see arrl letter volume 3 number 11. the proposal
has been accepted philosophically by nasa, jsc engineering
personnel must now make technical and feasibility assessments.
arrl expects nasa to send a letter to the two organizations in
a few weeks informing them of the acceptance contingent upon
the project meeting all nasa technical and operational criteria
ar

From 2090894478939865153
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,21f3e93118f6fa4f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-01 16:09:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 80 (arrl opposes more bdcst on 40)
Message-ID: <12805@mgweed.UUCP>
Date: Mon, 1-Oct-84 19:09:34 EDT
Article-I.D.: mgweed.12805
Posted: Mon Oct 1 19:09:34 1984
Date-Received: Wed, 3-Oct-84 08:26:53 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

qst de k9eui
hr arrl bulletin nr 80 from arrl headquarters
newington ct september 26, 1984
to all radio amateurs bt

arrl has filed comments in mm docket number 84 706 opposing fcc licensing of any shortwave broadcast stations outside itu region 2 permitted to use frequencies in the 7100 to 7300 khz band. although fcc is legally within its rights to take this action, arrl argues that it is unwise because of fccs historical role defending this band segment for amateurs in region 2. at the very least, fcc should require that broadcasters meet stringent standards to abate any interference to amateur operation in region 2. details in arrl letter and november qst ar

From 3222560637446013940
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,88d7f1182a4562e1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-01 16:09:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 40
Message-ID: <12806@mgweed.UUCP>
Date: Mon, 1-Oct-84 19:09:59 EDT
Article-I.D.: mgweed.12806
Posted: Mon Oct 1 19:09:59 1984

Date-Received: Wed, 3-Oct-84 08:27:08 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 32

qst de k9eui
hr propagation forecast bulletin nr 40 from arrl headquarters newington ct october 1, 1984
to all radio amateurs bt

solar flux data for july through september make a good case for last weeks statement thast the end of solar cycle 21 could be near. the flux high for july was 93. the first 93 of the rising cycle came in february, 1977. the september average, 78, relates to march 1977, in the same way. the weeks low, 79, was last seen in november 1976, when cycle 21 was a mere four months old.

if fall dx results thus far have been below expectations, it could be because the qst charts from july on were based on solar flux values between 12 and 17 percent of those actually observed. this condition now seems leikely to apply to the charts in october qst as well.

the past week did not bring the rise that had been indicated by new solar activity observed one solar rotation earlier. instead, the solar flux staggered along in the low seventies, then dropped to an eight year low of 79 on the 20th, but no large upswing is expected. rather the prospects are for generally poor conditions through october 3. the beginning of the forecast week should be quite good, but with continuing low maximum useable frequencies.

american sunspot numbers for september 20 through 27 were between 0 and 9 with a mean of 3.1 ar

From 6552760291627146398
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6298b83e11f588a0,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,6298b83e11f588a0,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1984-10-01 16:34:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio,net.columbia
Subject: STS-41G Orbital Elements (more)
Message-ID: <167@mouton.UUCP>
Date: Mon, 1-Oct-84 19:34:49 EDT
Article-I.D.: mouton.167

Posted: Mon Oct 1 19:34:49 1984
Date-Received: Wed, 3-Oct-84 08:05:36 EDT
Organization: Bell Communications Research, Inc
Lines: 45

Relayed from the ARRL:

STS-41G Keplerian Element Sets for GAS 007 Planning

Launch: October 5, 1984 at 11:03 UTC.

I.D. Planning Set # 1-B (First Downlink)
Epoch 84/280.85347222
Drag 7.6E-02
Inclination 57.2007
R.A.A.N. 73.8280
Eccentricity .0010544
Arg. of Perigee 346.2766
Mean Anomaly 14.1415
Mean Motion 15.97849766
Orbit # 23

I.D. Planning Set # 2-B (Second Downlink)
Epoch 84/281.84930555
Drag 8.4E-02
Inclination 57.1942
R.A.A.N. 69.1449
Eccentricity .0007995
Arg. of Perigee 345.4320
Mean Anomaly 17.6465
Mean Motion 16.16455877
Orbit # 39

I.D. Planning Set # 3-B (Third Downlink)
Epoch 84/282.83678240
Drag 8.0E-02
Inclination 57.1865
R.A.A.N. 64.3691
Eccentricity .0008229
Arg. of Perigee 359.4947
Mean Anomaly 0.5436
Mean Motion 16.15978125
Orbit # 55

Note: These sets have been adjusted to match the design flight profile
to within approximately 10 seconds for each downlink period. An
error of several minutes can accumulate for propagation beyond these regions.

73 Bernie, W9KDR.

From 4101214753223494840

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,19990fb267479d16,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-01 16:36:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian orbital elements
Message-ID: <168@mouton.UUCP>
Date: Mon, 1-Oct-84 19:36:16 EDT
Article-I.D.: mouton.168
Posted: Mon Oct 1 19:36:16 1984
Date-Received: Wed, 3-Oct-84 08:06:07 EDT
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84269.11273179
   Tue Sep 25 02:42:20.26 1984 UTC
Element set: 688
Inclination: 97.6024 deg
RA of node: 245.3290 deg
Eccentricity: 0.0003981
Arg of perigee: 110.9280 deg
Mean anomaly: 249.2431 deg
Mean motion: 15.26407206 rev/day
Decay rate: 1.945e-05 rev/day^2
Epoch rev: 16478
Semi major axis: 6861.665 km
Anom period: 94.339177 min
Apogee: 504.582 km
Perigee: 499.119 km
Ref perigee: 2459.13288749
   Tue Sep 25 03:11:21.479 1984 UTC
Beacon: 145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84266.86002728
   Sat Sep 22 20:38:26.356 1984 UTC
Element set: 131
Inclination: 25.7453 deg
RA of node: 176.9223 deg
Eccentricity: 0.6058205
Arg of perigee: 308.4683 deg
Mean anomaly: 11.4966 deg
Mean motion: 2.05850303 rev/day
Decay rate: -1.27e-06 rev/day^2
Epoch rev: 962
Semi major axis: 26106.044 km

```
Anom period:    699.537469 min
Apogee:          35545.949 km
Perigee:          3914.796 km
Ref perigee:      2456.84451358
   Sat Sep 22 20:16:05.973 1984 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84265.21359828
   Fri Sep 21 05:07:34.891 1984 UTC
Element set:     43
Inclination:       98.2318 deg
RA of node:       327.0799 deg
Eccentricity:    0.0013527
Arg of perigee:   351.4789 deg
Mean anomaly:       8.6131 deg
Mean motion:   14.61903966 rev/day
Decay rate:       1.08e-06 rev/day^2
Epoch rev:            2973
Semi major axis:  7062.246 km
Anom period:     98.501682 min
Apogee:            694.114 km
Perigee:           675.008 km
Ref perigee:      2455.21196170
   Fri Sep 21 05:05:13.490 1984 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84257.01896079
   Thu Sep 13 00:27:18.212 1984 UTC
Element set:     102
Inclination:       82.9547 deg
RA of node:        84.3726 deg
Eccentricity:    0.0058689
Arg of perigee:   163.2634 deg
Mean anomaly:     197.0424 deg
Mean motion:   12.15588439 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12160
Semi major axis:  7987.325 km
Anom period:    118.461146 min
Apogee:           1657.804 km
Perigee:          1564.050 km
Ref perigee:      2447.05619872
   Thu Sep 13 01:20:55.569 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84264.57512763
   Thu Sep 20 13:48:11.27  1984 UTC
Element set:     220
```

```
Inclination:       82.9547 deg
RA of node:        89.8654 deg
Eccentricity:    0.0017040
Arg of perigee:   235.7929 deg
Mean anomaly:     124.1516 deg
Mean motion:   12.06664240 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12159
Semi major axis:  8026.684 km
Anom period:    119.337257 min
Apogee:           1676.623 km
Perigee:          1649.268 km
Ref perigee:      2454.54654755
   Thu Sep 20 13:07:01.708 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      84270.16226739
   Wed Sep 26 03:53:39.902 1984 UTC
Element set:     191
Inclination:       82.9532 deg
RA of node:        88.4127 deg
Eccentricity:    0.0009736
Arg of perigee:   254.2730 deg
Mean anomaly:     105.7276 deg
Mean motion:   12.05085952 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12210
Semi major axis:  8033.833 km
Anom period:    119.496634 min
Apogee:           1683.026 km
Perigee:          1667.382 km
Ref perigee:      2460.13789607
   Wed Sep 26 03:18:34.220 1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84268.49867713
   Mon Sep 24 11:58:05.704 1984 UTC
Element set:     88
Inclination:       82.9545 deg
RA of node:        80.2048 deg
Eccentricity:    0.0050224
Arg of perigee:   158.5927 deg
Mean anomaly:     201.7256 deg
Mean motion:   12.13563013 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12276
Semi major axis:  7996.210 km
Anom period:    118.658857 min
Apogee:           1661.031 km
Perigee:          1580.711 km
Ref perigee:      2458.53490525
```

```
   Mon Sep 24 12:50:15.813 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      84258.51084144
   Fri Sep 14 12:15:36.700 1984 UTC
Element set:     171
Inclination:       82.9535 deg
RA of node:        90.8446 deg
Eccentricity:    0.0021498
Arg of perigee:   204.9121 deg
Mean anomaly:     155.0898 deg
Mean motion:   12.08685243 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12106
Semi major axis:  8017.728 km
Anom period:    119.137717 min
Apogee:           1660.557 km
Perigee:          1626.084 km
Ref perigee:      2448.47519899
   Fri Sep 14 11:24:17.192 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      84271.02350192
   Thu Sep 27 00:33:50.565 1984 UTC
Element set:     293
Inclination:       82.9545 deg
RA of node:        90.0971 deg
Eccentricity:    0.0019055
Arg of perigee:   307.1710 deg
Mean anomaly:      52.7595 deg
Mean motion:   12.02947950 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12199
Semi major axis:  8043.217 km
Anom period:    119.705927 min
Apogee:           1693.773 km
Perigee:          1663.120 km
Ref perigee:      2461.01131900
   Thu Sep 27 00:16:17.961 1984 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84268.00965680
   Mon Sep 24 00:13:54.347 1984 UTC
Element set:     273
Inclination:       99.0574 deg
RA of node:       240.5074 deg
Eccentricity:    0.0013124
Arg of perigee:   173.6948 deg
Mean anomaly:     186.4389 deg
Mean motion:   14.13083789 rev/day
```

```
Decay rate:       1.23e-06 rev/day^2
Epoch rev:           16781
Semi major axis:  7224.158 km
Anom period:    101.904785 min
Apogee:            855.746 km
Perigee:           836.784 km
Ref perigee:      2458.04377468
   Mon Sep 24 01:03:02.131 1984 UTC
Beacon:           137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84247.13108875
   Mon Sep  3 03:08:46.68  1984 UTC
Element set:     92
Inclination:       98.7036 deg
RA of node:       277.1751 deg
Eccentricity:    0.0016362
Arg of perigee:   185.1278 deg
Mean anomaly:     174.9735 deg
Mean motion:   14.22429264 rev/day
Decay rate:        3.8e-07 rev/day^2
Epoch rev:            7455
Semi major axis:  7192.471 km
Anom period:    101.235263 min
Apogee:            826.261 km
Perigee:           802.725 km
Ref perigee:      2437.09691921
   Mon Sep  3 02:19:33.819 1984 UTC
Beacon:           137.5000 MHz


From -7314663558436884058
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31e41bbde9b484b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-02 07:28:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site smu.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!smu!pedz
From: pedz@smu.UUCP
Newsgroups: net.ham-radio
Subject: Inductors
Message-ID: <13200007@smu.UUCP>
Date: Tue, 2-Oct-84 10:28:00 EDT
Article-I.D.: smu.13200007
Posted: Tue Oct  2 10:28:00 1984
Date-Received: Thu, 4-Oct-84 02:39:46 EDT
Lines: 18
Nf-ID: #N:smu:13200007:000:853
Nf-From: smu!pedz    Oct  2 09:28:00 1984

I ams, and  trying to put together a few things on my own and keep running up
```

again the problem of inductors (and transformers) not being as availiable
as R's and C's. What do most people do to cope with this problem. I
assume that you wind your own but there are many things required to do
this. Cores, wire, and slugs are to name a few. Not to mention some
sort of charts which tell you which core, wire, and windings to use to
get the size that you want. (I know that straight physics of the problem
would result in a very poor approximation to this problem). Is there
a kit sold by someone which has all the goodies needed to build your
own inductors with reasonable accuracy? Are there other solutions to the
problem?

I would prefer that you mail your responses directly to me and I will
post a summary if requested.

Perry
convex!smu!pedz

From -3326413853201391228
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,723d229a756afb6d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-02 07:29:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Denver Mods 4/2/84) 6/24/83; site drutx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!hogpc!houxe!drutx!n2ic
From: n2ic@drutx.UUCP
Newsgroups: net.ham-radio
Subject: Re: Dr. DX
Message-ID: <1202@drutx.UUCP>
Date: Tue, 2-Oct-84 10:29:33 EDT
Article-I.D.: drutx.1202
Posted: Tue Oct 2 10:29:33 1984
Date-Received: Wed, 3-Oct-84 19:30:36 EDT
Organization: AT&T Information Systems Laboratories, Denver
Lines: 9

The DX column in the October QST has an unsolicited review of
Dr. DX.

If you are interested in talking to someone who has used the latest version
of Dr. DX, call Mike (NI0E) at Colorado Amateur Radio (303 841-8444).
He will be happy to tell you all about it.

73,
Steve, N2IC/0

From 7333921698459549757
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a19c3f2be7a7a6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-02 07:43:29 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Denver Mods 4/2/84) 6/24/83; site drutx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!hogpc!houxe!drutx!n2ic
From: n2ic@drutx.UUCP
Newsgroups: net.ham-radio
Subject: Re: Tribanders
Message-ID: <1205@drutx.UUCP>
Date: Tue, 2-Oct-84 10:43:29 EDT
Article-I.D.: drutx.1205
Posted: Tue Oct 2 10:43:29 1984
Date-Received: Wed, 3-Oct-84 19:31:54 EDT
Organization: AT&T Information Systems Laboratories, Denver
Lines: 25

I wholeheartedly endorse the KT-34XA.
It typically outperforms my monobanders.

A word of warning about roof-mounted tripods, however:

I used the South River 15 foot tripod for 3 years when I lived
in New Jersey. It is not intended for use with ham radio
antennas (as the manufacturer will be happy to tell you).
I had a Wilson 3-element tribander on top of it (not a particularly
large antenna). In addition to anchoring the tripod into the roof,
I had one set of guy wires set into the roof rafters.
Despite this precaution, I experienced many problems with
damaged cross-members in the tripod (i.e. they would break due
to twisting of the tripod). Also be warned that without modification,
the rotor mounting in the tripod is not large enough to accomodate
a "normal" sized ham rotor (i.e. HD-73, Ham-4, etc.), and the
opening in the top of the tripod will not accommodate a standard
2" mast.

In summary, the South River roof tripods are, at best, a temporary
solution (2-3 years), which will require considerable maintenance
(usually in mid-February when the weather is at its worst).

73,
Steve, N2IC/0

From 1919359700173779883
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e8cdae4ecb3c9fdd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-03 10:19:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: FCC aux comments
Message-ID: <12826@mgweed.UUCP>

Date: Wed, 3-Oct-84 13:19:50 EDT
Article-I.D.: mgweed.12826
Posted: Wed Oct 3 13:19:50 1984
Date-Received: Thu, 4-Oct-84 09:52:17 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 27

I think the idea of an FCC auxilliary is a good one. After all, hams are doing the testing now so why not.

However I really wonder how well it would work.

Last year we had a couple jammers on several Northern Illinois repeaters. We caught one of them, so we have his name and address. (Stupid jerk had a CB receiver connected to a 2 meter rig and let the vox kick on the 2 meter rig on our input. This went on continuously for 2 days). We called the Chicago FCC office and were promised help from a field engineer, which never happened. I wrote to a Senator, a Congressman, and the head honcho of the FCC in Washington. So far all we got is the promise that the FCC will now take the word of a repeater trustee that a violation has occured (they no longer have to hear it themselves).

I gess my point is that I have seen no action yet, even though the name and address of the offendor was given them. The same is true of a 27.5 MHz ssb'er. One I heard was dumb enough to give his address over the air. I told the FCC about him too, and nothing has been done.

As I see it, funds for the FCC have been cut so badly they don't have anyone to do enforcement work. What's the solution?

Bob K9EUI

From -4626753377546193617
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd7c7a454b80e276,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-03 11:12:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!hogpc!houti!ariel!vax135!
cornell!uw-beaver!tektronix!hplabs!hp-pcd!hplvle!chris
From: chris@hplvle.UUCP
Newsgroups: net.ham-radio
Subject: Re: White House Communications
Message-ID: <2800002@hplvle.UUCP>
Date: Wed, 3-Oct-84 14:12:00 EDT
Article-I.D.: hplvle.2800002
Posted: Wed Oct 3 14:12:00 1984
Date-Received: Tue, 9-Oct-84 02:59:57 EDT
Organization: Hewlett-Packard - Loveland, CO

Lines: 22
Nf-ID: #N:hplvle:2800002:000:925

Nf-From: hplvle!chris   Oct 3 10:12:00 1984

Subject: White House Communications

For what it's worth department, August 6 AW&ST had a note that:
"Defense Communications Agency plans to lease commercial Ku band
"Satellite service for White House Communications and has requested
"bids by mid-September. The contractor is to supply six portable
"satcom terminals that can be disassembled and shipped by commercial
"or military aircraft. Each terminal is to be capable of offering
"256 kilobit/sec capacity to permit encryption."

Sounds like something beyond the suitcase-sized comm, but maybe the suitcases will link into these "portable" terminals in the same city as the President. Either way, it doesn't sound like something the aficionado would be able to hear, but for those who asked last month, perhaps its a measure of the security used for such potentially critical communications.

73's,
Chris WD5IBS

From 4421010882452932328
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f1c294ad0d9c95ea,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-03 17:14:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.13 $; site iuvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!iuvax!k9iu
From: k9iu@iuvax.UUCP
Newsgroups: net.ham-radio
Subject: Univ. Radio Club Net
Message-ID: <8500009@iuvax.UUCP>
Date: Wed, 3-Oct-84 20:14:00 EDT
Article-I.D.: iuvax.8500009
Posted: Wed Oct 3 20:14:00 1984
Date-Received: Thu, 4-Oct-84 10:11:59 EDT
Lines: 24
Nf-ID: #N:iuvax:8500009:000:1013
Nf-From: iuvax!k9iu   Oct 3 19:14:00 1984

The first session of the University Amateur Radio Clubs net will be on October 8th, 0100 UTC (Sunday evening 8:00 p.m. EST) on 3905 khz, +/- QRM. Net control will be K9IU at Indiana Univeristy in Bloomington, IN.

The intent of this net is to provide a means for club stations at various campuses to communicate with each other and exchange information that is felt to be of interest to the other club stations.

This initial net will be a "get acquainted" session for the clubs. An exchange of size of clubs, type of equipment, club activities and projects, problems, etc. will start the net off. After the introductions, be ready to express your ideas on what you (your club) would like to see happen with this net. We realize that 75 meters may not provide as wide a coverage as everyone would like. Suggestions for alternate frequencies or times will be accepted.

I hope to meet all of you on the net.

73

Ed Crandell, WD8CBE
President, K9IU ARC
ihnp4!inuxc!iuvax!k9iu

From 2974297401479242997
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ac7881a4e8f027cd
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-03 21:52:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/18/84; site geowhiz.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!uwvax!geowhiz!karsh
From: karsh@geowhiz.UUCP (Bruce Karsh)
Newsgroups: net.ham-radio
Subject: Re: some questions about UNIDEN CR2021
Message-ID: <134@geowhiz.UUCP>
Date: Thu, 4-Oct-84 00:52:25 EDT
Article-I.D.: geowhiz.134
Posted: Thu Oct 4 00:52:25 1984
Date-Received: Fri, 5-Oct-84 08:52:30 EDT
References: <12290@sri-arpa.UUCP> <380@voder.UUCP>
Organization: UW Madison, Geology Dept.
Lines: 15

> [if this line is present please report to the office]
>
> Re schematics with electronic gear: the Shack DX-400 comes with a
> schematic and costs $300; the essentially identical Uniden CR-2021
> comes without one and costs $90 or $100. Take your choice.
> Gene E. Bloch (...!nsc!voder!gino)

I went out and bought the DX-400 for about $200 a few months ago. What I'd like to know is whether there is any difference

at all between the DX-400 and the CR-2021.

A friend of mine is very anxious to get the DX-400. Wouldn't
he be a lot better off getting the Uniden?

Bruce Karsh

From 4949194654808551868
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ada17602e7807545,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-04 08:10:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Why is 250 Hz filter CHEAPER than 500 Hz? (ICOM R71A)
Message-ID: <363@ihu1h.UUCP>
Date: Thu, 4-Oct-84 11:10:11 EDT
Article-I.D.: ihu1h.363
Posted: Thu Oct 4 11:10:11 1984
Date-Received: Fri, 5-Oct-84 05:51:14 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 16

Why is ICOM'S 250 Hz Filter Cheaper Than Its 500 Hz Filter?

ICOM offers 2 narrow CW filters for the 9 MHz 1st IF in
the
R71A general coverage receiver:

1. FL-32 (500 Hz @6 db, 1.5 KHz @ 60 db). Price = $60.

2. FL-63 (250 Hz @6 db, ? @ 60 db). Price = $48.50.

The 500 Hz filter worked ok in my older R70. Why is
the
more narrow filter CHEAPER? Does anyone have any experience
with either filter in the R71A?
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -6618115796680985926
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ac7881a4e8f027cd
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-04 08:43:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Re: some questions about UNIDEN CR2021
Message-ID: <5055@brl-tgr.ARPA>
Date: Thu, 4-Oct-84 11:43:27 EDT
Article-I.D.: brl-tgr.5055
Posted: Thu Oct 4 11:43:27 1984
Date-Received: Fri, 5-Oct-84 08:58:39 EDT
References: <12290@sri-arpa.UUCP> <380@voder.UUCP>, <134@geowhiz.UUCP>
Organization: Ballistics Research Lab
Lines: 20

It's doubtful that you could say that someone would be "better off" buying
the Uniden CR-2021 than the Radio Shack DX-400. They are essentially the same
radio, with minor cosmetic and S-meter differences. The main difference is the
price and warranty situation. You trade off the Radio Shack warranty and easy
access to service for buying by mail order at a much lower price. (Unless
you happen to be located in the area of one of the Uniden discount sellers.)

It's been my experience that modern electronics that work when you turn them
on continue to work, at least through any warranty period. Only long
extended (5-year) warranties on expensive hifi gear seem to be worthwhile
to me, so I personally discount the advantages of buying the Radio Shack.

By the way, in addition to the two $89 sources of the Uniden previously
posted (Missouri Radio Center & National Tower), Grove Enterprises is now
selling it at $99 with free UPS. EEB still is including the free headphones
but charges for UPS. Competition reigns...

Will Martin

seismo!brl-bmd!wmartin   or   wmartin@almsa-1.ARPA

From 5460187327733447864
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b57f57be89ad9999,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-04 11:00:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hound.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!hound!royw
From: royw@hound.UUCP (#R.WALTERS)
Newsgroups: net.ham-radio
Subject: SWLs
Message-ID: <657@hound.UUCP>
Date: Thu, 4-Oct-84 14:00:48 EDT
Article-I.D.: hound.657
Posted: Thu Oct 4 14:00:48 1984
Date-Received: Fri, 5-Oct-84 06:03:00 EDT
Organization: AT&T Bell Labs, Holmdel NJ

Lines: 12

I don't understand the "ham vs SWL" at all. I have received SWL cards from as far away as USSR and Czechoslovakia and the SWL cards and quite similar to the QSL cards that all "hams" enjoy receiving. The SWL people in the US should also send SWL cards. Maybe not to US "hams" but at least to "hams" operating outside the US. This "ham vs SWL" is getting to be "snob" oriented.

Some comments that I have read, look like they came from EX-11 meter people (CBers). TSK TSK.

Roy Walters WA2FVM

From -2979708442176074556
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7293bc0cb19ed9a7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-04 11:48:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.17 $; site infoswx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!infoswx!jim
From: jim@infoswx.UUCP
Newsgroups: net.ham-radio
Subject: Re: Need Help on Icom xmit delay
Message-ID: <3200021@infoswx.UUCP>
Date: Thu, 4-Oct-84 14:48:00 EDT
Article-I.D.: infoswx.3200021
Posted: Thu Oct 4 14:48:00 1984
Date-Received: Sat, 6-Oct-84 04:42:15 EDT
References: <170@zps.UUCP>
Lines: 19
Nf-ID: #R:zps:-17000:infoswx:3200021:000:881
Nf-From: infoswx!jim Oct 4 13:48:00 1984

My new Yaesu FT-209RH has the same problem after it 'warms up'. More specifically, after being in QSO for several minutes the transmitter tends to want to stay keyed for 0.5 - 1.0 seconds after the PTT switch is released. What is really interesting about it is that it does this only when 'warm', and only after speaking into the microphone (external speaker/mic, too). Just keying and releasing the PTT switch won't make it happen. The demo FT-209RH at the local ham emporium does not have this problem. Anyway, my radio is currently at the Yaesu repair center in California where the problem hopefully will be resolved. As soon as I find out what the problem is, I'll post it to the net. Perhaps the phenomonon in the Icom is similar to the Yaesu's and may have a similar cause.

73's,
Jim Gerke, KC5OA
Infoswitch Corp.

Richardson, TX
(214) 644-0570
allegra!convex!infoswx!jim

From -2302444356533892966
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de95ebb0e333ed0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-04 16:26:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2(pesnta.1.2) 9/5/84; site pesnta.UUCP
Path: utzoo!linus!decvax!decwrl!sun!idi!pesnta!jiml
From: jiml@pesnta.UUCP (Jim Livingston)
Newsgroups: net.ham-radio
Subject: Novice Questions
Message-ID: <2579@pesnta.UUCP>
Date: Thu, 4-Oct-84 19:26:46 EDT
Article-I.D.: pesnta.2579
Posted: Thu Oct 4 19:26:46 1984
Date-Received: Fri, 5-Oct-84 20:44:59 EDT
Distribution: net
Organization: Perkin-Elmer DSG, Santa Clara, Calif.
Lines: 37

Hello, net.ham-radio !

I have been reading this newsgroup for only a week, and find
it very interesting(although largely incomprehensible), and I
have a general question; how does one "get into" ham radio ?

I have a background which gives me some knowledge of electronics
and electricity, and a bit of telecommunications, and would like
to find out if this fascinating hobby is for me.

My only experience with two way radio communications is the CB
in my car.

Is there any particular reading which would be enlightening to
a novice ?

Any help would be greatly appreciated.

Thanks in advance

Regards;
jim

PS Please reply by mail, if possible.

MADE IN U.S.A. - REG. PENNA. DEPT. AGR.

Jim Livingston, Perkin-Elmer Data Systems Group - Santa Clara, Calif.
UUCP: ..!hplabs!pesnta!jiml
(408) 727-5540

From 392106727773279613
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf3eb26e16ecfc79,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-04 16:50:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 8/7/84; site ucbvax.ARPA
Path: utzoo!linus!decvax!ucbvax!medin
From: medin@ucbvax.ARPA (Milo Medin)
Newsgroups: net.ham-radio
Subject: Re: separate lists
Message-ID: <2360@ucbvax.ARPA>
Date: Thu, 4-Oct-84 19:50:31 EDT
Article-I.D.: ucbvax.2360
Posted: Thu Oct 4 19:50:31 1984
Date-Received: Sat, 6-Oct-84 01:48:35 EDT
References: <12577@sri-arpa.UUCP>
Organization: University of California at Berkeley
Lines: 6

I vote to keep them together...

Milo Medin
KB6ADT

From 8888899716372159614
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de95ebb0e333ed0
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-05 06:37:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ih1ap.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ih1ap!bmalc
From: bmalc@ih1ap.UUCP (Bill Malcolm)
Newsgroups: net.ham-radio
Subject: Re: Novice Questions
Message-ID: <414@ih1ap.UUCP>
Date: Fri, 5-Oct-84 09:37:13 EDT
Article-I.D.: ih1ap.414
Posted: Fri Oct 5 09:37:13 1984

Date-Received: Sat, 6-Oct-84 05:14:24 EDT
References: <2579@pesnta.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 41

Jim:

It is nice to hear of people who are interested in getting into ham-radio. I have been a ham about 8 years and have spent many enjoyable hours(much to my wife's annoynamce) at the dials of my rig.

I can understand your comment about not understanding the contents of the net-news articles, as in all hobbies, jobs, etc the jargon sometimes gets almost non understandable.

To get information about getting into ham radio some suggestions which may or may not apply to your personal situation but should get you on the way:

1. buy (or go to library) a copy of one or more of the the following mags. , QST(publication of the ARRL (American Radio Relay League--a ham oriented organization which some hams join--i did), 73, HAM RADIO and others. These publications have articles about the hobby as well as adverts. about equipment--to get an idea of the cost of getting into the hobby.
2. Contact a local ham club--some clubs have a telephone number listed in the telephone directory. Some clubs have classes for new hams or classes for upgrading for licenced hams.
3. Attend a local ham-fest(a ham,electronics,computer,junk) flea market.
4. If you know a ham ask him to help get you started, most hams enjoy being an "Elmer"(a ham jargon term for a ham who helps a new ham thru the steps necessary to get his "ticket").
5. The ARRL publishes a number of primer type books which can sometime be found in bookstores, their licence manual is pretty good. The books can be ordered from ARRL via coupons printed in QST.
6. I hope this has helped--I have not coverd all the avenues but at these are the way that come to mind at this time.

   73(more jargon for best wishes-and other nice things)
   Bill wb9rky
   1h1ap!bmalc

From 8630723166209055708
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f4f38bcc831086e6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-05 09:07:15 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: swl list comments
Message-ID: <12832@mgweed.UUCP>
Date: Fri, 5-Oct-84 12:07:15 EDT
Article-I.D.: mgweed.12832
Posted: Fri Oct 5 12:07:15 1984
Date-Received: Sat, 6-Oct-84 05:13:41 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 6

I also vote to keep the SWL and similar postings here. As someone said,
we could perhaps indicate in the title what it is.

Bob K9EUI

From 5437823237427962444
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,174c4f1eea1336a0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-07 00:36:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 v7 ucbopal-1.9 BSD 4.2; site
ucbopal.CC.Berkeley.ARPA
Path: utzoo!linus!decvax!ucbvax!ucbtopaz!ucbopal!wcwells
From: wcwells@ucbopal.CC.Berkeley.ARPA
Newsgroups: net.ham-radio
Subject: Navy - Marine Corps MARS
Message-ID: <206@ucbopal.CC.Berkeley.ARPA>
Date: Sun, 7-Oct-84 03:36:17 EDT
Article-I.D.: ucbopal.206
Posted: Sun Oct 7 03:36:17 1984
Date-Received: Mon, 8-Oct-84 04:47:22 EDT
Organization: Univ. of Calif., Berkeley CA USA
Lines: 54

Ref: CNO WASHINGTON DC 160106Z SEP 84 (NAVOP 106/84, Navy Newsgram 38-84)

     The Navy - Marine Corps Military Affiliate Radio System (MARS)
is a Navy Department sponsored emergency communications system
available to military and civilian disaster officials during
periods of emergency. A primarily volunteer organization, MARS is
unique within the Naval establishment. The Commander, Naval
Telecommunications Command is the central coordinator in carrying
out MARS responsibilities.

     Although a military system, MARS is closely related to Amateur
Radio. An amateur radio operators license is a prerequisite for

affiliation, and the system relies on the expertise of its 3,000 volunteer amateur radio operators who use Navy telecommunications procedures. All MARS operations are conducted on military assigned frequencies.

Although no major communications outages resulted from Hurricane Diana's erratic activities, Navy - Marine Corps MARS "stood at the ready" throughout the storm's life. 140 volunteer MARS members from Florida to Virginia participated, each with their own equipment, for a total of 3,400 man-hours. The rate for this service, if purchased, would be more than $100,000.

The National Communications System (NCS), a confederation of federal agencies and departments established by Presidential Memorandum, is responsible for ensuring that critical telecommunications needs of the Federal Government are met during any emergency. Since entering into a memorandum of understanding with NCS on 17 Nov 83, Navy - Marine Corps MARS offers organizations providing emergency services a reliable alternative to costly equipment purchases and personnel assignments.

If you are a U.S. Citizen, age 14 or older, with an Amateur Radio Operator's license and would like to know more about Navy - Marine Corps MARS, contact: Chief, Navy - Marine Corps MARS, 4401 Massachusetts Avenue NW, Washington DC 20390.

WB6NLL Note: Navy - Marine Corps MARS operates a worldwide RTTY message traffic system and a ship/shore phone-patch service for naval personnel afloat and overseas. To participate in Navy - Marine Corps MARS you will need a station capable of operating on military frequencies in a least two HF bands (eg. near the 40m and 80m Amateur bands). Since Navy - Marine Corps MARS handles a lot of RTTY messages you will also want to have a RTTY station capable of 100 wpm.

Bill Wells, RMC, USNR
Chief MARS Operator, Naval Reserve Readiness Command Region 20
WB6NLL
wcwells@Berkeley.ARPA
ucbvax!wcwells

From -991497693381219632
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f5699b14842cb208,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-07 13:20:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!Geoff@SRI-CSL.ARPA
From: Geoff@SRI-CSL.ARPA
Newsgroups: net.ham-radio

Subject: re: white house radios
Message-ID: <12779@sri-arpa.UUCP>
Date: Sun, 7-Oct-84 16:20:00 EDT
Article-I.D.: sri-arpa.12779
Posted: Sun Oct 7 16:20:00 1984
Date-Received: Tue, 9-Oct-84 08:36:21 EDT
Lines: 157

From: the tty of Geoffrey S. Goodfellow <Geoff@SRI-CSL.ARPA>

I think they are aware of the problem and help may be on the way:

n062 1458 06 Oct 84
BC-PHONES 2takes
NSA Seeking 500,000 'Secure' Telephones
Exclusive 6 p.m. EDT embargo
By DAVID BURNHAM
c.1984 N.Y. Times News Service
    WASHINGTON - The National Security Agency is proposing that the government and industry be equipped with as many as 500,000 telephones that can be secured against interception.
    The agency is convinced that the Soviet Union and the other nations are obtaining important intelligence from United States telephones.
    Although cloaked in secrecy, a program like the one the agency proposes could cost hundreds of millions of dollars. The project could also lead to a new role for the intelligence agency in private industry. Under the proposal, production of the secure phones would begin in two years.
    The decision by the largest and most secretive American intelligence organization to propose a major effort to combat telephone eavesdropping was disclosed by Walter G. Deeley, the senior official in charge of protecting government communications.
    He said in an interview that electronic eavesdropping by the Soviet Union, other countries he did not name and corporations posed a genuine threat to the security of the United States.
    ''I want the country to be aware that if we don't protect our communications, it can do a great deal of damage to us,'' Deeley said. ''This is a problem that goes to the very fabric of our society. It is not just a worry of the national security agencies.''
    He said he believed the United States was in ''deep trouble,'' adding: ''They are having us for breakfast. We're hemorrhaging. Your progeny may not enjoy the rights we do today if we don't do something.''
    A Reagan administration official familiar with intelligence matters agreed there was a surveillance problem, but he also said no final decision had been made to go beyond research or to request money to produce the phones.
    In August, the National Security Agency sent a letter to more than 2,000 major corporations saying, ''The U.S. has initiated an effort to develop low-cost, user-friendly secure telephone instruments.''
    The number of secure telephones currently used by government agencies is classified information. But the Carter administration said there were 100 such phones in the government, and it planned to

buy 150 more. The cost of each phone then was $35,000. The Reagan administration has bought an unknown number of additional secure phones.

The phones proposed by the NSA would be used by the Central Intelligence Agency, the Defense and State departments, military contractors and other private corporations such as banks that handle information of possible use to a foreign power.

The NSA was set up by President Truman in a secret executive order in 1952 to conduct electronic intelligence all over the world and protect the sensitive messages of the United States. It has used its secret budget, now estimated at $4 billion a year, to make itself a major sponsor of advanced computer research, and it has played an important covert role in shaping national communication policy. Its top officials almost never grant on-the-record interviews.

''Anyone making a phone call to the West Coast or Boston from the Washington area has no idea how the conversation will be transmitted,'' Deeley said. ''It might go via fiber optics, conventional cable, microwave towers or one of the 19 domestic satellites. If is going via satellite you can presume the other guy is listening to it.''

Asked for specific examples of electronic espionage, he said he could not disclose them because they were classified. Citing individual cases, he said, would give the Russians important clues about the ability of the United States to detect their efforts.

Deeley said his agency was developing a similar program to improve the security of computerized data. ''This area has blown up extraordinarily fast,'' he said. ''In many ways computerized data is more harmful than telephones because it's all record information.

''The financial institutions have become aware of this problem. The insurance companies are becoming aware. The rest of the private sector companies are just now beginning to see that if they are going to survive, they have to protect their communications.''

He said increasing American use of communication satellites and microwave transmission towers made it economically possible for almost any nation and many large corporations to intercept messages, then use high-speed computers to sort them out.

A spokesman for the American Telephone and Telegraph Co. said he could not estimate the amount of telephone traffic that was subject to relatively easy interception because it was transmitted by microwave towers or satellites. But he added that one rough indicator was that 70 percent of AT&T's domestic equipment and 60 percent of its overseas equipment transmitted telephone messages through the atmosphere rather than by cable, which is harder to intercept.

Few members of Congress other than members of the Senate and House intelligence committees are aware of the NSA's plan. One exception is Rep. Glenn English, D-Okla., chairman of the House Government Operations Subcommittee on Information. In a letter Sept. 24 to the General Accounting Office, a congressional investigative arm, he said, ''There can, of course, be no objection to maintaining adequate security for classified information.''

He said, however, that he knew ''from past experience that the national security bureaucracy has a tendency to require a degree of protection for classified information that may be excessive.'' He

added, ''Technological security measures are very expensive, and my concern is that the unnecessary use of these measures is a waste of scarce federal funds.''

English asked the GAO to prepare an unclassified report on whether the proposed protective measures were necessary and worth the cost.

Henry Geller, director of the National Telecommunications and Information Administration in the Carter administration and now the head of the Washington Center for Public Policy Research of Duke University, raised questions about the project.

He said that when the Carter administration studied Soviet eavesdropping, it decided that its biggest security agency should be responsible for assuring the communications security of the American military and American intelligence services but that the Commerce Department should be responsible for working with private companies.

''There was a strong belief in the Carter administration that the United States has a long and important tradition that the telephone systems and broadcasting groups are independent, privately owned entities,'' he said. ''Adopting a plan that gives the NSA, a branch of the Pentagon, an important role in the communication network of private corporations and civilian agencies of government is a significant policy change that should be carefully examined by Congress before it is adopted.''

Deeley said his agency's concern prompted it earlier this year to award five of the major American communication companies small contracts to conduct individual studies; the object would be to determine whether they could mass-produce a low-cost, easy-to-use telephone that would be difficult to intercept. The companies are AT&T, the GTE Corp., the ITT Corp., the Motorola Corp. and the RCA Corp.

Deeley did not describe the telephones, but experts in the field said each would presumably have a small computer that would transform the voice signals into a stream of coded digits. They said this would require time and expensive equipment for an outsider to decode the message.

However, after the coded message was transmitted by conventional means to another special telephone, the receiving unit's computer could quickly turn the digits back into an understandable voice.

As a result of the preliminary studies supported by his agency, Deeley said that he hoped to get bids on the project in November and sign an agreement with two of the five companies before the end of this year, and that production of the devices could begin before the end of 1986. ''We're talking about a half a million phones,'' Deeley said.

While the Carter administration paid $35,000 for each such phone, Deeley said the NSA hoped that mass production could cut the cost.

''Communications security is like insurance,'' he said. ''It has no intrinsic value until it is needed. Some people buy insurance, some don't. If you are a responsible person with a family, you take out a little term insurance. If you aren't, you buy a case of beer.''

Deeley said a major investment in secure telephones by the private sector would result in a substantial reduction of the cost of such equipment for the federal government.

''If Exxon or Hanover Trust want to protect themselves,'' he said,

''they ought to be able to get the right equipment to achieve that
goal. If they don't care about other people reading their mail,
that's their business.''

nyt-10-06-84 1808edt
****

From 3945523491845532337
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,da264a248aca7e29,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-07 14:02:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site houxn.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!hogpc!houxn!jak
From: jak@houxn.UUCP
Newsgroups: net.ham-radio
Subject: Re: HANDI-HAMS
Message-ID: <564@houxn.UUCP>
Date: Sun, 7-Oct-84 17:02:09 EDT
Article-I.D.: houxn.564
Posted: Sun Oct 7 17:02:09 1984
Date-Received: Mon, 8-Oct-84 03:32:15 EDT
References: <12587@sri-arpa.UUCP>
Organization: AT&T Information Systems, Holmdel NJ
Lines: 7

The only address for handi-hams that I am aware of is ARRL HQ
225 Main Street, Newington, Ct 06111.

I have corresponded with them previously and they should be able to send you
a pile of literature that will answer your question.

73, Jim KY2D

From 7535193965027351580
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,11e9ccae5aadc1d5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-07 22:26:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin 95
Message-ID: <173@mouton.UUCP>
Date: Mon, 8-Oct-84 01:26:27 EDT
Article-I.D.: mouton.173
Posted: Mon Oct 8 01:26:27 1984
Date-Received: Mon, 8-Oct-84 05:02:35 EDT

Organization: Bell Communications Research, Inc
Lines: 195

**** UoSAT Bulletin-95   5th October 1984 ****

UoSAT Spacecraft Control Centre,   University of Surrey

  ****
* UoSAT-OSCAR-9's Third Birthday *
  ****

UO-9 was launched at 11:27 gmt on 6th October 1981 from Vandenberg AFB, California into a 554 km sun-synchronous, polar earth orbit by NASA DELTA-2130.

A great deal has happened since that day, both on the spacecraft and on the ground. UO-9 took a little while to 'tame' - the difficult command links caused the commissioning phase to stretch longer than anticipated and gave rise to the well-remembered months of 'steady tone' whilst UoS and SRI fought to regain use of the spacecraft. Those months (5) were put to good use upgrading the ground station and, following the successful recovery of the spacecraft, great strides were made with the activation of the on-board experiments and particularly navigation and attitude control. The complex and difficult despin and attitude manoeuvres culminated in temporary gravity-gradient stabilisation, however the magnetometer cables on the boom became tangled during deployment and the boom had to be retracted. The spacecraft was then spin stabilised and the remaining experiments activated. A weekly schedule of daily experiments have been executed for the last two years including a weekly news Bulletin Service; CCD image data; Radiation Experiment data, computer-generated telemetry, DIGITALKER and whole-orbit telemetry surveys. The Bulletin service has been especially successful for maintaining the user community in close contact with spacecraft operations; future mission proposals and more general space news. The DIGITALKER experiment has had a profound impact in schools and colleges worldwide due to its vivid demonstration of low-cost, simple satellite groundstations. The CCD camera has not yielded the hoped-for image quality, but regular image dumps have stimulated interest in image processing and acted as a development tool for the UO-11 CCD Experiment. The best image thus far was received this week!

UoSAT-1 has not exhibited any measurable degradation since the failure of the secondary computer memory devices in the summer of 1982 and the rate of decay of the orbit has been much less pronounced than was anticipated - giving rise to an extended orbital lifetime of, perhaps, another two years?

     ****

```
*                                              *
*  H A P P Y   B I R T H D A Y   U O S A T - 1  *
*                                              *
*           OCTOBER  6   1984                  *
*                                              *
*     from the UoSAT Team and the many         *
*         experimenters worldwide              *
*                                              *
 ***********************************************
```

The UoSAT Team at Surrey would like to take this opportunity to thank the many experimenters for their participation, support and patience (!) during the mission thus far and we look forward to more exciting projects.

** GENERAL NEWS **

** AMPTE-UKS Spacecraft Update **

The three Active Magnetospheric Particle Tracer Expt. (AMPTE) spacecraft launched successfully by NASA DELTA from Cape Canaveral on Thursday 16th August are reported to be functioning well. UoSAT contributed some signal processing modules to the UK satellite. Lithium releases have been successfully completed on Sept 11 and 20th and the major barium release of 10E25 ions is currently scheduled for Christmas day 1984. This release should give rise to a spectacular artificial 'comet' visible to the naked eye from the ground.

Some experiments have been scheduled with UO-11 - more later in the Bulletin.

** NOAA-9 **

The launch of NOAA-F (9) has been set for the 12th of November.

** UoSAT-Oscar-9 Schedule **

This weeks schedule is as follows:

```
Friday    -  load Bulletin
Saturday  -  Bulletin/DIGITALKER/1200 bps telemetry
Sunday    -  Bulletin/DIGITALKER/1200 bps telemetry
Monday    -  Bulletin/DIGITALKER/1200 bps telemetry
Tuesday   -  CCD Camera - next week Radiation data
Wednesday -  Whole orbit telemetry survey
Thursday  -  Computer check-summed telemetry
```

The 21 MHz Beacon will be in use this week.

* CCD Image!! *

A routine CCD image taken last Wednesday afternoon contained a close-up view of northern Italy with both coastlines quite clearly defined - the best yet! Does anyone else have hard copy of this image data? As this image was more interesting than usual, it will be repeated next Wednesday (10th) instead of Radiation data.

** UoSAT-Oscar-11 Operations **

* 9600 bps data was received successfully for the first time from the UO-11 435 MHz downlink at UoS today (Friday) - work continues!

* The real-time clock in the standard telemetry frame on UO-11 was reset to GMT (within 4 secs) on orbit 3077 (Friday 28th) to facilitate the data-logging of telemetry. The clock was reset using the spacecraft on-board computer feeding time information to the telemetry system. Sorry it has taken us so long to get around to this task!

* Particle/Wave Experiments - UO-11 and the AMPTE spacecraft will be in conjunction for a couple of weeks at the end of October allowing the simultaneous measurement of P/W interactions with UO-11 and UKS. Preliminary tests will be carried out on Monday 081084 to evaluate the P/W experiment in preparation for this experiment. These conjunctions occur only once every six months so we must get going! More details will be given soon.

* No CCD images were taken this week as work continues on preparing for the 9600 bps downlink and carrying out DCE rf tests from UoS.

* The Particle/Wave experiment channel plate control counter has been checked prior to testing of the Electron Spectrometer next week. A meeting with AMPTE experimeters from the Rutherford Appleton Labs. took place at UoS today (Friday) to discuss the operation of the P/Wave experiment on UO-11.
A daily account of UO-11 operations follows:

DAY	ORBIT	CHANNELS	RESET TIME
***	*****	********	**********
Friday	3082	1,2,3,52	18:09:55
(Telemetry rate set to 300 bps for longer survey!)			
(six orbits stored at lower sample rate)			
Saturday	Six orbit survey dump		
Sunday	3108	1,2,3,52	13:05:10

Monday 3120 1,2,3,52 08:50:20
3121
3122 435 MHz downlink afsk test
ODATA dump
(OBC told to change d/link from ODATA to TLM after 8.5hrs)

Tuesday 3136 1,2,3,52 10:02:39
(OBC told to change d/link from ODATA to TLM after 9.5hrs)

Wednesday 3047 despin to Zspin~4.5 min.
3151 DCE encoder checkout for LSK

3152 1,2,3,52 13:18:22
(OBC told to change d/link from ODATA to TLM after 8.5hrs)

Thursday 3164 DCE rf tests using VHF up & UHF down
3165 ditto
3166 1,2,3,52 12:16:40
(OBC told to change d/link from ODATA to TLM after 8.5hrs)

Friday 3179 set up 9600 bps test data

3180 435 MHs beacon 9600 bps psk
nrzi data test (5 mins)

** Thanks for Reports & Questionnaire Returns **

N6CSI, ZL1GGZ, ZL1PK, ZL1BHX, ZL1UJT, ZL1MO, JE3MXU, F6BVP, G6AAL, WB9ANQ

This week: W7AVE, JA2WO,

** Messages ** W7AVE DE G3YJO - thanks for the letter, intrigued by your method of decoding 1200 bps Bulletin using 300 bps system! Thanks for the donation too!

From -301188490168512985
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1248e369091b4c5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-07 22:28:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Has anybody heard the Shuttle
Message-ID: <174@mouton.UUCP>
Date: Mon, 8-Oct-84 01:28:53 EDT
Article-I.D.: mouton.174

Posted: Mon Oct 8 01:28:53 1984
Date-Received: Mon, 8-Oct-84 05:02:54 EDT
Organization: Bell Communications Research, Inc
Lines: 12

Posted: Mon Oct 8, 1984   3:34 AM GMT   Msg: IGIE-1926-4588
From: TCLARK
To: amsat
Subj: Has anyone heard MARCE?

We are trying to collect reports on the Marshall Amateur Radio Club
Experiment (MARCE) flying on the current 41G Shuttle flight (see Sept
QST, pg 46). Has anyone heard the 435.033 downlink at all? The ad hoc
net on AO-10 (145.957 downlink) has produced no confirmed signals.
The builder of MARCE, W4QAU has been on AO-10 from WA4NZD eagerly
awaiting inputs. If you have any news, forward by this channel or
join us on AO-10 between 00:00 and 01:00 UT.

From -1415414550420935742
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f55d8f91e73e7088,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-10-08 09:29:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: more SWL loggings
Message-ID: <366@ihu1h.UUCP>
Date: Mon, 8-Oct-84 12:29:04 EDT
Article-I.D.: ihu1h.366
Posted: Mon Oct 8 12:29:04 1984
Date-Received: Tue, 9-Oct-84 03:48:24 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 24

Heard these using ICOM R71A with active indoor antenna and Kenwood
TS930S with triband quad:

   5.5500   ?   h ICAO, in-flight aircraft wrkg "New York" JFK , usb (New
York,
   8.8420   COL   h USSR: Aeroflot, commercial flights to Cuba, cw (Cuba)
   8.9929   6WW   h France: Navy, Dakar Naval, cw (Senegal)
  10.3400   WFK50   h Associated Press, fax (New York, NY)
  10.5097   RIW   h USSR: Navy, Khiva Naval, cw (Uzbek SSR)
  11.1820   ?   h US: Air Force, Scott AFB, in-flight aircraft, usb
(Illinois)
  11.2040   ?   h Great Britain: RAF Strike Cmd, in-flight aircraft
(Belize)
  12.3641   WLO   h ship-to-shore radiotelephone, ship, usb (Mobile, AL)

```
  13.1163    WOM      h  AT&T ship-to-shore radiotelephone, wx, usb (Ft
Lauderdale, FL)
  13.1349    WLO      h  ship-to-shore radiotelephone, shore, usb (Mobile, AL)
  14.4600    Y7L36    h  East Germany: embassy, cw (Havana, Cuba)
  14.6410    EBA      h  Spain: Navy, cw (Madrid, Spain)
  14.8490    ?        h  unidentified: piccolo mode, encoding into musical tones
  15.0240    COL      h  USSR: Aeroflot, commercial flights to Cuba, cw (Cuba)
  15.0350    ?        h  Canada: Military Aeronautical Comm Sys, wx, usb
(Edmonton)
  15.9200    CFH      h  Canada: Canadian Forces Maritime Radio, cw (Halifax, NS)

--
================================================================================
Bob Parnass,  Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414


From -2845570770813431060
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b9aea67abeee0d3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-30 19:33:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: GATEWAY
Message-ID: <146@mouton.UUCP>
Date: Thu, 30-Aug-84 22:33:25 EDT
Article-I.D.: mouton.146
Posted: Thu Aug 30 22:33:25 1984
Date-Received: Fri, 31-Aug-84 03:20:31 EDT
Organization: Bell Communications Research, Inc
Lines: 366

GATEWAY SUBSCRIPTIONS

If  you have received the first two issues of Gateway for free,  now  is
the  time  to  subscribe.   We have to recover the  cost  of  producing,
printing,  and mailing the newsletter.   Subscription information can be
found on the back page.

GATEWAY INPUT

Is  there  packet  activity  in your area which you think  would  be  of
interest to the readers of Gateway?   If there is, send it along to ARRL
Hq,  marked "Attention: Gateway Editor."  This newsletter was started to
distribute information about packet radio throughout the world.  Send us
a  summary of activity on your packet network or tell us of any  packet-
radio related R+D work going on in your area.


HF PACKET BULLETIN BOARD
```

You can now connect to the W0RLI packet bulletin-board system (PBBS) on twenty meters. The PBBS is located near Boston, MA, and is run by Hank Oredson, W0RLI. Hank has had the PBBS on 145.01 MHz for several months, and it has become one of the major "servers" for the large Boston-area packet network.

The W0RLI PBBS software, written by Hank in Z80 assembly language, runs on a Xerox 820 with a TAPR TNC. The PBBS provides automatic time/date stamps for messages, automatically deletes inactive messages, and will even try to send you a beacon if there is mail waiting for you. Now, with the addition of a second TAPR TNC, the bulletin board is available on both HF and VHF.

On twenty meters you will find the PBBS as near 14.080 MHz as band occupation permits. Use 300 bauds, and 200-Hz shift. (The same shift and speed used by 10-MHz packet stations.) When you connect to W0RLI, the PBBS will send you operating instructions. Via W0RLI.

NTS TRAFFIC VIA PACKET

W0RLI's PBBS is also being used to originate NTS traffic. Messages are stored in standard NTS format, with the preamble information on the first line of the message. The PBBS is checked each evening and messages are then delivered to the appropriate NTS net.

Packet radio is a valuable tool for traffic handling. Of course, the national packet network that we are working toward will be a perfect traffic-handling tool, but what we already have can and should be connected to NTS. The existing local networks can be used for message origination and delivery. Two packet stations on 10 MHz or OSCAR-10 could provide TCC service. These operations could begin today if NTS officials contacted packeteers, or packeteers contacted NTS officials. Let's get started!

Via The NEPRA Packetear.

PACKET RADIO AND ARES

Among packeteers, it is "common knowledge" that packet radio would be a good mode for the high-volume, error-free communications needed during emergencies. Unfortunately, this knowledge has yet to reach the leaders and operators in the Amateur Radio Emergency Service (ARES). To remedy this, a new chapter has been added to the ARRL's Emergency Coordinator's Handbook.

In July, Mike Riley, WF4R, editor of the EC Handbook, met with Terry Fox, WB4JFI, of AMRAD. The two discussed ways in which packet radio could aid the ARES. The new ten-page "Packet Radio" chapter in the EC Handbook is the result of that discussion.

The EC Handbook is sent free-of-charge to all Emergency Coordinators.

The latest edition, with the packet-radio chapter, will be available early in September. At that time, packet-radio enthusiasts should be prepared to discuss emergency operations with their ECs.

HIGH-SPEED PACKETS

On August 23, Curtis Spangler, N6ECT, and Mike Flynn, W2FRT, exchanged packets at 9600 bauds using quadrature amplitude modulation (QAM) techniques. Both stations were using personal computers, 9600-bit/s modems, homemade radio/modem interfaces, and 440-MHz radios. Special software, written in Turbo Pascal, drove the synchronous data link controller (SDLC) cards in the computers. Over the five-mile path between the stations, there were no errors using 10 watts, and 60% to 70% throughput at one watt. Via KA6M

TELEPORT STA

On August 6, the ARRL and AMSAT filed a request for special temporary authority for the operation of teleport stations. The following comes from the text of the STA:

"The operations of the stations operating under the STA will involve communications with terrestrial Amateur Radio Stations and Amateur Radio stations in space operation. They will function primarily as intermediary stations between terrestrial and space Amateur Radio stations. We hereby designate these intermediary stations `teleports.'

"The purpose of a teleport is to relay digital messages automatically between terrestrial Amateur Radio stations and amateur stations in space operation (amateur satellites). This need to do so is twofold:

"(1) to obviate the need for every Amateur Radio station having a digital communications capability to also have an earth station capability in order to communicate with amateur satellites.

"(2) to provide a measure of traffic-flow control for the digital channel(s) on the satellite(s)...

"There are three primary objectives of this request for STA:

"(1) to determine experimentally what equipment and techniques are required to provide near-real-time relays between two or more terrestrial stations using local teleports and an amateur satellite.

"(2) to determine experimentally what is required to provide reliable store-and-forward communications wherein the teleport station buffer stores the messages between the hours that the satellite and terrestrial links are not available at the same time.

"(3) to gather the necessary information for permanent rule change to permit teleport operation."

The request for STA then goes on to list the frequencies of operation, and other administrative details. The following stations will be authorized to operate teleports when the STA is approved: John Biro, K1KSY; Tom Clark, W3IWI; Den Connors, KD2S; Bob Diersing, N5AHD; John DuBois, W1HDX; David Engle, KE6ZE; Gary Garriott, WA9FMQ; Sumner Hansen, WB6YMH; Lyle Johnson, WA7GXD; Phil Karn, KA9Q; Bob McCaffrey, K0CY; Harold Price, NK6K; Bill Reed, WD0ETZ; Hank Magnuski, KA6M; Vern Riportella, WA2LQQ; Jose Sancho-Dominguez, WB5YFU; Bob Stricklin, N5BRG; ARRL club station, W1AW; and AMRAD club station, WD4IWG. Building a teleport is a demanding task, and no one will have a teleport immediately. Please do not bother these operators by asking when their teleport will be on the air.

OSCAR-10 and UoSAT-OSCAR-11 are the satellites that are likely to be used by the authorized stations. OSCAR-10, with its long access times and great coverage, will be used to test the near-real-time links. UoSAT-OSCAR-11, if it is made available at all, will be used for store-and-forward teleports.

Watch Gateway for further news of the STA and the stations involved.

PACKETEERS ARE EVERYWHERE

There is a lot more packet activity out there than meets the eye! This was brought home to me on a recent weekend while my wife Linda, KA1ZD, daughter Deryn, and I were vacationing in New Hampshire. As we were wandering around a computer tent sale, someone spotted Linda's HT and said, "I bet you're a ham." He turned out to be Dave McLanahan, WA1FHB, and we had a long and pleasant conversation about all sorts of things. Eventually I introduced the subject of packet radio, and asked innocently if Dave was familiar with the mode. He was not only familiar with packet, he was on it! Living in a bit of an RF hole in the wilds of southwestern New Hampshire, Dave goes hilltopping with a ZX81, a 5-inch TV monitor, and a GLB TNC to connect into the Nashua, New Hampshire area. With EASTNET growing as it is, he should soon be able to packet without leaving his home. Via Dave Sumner, K1ZZ.

[Dave is General Manager of the ARRL -- Ed.]

PACKET RADIO IN AUSTRALIA

There are at least two active packet clubs in Australia, one in Melbourne and one in Sydney. The newly-formed Melbourne Packet Radio Group has four members: John Smelstorius, VK3ZVR; Ian Clark, VK3YRR; Peter Jetson, VK3ZMB; and David Furst, VK3YDF. These four have started a local net using the VADCG protocol. They will be attempting to link to the larger group in Sydney.

The Sydney Amateur Digital Communications Group (SADCG) has an active net of about twenty stations with a digipeater and a packet bulletin-board system.

Perhaps someone will set up an HF or satellite gateway linking the U.S. and Australia.

Via Amateur Radio.

THE PACKET ADAPTIVE MODEM

If amateurs are to construct a long-distance packet network in the near future, some of the cross-country links are going to have to be on HF. While HF links are not as reliable as VHF links, we simply cannot expect to have a complete chain of VHF sites across the country as soon as we need it. The HF links will have problems not encountered on VHF links, such as long-term fading and multipath effects. To combat these problems, Bob Watson, and Paul Rinaldo, W4RI, designed the Packet Adaptive Modem (PAM).

Briefly, PAM uses a 600-Hz shift at 75, 150, 300, 600, or 1200 bauds. Programmable switched-capacitor filters (like those used on the TAPR TNC) keep the modem passband as narrow as possible, reducing noise and QRM on the received signal. In operation, the stations using PAM can determine the highest data rate that the link can support, and then use that data rate. If the link gets worse, they can go slower. If the link gets better, they can adapt and go faster. This should allow the use of the best transmission rate for a given link. [For further discussion of PAM, see Second ARRL Amateur Radio Computer Networking Conference proceedings, published by the ARRL.]

PAM is built on an S-100 card, but only uses the S-100 power supply. Serial I/O and filter control lines are provided through an RS-232-C port.

Jon Bloom, KE3Z, has built two PAMs in the ARRL lab. One of these "alpha test" modems will be sent to Ralph Wallio, W0RPK, and the other will be set up at W1AW. Testing of the modems will then be conducted on several HF bands.

After these units are tested, the circuit board layout will be updated and several "beta test" modems will be made available for more widespread testing.

RMPRA PACKET BULLETIN BOARD

The Rocky Mountain Packet Radio Association (RMPRA) is now operating what they believe to be the most sophisticated packet bulletin board around.

The system is a modified version of The Bread Board System (TBBS), by Phil Becker, WB0EIV. It was donated to RMPRA and modified for packet-radio operation by Phil and Dave Ebert, W7RH.

TBBS is a modular software system that can be easily modified by the

system operator to fit his particular needs. The RMPRA version is accessable through the Pike's Peak digipeater or via telephone at (303)-452-4735. If you want to call up and see the software in operation, set your terminal to 300 bauds, half duplex, 8 data bits and no parity.

23-CM BAND PLANS AND PACKET RADIO

Although most packet-radio activity is now on the two-meter band, band plans for the higher VHF and UHF bands will have profound effects on the future of packet radio. The number of packet stations on the air increases daily, and the need for high-speed, wideband links is becoming obvious in many urban areas. Both of these factors will push packet radio onto the higher bands, where several hundred kiloHertz of band space should be easy to come by.

Since it is important for packet-radio enthusiasts to keep track of VHF/UHF spectrum plans, we present here a proposed band plan for the 23 cm band.

The ARRL VHF UHF Advisory Committee will recommend a 23 cm bandplan to the ARRL Board of Directors at the B.O.D.'s October meeting. The latest draft of this recommendation contains the following allocations of interest to packet-radio operators:

1240 MHz - 1258 MHz	Wideband communications
1258 MHz - 1260 MHz	Medium bandwidth digital duplex (with 1288-1290).
1275.5 MHz - 1276 MHz	Single-frequency digital communications.
1276 MHz - 1288 MHz	Wideband communications.
1288 MHz - 1290 MHz	Medium-bandwidth digital duplex (with 1258 - 1260).
1297 MHz - 1300 MHz	Single-frequency communications, eg. digital, control links, cross-mode and remote base.

"Wideband communications" includes ATV, spread spectrum, and digital. Those portions of the band allocated to wideband communications will be coordinated by region. It is further recommended that coordination of multiple users of a single channel in local areas can be achieved through isolation by means of cross polarization and directional beam antennas.

It should be remembered that the above is a draft of a recommendation that will be presented to the ARRL Board of Directors. It is not a currently adopted bandplan.

It is important that packet-radio enthusiasts keep in touch with representatives of their local and national frequency-coordination

groups so that packet radio's future will be provided for. The ARRL Board of Director's meeting will be in October, so be sure to express your feelings on the 23-cm bandplan to your Director.

CLUB LISTING CORRECTIONS, ADDITIONS

Add to the listing of packet-radio clubs:

Oahu Packet Enthusiasts Club (OPEC)
P.O. Box 1355
Pearl City, HI 96782

Pacific Packet Radio Society (PPRS)
c/o Hank Magnuski, KA6M
311 Stanford Avenue
Menlo Park, CA 94025

Change these addresses:

Florida Amateur Digital Communications Association
(FADCA)
c/o Gwyn Reedy, W1BEL
812 Childers Loop
Brandon, FL 33511

Rocky Mountain Pakcet Radio Association (RMPRA)
c/o Andy Freeborn, N0CCZ
5222 Borrego Drive
Colorado Springs, CO 80918

TAPR GETS OFFICE

Tucson Amateur Packet Radio (TAPR), an international Amateur packet radio research and development group based in Tucson, Arizona, is proud to announce the opening of its office.

The office address is:

TAPR
1016 East Pennsylvania Avenue
Suite 302
Tucson, AZ 85714
Phone: (602) 746-1166
Office hours are 9:00 AM - 5:30 PM (MST) Monday through Friday.

The office staff is provided to expedite information requests, provide spare parts support, fill orders, etc. They can NOT answer technical questions. Technical questions should be routed to the TAPR P.O. box (printed in the last issue of Gateway).

AEA PACKET RADIO INFORMATION

John Gates, N7BTI, of Advanced Electronic Applications is willing to talk on the phone or correspond by mail to answer technical questions concerning packet radio.

Contact: AEA
P.O. Box C2160
Bldg O&P 2006-196th SW
Lynnwood, WA 98036-0918

PACKET RADIO AT HAMFESTS

Several Buffalo, NY, ham radio clubs will be sponsoring the HAM-O-RAMA at the Erie County Fairgrounds on September 7 and 8. This hamfest is of intrest to packeteers, since the swap meet will feature computer equipment and the presentations will address "Computers and Amateur Radio." Jeff Ward of the ARRL will give an introduction to digital communications at 9:30 Saturday morning, and Gil Bolke, of GLB Electronics, will discuss packet radio later on Saturday.

REPRODUCTION OF GATEWAY MATERIAL

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From -4456103230687933922
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b13dfee328ae6c3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-31 06:02:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Price break on portable HF receiver
Message-ID: <327@ihu1h.UUCP>
Date: Fri, 31-Aug-84 09:02:06 EDT
Article-I.D.: ihu1h.327
Posted: Fri Aug 31 09:02:06 1984
Date-Received: Sat, 1-Sep-84 11:42:19 EDT
References: <12922@sri-arpa.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 8

The Uniden CR2021 (aka Radio Shack) was offered for sale for $99.95

at several northen Illinois hamfests this summer.

--
NOTE NEW ADDRESS
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1g!parnass - (312)979-5414
==========

From 5459312413498961518
X-Google-Language: Unknown,Unknown
X-Google-Thread: 151e61,388f100db808b82a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-31 07:43:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!sri-unix!STEELE.HENR@XEROX.ARPA
From: STEELE.HENR@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: SonyICF-2001,etc.
Message-ID: <13039@sri-arpa.UUCP>
Date: Fri, 31-Aug-84 10:43:00 EDT
Article-I.D.: sri-arpa.13039
Posted: Fri Aug 31 10:43:00 1984
Date-Received: Mon, 3-Sep-84 11:28:28 EDT
Lines: 14

From 2483581432196970284
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,388f100db808b82a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-31 11:30:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!sri-unix!WMartin@SIMTEL20.ARPA
From: WMartin@SIMTEL20.ARPA
Newsgroups: net.ham-radio
Subject: Re: SonyICF-2001,etc.
Message-ID: <13044@sri-arpa.UUCP>
Date: Fri, 31-Aug-84 14:30:38 EDT
Article-I.D.: sri-arpa.13044
Posted: Fri Aug 31 14:30:38 1984
Date-Received: Mon, 3-Sep-84 11:30:03 EDT
Lines: 63

From: William G. Martin <WMartin@SIMTEL20.ARPA>

I've used a Sony ICF-2001 for many years now; I wrote the review of it that
appeared in Review of International Broadcasting. (I had that archived
but retrievable until we changed hosts earlier this year; sorry I can't
just send out a copy now.) I plan on doing a direct comparison between the

two Sony models (ICF-2001 and ICF-7600D [same as the 2002]) and the Uniden when I get the latter. I'll send that info out on the list.

It's sad that it is just about impossible to do any comparisons or evaluations of shortwave portables in stores. They always seem to be in steel-framed buildings and loaded with fluorescent lights, and they never have an external longwire you can attach to for testing.

I can point anybody interested in these receivers to the latest (1984) issue of the World Radio TV Handbook -- if you can't find that in a radio store, your local public library may well have a copy. The back section includes some extensive receiver reviews by Larry Magne, and that issue covers the field which includes the Uniden, Radio Shack, and Sony (with a pointer to the preceeding issue with the 2001 review).

I can give a subjective impression of comparing some of these with my "big" radio -- a Galaxy R-530 (this was made by Hy-Gain and was one of the better non-digital direct-frequency-readout solid-state models, using accurate dial calibration instead of a digital display; it does suffer from excessive cross-modulation, so it's not wonderful, but it was fairly well regarded when it came out).

With the same external antenna connected, everything is sensitive enough that it is hard to tell the difference. Without external antennae, using just the whip (of course the Galaxy doesn't have one), the two Sonys have definite differences. The 2001 is MUCH more sensitive than the 2002/7600D. A lot of this is simply due to the newer model's smaller size -- they can only install a whip half the length of the one on the bigger version; there is only so much room for the telescoped whip to fit into. The Uniden's whip is about as long as the 2001's, and reviews indicate that it has similar sensitivity.

As far as selectivity goes, it is sort of meaningless to compare a communications receiver with switchable filter banks with an entertainment portable. I never did get all the possible filters installed in the Galaxy anyway; at $65 each or so, it wasn't worth it. The 2002/7600D has much better selectivity than the 2001. The 2001 has a single, rather wide bandwidth for AM, and the narrow bandwidth filter only operates while in SSB/CW mode. In the 2002/7600D, the main filter is much improved, with better shape factor, and the narrow filter can be switched in without turning on the BFO (or product detector or whatever it is). However, most models of the 2002/7600D exhibit a "pulling" characteristic when receiving SSB or CW, which means the receiver tends to tune toward strong signals nearby, which can make reception of a weaker SSB signal close to a stronger one just about impossible.

The Uniden, though modelled after the 2001's circuitry, has improved filter characteristics, and has bandwidth switchable independent of the SSB/CW mode choice. None of the reviews have mentioned any "pulling" problems with it similar to the 2002/7600D in SSB, so therefore I think it may be the best choice for a ham backup, in addition to the price factor.

Hope all this is of help in making your decision.

Regards, Will Martin

From 8211763844980141624
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a9e1607bc04ab619,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-01 09:19:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!sri-unix!W8SDZ@SIMTEL20
From: W8SDZ%SIMTEL20@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: Cc'ing to HamRadio^.ES at XEROX
Message-ID: <13067@sri-arpa.UUCP>
Date: Sat, 1-Sep-84 12:19:00 EDT
Article-I.D.: sri-arpa.13067
Posted: Sat Sep 1 12:19:00 1984
Date-Received: Mon, 3-Sep-84 11:37:31 EDT
Lines: 8

From: Keith Petersen <W8SDZ@SIMTEL20>

Please don't Cc: or direct messages intended for INFO-HAMS to
HamRadio^.ES at XEROX. That address is on the INFO-HAMS mailing list
so it will receive your messages directed to Info-Hams at SIMTEL20 (or
net.ham-radio on the usenet side). Including HamRadio^.ES causes
everyone on that list to receive the message twice.
--73, Keith W8SDZ

From -3712840284043911792
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6db321f7f88048d6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-02 00:25:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: FM Optional Add-Ons for HF Receivers
Message-ID: <331@ihu1h.UUCP>
Date: Sun, 2-Sep-84 03:25:47 EDT
Article-I.D.: ihu1h.331
Posted: Sun Sep 2 03:25:47 1984
Date-Received: Mon, 3-Sep-84 10:41:16 EDT
References: <4343@brl-tgr.ARPA>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 37

x
> Many HF receivers, such as the Icom R-70 and R-71, have an extra-cost option
> of an FM detector mode. This is intended, I believe, for use in receiving
> narrow-band FM used in certain ham bands. I am under the impression
that
> those bands are all above 20 MHz. Does anyone know if these
FM options are
> so contructed so as to only operate in this higher portion of the HF
> spectrum? Or will they function no matter what frequency the receiver is
> tuned to?

The FM detector option allows my R70 to detect NBFM
signals within the 100 KHz - 30 MHz range. I use the
FM detector mainly for cordless phone listening,
although I used it initially for monitoring 10 meter FM
activity. The FM detector would be useful if
a VHF
converter were placed ahead of the R70.

From reading the R70 instruction manual, it appears
that this receiver can be connected to an optional ICOM
VHF converter in such a way as to permit direct fre-
quency readout using the display section of the R70. I
haven't yet seen any ICOM converters offered for sale
in the US. Maybe European netnews readers can add some
insight here.

> I ask this because older tube receivers, such as my old Hallicrafters
> SX-42, which cover from medium wave up to 108 MHz, have FM modes which
> only function in the higher bandswitch position(s), not at all
> frequencies.

Yes, the 1947 vintage SX-42 was a hefty toy!
I too
wish Hallicrafters had seen fit to permit all band FM
reception.

--
NOTE NEW ADDRESS
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5001467258012048053
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9af3be22fc7a5554,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-02 14:47:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)

Newsgroups: net.ham-radio
Subject: TAPR question
Message-ID: <88@sask.UUCP>
Date: Sun, 2-Sep-84 17:47:39 EDT
Article-I.D.: sask.88
Posted: Sun Sep 2 17:47:39 1984
Date-Received: Mon, 3-Sep-84 12:10:30 EDT
Organization: U of Saskatchewan, Canada
Lines: 9

A friend of mine has put together his TAPR packet board but has found that
the function of the switches on the front of the box are not documented.
Can someone explain them please? He's particularly curious about the Bank 0/1
switch and also how (or if) these switches interact in any way with the DIP
switches on the board.

Tx + 73
Pete Ve5bel
mail to ihnp4!sask!hardie

From 3245057450964579072
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,22aef7090f2fce29,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-02 21:26:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: anyone used Kenwood's new digital squelch yet?
Message-ID: <2368@ihuxf.UUCP>
Date: Mon, 3-Sep-84 00:26:17 EDT
Article-I.D.: ihuxf.2368
Posted: Mon Sep 3 00:26:17 1984
Date-Received: Tue, 28-Aug-84 23:47:47 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 24

x
  I just purchased a new Kenwood TR-2600A 2 meter walkie-
  talkie (it was a tossup between it and the ICOM IC02AT).
  Like the other brand new Kenwood vhf/uhf radios, it comes
  equipped with   DCS, a Kenwood-ized ASCII afsk digital squelch
  system, which   allows what is   essentially "selective
      call"
  operation.

  Since this is a new "feature", and few hams I know have
  equipment containing this circuitry,   I haven't found
     anyone

to test it with yet! Has anyone in net-land tried using this new digital signaling feature Kenwood-to-Kenwood? Comments?

Anyone else have a TR-2600A? So far, it has performed quite well, especially the 140 -160 MHz receive coverage.

I will post a product review after I have more experience with this radio.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 490420817390420646
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,67b8db56a77fd1f2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-03 10:46:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Owner's report: Kenwood TR-2600A 2m portable
Message-ID: <332@ihu1h.UUCP>
Date: Mon, 3-Sep-84 13:46:43 EDT
Article-I.D.: ihu1h.332
Posted: Mon Sep 3 13:46:43 1984
Date-Received: Thu, 6-Sep-84 03:09:05 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 150

x
Owner's Report: Kenwood TR-2600A 2m Walkie-Talkie, a Winner

In considering the purchase of a new 2 meter ht, I limited my choices to the Kenwood TR-2600A, the ICOM IC02AT, and the Yaesu FT209, the Yaesu not being available for another few weeks. I bought a Kenwood TR-2600A, a 2.5w/300mw, 10 channel ht, and have been using it now for one week.

There are at least 4 features that separate this unit from other new 2m ht's:

1. As sold off the shelf, this ht has continuous receive coverage

from 140 - 160 MHz. Factory authorized modification information that permits out of band transmitter coverage will be furnished upon receipt of a copy of the owner's MARS license.

2. Like other new Kenwood vhf/uhf offerings, a Kenwood designed digital control squelch (DCS) is included. To quote from the owner's manual:

"The new DCS system gives the operator the ability to select which stations he wants to listen to. Only those stations that transmit the proper data will be able to "open" the squelch of the TR-2600A, when the DCS system is actuated."

"A short burst of ASCII data, at the beginning and end of the transmission, contains the necessary information for the proper DCS system operation. Both a 5 digit access code and call sign data are contained in this data string."

3. Using the keypad, the owner's call sign may be programmed in ASCII. An optional rolling screen type LCD display accessory can display the call sign of the transmitting station, and store call signs of those others that have called (crude form of mail box).

4. In a throwback to the early ht's from Standard and Wilson, a conventional, but illuminated, meter is located on the top of the radio. It is used as an S-meter on receive, and a battery voltmeter on transmit. The Yaesu FT209 has a conventional meter also. The ICOM IC02AT uses a section of the LCD display as a bar graph.

The TR-2600A allows one to scan the 10 memory channels, scan between the limits in channels 8 and 9, or scan the entire 20 MHz wide band. In the last two modes, the user can select the frequency increment (e.g. 5, 10, 15, 30 KHz etc). Unlike the ICOM IC02AT, individual channels may be locked out (excluded) from the memory scan.

Like the IC02AT and FT209, plus 600, minus 600, and simplex offset information is stored with each memory channel. Odd splits can be programmed by selecting channel 0 as the transmit frequency. A latching type "reverse" switch is included.

I bought the optional $35 CTCSS ("PL" - tm) encode-only deck. As in the earlier model TR-3500 UHF radio, this deck fits inside the radio, and the proper CTCSS frequency is selected by programming the 6 DIP

switches, which protrude through the rear of the case. The ICOM IC02AT comes with PL as a freebie. The PL code is programmed into memory from its keypad.

The TR-2600A comes standard with a 450 mah NiCd battery and 15 hour wall charger. The ICOM portables come with a short life 225 mah battery. I bought a spare battery and the ST-2 rapid charger/base power supply. My ST-2 recharges a completely dead NiCd pack in 1.0 hours.

Using a Fluke 8024B DMM and Bird 43 wattmeter, I checked out the current drain of my TR-2600A. The figures in parenthesis are Kenwood's specifications:

condition	voltage	current in ma.
recv, fully squelched	8.4	36 (35)
recv, open squelch, volume off COR LED glowing	8.4	61
recv, open squelch, full volume	8.4	135
xmit, high power, pl off	fresh battery	644 (less than 800)
xmit, high power, pl on	fresh battery	660
xmit, low power, pl off	fresh battery	264 (less than 400)
xmit, low power, pl on	fresh battery	268

The power output into a Heath "Cantenna" measured 350 mw on low power and varied between 2.5 and 3.5 watts, depending on the frequency.

The standard battery seems to last a good long time.

With the exception of the Tempo S5 and S1, low audio output in the receiver section has plagued several ht's (e.g. ICOM 2AT, 02AT, Yaesu FT208R). In contrast, the audio output on the TR-2600A is husky. I have no problem hearing stations in crowds when the radio is worn on my hip. I use the optional speaker/microphone on my lapel to avoid being a "walking PA system."

ICOM has a good reputation for compatibility of accessories across its product line. Kenwood dealt the owners of the predecessor TR-2500 and TR-3500 a bad hand: the batteries, speaker/mic, and leather case are not upwards compatible with the TR-2600A. However, the rapid/charger is the same for all units, and with the exception of a label, the CTCSS deck is the same for the TR-2600A and TR-3500.

Aside from an error in the DCS section, the TR-2600A users' manual reasonably well written, containing a block diagram and schematic. No PC board layouts are included, but a service manual will be available for purchase. The users' manual makes reference to the TR-3600A, which I assume will be the (as yet unannounced) 440 MHz version of this radio.

Some other user impressions:

- The ability to selectively lock out memory channels from the memory scan is a big win over the ICOM IC02AT. I wish both of them would scan faster though.

- I have no way to test the ASCII and DCS fanciness. I would have preferred a convention PL be included as standard instead. The circuitry for this new Kenwood feature is implemented using a separate microprocessor and modem chip, so it wasn't just a free-bie. If the Kenwood idea doesn't become widely accepted, this feature will be useless.

- The keyboard has a nice, positive feel (differs from TR-2500).

- The belt clip was $5, and it should have been standard.

- The keypad is also a 16 key DTMF pad and one hears the tones as the keys are struck. The xmtr is held on for 2 seconds after each key is struck (a nice touch).

- The supplied BNC-terminated flexible antenna looks more like a 450 MHz "rat tail", but it seems to work about the same as the more familiar, fatter heliflex.

- The plastic case doesn't seem as rugged the ICOM cases do. There wasn't as much weatherproofing either.

In summary, I enjoy using this radio. A hand held radio that scans the public service/business/government frequencies AND allows amateur QSOs seems twice the fun of a conventional ht or pocket scanner.

I'm awaiting announcement of the UHF version, in hopes that it too provides generous out of band receive coverage.

--

NOTE NEW ADDRESS

==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5494937129705547715
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,feca04b78b370097,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-04 09:30:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site trsvax.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!houxm!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: MDS - (nf)
Message-ID: <52800030@trsvax.UUCP>
Date: Tue, 4-Sep-84 12:30:00 EDT
Article-I.D.: trsvax.52800030
Posted: Tue Sep 4 12:30:00 1984
Date-Received: Sun, 16-Sep-84 11:44:35 EDT
References: <12853@sri-arpa.UUCP>
Lines: 19
Nf-ID: #R:sri-arpa:-1285300:trsvax:52800030:000:721
Nf-From: trsvax!mikey   Sep 4 11:30:00 1984

#R:sri-arpa:-1285300:trsvax:52800030:000:721
trsvax!mikey   Sep 4 11:30:00 1984

Hams are allocated 2300-2450 mhz. The MDS channels are adjacent to this band and most of the pirate equipment is modified from HAM kits. Sidesteping the legal issue of the actual receiving of the MDS signals, should HAMs suffer (by harrasment or restricting equipment availability) because there MIGHT be unauthorized reception taking place. (I intentionally said unauthorized as opposed to illegal because it is STILL undetermined!!!)

As for the individual who sent me mail about what information should or should not be posted, the mail went into the bit-bucket. Until the courts decide otherwise, if it comes through the air into my airspace, I feel that I can look at it for personal use.

Mikey KA5MJQ

From -7221189171098016746
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5eefd601f55579ad,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-04 12:37:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site ptsfb.UUCP
Path: utzoo!linus!decvax!decwrl!amd!dual!ptsfa!ptsfb!rwf
From: rwf@ptsfb.UUCP (Roy Fontes)

Newsgroups: net.ham-radio
Subject: DX-CT-3 Operation Madeira Island
Message-ID: <112@ptsfb.UUCP>
Date: Tue, 4-Sep-84 15:37:17 EDT
Article-I.D.: ptsfb.112
Posted: Tue Sep 4 15:37:17 1984
Date-Received: Thu, 13-Sep-84 06:28:43 EDT
Distribution: net
Organization: Pacific Bell, San Francisco
Lines: 4

I will be operating from Madeira Island on all bands
from October 19th Thru 31st. Expect to be on for the
CQWW contest weekend.------W6TEX

From -3779174272203394449
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,28ec150de0d37343,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-04 13:47:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <151@mouton.UUCP>
Date: Tue, 4-Sep-84 16:47:39 EDT
Article-I.D.: mouton.151
Posted: Tue Sep 4 16:47:39 1984
Date-Received: Thu, 6-Sep-84 03:31:15 EDT
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84243.08636625
   Thu Aug 30 02:04:22.43 1984 UTC
Element set: 676
Inclination: 97.5987 deg
RA of node: 218.8525 deg
Eccentricity: 0.0001857
Arg of perigee: 176.0526 deg
Mean anomaly: 184.0738 deg
Mean motion: 15.26283872 rev/day
Decay rate: 1.686e-05 rev/day^2
Epoch rev: 16081
Semi major axis: 6862.035 km
Anom period: 94.346801 min
Apogee: 485.264 km
Perigee: 482.715 km
Ref perigee: 2433.11838414

```
   Thu Aug 30 02:50:28.389 1984 UTC
Beacon:           145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time:      84233.34303682
   Mon Aug 20 08:13:58.381 1984 UTC
Element set:     120
Inclination:       25.6050 deg
RA of node:        182.6085 deg
Eccentricity:    0.6071111
Arg of perigee:    299.0657 deg
Mean anomaly:       13.7665 deg
Mean motion:    2.05847824 rev/day
Decay rate:        -4.1e-07 rev/day^2
Epoch rev:              893
Semi major axis: 26106.272 km
Anom period:    699.545894 min
Apogee:           35580.586 km
Perigee:           3881.771 km
Ref perigee:      2423.32445986
   Mon Aug 20 07:47:13.331 1984 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84238.10950802
   Sat Aug 25 02:37:41.492 1984 UTC
Element set:     40
Inclination:       98.2346 deg
RA of node:        300.0812 deg
Eccentricity:    0.0014750
Arg of perigee:     73.2178 deg
Mean anomaly:      287.0654 deg
Mean motion:   14.61895430 rev/day
Decay rate:         7.7e-07 rev/day^2
Epoch rev:             2577
Semi major axis:  7062.277 km
Anom period:     98.502257 min
Apogee:            713.749 km
Perigee:           692.915 km
Ref perigee:      2428.12336647
   Sat Aug 25 02:57:38.863 1984 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84225.99016673
   Sun Aug 12 23:45:50.405 1984 UTC
Element set:     100
Inclination:       82.9582 deg
RA of node:        101.5908 deg
Eccentricity:    0.0057778
```

```
Arg of perigee:   229.0399 deg
Mean anomaly:     130.5659 deg
Mean motion:   12.15587640 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11783
Semi major axis:  7987.328 km
Anom period:    118.461224 min
Apogee:           1667.344 km
Perigee:          1575.046 km
Ref perigee:      2415.96033070
   Sun Aug 12 23:02:52.572 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84242.60334243
   Wed Aug 29 14:28:48.785 1984 UTC
Element set:     216
Inclination:       82.9593 deg
RA of node:       101.8481 deg
Eccentricity:    0.0017274
Arg of perigee:   283.4061 deg
Mean anomaly:      76.4961 deg
Mean motion:   12.06667459 rev/day
Decay rate:              0 rev/day^2
Epoch rev:           11894
Semi major axis:  8026.669 km
Anom period:    119.336938 min
Apogee:           1682.321 km
Perigee:          1654.590 km
Ref perigee:      2432.58573284
   Wed Aug 29 14:03:27.317 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      84239.02868601
   Sun Aug 26 00:41:18.471 1984 UTC
Element set:     186
Inclination:       82.9592 deg
RA of node:       105.3413 deg
Eccentricity:    0.0010404
Arg of perigee:   321.1777 deg
Mean anomaly:      38.8554 deg
Mean motion:   12.05058074 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           11835
Semi major axis:  8033.819 km
Anom period:    119.496316 min
Apogee:           1672.311 km
Perigee:          1655.594 km
Ref perigee:      2429.01972946
   Sun Aug 26 00:28:24.625 1984 UTC

Satellite: rs-6
```

```
Catalog number: 13002
Epoch time:      84226.04121654
   Mon Aug 13 00:59:21.109 1984 UTC
Element set:     86
Inclination:       82.9587 deg
RA of node:       103.6695 deg
Eccentricity:    0.0049267
Arg of perigee:   248.5096 deg
Mean anomaly:     111.0709 deg
Mean motion:   12.13562429 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11761
Semi major axis:  7996.218 km
Anom period:    118.658914 min
Apogee:           1675.705 km
Perigee:          1596.915 km
Ref perigee:      2416.01579302
   Mon Aug 13 00:22:44.516 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      84240.13503892
   Mon Aug 27 03:14:27.362 1984 UTC
Element set:     169
Inclination:       82.9565 deg
RA of node:       100.9050 deg
Eccentricity:    0.0021211
Arg of perigee:   243.5075 deg
Mean anomaly:     116.3817 deg
Mean motion:   12.08685160 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11884
Semi major axis:  8017.728 km
Anom period:    119.137725 min
Apogee:           1673.462 km
Perigee:          1639.449 km
Ref perigee:      2430.10829229
   Mon Aug 27 02:35:56.454 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      84240.00178162
   Mon Aug 27 00:02:33.931 1984 UTC
Element set:     288
Inclination:       82.9591 deg
RA of node:       106.8992 deg
Eccentricity:    0.0020036
Arg of perigee:    10.4504 deg
Mean anomaly:     349.7016 deg
Mean motion:   12.02946401 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11826
Semi major axis:  8043.224 km
```

```
Anom period:    119.706082 min
Apogee:           1681.887 km
Perigee:          1649.657 km
Ref perigee:      2430.00415967
   Mon Aug 27 00:05:59.395 1984 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84238.90807982
   Sat Aug 25 21:47:38.96  1984 UTC
Element set:     271
Inclination:       99.0546 deg
RA of node:       211.0634 deg
Eccentricity:    0.0012301
Arg of perigee:   261.1215 deg
Mean anomaly:      98.8572 deg
Mean motion:   14.13073731 rev/day
Decay rate:       1.58e-06 rev/day^2
Epoch rev:           16370
Semi major axis:  7224.194 km
Anom period:    101.905511 min
Apogee:            875.294 km
Perigee:           857.521 km
Ref perigee:      2428.88864677
   Sat Aug 25 21:19:39.80  1984 UTC
Beacon:           137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84232.85163208
   Sun Aug 19 20:26:21.11  1984 UTC
Element set:     91
Inclination:       98.7041 deg
RA of node:       263.0761 deg
Eccentricity:    0.0015701
Arg of perigee:   228.8701 deg
Mean anomaly:     131.1120 deg
Mean motion:   14.22427678 rev/day
Decay rate:        4.3e-07 rev/day^2
Epoch rev:            7252
Semi major axis:  7192.443 km
Anom period:    101.235375 min
Apogee:            837.446 km
Perigee:           814.860 km
Ref perigee:      2422.82602797
   Sun Aug 19 19:49:28.816 1984 UTC
Beacon:           137.5000 MHz


From -8785000326356869266
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb1f15da07d53f9d,start
X-Google-Attributes: gid151e61,public
```

X-Google-ArrivalTime: 1984-09-04 15:11:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: AO-10 Beacon/Schedule Change
Message-ID: <152@mouton.UUCP>
Date: Tue, 4-Sep-84 18:11:04 EDT
Article-I.D.: mouton.152
Posted: Tue Sep 4 18:11:04 1984
Date-Received: Thu, 6-Sep-84 03:37:40 EDT
Organization: Bell Communications Research, Inc
Lines: 46

Posted: Tue Sep 4, 1984   5:12 AM GMT Msg: CGIE-1892-7285
From: VRIP
To: AMSAT
Subj: AO-10 Interim Operating Schedule

An AO-10 interim operating schedule was put in effect on 03 Sep 84 by DJ4ZC.
The following was compiled based on a report by VE1SAT.

Interim Operating Schedule:

MA Start	MA End	Mode
190	031	Off
032	099	B
100	116	L
117	189	B

Mode B replaces Mode L on Sundays. (B continuous 032-189, inclusive)

Beacon Schedule:

Mode B		Mode L	
Minutes Past Hour	Beacon Mode	Minutes Past Hour	Beacon Mode
00-04	CW	00-04	RTTY
05-14	PSK	05-14	PSK
15-19	RTTY	15-19	RTTY
20-29	PSK	20-29	PSK
30-34	CW	30-34	RTTY
35-44	PSK	35-44	PSK
45-49	RTTY	45-49	RTTY
50-59	PSK	50-59	PSK

It is suggested that, based on post-eclipse analysis, it may be possible to

expand the transponder operating schedule beyond that described above. The health of the spacecraft (batteries in particular) shall be the determining factor. The current perigee eclipse period commences now and lasts until mid-October. The eclipses reach maximum duration on/about 21 Sep when the duration will reach 1.16 hours +/-. DJ4ZC says a further schedule adjustment will be made in October (presumably) at the completion of the eclipse season.

CW is at 13 wpm; RTTY is 170 Hz 50 baud FSK Baudot; PSK is 400 baud ASCII.

From 3781939836886781634
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e90ee76d20fbf3f7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-04 16:18:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 65 (RM-4831 petition put on hold)
Message-ID: <11993@mgweed.UUCP>
Date: Tue, 4-Sep-84 19:18:10 EDT
Article-I.D.: mgweed.11993
Posted: Tue Sep 4 19:18:10 1984
Date-Received: Thu, 6-Sep-84 03:47:07 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 26

qst de k9eui
hr arrl bulletin nr 65 from arrl headquarters
newington ct august 28, 1984
to all radio amateurs bt

rm 4831, the sti petition to take 216 to 222 mhz for private land mobile, has been put on hold by the fcc. two companies with interests in the inland waterway communications system, acbl and watercom, obtained an extension of the deadline for filing comments until 14 days after an fcc administrative law judge rules on their petition claiming a conflict of interest. the petition seeks to disqualify stis law firm because it had previously represented acbl and watercom. in the meantime, amateurs can and should continue to file comments in this proceeding. when a new deadline is known, w1aw will carry this information. comment and reply deadlines in rm 4829, the lmcc petition, are not affected by this action. please be aware that copies of comments on such petitions must be served on the petitioner. it is adequate to send a copy by first class mail, and to attach a certificate of service to the comments. it should say something like, i certify that i have on this date sent a copy of these comments by first class mail to . . . the address for the petitioner of rm 4831 is sideband technology,

inc., 2000 m street nw, suite 600, washington, dc 20036 ar

From 9028523395290486881
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,835ef4c3f5dbc7a5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-04 16:19:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 66 (division directors/vice directors)
Message-ID: <11994@mgweed.UUCP>
Date: Tue, 4-Sep-84 19:19:28 EDT
Article-I.D.: mgweed.11994
Posted: Tue Sep 4 19:19:28 1984
Date-Received: Thu, 6-Sep-84 03:47:22 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 68

qst de k9eui
hr arrl bulletin nr 66 from arrl headquarters
newington, ct august 29, 1984
to all radio amateurs bt

the arrl executive committee met august 26 to examine nominating
petitions filed by members in eight divisions for arrl director and
vice director for two year terms beginning january 1, 1985.

the following candidates are unopposed and so were declared elected
without balloting.

central director edmond a. metzger, w9prn
roanoke director gay e. milius, jr., w4ug
rocky mountain director lys carey, k0pgm
southwestern director fried heyn, wa6wzo
west gulf director raymond b. wangler, w5edz

hudson division vice director stephen mendelsohn, wa2dhf
new england vice director richard p. beebe, k1pad
roanoke vice director john c. kanode, n4mm
west gulf vice director thomas w. comstock, n5tc

ballots were ordered mailed to full members in six divisions, as
follows.

central division
   for vice director
      ebneter, k9en
      huntington, k9km

hudson division
   for director
      diehl, w2iha
      ferdinand, n2yl

new england division
   for director
      frenaye, k1ki
      sullivan, w1hhr

northwestern division
   for director
      gibson, w7jie
      lewis, w7qgp
      winter, wa7rwk

   for vice director
      drake, w7rm
      orr, kb7cc
      pilotte, wa7iim

rocky mountain division
   for director
      quiat, ag0x
      scupp, wb5yyx

southwestern division
   for vice director
      overbeck, n6nb
      pagel, n6bvu
      schaffstein, wa6fah
      sherwood, wa6yeo

ballots will be mailed before october 1. ballots must be received
by noon november 20, and will be counted that day. election results
will be announced by subsequent bulletin ar

From 3020531463638832331
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,99c9c5632b868d8d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-04 16:20:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 27 (regional directors)
Message-ID: <11995@mgweed.UUCP>
Date: Tue, 4-Sep-84 19:20:18 EDT
Article-I.D.: mgweed.11995
Posted: Tue Sep 4 19:20:18 1984

Date-Received: Thu, 6-Sep-84 03:47:37 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 33

qst de k9eui
hr crrl bulletin nr 27 from crrl headquarters
london ont august 28, 1984
to all radio amateurs bt

the crrl executive committee met on august 26 to examine nominating
petitions filed by members for crrl regional directors for 2 year
terms of office beginning january 1, 1985. the following were
unopposed and declared elected without balloting.

western region director william kremer, ve7csd
quebec region director albert daemen, ve2ij

ballots were ordered mailed on october 1 to full members in three
regions. candidates are as follows.

prairies region
   anderson, ve4ap
   gillespie, ve6abc
   gowron, ve4ads

ontario region
   loucks, ve3ar
   perrin, ve3fn

atlantic region
   hesler, ve1sh
   mclellan, ve1asj

ballots must be received by noon november 20 and will be counted
later that day. results will be announced soon after. ar

From -5590893816145020785
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ad37baebe6cc343c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-04 16:20:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 36
Message-ID: <11996@mgweed.UUCP>
Date: Tue, 4-Sep-84 19:20:44 EDT
Article-I.D.: mgweed.11996
Posted: Tue Sep 4 19:20:44 1984

Date-Received: Thu, 6-Sep-84 03:47:52 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 33

qst de k9eui
hr propagation forecast bulletin nr 36 from arrl headquarters
newington ct september 3, 1984
to all radio amateurs bt

the solar flux average for august was 83.7, the lowest monthly figure since july 1977, when the current solar cycle was just one year old. the flux has been rising slowly since its low of 74 during the third week of august. it appeared to level off at 92 in the first two days of september, but it may move a bit higher before falling again toward the end of the forecast week.

after nearly a week of minor geomagnetic disturbances and fair to poor propagation, conditions will improve september 3 and 4. another disturbance is likely september 5 and 6. somewhat more stable propagation is expected september 7 to 10.

signs of rising muf are showing, as a result of the more favorable sun position for the northern hemisphere. the 21 mhz band is becoming marginally usefull, mostly on low latitude circuits. more improved 21 mhz coverage will come later in the month. the 28 mhz band should be opening at least briefly by the middle of september, on days when the k index is 2 or lower and the solar flux is above 80. both bands will improve over the next ten weeks, peaking in november. skip will be longer, especially on 40 and 80 meters, than we have seen over the last five years.

american sunspot numbers for august 23 to 29 were between 13 and 49 with a mean of 36.3 ar

From 8480967629800722118
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cc33dae7668a1860,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-06 07:42:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!houxm!ihnp4!mgnetp!
mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Useful mods for the Kenwood 930
Message-ID: <12036@mgweed.UUCP>
Date: Thu, 6-Sep-84 10:42:14 EDT
Article-I.D.: mgweed.12036

Posted: Thu Sep 6 10:42:14 1984
Date-Received: Sun, 16-Sep-84 12:02:12 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 144

The following is a list of favorite changes that can be made to the Kenwood 930. These changes are quite simple and do not require the addition of any switches.

NOTE: In the operator's manual supplied with the 930, there is an error on one of the drawings. On the upper left corner of the DIGITAL UNIT schematic locate connector 8. The lead designations are as follows (note that some of the designations do not appear on this sheet so you can add them to the drawing):

Pin	Desig.
1	100
2	MU
3	SCN
4	M2
5	MIN
6	FSK
7	B2
8	FT

On the main drawing, called SCHEMATIC DIAGRAM, the pin numbers shown on connector 8 are reversed from the way they are numbered on the DIGITAL UNIT schematic. In the following changes, I am assuming that the numbering on the DIGITAL UNIT sheet is correct. In any event, it will be obvious which end is which since the end pin is vacant.

CHANGES

1) The resolution of the main tuning digital readout can be increased from 100 Hz to 10 Hz. No digits are lost since the readout has the extra digit for this purpose. This change is accomplished by grounding pin 1 of connector 8 on the DIGITAL UNIT.

2) The tuning rate is 10 kHz per revolution of the main tuning knob. The tuning rate can be changed to 5 kHz per revolution by cutting one end of diode D-13 on the DIGITAL UNIT.

(Note that the black marks on the tuning knob itself are exactly 500 Hz apart. The knob can be "corrected" by tuning in an exact frequency, for example 10,000.00 kHz, pressing the DIAL LOCK switch, then turning the knob to line up a black line. As long as you don't spin the dial too fast, it will track nicely from one end to the other. With the slow rate modification, the dial increments become 250 Hz per division).

You may desire to switch this reduced tuning rate on and off. For example, you can select the new rate on just VFO B by using an unused section of the "FUNCTION" switch. Another possibility is to use the

display "DIM" switch.

3) There are an additional 8 memories available. These can be obtained by grounding pin 5 of connector 7 on the DIGITAL UNIT. (This lead is designated "M3").

The 8 additional memories can be selected by using an unused contact on the "FUNCTION" switch.

4) Each group of 8 memories can be scanned at a rate of about 1 per second. Unlike a normal scanner, The unit will not stop scanning when a signal is present, but it is a good way to search favorite frequencies for activity.

A method of turning on the scan function without affecting normal switch functions would be to wire the unused section of the DIAL LOCK switch in series with the unused section of the METER switch (meter switch in the "VC" position).

5) A handy option is to be able to momentarily unlock one VFO when the DIAL LOCK is on. This can be useful during split frequency operation when you want to keep the receive vfo locked (the DX station's xmit freq), yet quickly qsy to the frequency he is listening to with your transmit VFO.

This change can be made by wiring one lead from the DIAL LOCK switch in series with extra normally closed contacts of the "T-F" switch.

6) This change permits automatic disabling of a linear amplifier during full break-in cw operation. This is desirable since the relays in a linear cannot properly follow each keyed character element. This change should also be done if AMTOR operation is contemplated.

Assuming that your 930 has the aux. relay board in it, merely wire the +28 volt lead to the relay coil in series with the extra contacts of the "FULL-SEMI" switch.

7) For AMTOR operation, the T-R switching speed must be increased.

2 suggested changes are to remove C-500 (4.7uf) on the SIGNAL BOARD (located top center near connector 30), and to ground the junction of R-476 / Q-100.

8) In early units, the WARC band transmit was not enabled. If this is the case, solder a jumper from pin 12 of IC-23 to ground on the DIGITAL UNIT. (Ground can be obtained at pin 8 of IC-24).

9) Transmit can be enabled on all frequencies between 1.5 and 30 MHz for MARS and transverter use by adding two jumpers on the DIGITAL UNIT:

Connect pin 9 of IC-11 to pin 12 of IC-21.
Connect pin 9 of IC-12 to pin 12 of IC-22.

==========
Additional comments:

Even though the receiver low frequency end is spec'd as 150 kHZ, it will operate down to 100 kHz. [A[BTo conveniently switch in a general purpose receiving antenna you must use the transverter connector. When the 8 pin DIN plug is plugged into this connector, a switch operates which separates the coaxial antenna input from the receiver input. These two connections appear at pins 8 and 5 resp. of the transverter connector. (This 8 pin DIN plug is not furnished with the 930). The most convenient setup is to bring cables from both the REMOTE and TRANSVERTER connectors into a junction box which has appropriate connectors and switches on it for interfacing to a transverter, receiving antenna, linear amp, etc.

Here is a chart of the connections to these connectors:

REMOTE (7 pin DIN)	XVERTER (8 pin DIN)
1 Speaker output	1 Grd
2 Grd	2 +V out on xmit*
3 PTT	3 Grd
4 Q-22 out**	4 XVRT ON/OFF Control***
5 unused	5 Receiver input
6 ALC input	6 XVRTR ALC input
7 XMIT RELAY**	7 Xmit RF to xvrtr input
	8 HF ant in

* A 12 volt, 50ma max. relay may be connected from pin 2 to ground. This relay will operate on xmit.

** Original units used Q-22 collector for linear amp relay control. This did not work with low voltage relay systems or those using a negative voltage. An optional relay board (Now supplied in all units as standard) is available and provides a normally open contact closure to ground at pin 7.

*** Pin 4 is grounded to enable xvrtr operation. This may be done by a switch in the transverter itself.

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From -7823659449156497392
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,67b8db56a77fd1f2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-06 14:13:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site houxn.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!houxm!hogpc!houxn!rb
From: rb@houxn.UUCP
Newsgroups: net.ham-radio

Subject: Re: Owner's report: Kenwood TR-2600A 2m portable
Message-ID: <548@houxn.UUCP>
Date: Thu, 6-Sep-84 17:13:24 EDT
Article-I.D.: houxn.548
Posted: Thu Sep 6 17:13:24 1984
Date-Received: Sun, 16-Sep-84 12:20:19 EDT
References: <332@ihu1h.UUCP>
Organization: AT&T Information Systems, Holmdel NJ
Lines: 12

Bob;
It sounds like a nice radio....but!!!

According to NJ law...." it is illegal to possess a scanning
radio capable of receiving police transmissions....in a moving
vehicle....without a permit from the chief of police of each
jurisdiction"

Unless we get exemption for hams here, it sounds like they are
illegal in NJ!

     Rob, N2FC

From 2639880888926212565
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,67b8db56a77fd1f2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-06 20:41:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Owner's report: Kenwood TR-2600A 2m portable
Message-ID: <338@ihu1h.UUCP>
Date: Thu, 6-Sep-84 23:41:08 EDT
Article-I.D.: ihu1h.338
Posted: Thu Sep 6 23:41:08 1984
Date-Received: Wed, 12-Sep-84 01:23:19 EDT
References: <332@ihu1h.UUCP>, <548@houxn.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 23

  >It sounds like a nice radio....but!!!
  >
  >According to NJ law...." it is illegal to possess a scanning
  >radio capable of receiving police transmissions....in a moving
  >vehicle....without a permit from the chief of police of each
  >jurisdiction"
  >
  >Unless we get exemption for hams here, it sounds like they are

>illegal in NJ!
>

According to a 1984 pamphlet entitled "Summary of State Laws Regarding Ownership and Use of Scanner Radios", by the Scanner Association of North America, "FCC licensed Amateur Radio operators with Technician Class or higher grade license" are exempt from this New Jersey law.

This was not the case at the time I fled New Jersey.

--
NOTE NEW ADDRESS
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 8163983119186380292
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,518794e25d137bb2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-07 07:31:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: FM Optional Add-Ons for HF Receivers - (nf)
Message-ID: <52800032@trsvax.UUCP>
Date: Fri, 7-Sep-84 10:31:00 EDT
Article-I.D.: trsvax.52800032
Posted: Fri Sep 7 10:31:00 1984
Date-Received: Thu, 13-Sep-84 08:10:26 EDT
References: <4343@brl-tgr.UUCP>
Lines: 14
Nf-ID: #R:brl-tgr:-434300:trsvax:52800032:000:393
Nf-From: trsvax!mikey Sep 7 09:31:00 1984

#R:brl-tgr:-434300:trsvax:52800032:000:393
trsvax!mikey Sep 7 09:31:00 1984

The cordless phones that I have experienced were FM only in the VHF low band (49 Mhz). The 1600-1800 link were all AM. The new phones that are advertised as all FM use new frequencies recently allocated at 49 Mhz to get FM both ways. BTW, the phones that used 1600-1800 were carrier current AM for the base to handset and FM VHF for handset to base.

Mike Yetsko KA5MJQ
mikey at trsvax

From 3216571136287467772
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d448b1254944dc1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-07 16:51:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site x.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!hpda!fortune!amd!decwrl!decvax!genrad!mit-eddie!frog!x!die
From: die@x.UUCP (Dave Emery)
Newsgroups: net.ham-radio
Subject: Which White House circuits have been secured ?
Message-ID: <145@x.UUCP>
Date: Fri, 7-Sep-84 19:51:46 EDT
Article-I.D.: x.145
Posted: Fri Sep 7 19:51:46 1984
Date-Received: Fri, 14-Sep-84 20:47:38 EDT
Reply-To: frog!die
Organization: Charles River Data Systems, Framingham MA
Lines: 77

As a follow on to the discussion of the White House use of DVP or some related digital security technique on secret service voice channels, does anybody happen to know whether they have also secured the telephone ("phone patch") circuits to Air Force 1 that have been traditionally left in the clear ? A list of those circuits in use a few years ago follows :

(note that all of this information has been published in some form)

1. "Nationwide" or "Echo-Foxtrot" half-duplex single channel nbfm voice via about 100 sites located on AT&T microwave relay towers throughout US tied by leased voice channels to manual switchboard at White House ("Crown Control"). Uses 415.700 mhz from AF-1, 407.85 mhz. to AF-1, at rather low EIRP's (less than a few watts).

2. "Combat Ciders" or "Autovon" or "Wideband" full-duplex FDM multi channel wbfm via nuclear hardened antenna's at many of the Autovon switching centers, also via relay aircraft and the various emergency command post aircraft (eg "Lookinglass"). Has provisions for secure voice and teletype (also fax) as well as fully automatic autovon voice trunks with standard autovon signalling and control. Trunks are located on 12, 16, 20 and 24 khz ssb channels, 0-4 khz is used for an order wire to ground station. Uses various frequencies in the 225-400 mhz military UHF band, 390.55 and 392.55 have been used as transmit from AF-1 in past. EIRP is (or was) very high, one published description of system said it was 1 Kw to counter absorption effects near nuclear fireballs.

3. "Yankee Zulu" full-duplex single channel nbfm voice via portable equipment set up by secret service at site of presidential visit. This system has also been used for non-secure circuits to presidential automobiles, and is probably what Reagan used to talk to the gunman in

the golf coarse incident. Frequencies are around 163 and 172 Mhz
at EIRP's of perhaps 25-100 watts.

4. "Mystic Star" hf ssb via about 10-15 AF bases throughout world with remote transceivers controlled via telephone voice channels from Andrews AFB. This system is used for telephone traffic mostly when AF-1 is out of range of the UHF links, but at least two ssb voice frequencies (and a full duplex 75 baud secure teletype channel called "India Oscar" which use a special anti-multipath modem) are maintained continuously and used for coordination of other communications links. Frequencies are chosen from a list of about 150 scattered throughout the available chunks of hf spectrum and are designated by "fox" code numbers which change from time to time.

5. Fltsatcom. A full-duplex nbfm voice channel to AF-1 is maintained via whichever of the Navy fltsatcom spacecraft are in an optimal position. This circuit (which isn't very private since 1/3 of the globe can pick it up) is mostly used for secure voice and fax transmission via conventional vf modems, but is occasionally used for clear voice traffic. (AF-1 also uses other secure forms of satellite transmission as well). Frequencies for downlink are around 261 mhz and 291 mhz for the uplink. Uplink EIRP is several hundred watts.

Are these circuits still in use ?

Does anyone know of any other non-secure AF-1 telephone circuits that they feel at liberty to discuss. ?

Finally has anyone thought that perhaps the White House decision to encrypt presidential protection communications with DES (?) implies that we consider DES breakable by world class cryptologic establishments ? One suspects that we haven't left those communications in the clear by accident as the status and health of the president of great concern to both our allies and our principle adversary. Perhaps we are assuming that the various world equivalents of the NSA can monitor presidential protection if they want to but terrorists and nosey journalists cannot ? Can anyone comment ?

--

David I. Emery
Charles River Data Systems
983 Concord St.
Framingham, MA 01701
Tel: (617) 626-1102
uucp: ...!decvax!frog!die

From 6200681824794302731
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eae0ece8e75526e7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-10 06:22:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: Notesfiles; site infoswx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!uiucdcs!infoswx!
jim
From: jim@infoswx.UUCP
Newsgroups: net.ham-radio
Subject: Re: IC02AT info request
Message-ID: <3200019@infoswx.UUCP>
Date: Mon, 10-Sep-84 09:22:00 EDT
Article-I.D.: infoswx.3200019
Posted: Mon Sep 10 09:22:00 1984
Date-Received: Tue, 25-Sep-84 01:23:19 EDT
References: <13164@sri-arpa.UUCP>
Lines: 46
Nf-ID: #R:sri-arpa:-1316400:infoswx:3200019:000:2111
Nf-From: infoswx!jim   Sep 10 08:22:00 1984

According to the IC-02AT spec sheet the current drain on transmit (high power) is 1.2 Amps, while in receive with no signal present (squelched) the drain is spec'd at either 35 ma or 45 ma depending on which printing of the spec sheet you have in your hand. The Icom repair center here in Dallas says that the ones they have checked draw right at 35 ma. I recently (8/31/84) purchased a new Yaesu FT-209RH which I believe is superior to both the IC-02AT and the Kenwood TR-2600A. For the same high power output (5.0 watts) the Yaesu draws about 1.0 Amps -- 200 ma. better than the Icom (the Kenwood only runs 2.5 to 3.0 watts). On receive the Yaesu draws about 40 ma. squelched but has a battery saver circuit that can be used to reduce the average receive current drain to as low as 11 ma. This is a feature that neither the Icom or Kenwood HT's incorporate. Yaesu actually makes 2 versions of this HT -- the FT-209RH, 500 mw/5.0 watts, and the FT-209R, 350 mw/3.5 watts. The primary difference between the two radios is the battery pack itself, although each also uses a different transistor in the P.A. The battery pack supplied with the FT-209RH is a 12 volt, 500 mah pack, while the FT-209R comes with a 10.8 volt, 425 mah pack. By the way, don't confuse the '209' with the FT-203R which is a plain jane, thumbwheel switch radio designed to compete with the old IC-2AT variety radios. The FT-209R/RH is the replacement for the FT-208R which has been around for nearly 3 years. Yaesu has promised to have both 220 MHz and 440 MHz versions of these radios (209/203) so keep that in mind as well. Also, the 209/203 series radios share common accesories, i.e., batteries, speaker/mike, drop-in quick charger, etc., although the only accessory from the old 208/708 line that can be used with the new radios is the PA-3 mobile adapter/charger. I guess that's enough for now. As I use the FT-209RH and become more familiar with its capabilities I'll post the information on the net for all to see.

73's,
Jim Gerke, KC5OA
Infoswitch Corp.
Richardson, TX
(214) 644-0570

allegra!convex!infoswx!jim
:x

q

From -7330371567366606197
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ea13ddb805f92cf9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-11 20:57:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site orca.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!vax135!cornell!uw-beaver!
tektronix!orca!tomk
From: tomk@orca.UUCP (Tom Kloos)
Newsgroups: net.ham-radio
Subject: 'Limited' General coverage receiver?
Message-ID: <1046@orca.UUCP>
Date: Tue, 11-Sep-84 23:57:45 EDT
Article-I.D.: orca.1046
Posted: Tue Sep 11 23:57:45 1984
Date-Received: Fri, 14-Sep-84 08:59:06 EDT
Organization: Tektronix, Wilsonville OR
Lines: 12

The manual for my ICOM R71 receiver (a truly fine piece of gear!)
shows the frequency coverage as 0.1 MHz to 30 MHz. Underneath that
it has "Australian version: 2.0MHz to 30.0MHz" and "German
version 0.15MHz to 26.1MHz". Are these coutries protecting their
own SW receiver industry or don't they want the population to
listen to some magic segment of spectrum?

-Tom Kloos, WA7NJK, Tektronix, Wilsonville, Oregon
                  Ignore paths in header. Use this:
uucp: ..{ucbvax,decvax,uw-beaver,hplabs,allegra}!tektronix!orca!tomk
ARPA: tekecs!tomk.tek@rand-relay

From 5250865372790548545
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,afc04eb5b9cade7a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-12 05:43:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxf!signal
From: signal@houxf.UUCP (J.BODDIE)
Newsgroups: net.ham-radio

Subject: Hurricane Hunters
Message-ID: <784@houxf.UUCP>
Date: Wed, 12-Sep-84 08:43:44 EDT
Article-I.D.: houxf.784
Posted: Wed Sep 12 08:43:44 1984
Date-Received: Fri, 14-Sep-84 20:36:24 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 11

x

Listen to hurricane hunter aircraft when there is an active storm
on 6673 kHz USB. These planes (WC-130) stay aloft for several hours
making up to one "penetration" of the eye every half hour. They transmit
information about the conditions near and in the eye (temp, bar. press,
condition of wall, wind speed, location, etc.).

Jim Boddie NG2J
houxf!signal

From -6508245440202080859
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,70ed1d9a9b0e9e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-12 11:20:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: comments on tuners for long wires and rcvrs
Message-ID: <12199@mgweed.UUCP>
Date: Wed, 12-Sep-84 14:20:25 EDT
Article-I.D.: mgweed.12199
Posted: Wed Sep 12 14:20:25 1984
Date-Received: Fri, 14-Sep-84 06:49:12 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

For general coverage listening, I use a "T" network tuner on my 30
foot vertical wire (wire runs direct to the rcvr, not thru coax).

For a tuner for random wires a simple T or L network will work fine,
such as the low-cost MFJ units. It won't matter to the rcvr if it
sees 50 or 100 ohms, but if the antenna is up around 500 to several
kilohms, which it will be at some frequencies, the tuner will make
quite a difference. This is especially true of the newer rcvrs
like the R-1000's and those that have a REAL 50 ohm input.

Bob K9EUI

From -3484742552882912696
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,273bcd6aeefd7ae0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-13 05:00:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site proper.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!hplabs!nsc!proper!chris
From: chris@proper.UUCP (Chris Hayes)
Newsgroups: net.ham-radio
Subject: MDS, HBO , freedom?
Message-ID: <1566@proper.UUCP>
Date: Thu, 13-Sep-84 08:00:34 EDT
Article-I.D.: proper.1566
Posted: Thu Sep 13 08:00:34 1984
Date-Received: Tue, 25-Sep-84 02:27:35 EDT
Organization: Proper UNIX, San Leandro, CA
Lines: 64

<Reading this line is illegal.....>

It's quite interesting that this subject
should come up. As has been said, (here) in the
bay area they have been poking around for "funny"
antennas, and harassing owners of said equiptment.

I know a couple whom this has happened to. They ,
apparently , are aiming to scare people into paying
HBO for doing something that they have every right
to do (have a VHF antenna). It's really not too
funny the kind of things they're trying to pull.

Ok, *SUPPOSEDLY* they can tell if a person is actually
using HBO by analyzing his / her antenna. It is
my guess that they would (theoretically) use
a directional antenna, and look at the reflected
signal from said antenna..... Doesn't that seem
like a bit of a double standard? Sending
people to poke around people's backyards, and possibly
"monitoring" the signals from a person's antenna???
THAT's what I call unauthorized butting in to
signals / privacy.

All that is nothing new, but as an sidenote, look
into the cordless fone issue that has been recently
discussed in fa.telecom. I think a decision was made...
"If a reasonable expection of signal privacy was
intended and implemented..... monitoring is a no-no..."

Well, then note this fact: near where I live

there's a transmitter link / repeater for it
of some kind. This link isn't "scrambled". The signal
from this thing (around 87Mhz...) actually cuts
into the bandwidth that is on low-end FM, and such.
In fact, I know of a person (I have witnessed this)
who can , with *NO* special antenna, tune his tv
to ch#6, and receive decent chroma + sound from it
with very little tweaking of any kind! (No antenna now..).

Surely, this isn't "Reasonable expection of privacy...."?!

Can anybody tell me what type of "scrambling", and
what freq. the main vid + sound carriers are
"supposed" to occupy? Is it usually this bad?
I mean, even el-cheapo sine-wave scrambling
techniques would seem to work better..... As I said,
I don't know how HBO actually funkys up the signal,
but would be interested to hear. I'm sure, whatever they
do, they can't be justified is this type of "antenna search".

(That they do it at all, would indicate their expection
of privacy isn't high. Do you see SHOWTIME doing that?)

Please send any & all
comments you might have
either to the net, or:

...ucbvax!dual!proper!chris
...intelca!proper!chris

(mail here is a bit flakey, but if I get a mesg I will respond.)

From 3836769629363795197
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2b09ea28a00faf88,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-13 07:35:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: free tower and antennas
Message-ID: <619@inuxd.UUCP>
Date: Thu, 13-Sep-84 10:35:25 EDT
Article-I.D.: inuxd.619
Posted: Thu Sep 13 10:35:25 1984
Date-Received: Tue, 25-Sep-84 00:33:58 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 23

**********FREE**********

75ft Telephone Pole (65ft above ground)
3 element 10 mtr beam
3 elements on 15 & 20 mtrs
2 inch pipe from ground to top
aircraft prop-pitch motor (rotor) **2 extra motors**
compass control
ladder spikes from ground to top insatlled

CATCH--- you take down--HI HI

****

This is from an estate in Indianapolis, IN and the family wants it removed. They have someone with a hydraulic lift truck that has agreed to move and re-set it within the INDY area for $500. If anyone is interested, please send me mail and I will give you the details and where you can go to see it.

R. C. Fitch KN9K

From 1638680757643470704
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e39ee52e6b3bc314,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-14 08:11:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!ihnp4!zehntel!hplabs!hao!seismo!cmcl2!acf4!sullivan
From: sullivan@acf4.UUCP
Newsgroups: net.ham-radio
Subject: Re: antenna tuners for receivers.
Message-ID: <16400015@acf4.UUCP>
Date: Fri, 14-Sep-84 11:11:00 EDT
Article-I.D.: acf4.16400015
Posted: Fri Sep 14 11:11:00 1984
Date-Received: Tue, 25-Sep-84 03:46:36 EDT
References: <13395@Mitre-Bed.UUCP>
Organization: New York University
Lines: 16
Nf-ID: #R:Mitre-Bed:-1339500:acf4:16400015:000:924
Nf-From: acf4!sullivan Sep 14 11:11:00 1984

Tuners no good for receivers? Ah, this is not so! My ICOM R71A manual says that "for best performance" one should have an antenna tuner to ensure that the receiver sees 50 ohms (or as close as possible). And sure enough, an antenna tuner made a big difference in signal catching capability. I should add that I don't believe that my "receiver is so poor that [it is] limited by received signal strength and receiver front-end noise."

In any case, I no longer use an antenna tuner since I now have a McKay-Dymek DA 100D active antenna. (I couldn't put up an antenna in my new apartment, so I bought this and sat it on a window sill). The DA 100D presents a nice load to the ICOM, and works out better than my previous antenna tuner/fire-escape antenna. I recommend this antenna to anyone who is in a similar predicament.

David J. Sullivan, WA1TNS sullivan@nyu-cmcl2
New York University ...!ihnp4!cmcl2!sullivan

From 1254823517286912681
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,828e74d918809582,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-14 09:09:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!ihnp4!inuxc!inuxg!wheatley
From: wheatley@inuxg.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: anyone have callbook supplements?
Message-ID: <334@inuxg.UUCP>
Date: Fri, 14-Sep-84 12:09:33 EDT
Article-I.D.: inuxg.334
Posted: Fri Sep 14 12:09:33 1984
Date-Received: Tue, 25-Sep-84 01:32:59 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 6

Does anyone have the us and/or dx callbook supplements and wouldn't mind looking up the following calls. Thanks in advance

KU1H, and EA6QV

de KU9C....inuxg!wheatley

From 4046973223864992750
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7293bc0cb19ed9a7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-17 15:06:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!ihnp4!zehntel!zps!digger
From: digger@zps.UUCP (Scott A. Miles)
Newsgroups: net.ham-radio
Subject: Need Help on Icom xmit delay
Message-ID: <170@zps.UUCP>
Date: Mon, 17-Sep-84 18:06:53 EDT
Article-I.D.: zps.170
Posted: Mon Sep 17 18:06:53 1984

Date-Received: Tue, 25-Sep-84 05:56:21 EDT
Lines: 14

The ICOM ht series radios have a characteristic of the transmitter not unkeying exactly when you unkey the PTT switch. This causes a delay before the receiver comes back on. This is a problem when used with repeater telemetry that relays repeater status and such.

Question ?? Does anyone know of a remedy to this ICOM characteristic?? I won't call it a problem because it probably doesn't affect everyone.

Scott Miles WB6PQM
zehntel!zps!digger

From -2686909936672845078
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,232c8999295ef3aa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-18 08:03:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: SWR bridge warning (MFJ) and antenna tuner comments
Message-ID: <12369@mgweed.UUCP>
Date: Tue, 18-Sep-84 11:03:02 EDT
Article-I.D.: mgweed.12369
Posted: Tue Sep 18 11:03:02 1984
Date-Received: Tue, 25-Sep-84 03:16:27 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 36

I can personally vouch for the fact that some swr indicators built into antenna tuners are "off"! A friend of mine has a MFJ tuner (not sure of the model) with a built-in bridge. When he adjusts the tuner for minimum reflected, the power out of his TS-430 is half of what it should be. Adjusting the tuner using a Bird wattmeter, everything is as it should be. The MFJ bridge then indicates about 1.8 to 1.

I noticed the same thing with my old Heath swr bridge on my TS-930.

As to someone's comment about not needing a tuner for receivers; This may be more true with older receivers with tuned input circuits such as Hallicrafters or Hammarlund or especially those with tunable preselectors such as Drake or the Yeasu FRG-7. However with receivers

that have a fixed broadband front end, such as the Kenwood R-1000, etc. a tuner makes quite a difference, especially at lower frequencies. True, this may not affect the signal to noise ratio much, but I have seen cases where on 80 meters a tuner can make a difference of more than 10dB. These newer types of receivers want to see 50 ohms! I should further say that the tuner is especially useful when using some random length of wire for an antenna, not one that is resonant at the frequency used.

Concerning tuners that have a balun to feed a balanced line; This is a compromise situation. Balunes are only good for a narrow impedance range and then only good if the load is not reactive. This is seldom the case with open wire fed antennas. The balun should be between the rig and the tuner where it sees a resistive load. So far as I know, Palomar is the only one that has used this approach. For feeding a balanced line, the best bet is still something like the old Johnson Matchbox, or one of the handbook circuits especially made for the purpose.

Bob, K9EUI

From -8075487584155182392
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ae0ac899fb755511,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-18 08:10:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: VEC info for Indiana
Message-ID: <622@inuxd.UUCP>
Date: Tue, 18-Sep-84 11:10:32 EDT
Article-I.D.: inuxd.622
Posted: Tue Sep 18 11:10:32 1984
Date-Received: Tue, 25-Sep-84 03:15:34 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 8

> Can anyone give me the address and/or telephone
> number of the De-Vry organization in Indiana to
> apply for VEC??? Several here are interested
> and so far no one in this area has been appointed.

Thanks in Advance Rich KN9K

From 7490451568777211202
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,232c8999295ef3aa

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-18 16:55:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: SWR bridge warning (MFJ) and antenna tuner comments
Message-ID: <348@ihu1h.UUCP>
Date: Tue, 18-Sep-84 19:55:17 EDT
Article-I.D.: ihu1h.348
Posted: Tue Sep 18 19:55:17 1984
Date-Received: Tue, 25-Sep-84 03:37:15 EDT
References: <12369@mgweed.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 8

As for an antenna matcher not being needed on todays' SWL receivers:

If the antenna matcher has the appropriate band pass/reject response,
it will help keep strong broadcast band signals out of a broadband
receiver on VLF and HF.
--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From -5878672610858812206
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,60ea9e65309a3710,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-18 17:17:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast nr 38
Message-ID: <12384@mgweed.UUCP>
Date: Tue, 18-Sep-84 20:17:36 EDT
Article-I.D.: mgweed.12384
Posted: Tue Sep 18 20:17:36 1984
Date-Received: Tue, 25-Sep-84 06:11:49 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 32

qst de k9eui
hr propagation forecast bulletin nr 38 from arrl headquarters
newington ct september 17, 1984
to all radio amateurs bt

the solar flux fell steadily, from 93 on sept 3 to 73 on the

15th and 16th. this range of flux variations is reminiscent of
the summer of 1977. the last time we had two days with the
flux at 73 came in the middle of april of that year, when cycle
21 was only nine months old.

despite the solar flux decline, radio propagation was generally
fair to good, and getting better, thanks to the improving
position of the__GoOgLE_
X-Google-ArrivalTime: 1984-09-18 17:21:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/17/84; site seismo.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!mhuxj!mhuxn!mhuxl!ulysses!
allegra!mit-eddie!genrad!decvax!seismo!rick
From: rick@seismo.UUCP (Rick Adams)
Newsgroups: net.sources
Subject: diff -c of changes to the 9/5 news 2.10.2 src distribution
Message-ID: <4042@seismo.UUCP>
Date: Tue, 18-Sep-84 20:21:29 EDT
Article-I.D.: seismo.4042
Posted: Tue Sep 18 20:21:29 1984
Date-Received: Tue, 25-Sep-84 06:17:46 EDT
References: <4041@seismo.UUCP>
Distribution: net
Organization: Center for Seismic Studies, Arlington, VA
Lines: 2317

     For those of you (like me) that are paranoid about running
     ed scripts blindly, here is a diff -c of the changed
     routines.

     ---rick

```
diff -c -b NEW/Makefile.usg OLD/Makefile.usg
*** NEW/Makefile.usg    Mon Sep 17 19:27:02 1984
--- OLD/Makefile.usg    Tue Sep 18 16:41:18 1984
***************
*** 1,4
! # @(#)Makefile.usg    2.27 9/17/84
  # Makefile for System III, System V and other USG based systems

  # definitions

--- 1,4 -----
! # @(#)Makefile.usg    2.25 9/3/84
  # Makefile for System III, System V and other USG based systems

  # definitions
***************
*** 38,44
     process.o rpathinit.o digest.o $(OBJECTS)
  VOBJECTS = readnews.o rfuncs.o rfuncs2.o rextern.o process.o rpathinit.o \
     $(OBJECTS) visual.o virtterm.o
```

```
! EXPOBJS=  expire.o header.o funcs.o getdate.o iextern.o epathinit.o \
     funcs2.o ndir.o $(MISC)

  SRCS = funcs.c funcs2.c header.c

--- 38,44 -----
     process.o rpathinit.o digest.o $(OBJECTS)
  VOBJECTS = readnews.o rfuncs.o rfuncs2.o rextern.o process.o rpathinit.o \
     $(OBJECTS) visual.o virtterm.o
! EXPOBJS=  expire.o header.o funcs.o getdate.o rextern.o epathinit.o \
     funcs2.o ndir.o $(MISC)

  SRCS = funcs.c funcs2.c header.c
***************
*** 48,54
     digest.c $(SRCS)
  VSRCS = readnews.c rfuncs.c rfuncs2.c rextern.c process.c $(SRCS) \
     visual.c virtterm.c
! EXPSRCS = expire.c header.c funcs.c getdate.c iextern.c \
     funcs2.c
  OSRCS = uurec.c recnews.c sendnews.c batch.c unbatch.c caesar.c \
     recmail.c compress.c

--- 48,54 -----
     digest.c $(SRCS)
  VSRCS = readnews.c rfuncs.c rfuncs2.c rextern.c process.c $(SRCS) \
     visual.c virtterm.c
! EXPSRCS = expire.c header.c funcs.c getdate.c rextern.c \
     funcs2.c
  OSRCS = uurec.c recnews.c sendnews.c batch.c unbatch.c caesar.c \
     recmail.c compress.c
***************
*** 133,139
  postnews: Makefile $(POBJECTS)
     $(CC) $(CFLAGS) $(LFLAGS) $(POBJECTS) -o postnews

! postnews.o: postnews.c defs.h params.h header.h
     $(CC) $(CFLAGS) -c postnews.c

  readnews.o:  readnews.c rparams.h defs.h params.h header.h

--- 133,139 -----
  postnews: Makefile $(POBJECTS)
     $(CC) $(CFLAGS) $(LFLAGS) $(POBJECTS) -o postnews

! postnews.o: postnews.c defs.h
     $(CC) $(CFLAGS) -c postnews.c

  readnews.o:  readnews.c rparams.h defs.h params.h header.h
***************
*** 155,161
     $(CC) $(CFLAGS) -c checknews.c
```

```
  vnews: $(VOBJECTS)
!    $(CC) $(LFLAGS) $(VOBJECTS) -ltermlib $(LIBS) -o $@

  visual.o:  visual.c rparams.h defs.h params.h ndir.h header.h
     $(CC) $(CFLAGS) -c visual.c

--- 155,161 -----
     $(CC) $(CFLAGS) -c checknews.c

  vnews: $(VOBJECTS)
!    $(CC) $(LFLAGS) $(VOBJECTS) -ltermcap $(LIBS) -o $@

  visual.o:  visual.c rparams.h defs.h params.h ndir.h header.h
     $(CC) $(CFLAGS) -c visual.c
***************
*** 194,200
  compress: compress.c
     $(CC) -o compress compress.c

! recmail:  recmail.c defs.h params.h header.h
     $(CC) $(CFLAGS) -s recmail.c -o recmail

  process.o:  process.c rparams.h defs.h params.h header.h

--- 194,200 -----
  compress: compress.c
     $(CC) -o compress compress.c

! recmail:  recmail.c
     $(CC) $(CFLAGS) -s recmail.c -o recmail

  process.o:  process.c rparams.h defs.h params.h header.h
***************
*** 228,235
  sendnews.o: sendnews.c defs.h
     $(CC) $(CFLAGS) -c sendnews.c

! fullname.o: defs.h params.h header.h
!    $(CC) $(CFLAGS) -c fullname.c

  expire: Makefile $(EXPOBJS)
     $(CC) $(LFLAGS) -o expire $(EXPOBJS) $(LIBS)

--- 228,234 -----
  sendnews.o: sendnews.c defs.h
     $(CC) $(CFLAGS) -c sendnews.c

! fullname.o: defs.h

  expire: Makefile $(EXPOBJS)
     $(CC) $(LFLAGS) -o expire $(EXPOBJS) $(LIBS)
diff -c -b NEW/Makefile.v7 OLD/Makefile.v7
*** NEW/Makefile.v7    Mon Sep 17 19:26:56 1984
```

```
--- OLD/Makefile.v7    Tue Sep 18 16:41:56 1984
***************
*** 1,4
! # @(#)Makefile.v7    2.28 9/17/84
  # Makefile for V7, 4.1BSD, and other Research V7 based systems

  # definitions

--- 1,4 -----
! # @(#)Makefile.v7    2.26 9/3/84
  # Makefile for V7, 4.1BSD, and other Research V7 based systems

  # definitions
***************
*** 38,44
     process.o rpathinit.o digest.o $(OBJECTS)
  VOBJECTS = readnews.o rfuncs.o rfuncs2.o rextern.o process.o rpathinit.o \
     $(OBJECTS) visual.o virtterm.o
! EXPOBJS=  expire.o header.o funcs.o getdate.o iextern.o epathinit.o \
     funcs2.o ndir.o $(MISC)

  SRCS = funcs.c funcs2.c header.c

--- 38,44 -----
     process.o rpathinit.o digest.o $(OBJECTS)
  VOBJECTS = readnews.o rfuncs.o rfuncs2.o rextern.o process.o rpathinit.o \
     $(OBJECTS) visual.o virtterm.o
! EXPOBJS=  expire.o header.o funcs.o getdate.o rextern.o epathinit.o \
     funcs2.o ndir.o $(MISC)

  SRCS = funcs.c funcs2.c header.c
***************
*** 48,54
     digest.c $(SRCS)
  VSRCS = readnews.c rfuncs.c rfuncs2.c rextern.c process.c $(SRCS) \
     visual.c virtterm.c
! EXPSRCS = expire.c header.c funcs.c getdate.c iextern.c \
     funcs2.c
  OSRCS = uurec.c recnews.c sendnews.c batch.c unbatch.c caesar.c \
     recmail.c compress.c

--- 48,54 -----
     digest.c $(SRCS)
  VSRCS = readnews.c rfuncs.c rfuncs2.c rextern.c process.c $(SRCS) \
     visual.c virtterm.c
! EXPSRCS = expire.c header.c funcs.c getdate.c rextern.c \
     funcs2.c
  OSRCS = uurec.c recnews.c sendnews.c batch.c unbatch.c caesar.c \
     recmail.c compress.c
***************
*** 133,139
  postnews: Makefile $(POBJECTS)
     $(CC) $(CFLAGS) $(LFLAGS) $(POBJECTS) -o postnews
```

```
! postnews.o: postnews.c defs.h params.h header.h
     $(CC) $(CFLAGS) -c postnews.c

  readnews.o:  readnews.c rparams.h defs.h params.h header.h

--- 133,139 -----
  postnews: Makefile $(POBJECTS)
     $(CC) $(CFLAGS) $(LFLAGS) $(POBJECTS) -o postnews

! postnews.o: postnews.c defs.h
     $(CC) $(CFLAGS) -c postnews.c

  readnews.o:  readnews.c rparams.h defs.h params.h header.h
***************
*** 155,161
     $(CC) $(CFLAGS) -c checknews.c

  vnews: $(VOBJECTS)
!    $(CC) $(LFLAGS) $(VOBJECTS) -ltermlib $(LIBS) -o $@

  visual.o:  visual.c rparams.h defs.h params.h ndir.h header.h
     $(CC) $(CFLAGS) -c visual.c

--- 155,161 -----
     $(CC) $(CFLAGS) -c checknews.c

  vnews: $(VOBJECTS)
!    $(CC) $(LFLAGS) $(VOBJECTS) -ltermcap $(LIBS) -o $@

  visual.o:  visual.c rparams.h defs.h params.h ndir.h header.h
     $(CC) $(CFLAGS) -c visual.c
***************
*** 194,200
  compress: compress.c
     $(CC) -o compress compress.c

! recmail:  recmail.c defs.h params.h header.h
     $(CC) $(CFLAGS) -s recmail.c -o recmail

  process.o:  process.c rparams.h defs.h params.h header.h

--- 194,200 -----
  compress: compress.c
     $(CC) -o compress compress.c

! recmail:  recmail.c
     $(CC) $(CFLAGS) -s recmail.c -o recmail

  process.o:  process.c rparams.h defs.h params.h header.h
***************
*** 228,235
  sendnews.o: sendnews.c defs.h
```

```
     $(CC) $(CFLAGS) -c sendnews.c

! fullname.o: defs.h params.h header.h
!    $(CC) $(CFLAGS) -c fullname.c

  expire: Makefile $(EXPOBJS)
     $(CC) $(LFLAGS) -o expire $(EXPOBJS) $(LIBS)

--- 228,234 -----
  sendnews.o: sendnews.c defs.h
     $(CC) $(CFLAGS) -c sendnews.c

! fullname.o: defs.h

  expire: Makefile $(EXPOBJS)
     $(CC) $(LFLAGS) -o expire $(EXPOBJS) $(LIBS)
diff -c -b NEW/compress.c OLD/compress.c
*** NEW/compress.c Wed Sep 12 21:32:03 1984
--- OLD/compress.c Tue Sep 18 16:43:08 1984
***************
*** 21,27
   *
   */
  #ifndef lint
! static char *SccsId = "@(#)compress.c   1.6  9/12/84";
  #endif !lint

  #include <stdio.h>

--- 21,27 -----
   *
   */
  #ifndef lint
! static char *SccsId = "@(#)compress.c   1.5  9/4/84";
  #endif !lint

  #include <stdio.h>
***************
*** 160,166
     zcat_flg = 1;
      }

! #ifdef BSD4_2
      /* 4.2BSD dependent - take it out if not */
      setlinebuf( stderr );
  #endif BSD4_2

--- 160,166 -----
     zcat_flg = 1;
      }

! #ifdef BSD42
      /* 4.2BSD dependent - take it out if not */
```

```
      setlinebuf( stderr );
  #endif BSD42
***************
*** 163,169
  #ifdef BSD4_2
      /* 4.2BSD dependent - take it out if not */
      setlinebuf( stderr );
! #endif BSD4_2

      /* Argument Processing
       * All flags are optional.

--- 163,169 -----
  #ifdef BSD42
      /* 4.2BSD dependent - take it out if not */
      setlinebuf( stderr );
! #endif BSD42

      /* Argument Processing
       * All flags are optional.
***************
*** 278,284
          }
          /* Generate output filename */
          strcpy(ofname, *fileptr);
! #ifndef BSD4_2       /* Short filenames */
          if ((cp=rindex(ofname,'/')) != NULL)  cp++;
          else                    cp = ofname;
          if (strlen(cp) > 12) {

--- 278,284 -----
          }
          /* Generate output filename */
          strcpy(ofname, *fileptr);
! #ifndef BSD42        /* Short filenames */
          if ((cp=rindex(ofname,'/')) != NULL)  cp++;
          else                    cp = ofname;
          if (strlen(cp) > 12) {
***************
*** 285,291
              fprintf(stderr,"%s: filename too long to tack on .Z\n",cp);
              continue;
          }
! #endif  BSD4_2       /* Long filenames allowed */
          strcat(ofname, ".Z");
         }
         /* Check for overwrite of existing file */

--- 285,291 -----
              fprintf(stderr,"%s: filename too long to tack on .Z\n",cp);
              continue;
          }
! #endif  BSD42        /* Long filenames allowed */
```

```
          strcat(ofname, ".Z");
         }
         /* Check for overwrite of existing file */
diff -c -b NEW/control.c OLD/control.c
*** NEW/control.c  Wed Sep 12 21:31:21 1984
--- OLD/control.c  Tue Sep 18 16:46:01 1984
***************
*** 6,12
    */

   #ifndef lint
! static char *SccsId = "@(#)control.c    2.30 9/12/84";
   #endif !lint

   #include "iparams.h"

--- 6,12 -----
    */

   #ifndef lint
! static char *SccsId = "@(#)control.c    2.29 9/3/84";
   #endif !lint

   #include "iparams.h"
***************
*** 26,38
   {
      register char *ctlmsgtext;

!    if (strncmp(h->title, "cmsg ", 5) == 0) {
!         register char *cp1, *cp2;
!         cp1 = h->title;
!         cp2 = h->title + 5;
!         while(*cp1++ = *cp2++)
!              ;
!    }

      if (*h->ctlmsg)
           ctlmsgtext = h->ctlmsg;

--- 26,33 -----
   {
      register char *ctlmsgtext;

!    if (strncmp(h->title, "cmsg ", 5) == 0)
!         strcpy(h->title, h->title+5);

      if (*h->ctlmsg)
           ctlmsgtext = h->ctlmsg;
***************
*** 118,126
   char **argv;
   {
```

```
     char tl[256], ng[256];
- #ifdef u370
-    static struct hbuf htmp;
- #else !u370
     struct hbuf htmp;
  #endif !u370


--- 113,118 -----
  char **argv;
  {
     char tl[256], ng[256];
     struct hbuf htmp;

     if (argc < 2)
***************
*** 122,128
     static struct hbuf htmp;
  #else !u370
     struct hbuf htmp;
- #endif !u370

     if (argc < 2)
          xerror("ihave: Not enough arguments.");

--- 114,119 -----
  {
     char tl[256], ng[256];
     struct hbuf htmp;

     if (argc < 2)
          xerror("ihave: Not enough arguments.");
***************
*** 147,152
  c_sendme(argc, argv)
  char **argv;
  {
     int i;
     FILE *fp;
     struct srec srec;

--- 138,144 -----
  c_sendme(argc, argv)
  char **argv;
  {
+    struct srec srec;
     int i;
     FILE *fp;
     struct hbuf h;
***************
*** 149,158
  {
     int i;
```

```
     FILE *fp;
-    struct srec srec;
- #ifdef u370
-    static struct hbuf h;
- #else !u370
     struct hbuf h;
  #endif !u370


--- 141,146 -----
     struct srec srec;
     int i;
     FILE *fp;
     struct hbuf h;

     if (argc < 2)
***************
*** 154,160
     static struct hbuf h;
  #else !u370
     struct hbuf h;
- #endif !u370

     if (argc < 2)
          xerror("sendme: Not enough arguments.");

--- 142,147 -----
     int i;
     FILE *fp;
     struct hbuf h;

     if (argc < 2)
          xerror("sendme: Not enough arguments.");
***************
*** 234,239
  char **argv;
  {
     FILE *fd;
  #ifndef MANUALLY
     int rc;
  #endif MANUALLY

--- 221,228 -----
  char **argv;
  {
     FILE *fd;
+    char *groupname;
+    char groupdir[128];
  #ifndef MANUALLY
     int rc;
  #endif MANUALLY
***************
*** 240,247
```

```
     if (argc < 1)
          xerror("rmgroup: Not enough arguments.");
!    if (!validng(argv[1]))
!         return;

  #ifdef NOTIFY
     fd = mailhdr((struct hbuf *)NULL, "rmgroup control message");

--- 229,238 -----

     if (argc < 1)
          xerror("rmgroup: Not enough arguments.");
!    groupname = argv[1];
!    verifyname(groupname);
!    if (groupname[0] == '.' || groupname[0] <= ' ')
!         xerror("Illegal group name in rmgroup");

     strcpy(groupdir, dirname(groupname));
     if (access(groupdir, 0)) {
***************
*** 243,248
     if (!validng(argv[1]))
          return;

  #ifdef NOTIFY
     fd = mailhdr((struct hbuf *)NULL, "rmgroup control message");
     if (fd != NULL) {

--- 234,249 -----
     if (groupname[0] == '.' || groupname[0] <= ' ')
          xerror("Illegal group name in rmgroup");

+    strcpy(groupdir, dirname(groupname));
+    if (access(groupdir, 0)) {
+         /*
+          * If the group already is gone, it's a nonfatal error - we
+          * want to propagate the message anyway, since what probably
+          * happened is somebody locally already removed it.
+          */
+         log("Cannot remove newsgroup '%s'", groupname);
+         return;
+    }
  #ifdef NOTIFY
     fd = mailhdr((struct hbuf *)NULL, "rmgroup control message");
     if (fd != NULL) {
***************
*** 265,271
  #ifndef MANUALLY
     /* We let the shell do all the work.  See the rmgrp shell script. */
     setuid(geteuid()); /* otherwise it won't rmdir the dir */
!    sprintf(bfr, "exec %s/rmgroup %s", LIB, argv[1]);
     rc = system(bfr);
```

```
     log("system(%s) status %d", bfr, rc);
  #endif

--- 266,272 -----
  #ifndef MANUALLY
     /* We let the shell do all the work.  See the rmgrp shell script. */
     setuid(geteuid()); /* otherwise it won't rmdir the dir */
!    sprintf(bfr, "exec %s/rmgroup %s", LIB, groupname);
     rc = system(bfr);
     log("system(%s) status %d", bfr, rc);
  #endif
***************
*** 513,521
  xmitmsg(tosys, title, ng)
  char *tosys, *title, *ng;
  {
- #ifdef u370
-    static struct hbuf h;
- #else !u370
     struct hbuf h;
  #endif !u370
     struct srec srec;

--- 514,519 -----
  xmitmsg(tosys, title, ng)
  char *tosys, *title, *ng;
  {
     struct hbuf h;
     struct srec srec;
     FILE *tfp;
***************
*** 517,523
     static struct hbuf h;
  #else !u370
     struct hbuf h;
- #endif !u370
     struct srec srec;
     FILE *tfp;
     char *fname;

--- 515,520 -----
  char *tosys, *title, *ng;
  {
     struct hbuf h;
     struct srec srec;
     FILE *tfp;
     char *fname;
***************
*** 556,561
   * forking off a shell, you get a bare process.  You must have exactly
   * one argument, and the command must be mail.
   */
  #define RDR  0
```

```
  #define WTR  1
  static  int  mopen_pid[20];

--- 553,560 -----
   * forking off a shell, you get a bare process.  You must have exactly
   * one argument, and the command must be mail.
   */
+ #include <stdio.h>
+ #include <signal.h>
  #define RDR  0
  #define WTR  1
  static  int  mopen_pid[20];
diff -c -b NEW/defs.dist OLD/defs.dist
*** NEW/defs.dist  Mon Sep 17 19:26:51 1984
--- OLD/defs.dist  Tue Sep 18 16:47:56 1984
***************
*** 10,16
   * to be news_version below.
   */

! /* @(#)defs.dist 2.38 9/18/84 */

  #define NEWS_VERSION   "B 2.10.2 9/18/84"


--- 10,16 -----
   * to be news_version below.
   */

! /* @(#)defs.dist 2.35 9/5/84 */

  #define NEWS_VERSION   "B 2.10.2 9/5/84"

***************
*** 12,18

  /* @(#)defs.dist 2.37 9/17/84 */

! #define NEWS_VERSION   "B 2.10.2 9/17/84"

  #define DAYS     (60L*60L*24L)
  #define WEEKS    (7*DAYS)

--- 12,18 -----

  /* @(#)defs.dist 2.35 9/5/84 */

! #define NEWS_VERSION   "B 2.10.2 9/5/84"

  #define DAYS     (60L*60L*24L)
  #define WEEKS    (7*DAYS)
diff -c -b NEW/expire.c OLD/expire.c
*** NEW/expire.c   Wed Sep 12 21:30:21 1984
```

```
--- OLD/expire.c   Tue Sep 18 16:43:46 1984
***************
*** 5,11
    */

   #ifndef lint
! static char *SccsId = "@(#)expire.c 2.32 9/12/84";
   #endif lint

   #include "params.h"

--- 5,11 -----
    */

   #ifndef lint
! static char *SccsId = "@(#)expire.c 2.31 9/3/84";
   #endif lint

   #include "params.h"
***************
*** 21,26
   /* Number of array entries to allocate at a time. */
   #define SPACE_INCREMENT   1000

   extern int  errno;
   char   NARTFILE[BUFSIZ], OARTFILE[BUFSIZ];
   char   PAGFILE[BUFLEN], DIRFILE[BUFLEN];

--- 21,27 -----
   /* Number of array entries to allocate at a time. */
   #define SPACE_INCREMENT   1000

+ extern char groupdir[BUFSIZ], rcbuf[BUFLEN];
   extern int  errno;
   char   NARTFILE[BUFSIZ], OARTFILE[BUFSIZ];
   char   PAGFILE[BUFLEN], DIRFILE[BUFLEN];
***************
*** 34,41
   int    usepost = 0;
   int    frflag = 0;
   int    updateactive = 0;
! char   baduser[BUFLEN];
! extern char filename[], nbuf[];

   /*
    * This code uses realloc to get more of the multhist array.

--- 35,41 -----
   int    usepost = 0;
   int    frflag = 0;
   int    updateactive = 0;
! char   baduser[BUFLEN], filename[BUFLEN];
```

```
  /*
   * This code uses realloc to get more of the multhist array.
***************
*** 60,68
  struct passwd *pw;
  struct group *gp;
  char   arpat[LBUFLEN];
- char   ngpat[LBUFLEN];
- char   afline[BUFLEN];
- struct hbuf h;

  main(argc, argv)
  int    argc;

--- 60,65 -----
  struct passwd *pw;
  struct group *gp;
  char   arpat[LBUFLEN];

  main(argc, argv)
  int    argc;
***************
*** 69,74
  char   **argv;
  {
     register FILE *fp = NULL;
     register time_t now, newtime;
     char *p1, *p2, *p3;
     FILE *ohfd, *nhfd;

--- 66,72 -----
  char   **argv;
  {
     register FILE *fp = NULL;
+    struct hbuf h;
     register time_t now, newtime;
     char ngpat[LBUFLEN];
     char afline[BUFLEN];
***************
*** 70,75
  {
     register FILE *fp = NULL;
     register time_t now, newtime;
     char *p1, *p2, *p3;
     FILE *ohfd, *nhfd;
     DIR  *ngdirp = NULL;

--- 68,75 -----
     register FILE *fp = NULL;
     struct hbuf h;
     register time_t now, newtime;
+    char ngpat[LBUFLEN];
+    char afline[BUFLEN];
```

```
     char *p1, *p2, *p3;
     FILE *ohfd, *nhfd;
     DIR  *ngdirp;
***************
*** 72,78
     register time_t now, newtime;
     char *p1, *p2, *p3;
     FILE *ohfd, *nhfd;
!    DIR  *ngdirp = NULL;
     static struct direct *ngdir;
     char fn[BUFLEN];
     int uid, gid, duid, dgid;

--- 72,78 -----
     char afline[BUFLEN];
     char *p1, *p2, *p3;
     FILE *ohfd, *nhfd;
!    DIR  *ngdirp;
     static struct direct *ngdir;
     char fn[BUFLEN];
     int uid, gid, duid, dgid;
***************
*** 262,269
                         closedir(ngdirp);
                    if (fgets(afline, BUFLEN, ohfd) == NULL)
                         goto out;
!                   strcpy(nbuf, afline);
!                   p1 = index(nbuf, ' ');
                    if (p1 == NULL)
                         p1 = index(nbuf, '\n');
                    if (p1 != NULL)

--- 262,269 -----
                         closedir(ngdirp);
                    if (fgets(afline, BUFLEN, ohfd) == NULL)
                         goto out;
!                   strcpy(groupdir, afline);
!                   p1 = index(groupdir, ' ');
                    if (p1 == NULL)
                         p1 = index(groupdir, '\n');
                    if (p1 != NULL)
***************
*** 265,271
                    strcpy(nbuf, afline);
                    p1 = index(nbuf, ' ');
                    if (p1 == NULL)
!                        p1 = index(nbuf, '\n');
                    if (p1 != NULL)
                         *p1 = NULL;
                    if (!ngmatch(nbuf, ngpat))

--- 265,271 -----
                    strcpy(groupdir, afline);
```

```
                        p1 = index(groupdir, ' ');
                        if (p1 == NULL)
!                            p1 = index(groupdir, '\n');
                        if (p1 != NULL)
                            *p1 = NULL;
                        if (!ngmatch(groupdir, ngpat))
***************
*** 268,274
                            p1 = index(nbuf, '\n');
                        if (p1 != NULL)
                            *p1 = NULL;
!                       if (!ngmatch(nbuf, ngpat))
                            continue;

                        /* Change a group name from

--- 268,274 -----
                            p1 = index(groupdir, '\n');
                        if (p1 != NULL)
                            *p1 = NULL;
!                       if (!ngmatch(groupdir, ngpat))
                            continue;

                        /* Change a group name from
***************
*** 273,279

                        /* Change a group name from
                           a.b.c to a/b/c */
!                       for (p1=nbuf; *p1; p1++)
                            if (*p1 == '.')
                                *p1 = '/';


--- 273,279 -----

                        /* Change a group name from
                           a.b.c to a/b/c */
!                       for (p1=groupdir; *p1; p1++)
                            if (*p1 == '.')
                                *p1 = '/';

***************
*** 277,283
                            if (*p1 == '.')
                                *p1 = '/';

!                       if ((ngdirp = opendir(nbuf)) == NULL)
                            continue;

                    }

--- 277,283 -----
```

```
                            if (*p1 == '.')
                                 *p1 = '/';

!                       if ((ngdirp = opendir(groupdir)) == NULL)
                            continue;

                    }
***************
*** 283,289
                    }
                    ngdir = readdir(ngdirp);
               /*   Continue looking if not an article.  */
!              } while ( ngdir == NULL || !islegal(fn,nbuf,ngdir->d_name));

               p2 = fn;
               if (verbose > 2)

--- 283,289 -----
                    }
                    ngdir = readdir(ngdirp);
               /*   Continue looking if not an article.  */
!              } while ( ngdir == NULL || !islegal(fn,groupdir,ngdir->d_name));

               p2 = fn;
               if (verbose > 2)
***************
*** 301,308
               if (!p2)
                    continue;
               p2++;
!              strcpy(nbuf, p2);
!              p3 = index(nbuf, '/');
               if (p3)
                    *p3 = 0;
               else {

--- 301,308 -----
               if (!p2)
                    continue;
               p2++;
!              strcpy(groupdir, p2);
!              p3 = index(groupdir, '/');
               if (p3)
                    *p3 = 0;
               else {
***************
*** 316,322
                    strcpy(h.recdate, p1+1);
                    goto checkdate;
               }
!              if (!ngmatch(nbuf, ngpat)) {
                    fputs(afline, nhfd);
                    *p1 = 0;
```

```
                    remember(afline);

--- 316,322 -----
                    strcpy(h.recdate, p1+1);
                    goto checkdate;
               }
!              if (!ngmatch(groupdir, ngpat)) {
                    fputs(afline, nhfd);
                    *p1 = 0;
                    remember(afline);
***************
*** 437,443
               if (!dorebuild)
                    remember(h.ident);
               if (verbose > 2)
!                   printf("Good article %s\n", h.ident);
          }
     }


--- 437,443 -----
               if (!dorebuild)
                    remember(h.ident);
               if (verbose > 2)
!                   printf("Good article %s\n", rcbuf);
          }
     }

***************
*** 512,518

          if (fgets(afline, BUFLEN, ohfd) == NULL)
               continue;
!         if (sscanf(afline,"%s %ld %ld %c",nbuf,&maxart, &minart,
              &cansub) < 4)
               xerror("Active file corrupt");
          minart = maxart > 0 ? maxart : 1L;

--- 512,518 -----

          if (fgets(afline, BUFLEN, ohfd) == NULL)
               continue;
!         if (sscanf(afline,"%s %ld %ld %c",groupdir,&maxart, &minart,
              &cansub) < 4)
               xerror("Active file corrupt");
          minart = maxart > 0 ? maxart : 1L;
***************
*** 518,524
          minart = maxart > 0 ? maxart : 1L;
          /* Change a group name from
             a.b.c to a/b/c */
!         for (p1=nbuf; *p1; p1++)
               if (*p1 == '.')
```

```
                  *p1 = '/';


--- 518,524 -----
          minart = maxart > 0 ? maxart : 1L;
          /* Change a group name from
             a.b.c to a/b/c */
!         for (p1=groupdir; *p1; p1++)
              if (*p1 == '.')
                  *p1 = '/';

***************
*** 522,529
              if (*p1 == '.')
                  *p1 = '/';

!         gdsize = strlen(nbuf);
!         if ((ngdirp = opendir(nbuf)) != NULL) {
              while (ngdir = readdir(ngdirp)) {
                  nbuf[gdsize] = '/';
                  strcpy(&nbuf[gdsize+1], ngdir->d_name);

--- 522,529 -----
              if (*p1 == '.')
                  *p1 = '/';

!         gdsize = strlen(groupdir);
!         if ((ngdirp = opendir(groupdir)) != NULL) {
              while (ngdir = readdir(ngdirp)) {
                  groupdir[gdsize] = '/';
                  strcpy(&groupdir[gdsize+1],ngdir->d_name);
***************
*** 525,532
          gdsize = strlen(nbuf);
          if ((ngdirp = opendir(nbuf)) != NULL) {
              while (ngdir = readdir(ngdirp)) {
!                 nbuf[gdsize] = '/';
!                 strcpy(&nbuf[gdsize+1], ngdir->d_name);
                  /* We have to do a stat because of micro.6809 */
                  if (stat(nbuf, &stbuf) < 0 ||
                     !(stbuf.st_mode&S_IFREG) )

--- 525,532 -----
          gdsize = strlen(groupdir);
          if ((ngdirp = opendir(groupdir)) != NULL) {
              while (ngdir = readdir(ngdirp)) {
!                 groupdir[gdsize] = '/';
!                 strcpy(&groupdir[gdsize+1],ngdir->d_name);
                  /* We have to do a stat because of micro.6809 */
                  if (stat(groupdir,&stbuf) < 0 ||
                     !(stbuf.st_mode&S_IFREG) )
***************
*** 528,534
```

```
                    nbuf[gdsize] = '/';
                    strcpy(&nbuf[gdsize+1], ngdir->d_name);
                    /* We have to do a stat because of micro.6809 */
!                   if (stat(nbuf, &stbuf) < 0 ||
                       !(stbuf.st_mode&S_IFREG) )
                         continue;
                    n = atol(ngdir->d_name);

--- 528,534 -----
                    groupdir[gdsize] = '/';
                    strcpy(&groupdir[gdsize+1],ngdir->d_name);
                    /* We have to do a stat because of micro.6809 */
!                   if (stat(groupdir,&stbuf) < 0 ||
                       !(stbuf.st_mode&S_IFREG) )
                         continue;
                    n = atol(ngdir->d_name);
diff -c -b NEW/fullname.c OLD/fullname.c
*** NEW/fullname.c Mon Sep 17 19:26:47 1984
--- OLD/fullname.c Tue Sep 18 16:44:11 1984
***************
*** 14,20
     */

    #ifndef lint
! static char *SccsId = "@(#)fullname.c   1.8  9/17/84";
    #endif !lint

    #include "params.h"

--- 14,20 -----
     */

    #ifndef lint
! static char *SccsId = "@(#)fullname.c   1.7  8/14/84";
    #endif !lint

    #include <stdio.h>
***************
*** 17,23
    static char *SccsId = "@(#)fullname.c   1.8  9/17/84";
    #endif !lint

! #include "params.h"

    #ifndef LOCALNAME
    /*

--- 17,29 -----
    static char *SccsId = "@(#)fullname.c   1.7  8/14/84";
    #endif !lint

! #include <stdio.h>
! #include <ctype.h>
```

```
! #include <pwd.h>
! #ifdef USG
! struct passwd *getpwent(), *getpwuid(), *getpwnam();
! #endif USG
! #include "defs.h"

  #ifndef LOCALNAME
  /*
***************
*** 28,34
  fullname(un)
  char *un;
  {
!    static char inbuf[BUFLEN];
     struct passwd *pw;

     pw = getpwnam(un);

--- 34,40 -----
  fullname(un)
  char *un;
  {
!    static char inbuf[100];
     struct passwd *pw;

     pw = getpwnam(un);
***************
*** 51,58
  fullname(un)
  char *un;
  {
!    static char inbuf[BUFLEN];
!    char fbuf[BUFLEN];
     FILE *fd;
     char *p, *index(), *getenv();
     int pid;

--- 57,64 -----
  fullname(un)
  char *un;
  {
!    static char inbuf[100];
!    char fbuf[100];
     FILE *fd;
     char *p, *index(), *getenv();
     int pid;
diff -c -b NEW/funcs.c OLD/funcs.c
*** NEW/funcs.c    Wed Sep 12 21:29:22 1984
--- OLD/funcs.c    Tue Sep 18 16:45:06 1984
***************
*** 3,9
   */
```

```
  #ifndef lint
! static char *SccsId = "@(#)funcs.c  2.20 9/12/84";
  #endif !lint

  #include "params.h"

--- 3,9 -----
   */

  #ifndef lint
! static char *SccsId = "@(#)funcs.c  2.19 8/28/84";
  #endif !lint

  #include "params.h"
***************
*** 12,19
  #include <fcntl.h>
  #endif !v7

- extern char *Progname;
-
  /*
   * Append NGDELIM to string.
   */

--- 12,17 -----
  #include <fcntl.h>
  #endif !v7

  /*
   * Append NGDELIM to string.
   */
***************
*** 354,359
  int arg1, arg2, arg3;
  {
     char buffer[128];

     fflush(stdout);
     sprintf(buffer, message, arg1, arg2, arg3);

--- 352,358 -----
  int arg1, arg2, arg3;
  {
     char buffer[128];
+    extern char *Progname;

     fflush(stdout);
     sprintf(buffer, message, arg1, arg2, arg3);
diff -c -b NEW/iextern.c OLD/iextern.c
*** NEW/iextern.c  Wed Sep 12 21:29:06 1984
--- OLD/iextern.c  Tue Sep 18 16:43:11 1984
***************
```

```
*** 3,9
   */

  #ifndef lint
! static char *SccsId = "@(#)iextern.c    2.12 9/12/84";
  #endif !lint

  #include "iparams.h"

--- 3,9 -----
   */

  #ifndef lint
! static char *SccsId = "@(#)iextern.c    2.11 8/28/84";
  #endif !lint

  #include "iparams.h"
***************
*** 16,22
  struct hbuf header;           /* general-use header structure */
  char   bfr[LBUFLEN];          /* general-use scratch area */
  char   nbuf[LBUFLEN];             /* local newsgroup buffer */
! char   filename[BUFLEN];      /* general-use file name */

  #ifndef ROOTID
  int    ROOTID;                /* special users id # */

--- 16,22 -----
  struct hbuf header;           /* general-use header structure */
  char   bfr[LBUFLEN];          /* general-use scratch area */
  char   nbuf[LBUFLEN];             /* local newsgroup buffer */
! char   filename[NAMELEN];     /* general-use file name */

  #ifndef ROOTID
  int    ROOTID;                /* special users id # */
diff -c -b NEW/ifuncs.c OLD/ifuncs.c
*** NEW/ifuncs.c   Wed Sep 12 21:28:59 1984
--- OLD/ifuncs.c   Tue Sep 18 16:45:39 1984
***************
*** 3,9
   */

  #ifndef lint
! static char *SccsId = "@(#)ifuncs.c 2.35 9/12/84";
  #endif !lint

  #include "iparams.h"

--- 3,9 -----
   */

  #ifndef lint
! static char *SccsId = "@(#)ifuncs.c 2.33 9/3/84";
```

```
  #endif !lint

  #include "iparams.h"
***************
*** 64,71
          }
          if (ngmatch(h.nbuf, srec.s_nbuf)) {
               if (h.distribution[0] == '\0' ||
!                   ngmatch(h.distribution, srec.s_nbuf) ||
!                   ngmatch(h.nbuf, h.distribution)) {
                    if (transmit(&srec, xfopen(ARTICLE, "r"), 1)) {
                         if (nsent)
                              strcat(sentbuf, ", ");

--- 64,70 -----
          }
          if (ngmatch(h.nbuf, srec.s_nbuf)) {
               if (h.distribution[0] == '\0' ||
!                   ngmatch(h.distribution, srec.s_nbuf)) {
                    if (transmit(&srec, xfopen(ARTICLE, "r"), 1)) {
                         if (nsent)
                              strcat(sentbuf, ", ");
***************
*** 364,370

     sprintf(sfname, "%s/%s", userhome, PARTIAL);
     if ((tofd = fopen(sfname, "a")) == NULL)
!         xerror("Cannot save partial news in %s", sfname);
     time(&tim);
     fprintf(tofd, "----- News saved at %s\n", arpadate(&tim));
     while ((c = getc(fromfd)) != EOF)

--- 363,369 -----

     sprintf(sfname, "%s/%s", userhome, PARTIAL);
     if ((tofd = fopen(sfname, "a")) == NULL)
!         xerror("Cannot save partial news");
     time(&tim);
     fprintf(tofd, "----- News saved at %s\n", arpadate(&tim));
     while ((c = getc(fromfd)) != EOF)
***************
*** 491,497
     register char *s1, *s2;
     register FILE *f;
     register char *os1;
-    int ngroups = 1;
     char tbuf[BUFLEN], ngcheck[AFSIZ];

     f = xfopen(ACTIVE, "r");

--- 490,495 -----
     register char *s1, *s2;
     register FILE *f;
```

```
     register char *os1;
     char tbuf[BUFLEN], ngcheck[AFSIZ];

     f = xfopen(ACTIVE, "r");
***************
*** 525,531
          /* there shouldn't be blanks, but give the jerk a break */
          if (*s1 == NGDELIM || *s1 == ' ') {
               *s2++ = '\0';
-              ngroups++;
               while (*++s1 == NGDELIM || *s1 == ' ')
                    ;    /* remove extra commas */
          } else

--- 523,528 -----
          /* there shouldn't be blanks, but give the jerk a break */
          if (*s1 == NGDELIM || *s1 == ' ') {
               *s2++ = '\0';
               while (*++s1 == NGDELIM || *s1 == ' ')
                    ;    /* remove extra commas */
          } else
***************
*** 587,593
               /* check for local only distribution on incoming
                  newsgroups. This might occur if someone posted to
                  general,net.unix */
!              if(isproc && ngroups > 1 && index(os1, '.') == NULL) {
                    logerr("Local group '%s' removed", os1);
                    tbufcpy(os1, s1);
                    s1 = os1;

--- 584,590 -----
               /* check for local only distribution on incoming
                  newsgroups. This might occur if someone posted to
                  general,net.unix */
!              if(isproc && index(os1, '.') == NULL) {
                    logerr("Local group '%s' removed", os1);
                    tbufcpy(os1, s1);
                    s1 = os1;
***************
*** 650,657
  struct hbuf *hp;
  char *logname;
  {
!    register char *fn, *p;
!    char buf[BUFLEN];
     char *fullname(), *getenv();
     int fd;


--- 647,655 -----
  struct hbuf *hp;
  char *logname;
```

```
  {
!    char *fn;
!    static char buf[100];
!    char buf2[100];
     char *fullname(), *getenv();
     char *p;
     int fd;
***************
*** 653,658
     register char *fn, *p;
     char buf[BUFLEN];
     char *fullname(), *getenv();
     int fd;

     fn = getenv("NAME");

--- 651,657 -----
     static char buf[100];
     char buf2[100];
     char *fullname(), *getenv();
+    char *p;
     int fd;

     fn = getenv("NAME");
***************
*** 658,664
     fn = getenv("NAME");

     if (fn == NULL) {
!         sprintf(buf, "%s/%s", userhome, ".name");
          fd = open(buf, 0);
          if (fd >= 0) {
               read(fd, buf, sizeof buf);

--- 657,663 -----
     fn = getenv("NAME");

     if (fn == NULL) {
!         sprintf(buf, "%s/%s", getenv("HOME"), ".name");
          fd = open(buf, 0);
          if (fd >= 0) {
               read(fd, buf2, sizeof buf2);
***************
*** 661,667
          sprintf(buf, "%s/%s", userhome, ".name");
          fd = open(buf, 0);
          if (fd >= 0) {
!              read(fd, buf, sizeof buf);
               close(fd);
               if (buf[0] >= 'A') {
                    fn = buf;

--- 660,666 -----
```

```
          sprintf(buf, "%s/%s", getenv("HOME"), ".name");
          fd = open(buf, 0);
          if (fd >= 0) {
!              read(fd, buf2, sizeof buf2);
               close(fd);
               if (buf2[0] >= 'A')
                    fn = buf2;
***************
*** 663,670
          if (fd >= 0) {
               read(fd, buf, sizeof buf);
               close(fd);
!              if (buf[0] >= 'A') {
!                   fn = buf;
                    for (p=fn; *p; p++)
                         if (*p < ' ')
                              *p = '\0';

--- 662,669 -----
          if (fd >= 0) {
               read(fd, buf2, sizeof buf2);
               close(fd);
!              if (buf2[0] >= 'A')
!                   fn = buf2;
               for (p=fn; *p; p++)
                    if (*p < ' ')
                         *p = 0;
***************
*** 667,674
                    fn = buf;
                    for (p=fn; *p; p++)
                         if (*p < ' ')
!                             *p = '\0';
!              }
          }
     }


--- 666,672 -----
                    fn = buf2;
               for (p=fn; *p; p++)
                    if (*p < ' ')
!                        *p = 0;
          }
     }

diff -c -b NEW/makeactive.sh OLD/makeactive.sh
*** NEW/makeactive.sh  Mon Sep 17 19:26:41 1984
--- OLD/makeactive.sh  Tue Sep 18 16:43:45 1984
***************
*** 1,6
  : "Create active file and newsgroup hierarchy for new machine"
  : "Usage: sh makeactive.sh LIBDIR SPOOLDIR NEWSUSR NEWSGRP"
```

```
! : '@(#)makeactive    1.10 9/17/84'
  LIBDIR=$1
  SPOOLDIR=$2
  NEWSUSR=$3

--- 1,6 -----
  : "Create active file and newsgroup hierarchy for new machine"
  : "Usage: sh makeactive.sh LIBDIR SPOOLDIR NEWSUSR NEWSGRP"
! : '@(#)makeactive    1.9  9/4/84'
  LIBDIR=$1
  SPOOLDIR=$2
  NEWSUSR=$3
***************
*** 228,234
     *) echo Active file is in unrecognized format. Not upgraded.;;
     esac
  fi
! if test $# -eq 3 -o $# -eq 2
  then
     (sed '/^!net/!d
  s/^!//

--- 228,234 -----
     *) echo Active file is in unrecognized format. Not upgraded.;;
     esac
  fi
! if test $# -eq 3 -o $3 -eq -2
  then
     (sed '/^!net/!d
  s/^!//
diff -c -b NEW/postnews.c OLD/postnews.c
*** NEW/postnews.c Tue Sep 18 19:05:12 1984
--- OLD/postnews.c Tue Sep 18 16:50:41 1984
***************
*** 5,11
   */

  #ifndef lint
! static char *SccsId = "@(#)postnews.c   1.16 9/18/84";
  #endif !lint

  #include "params.h"

--- 5,11 -----
   */

  #ifndef lint
! static char *SccsId = "@(#)postnews.c   1.13 9/5/84";
  #endif !lint

  #include <stdio.h>
***************
*** 8,14
```

```
  static char *SccsId = "@(#)postnews.c   1.16 9/18/84";
  #endif !lint

! #include "params.h"

  char tempfname[50];       /* file name used for making article */
  char original[BUFLEN];         /* file name of original, used in followup */

--- 8,23 -----
  static char *SccsId = "@(#)postnews.c   1.13 9/5/84";
  #endif !lint

! #include <stdio.h>
! #include <ctype.h>
! #include <sys/types.h>
! #include <sys/stat.h>
! #include <pwd.h>
! #ifdef USG
! struct passwd *getpwent(), *getpwuid(), *getpwnam();
! #endif USG
! #include "defs.h"
! #define ARCHIVES_DEF "NEWSARCHIVE"

  char tempfname[50];       /* file name used for making article */
  char original[BUFLEN];         /* file name of original, used in followup */
***************
*** 103,109
     edit_article();
     post_checks();

-    if(ccname[0])
          save_article();
     post_article();
  }

--- 112,117 -----
     edit_article();
     post_checks();

     save_article();
     post_article();
  }
***************
*** 375,380
     time_t timenow, time();
     char *today, *ctime();

     in = xfopen(tempfname, "r");
     out = xfopen(ccname, "a");
     timenow = time((time_t)0);

--- 383,389 -----
     time_t timenow, time();
```

```
     char *today, *ctime();

+
     in = xfopen(tempfname, "r");
     out = xfopen(ccname, "a");
     timenow = time((time_t)0);
***************
*** 441,447
     strcpy(homedir, p);


!    p = getenv("NEWSARCHIVE");
     if (p == NULL)
          sprintf(ccname, "%s/author_copy", homedir);
     else

--- 450,456 -----
     strcpy(homedir, p);


!    p = getenv(ARCHIVES_DEF);
     if (p == NULL)
          sprintf(ccname, "%s/author_copy", homedir);
     else
***************
*** 647,654
  register char *baseart;
  {
     /* subject */
!    if (article_line(baseart, "Subject: ", buf)) {
!         if (!prefix(buf+9, "Re:"))
               sprintf(subject, "Re: %s", buf+9);
          else
               strcpy(subject, buf+9);

--- 656,662 -----
  register char *baseart;
  {
     /* subject */
!    if (article_line(baseart, "Subject: ", buf))
          sprintf(subject, "Re: %s", buf+9);
     else
          strcpy(subject, "Re: orphan response");
***************
*** 651,658
          if (!prefix(buf+9, "Re:"))
               sprintf(subject, "Re: %s", buf+9);
          else
-              strcpy(subject, buf+9);
-    } else
          strcpy(subject, "Re: orphan response");

     /* newsgroup */
```

```
--- 659,664 -----
     if (article_line(baseart, "Subject: ", buf))
          sprintf(subject, "Re: %s", buf+9);
     else
          strcpy(subject, "Re: orphan response");

     /* newsgroup */
diff -c -b NEW/process.c OLD/process.c
*** NEW/process.c  Tue Sep 18 19:05:02 1984
--- OLD/process.c  Tue Sep 18 16:40:53 1984
***************
*** 2,10
   * process - process options for readnews
   */

! #ifndef lint
! static char *SccsId = "@(#)process.c    2.10 9/18/84";
! #endif !lint

  #include "rparams.h"


--- 2,8 -----
   * process - process options for readnews
   */

! static char *SccsId = "@(#)process.c    2.9  4/20/84";

  #include "rparams.h"

***************
*** 23,29
  's',   NGDELIM,  FALSE,   STRING,  ANY,     UNKNOWN,header.nbuf,
  'x',    '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
  'h',    '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
- #ifdef TMAIL
  'M',    '\0',    FALSE,   OPTION,  UNKNOWN, MAIL,    (char *)NULL,
  #else !TMAIL
  '\377','\0',     FALSE,   OPTION,  UNKNOWN, UNKNOWN,(char *)NULL,

--- 21,26 -----
  's',   NGDELIM,  FALSE,   STRING,  ANY,     UNKNOWN,header.nbuf,
  'x',    '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
  'h',    '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
  'M',    '\0',    FALSE,   OPTION,  UNKNOWN, MAIL,    (char *)NULL,
  'f',    '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
  'u',    '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
***************
*** 25,33
  'h',    '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
  #ifdef TMAIL
  'M',    '\0',    FALSE,   OPTION,  UNKNOWN, MAIL,    (char *)NULL,
```

```
- #else !TMAIL
- '\377','\0',    FALSE,   OPTION,  UNKNOWN, UNKNOWN,(char *)NULL,
- #endif !TMAIL
  'f',   '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
  'u',   '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
  'e',   '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,

--- 22,27 -----
  'x',   '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
  'h',   '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
  'M',   '\0',    FALSE,   OPTION,  UNKNOWN, MAIL,    (char *)NULL,
  'f',   '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
  'u',   '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
  'e',   '\0',    FALSE,   OPTION,  ANY,     UNKNOWN,(char *)NULL,
***************
*** 57,63
                        goto found;
                }
                /* unknown option letter */
- #ifdef TMAIL
                fprintf(stderr, "Usage: readnews [ -a [ date ]] [ -n newsgroups ]
[ -t titles ] [ -lprxhfuM ]\n");
  #else !TMAIL
                fprintf(stderr, "Usage: readnews [ -a [ date ]] [ -n newsgroups ]
[ -t titles ] [ -lprxhfu ]\n");

--- 51,56 -----
                        goto found;
                }
                /* unknown option letter */
                fprintf(stderr, "Usage: readnews [ -a [ date ]] [ -n newsgroups ]
[ -t titles ] [ -lprxhfuM ]\n");
                fprintf(stderr, "\t[ -c [ ``mailer'' ]]\n\n");
                fprintf(stderr, "       readnews -s\n");
***************
*** 59,67
                /* unknown option letter */
  #ifdef TMAIL
                fprintf(stderr, "Usage: readnews [ -a [ date ]] [ -n newsgroups ]
[ -t titles ] [ -lprxhfuM ]\n");
- #else !TMAIL
-               fprintf(stderr, "Usage: readnews [ -a [ date ]] [ -n newsgroups ]
[ -t titles ] [ -lprxhfu ]\n");
- #endif !TMAIL
                fprintf(stderr, "\t[ -c [ ``mailer'' ]]\n\n");
                fprintf(stderr, "       readnews -s\n");
                exit(1);

--- 52,57 -----
                }
                /* unknown option letter */
                fprintf(stderr, "Usage: readnews [ -a [ date ]] [ -n newsgroups ]
[ -t titles ] [ -lprxhfuM ]\n");
```

```
              fprintf(stderr, "\t[ -c [ ``mailer'' ]]\n\n");
              fprintf(stderr, "       readnews -s\n");
              exit(1);
diff -c -b NEW/readr.c OLD/readr.c
*** NEW/readr.c    Tue Sep 18 19:04:58 1984
--- OLD/readr.c    Tue Sep 18 16:48:53 1984
***************
*** 3,9
    */

   #ifndef lint
! static char *SccsId = "@(#)readr.c  2.48 9/18/84";
   #endif !lint

   #include "rparams.h"

--- 3,9 -----
    */

   #ifndef lint
! static char *SccsId = "@(#)readr.c  2.46 9/5/84";
   #endif !lint

   #include "rparams.h"
***************
*** 611,616
     int edit = 1;
     char *ed;
     FILE *tfp;
     char *replyname();
     char subj[BUFLEN];
     char folbuf[BUFLEN];

--- 611,617 -----
     int edit = 1;
     char *ed;
     FILE *tfp;
+    char curberk[BUFLEN];
     char *replyname();
     char subj[BUFLEN];
     char folbuf[BUFLEN];
***************
*** 648,653
          *ptr1 = ' ';

     *rcbuf = '\0';
     pathptr = replyname(hptr);;
     for (ptr1 = address, ptr2 = pathptr; *ptr2; ptr1++, ptr2++) {
          if (index("\"\\$", *ptr2))

--- 649,655 -----
          *ptr1 = ' ';
```

```
     *rcbuf = '\0';
+    *curberk = '\0';
     pathptr = replyname(hptr);;
     for (ptr1 = address, ptr2 = pathptr; *ptr2; ptr1++, ptr2++) {
          if (index("\"\\$", *ptr2))
diff -c -b NEW/recmail.c OLD/recmail.c
*** NEW/recmail.c  Mon Sep 17 19:26:26 1984
--- OLD/recmail.c  Tue Sep 18 16:44:20 1984
***************
*** 7,13
    */

   #ifndef lint
! static char *SccsId = "@(#)recmail.c    1.9  9/17/84";
   #endif !lint

   #include "params.h"

--- 7,13 -----
    */

   #ifndef lint
! static char *SccsId = "@(#)recmail.c    1.8  8/14/84";
   #endif !lint

   #include <stdio.h>
***************
*** 10,16
   static char *SccsId = "@(#)recmail.c    1.9  9/17/84";
   #endif !lint

! #include "params.h"

   #ifndef MAILER
   #define MAILER "/bin/mail"

--- 10,21 -----
   static char *SccsId = "@(#)recmail.c    1.8  8/14/84";
   #endif !lint

! #include <stdio.h>
! #include <ctype.h>
! #include <pwd.h>
! #ifdef USG
! struct passwd *getpwent(), *getpwuid(), *getpwnam();
! #endif USG

   #ifndef MAILER
   #define MAILER "/bin/mail"
diff -c -b NEW/rfuncs2.c OLD/rfuncs2.c
*** NEW/rfuncs2.c  Wed Sep 12 21:27:09 1984
--- OLD/rfuncs2.c  Tue Sep 18 16:42:46 1984
***************
```

```
*** 3,9
   */

  #ifndef lint
! static char *SccsId = "@(#)rfuncs2.c    1.18 9/12/84";
  #endif !lint

  #include "rparams.h"

--- 3,9 -----
   */

  #ifndef lint
! static char *SccsId = "@(#)rfuncs2.c    1.17 9/3/84";
  #endif !lint

  #include "rparams.h"
***************
*** 47,55
  register char    *file, *to;
  {
     register FILE *ufp, *hfp;
- #ifdef u370
-    static struct hbuf hh;
- #else !u370
     struct hbuf hh;
  #endif !u370
     int  isprogram = 0;

--- 47,52 -----
  register char    *file, *to;
  {
     register FILE *ufp, *hfp;
     struct hbuf hh;
     int  isprogram = 0;
     int  isnew = 1;
***************
*** 51,57
     static struct hbuf hh;
  #else !u370
     struct hbuf hh;
- #endif !u370
     int  isprogram = 0;
     int  isnew = 1;
     register int i;

--- 48,53 -----
  {
     register FILE *ufp, *hfp;
     struct hbuf hh;
     int  isprogram = 0;
     int  isnew = 1;
     register int i;
```

```
***************
*** 318,326
  {
     register FILE *ifp, *ofp;
     register int  c;
- #ifdef u370
-    static struct hbuf hh;
- #else !u370
     struct hbuf hh;
  #endif !u370
     char TRANS[BUFLEN];

--- 314,319 -----
  {
     register FILE *ifp, *ofp;
     register int  c;
     struct hbuf hh;
     char TRANS[BUFLEN];

***************
*** 322,328
     static struct hbuf hh;
  #else !u370
     struct hbuf hh;
- #endif !u370
     char TRANS[BUFLEN];

  #ifdef DEBUG

--- 315,320 -----
     register FILE *ifp, *ofp;
     register int  c;
     struct hbuf hh;
     char TRANS[BUFLEN];

  #ifdef DEBUG
diff -c -b NEW/rparams.h OLD/rparams.h
*** NEW/rparams.h  Wed Sep 12 21:26:54 1984
--- OLD/rparams.h  Tue Sep 18 16:47:59 1984
***************
*** 2,8
   * rparams.h - parameters for readnews, rfuncs, and readr.
   */

! /* @(#)rparams.h 2.16 9/12/84  */

  #include "params.h"


--- 2,8 -----
   * rparams.h - parameters for readnews, rfuncs, and readr.
   */
```

```
! /* @(#)rparams.h 2.15 9/5/84    */

  #include "params.h"

diff -c -b NEW/sendnews.c OLD/sendnews.c
*** NEW/sendnews.c Mon Sep 17 19:26:22 1984
--- OLD/sendnews.c Tue Sep 18 16:43:23 1984
***************
*** 3,9
    */

  #ifndef lint
! static char *SccsId = "@(#)sendnews.c   2.9  9/17/84";
  #endif !lint

  #include <stdio.h>

--- 3,9 -----
    */

  #ifndef lint
! static char *SccsId = "@(#)sendnews.c   2.8  8/14/84";
  #endif !lint

  #include <stdio.h>
***************
*** 54,60
      }

  #ifdef debug
!     printf("/bin/mail %s\n", *argv);
      sprintf(buffer, "cat");
  #else
      sprintf(buffer, "/bin/mail %s", *argv);

--- 54,60 -----
      }

  #ifdef debug
!     printf("mail %s\n", *argv);
      sprintf(buffer, "cat");
  #else
      sprintf(buffer, "mail %s", *argv);
***************
*** 57,63
      printf("/bin/mail %s\n", *argv);
      sprintf(buffer, "cat");
  #else
!     sprintf(buffer, "/bin/mail %s", *argv);
  #endif
      out = popen(buffer, "w");
      uname(&ubuf);
```

```
--- 57,63 -----
     printf("mail %s\n", *argv);
     sprintf(buffer, "cat");
  #else
!    sprintf(buffer, "mail %s", *argv);
  #endif
     out = popen(buffer, "w");
     uname(&ubuf);
diff -c -b NEW/virtterm.c OLD/virtterm.c
*** NEW/virtterm.c Mon Sep 17 19:27:10 1984
--- OLD/virtterm.c Tue Sep 18 16:46:06 1984
***************
*** 1,5
  /*
!  *  Virtual terminal handler
   *  Written by Kenneth Almquist, AGS Computers  (HO 4C601, X7105).
   *  Modified by Stephen Hemminger, to use TERMCAP (without curses)
   */

--- 1,5 -----
  /*
!  *  Virtual terminal handler for the HP-2621 terminal.
   *  Written by Kenneth Almquist, AGS Computers  (HO 4C601, X7105).
   *  Modified by Stephen Hemminger, to use TERMCAP (without curses)
   */
***************
*** 3,8
   *  Written by Kenneth Almquist, AGS Computers  (HO 4C601, X7105).
   *  Modified by Stephen Hemminger, to use TERMCAP (without curses)
   */

  #ifndef lint
  static char *SccsId = "@(#)virtterm.c   1.5  9/14/84";

--- 3,9 -----
   *  Written by Kenneth Almquist, AGS Computers  (HO 4C601, X7105).
   *  Modified by Stephen Hemminger, to use TERMCAP (without curses)
   */
+ static char *SccsId = "@(#)virtterm.c   1.4  7/17/84";

  #include <stdio.h>
  #include <ctype.h>
***************
*** 4,13
   *  Modified by Stephen Hemminger, to use TERMCAP (without curses)
   */

- #ifndef lint
- static char *SccsId = "@(#)virtterm.c   1.5  9/14/84";
- #endif !lint
-
  #include <stdio.h>
  #include <ctype.h>
```

```
--- 5,10 -----
   */
  static char *SccsId = "@(#)virtterm.c   1.4  7/17/84";

  #include <stdio.h>
  #include <ctype.h>

***************
*** 66,71
  extern char *getenv(), *strcpy();

  #define ULINE 0200

  /* Constants accessable by user */
  int     hasscroll;        /* scrolling type, 0 == no scrolling */

--- 63,69 -----
  extern char *getenv(), *strcpy();

  #define ULINE 0200
+ #define CURSEEN 1

  /* Constants accessable by user */
  int     hasscroll;        /* scrolling type, 0 == no scrolling */
***************
*** 328,333
              return;
     }
     _dir = 1;
     _amove(_row, _col);
     vflush();          /* flush output buffer */
     _scratched = 0;

--- 326,332 -----
              return;
     }
     _dir = 1;
+    if (CURSEEN)
          _amove(_row, _col);
     vflush();          /* flush output buffer */
     _scratched = 0;
***************
*** 471,479
          lp = &_virt[i];
          if (lp->flags & DIRTY) {
               lp = &_virt[i];
!              for (p = &lp->l[lp->len]; --p >= lp->l && *p == ' ';)
!                   ;
!              lp->len = (int) (p - lp->l) + 1;
               if (lp->len == _actual[i].len && strncmp(lp->l, _actual[i].l, lp-
>len) == 0)
```

```
                    lp->flags &= ~DIRTY;
          }

--- 470,477 -----
          lp = &_virt[i];
          if (lp->flags & DIRTY) {
               lp = &_virt[i];
!              for (p = &lp->l[lp->len]; --p >= lp->l && *p == ' ';);
!              lp->len = p + 1 - lp->l;
               if (lp->len == _actual[i].len && strncmp(lp->l, _actual[i].l, lp-
>len) == 0)
                    lp->flags &= ~DIRTY;
          }
***************
*** 506,513
          len = vp->len;
          eval = 0;
     }
!    for (j = 0; j < len && vp->l[j] == ap->l[j]; j++)
!         ;
     if (j == len)
          return;
     first = j;

--- 504,510 -----
          len = vp->len;
          eval = 0;
     }
!    for (j = 0; j < len && vp->l[j] == ap->l[j]; j++);
     if (j == len)
          return;
     first = j;
***************
*** 646,653
     if (CV && plodstr - saveplod >= strlen(direct)) {
          register char *p;
          plodstr = saveplod;
!         for (p = direct ; *plodstr = *p++ ; plodstr++)
!              ;
     }
     return 0;
  }

--- 643,649 -----
     if (CV && plodstr - saveplod >= strlen(direct)) {
          register char *p;
          plodstr = saveplod;
!         for (p = direct ; *plodstr = *p++ ; plodstr++);
     }
     return 0;
  }
diff -c -b NEW/visual.c OLD/visual.c
*** NEW/visual.c   Tue Sep 18 19:04:37 1984
```

```
--- OLD/visual.c   Tue Sep 18 16:50:10 1984
***************
*** 3,9
    */

  #ifndef lint
! static char *SccsId = "@(#)visual.c 1.15 9/18/84";
  static char Author[] = "@(#)visual interface written by Kenneth Almquist";
  #endif !lint


--- 3,9 -----
    */

  #ifndef lint
! static char *SccsId = "@(#)visual.c 1.12 9/5/84";
  static char Author[] = "@(#)visual interface written by Kenneth Almquist";
  #endif !lint

***************
*** 252,258
  #endif
      || (prflags & HDRONLY) && artlines > hdrend) {
          atend = 0;
!         if (prflags&HDRONLY || maxlinno == 0)
              strcpy(prompt,"more? ");
          else
              sprintf(prompt,"more(%d%%)? ",((dlinno+ARTWLEN-hdrend)*100)/
maxlinno);

--- 252,258 -----
  #endif
      || (prflags & HDRONLY) && artlines > hdrend) {
          atend = 0;
!         if (prflags&HDRONLY)
              strcpy(prompt,"more? ");
          else
              sprintf(prompt,"more(%d%%)? ",((dlinno+ARTWLEN-hdrend)*100)/
maxlinno);
***************
*** 846,852
      fprintf(rfp, "To: %s\n", p);
      fprintf(rfp, "Subject: %s\n", subj);
      fprintf(rfp, "In-reply-to: your article %s\n", h->ident);
!     sprintf(rcbuf, "%s -t < %s; rm -f %s", MAILPARSER, tf, tf);
      nogomsg = "Mail not sent";
      putc('\n', rfp);
      fstat(fileno(rfp), &statb);

--- 846,852 -----
      fprintf(rfp, "To: %s\n", p);
      fprintf(rfp, "Subject: %s\n", subj);
      fprintf(rfp, "In-reply-to: your article %s\n", h->ident);
```

```
!    sprintf(rcbuf, "exec %s -t < %s; rm %s", MAILPARSER, tf, tf);
     nogomsg = "Mail not sent";
     putc('\n', rfp);
     fstat(fileno(rfp), &statb);
***************
*** 1114,1122
     if (verbose) {
          sprintf(linebuf, "From: %s", hp->from); tfappend(linebuf);
          sprintf(linebuf, "Path: %s", hp->path); tfappend(linebuf);
!         if (hp->organization[0]) {
!              sprintf(linebuf, "Organization: %s", hp->organization);
!              tfappend(linebuf);
          }
     }
     else {

--- 1114,1121 -----
     if (verbose) {
          sprintf(linebuf, "From: %s", hp->from); tfappend(linebuf);
          sprintf(linebuf, "Path: %s", hp->path); tfappend(linebuf);
!         if (hp->organization[0])
!              sprintf(linebuf, "Organization: %s", hp->organization),
tfappend(linebuf);
     }
     else {
          if (p1 != NULL)
***************
*** 1118,1124
               sprintf(linebuf, "Organization: %s", hp->organization);
               tfappend(linebuf);
          }
-    }
     else {
          if (p1 != NULL)
               *--p1 = '\0';      /* bump over the '(' */

--- 1117,1122 -----
          if (hp->organization[0])
               sprintf(linebuf, "Organization: %s", hp->organization),
tfappend(linebuf);
     }
     else {
          if (p1 != NULL)
               *--p1 = '\0';      /* bump over the '(' */
***************
*** 1167,1177
          if (hp->followto[0])
               sprintf(linebuf, "Followup-To: %s", hp->followto),
tfappend(linebuf);
     }
!    else if (strcmp(bfr, groupdir) != 0) {
!         sprintf(linebuf, "Newsgroups: %s", bfr);
!         tfappend(linebuf);
```

```
!         timer();
!    }
  }

  #ifdef MYDB

--- 1165,1172 -----
          if (hp->followto[0])
               sprintf(linebuf, "Followup-To: %s", hp->followto),
tfappend(linebuf);
     }
!    else if (strcmp(bfr, groupdir) != 0)
!         sprintf(linebuf, "Newsgroups: %s", bfr), tfappend(linebuf);
  }


***************
*** 1174,1179
     }
  }

  #ifdef MYDB

  char *

--- 1169,1177 -----
          sprintf(linebuf, "Newsgroups: %s", bfr), tfappend(linebuf);
  }

+
+
+
  #ifdef MYDB


***************
*** 1176,1181

  #ifdef MYDB

  char *
  findparent(id, num)
  char *id;

--- 1174,1180 -----

  #ifdef MYDB

+
  char *
  findparent(id, num)
  char *id;
***************
```

```
*** 1977,1988
     struct tchars tchars;   /* special characters, including interrupt */
  #endif
  #ifdef SIGTSTP
!    int getpgrp();
! #if defined(BSD4_2) || defined(BSD4_1C)
!    int tpgrp;
! #else   BSD4_1
!    short tpgrp;
! #endif  BSD4_1

  retry:
  #ifdef BSD4_2

--- 1976,1985 -----
     struct tchars tchars;   /* special characters, including interrupt */
  #endif
  #ifdef SIGTSTP
!    /* How to get/change terminal modes in a job control environment.
!       This code is right from the 4.1 bsd jobs(3) manual page.
!     */
!    int tpgrp, getpgrp();

  retry:
  #ifdef BSD4_2


From -4847653853812836407
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e100698369d6010,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-18 20:06:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.16 $; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!uok!
mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: re: white house radios
Message-ID: <2800018@uok.UUCP>
Date: Tue, 18-Sep-84 23:06:00 EDT
Article-I.D.: uok.2800018
Posted: Tue Sep 18 23:06:00 1984
Date-Received: Wed, 3-Oct-84 19:42:47 EDT
Lines: 17
Nf-ID: #N:uok:2800018:000:934
Nf-From: uok!mpackard    Sep 18 22:06:00 1984

[eat a peach]

The most distressing thing to hear is the secretary of state discussing
problems or passing information over a clear radio, but it happens all
the time.  Just listen to HF in the 11.200 to 11.300 band and you will
```

here just about everyone of importance talking around the subject.
The fact that the military spends billions on communications gear, doesn't
mean they use it. Usually the operator is lazy and just gets a frequency
the fastest way he can. "get me a freq as soon as possible I must speak
to the president" and the operator says gee not again, Oh piss I'll just
give him the HF. The easiest way to determine an aircrafts communications
capability is to look at it's antenna's. (you can't tell which ones are
the bogus ones) Don't forget to examine the skin for bumps which house
some of the antenna's. The reason for bumps is because the maintenance
types have to fix them sooner or later.
uok!mpackard

From -6846692542341043598
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d3922f4d54edb802,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-19 07:06:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site infoswx.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!ihnp4!inuxc!pur-ee!uiucdcs!
infoswx!jim
From: jim@infoswx.UUCP
Newsgroups: net.ham-radio
Subject: Re: Updates to call book - (nf)
Message-ID: <3200020@infoswx.UUCP>
Date: Wed, 19-Sep-84 10:06:00 EDT
Article-I.D.: infoswx.3200020
Posted: Wed Sep 19 10:06:00 1984
Date-Received: Tue, 25-Sep-84 08:54:43 EDT
References: <13404@sri-arpa.UUCP>
Lines: 8
Nf-ID: #R:sri-arpa:-1340400:infoswx:3200020:000:94
Nf-From: infoswx!jim   Sep 19 09:06:00 1984

#R:sri-arpa:-1340400:infoswx:3200020:000:94
infoswx!jim   Sep 19 09:06:00 1984

Quarterly supplements to the Callbook can be obtained from
the publisher.

73,
Jim, KC5OA

From -3146740024268587233
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bceba9c6b6d019df,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-19 07:18:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr

From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Linear amp for sale (Chicago area)
Message-ID: <12402@mgweed.UUCP>
Date: Wed, 19-Sep-84 10:18:00 EDT
Article-I.D.: mgweed.12402
Posted: Wed Sep 19 10:18:00 1984
Date-Received: Tue, 25-Sep-84 09:23:11 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

FOR SALE: Hallicrafter HT-45 "Loudenboomer" linear amp. 80-10 meters.
This is a desk top amp with a separate power supply (solid state rec-
tifiers). The amp has a single 3-400Z tube and runs 1000 watts DC input.
I have added a low voltage control circuit that is keyed by the
transceiver that switches the standby bias and rf bypass relay.

asking $250

Bob K9EUI

From -2163609075068392424
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3f4cf0c05f32b99a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-19 08:40:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!hao!seismo!cmcl2!acf4!leung
From: leung@acf4.UUCP
Newsgroups: net.ham-radio
Subject: Re: Updates to call book
Message-ID: <16400017@acf4.UUCP>
Date: Wed, 19-Sep-84 11:40:00 EDT
Article-I.D.: acf4.16400017
Posted: Wed Sep 19 11:40:00 1984
Date-Received: Tue, 25-Sep-84 20:59:14 EDT
References: <13404@SRI-KL.UUCP>
Organization: New York University
Lines: 16
Nf-ID: #R:SRI-KL:-1340400:acf4:16400017:000:517
Nf-From: acf4!leung   Sep 19 11:40:00 1984

Hi Allen,

Yes, there is a way to get updates to the call book (the one put out by the
call book company). If you write them a letter they can give you the info
on that. They put them out 4 times a year, both foreign and U.S. updates.

Though I believe it is not too cheap. I used to get it when I first became
a ham. Since the ARRL has started putting out their own book, you might
also get in touch with them.

73's

Alex Polozoff   KA3BQE/2   allegra!cmcl2!acf4!leung
New York University

From 5328765175965923834
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a0605d89cc2e602,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-19 09:20:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site whuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)
Newsgroups: net.ham-radio
Subject: Antenna Tuners on Receivers
Message-ID: <239@whuxl.UUCP>
Date: Wed, 19-Sep-84 12:20:37 EDT
Article-I.D.: whuxl.239
Posted: Wed Sep 19 12:20:37 1984
Date-Received: Tue, 25-Sep-84 09:16:51 EDT
Distribution: net
Organization: Bell Communications Research, Inc.
Lines: 10

There are several reasons why an antenna tuner can be benificial on an
receiver as well as on a transmitter.
Probably the most siginificant is the ability to improve selectivity throug
another tuned stage - given the amount of QRM around these days (especially
on 40, 20, & 15) this can be what you need to get that signal out of the noise.
The impedance match won't hurt you either but that's not too critical on
receiving (of course, that's why you want a tuner for your transmitter).
73's
Bill Mitchell, WB2IAU, (whuxl!wjm)

From 8565625626054331118
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,277764de56c6cc42,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-19 09:24:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.2 9/5/84; site whuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)
Newsgroups: net.ham-radio

Subject: Re: Malicious Interference Bill
Message-ID: <240@whuxl.UUCP>
Date: Wed, 19-Sep-84 12:24:48 EDT
Article-I.D.: whuxl.240
Posted: Wed Sep 19 12:24:48 1984
Date-Received: Tue, 25-Sep-84 09:17:33 EDT
Distribution: net
Organization: Bell Communications Research, Inc.
Lines: 4

A great idea, but what can the US Government do to keep some international
shortwave types from jamming 40 (e.g. Radio Moscow)?
73's
Bill Mitchell, WB2IAU (whuxl!wjm)

From -2778392326361131659
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,114506b08c9799de,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-19 10:19:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site homxa.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!homxa!nd2k
From: nd2k@homxa.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: 73 mag. routing list
Message-ID: <401@homxa.UUCP>
Date: Wed, 19-Sep-84 13:19:35 EDT
Article-I.D.: homxa.401
Posted: Wed Sep 19 13:19:35 1984
Date-Received: Tue, 25-Sep-84 09:24:47 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 17

My 73 magazine subscription is up for renewal and have thought of dropping it but have come up with an idea. If there is enough interest I might start a routing list, and circulate the magazine at HO, HOH, WB, NP etc. and then finally back to me. I would ask for $2 a year, let's say, unless there was more interest and then I could lower the price.

Let me know if you are interested, if I get at least five people, I'll gladly start it up.

Al Schwarz ND2K
(201) 949-3337

From -9036035703971564217
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63d4f01c339af2ce,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-19 14:52:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!mhuxj!mhuxn!mhuxl!ulysses!
allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <156@mouton.UUCP>
Date: Wed, 19-Sep-84 17:52:22 EDT
Article-I.D.: mouton.156
Posted: Wed Sep 19 17:52:22 1984
Date-Received: Tue, 25-Sep-84 06:18:27 EDT
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84255.41144950
   Tue Sep 11 09:52:29.236 1984 UTC
Element set: 683
Inclination: 97.6001 deg
RA of node: 231.3892 deg
Eccentricity: 0.0003120
Arg of perigee: 138.3034 deg
Mean anomaly: 221.8428 deg
Mean motion: 15.26355624 rev/day
Decay rate: 2.674e-05 rev/day^2
Epoch rev: 16269
Semi major axis: 6861.820 km
Anom period: 94.342365 min
Apogee: 495.113 km
Perigee: 490.831 km
Ref perigee: 2445.43659239
   Tue Sep 11 10:28:41.582 1984 UTC
Beacon: 145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84250.83001875
   Thu Sep 6 19:55:13.619 1984 UTC
Element set: 129
Inclination: 25.7205 deg
RA of node: 179.6441 deg
Eccentricity: 0.6065195
Arg of perigee: 303.9563 deg
Mean anomaly: 12.4427 deg
Mean motion: 2.05846116 rev/day

```
Decay rate:       -9.4e-07 rev/day^2
Epoch rev:             929
Semi major axis: 26106.405 km
Anom period:    699.551698 min
Apogee:          35565.075 km
Perigee:          3896.987 km
Ref perigee:      2440.81322802
   Thu Sep  6 19:31:02.901 1984 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84254.26247404
   Mon Sep 10 06:17:57.757 1984 UTC
Element set:     42
Inclination:       98.2322 deg
RA of node:       316.1726 deg
Eccentricity:    0.0014105
Arg of perigee:    26.1051 deg
Mean anomaly:     334.0856 deg
Mean motion:   14.61901343 rev/day
Decay rate:        1.7e-06 rev/day^2
Epoch rev:            2813
Semi major axis:  7062.258 km
Anom period:     98.501859 min
Apogee:            698.130 km
Perigee:           678.207 km
Ref perigee:      2444.26739807
   Mon Sep 10 06:25:03.193 1984 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84245.00250300
   Sat Sep  1 00:03:36.259 1984 UTC
Element set:     101
Inclination:       82.9566 deg
RA of node:        91.0443 deg
Eccentricity:    0.0058038
Arg of perigee:   188.5482 deg
Mean anomaly:     171.4626 deg
Mean motion:   12.15588021 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12014
Semi major axis:  7987.327 km
Anom period:    118.461187 min
Apogee:            1656.004 km
Perigee:           1563.291 km
Ref perigee:      2434.96332155
   Fri Aug 31 23:07:10.982 1984 UTC

Satellite: rs-4
Catalog number: 13000
```

```
Epoch time:      84251.64078515
   Fri Sep  7 15:22:43.836 1984 UTC
Element set:     218
Inclination:       82.9565 deg
RA of node:        96.9201 deg
Eccentricity:    0.0017344
Arg of perigee:   263.4440 deg
Mean anomaly:      96.4639 deg
Mean motion:   12.06665683 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12003
Semi major axis:  8026.674 km
Anom period:    119.337114 min
Apogee:           1683.240 km
Perigee:          1655.397 km
Ref perigee:      2441.61857889
   Fri Sep  7 14:50:45.216 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      84252.56139216
   Sat Sep  8 13:28:24.282 1984 UTC
Element set:     187
Inclination:       82.9570 deg
RA of node:        97.9860 deg
Eccentricity:    0.0010127
Arg of perigee:   291.1806 deg
Mean anomaly:      68.8155 deg
Mean motion:   12.05058122 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11998
Semi major axis:  8033.819 km
Anom period:    119.496311 min
Apogee:           1682.124 km
Perigee:          1665.852 km
Ref perigee:      2442.54552951
   Sat Sep  8 13:05:33.749 1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84247.06383140
   Mon Sep  3 01:31:55.32  1984 UTC
Element set:     87
Inclination:       82.9569 deg
RA of node:        92.0551 deg
Eccentricity:    0.0049459
Arg of perigee:   203.3380 deg
Mean anomaly:     156.5438 deg
Mean motion:   12.13562715 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12016
Semi major axis:  7996.217 km
Anom period:    118.658886 min
```

```
Apogee:           1660.926 km
Perigee:          1581.829 km
Ref perigee:      2437.02799939
   Mon Sep  3 00:40:19.147 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      84245.10146566
   Sat Sep  1 02:26:06.633 1984 UTC
Element set:     170
Inclination:       82.9569 deg
RA of node:        98.1893 deg
Eccentricity:    0.0021026
Arg of perigee:   233.9609 deg
Mean anomaly:     125.9506 deg
Mean motion:   12.08686173 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11944
Semi major axis:  8017.724 km
Anom period:    119.137625 min
Apogee:           1670.210 km
Perigee:          1636.494 km
Ref perigee:      2435.07251995
   Sat Sep  1 01:44:25.723 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      84255.05521280
   Tue Sep 11 01:19:30.385 1984 UTC
Element set:     292
Inclination:       82.9589 deg
RA of node:        98.7477 deg
Eccentricity:    0.0018783
Arg of perigee:   340.8266 deg
Mean anomaly:      19.2149 deg
Mean motion:   12.02949274 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           12007
Semi major axis:  8043.211 km
Anom period:    119.705796 min
Apogee:           1682.446 km
Perigee:          1652.230 km
Ref perigee:      2445.05077581
   Tue Sep 11 01:13:07.30  1984 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84252.00735042
   Sat Sep  8 00:10:35.76  1984 UTC
Element set:     272
Inclination:       99.0563 deg
RA of node:       224.3150 deg
Eccentricity:    0.0012290
```

```
Arg of perigee:   220.5578 deg
Mean anomaly:     139.4679 deg
Mean motion:   14.13078237 rev/day
Decay rate:       1.61e-06 rev/day^2
Epoch rev:           16555
Semi major axis:  7224.178 km
Anom period:    101.905186 min
Apogee:            863.729 km
Perigee:           845.972 km
Ref perigee:      2441.97993433
   Fri Sep  7 23:31:06.325 1984 UTC
Beacon:           137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84247.13108875
   Mon Sep  3 03:08:46.68  1984 UTC
Element set:     92
Inclination:       98.7036 deg
RA of node:       277.1751 deg
Eccentricity:    0.0016362
Arg of perigee:   185.1278 deg
Mean anomaly:     174.9735 deg
Mean motion:   14.22429264 rev/day
Decay rate:        3.8e-07 rev/day^2
Epoch rev:            7455
Semi major axis:  7192.440 km
Anom period:    101.235263 min
Apogee:            826.230 km
Perigee:           802.694 km
Ref perigee:      2437.09691921
   Mon Sep  3 02:19:33.819 1984 UTC
Beacon:           137.5000 MHz


From 154777259763017044
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c662b8065a36b71c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-20 17:49:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihu1h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!ihu1h!parnass
From: parnass@ihu1h.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: FCC to allow access to data base
Message-ID: <351@ihu1h.UUCP>
Date: Thu, 20-Sep-84 20:49:51 EDT
Article-I.D.: ihu1h.351
Posted: Thu Sep 20 20:49:51 1984
Date-Received: Tue, 25-Sep-84 21:07:42 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 36
```

x
From the "Radio Communications Report", September 10, 1984:

FCC to Allow Access to Data Base

WASHINGTON - The FCC has voted to allow the public direct remote access to its computer data bases, with private land mobile and general mobile radio services' files expected to be the first on line.

The Agency's Aug. 8 ruling (Gen. Docket 83-483) comes in response to a proposal filed by the Association of Federal Communications Consulting Engineers (AFCEE), which originally sought direct remote access to FCC licensing information. While FCC files are presently available in computerized form on a restricted basis from the U.S. Department of Commerce's National Technical Information Service, there is no direct access to the data.....

.....the NTIS would act as account manager for a third party contractor without physically handling the files in the direct access mode....

.....The FCC noted that files from private land mobile and general mobile radio services are structured to permit timely offloading and updating of this information to the third-party computer.

Donald Enty, chief of FCC Managing Director's Planning and Analysis Division, said he expects the FCC to have the system commercially operational in June, 1985.
--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihu1h!parnass - (312)979-5414

From 5576057525393334307
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,277764de56c6cc42
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-21 07:49:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!ron
From: ron@trsvax.UUCP
Newsgroups: net.ham-radio

Subject: Re: Re: Malicious Interference Bill
Message-ID: <52800033@trsvax.UUCP>
Date: Fri, 21-Sep-84 10:49:00 EDT
Article-I.D.: trsvax.52800033
Posted: Fri Sep 21 10:49:00 1984
Date-Received: Wed, 26-Sep-84 07:57:37 EDT
References: <240@whuxl.UUCP>
Lines: 5
Nf-ID: #R:whuxl:-24000:trsvax:52800033:000:113
Nf-From: trsvax!ron   Sep 21 09:49:00 1984

It's simple. We'll go arrest them and fine them $200 and 1 year
in jail :-)   (Sure, we will).

     Ron Light KC5ER

From 7264110406941455578
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a0605d89cc2e602
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-21 14:17:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site alice.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!alice!danny
From: danny@alice.UUCP (Dan Kahn, K1DK)
Newsgroups: net.ham-radio
Subject: Re: Antenna Tuners on Receivers
Message-ID: <2996@alice.UUCP>
Date: Fri, 21-Sep-84 17:17:10 EDT
Article-I.D.: alice.2996
Posted: Fri Sep 21 17:17:10 1984
Date-Received: Tue, 25-Sep-84 21:35:52 EDT
References: <239@whuxl.UUCP>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 24

I've never seen much reason to use an antenna tuner on a rcvr on HF,
so I read with interest the articles on the net advocating the practice.
Two reasons have been given, neither of which I find convincing:

1. "It will increase your S meter reading by an S unit or two."
But in the great majority of cases on HF, if you are having trouble
copying a signal it is because it is weak WITH RESPECT TO an adjacent
signal or atmospheric or power-line noise, NOT because of ABSOLUTE
weakness. Better antenna tuning increases signal AND interference/noise
alike. (And if you're NOT having trouble copying the signal,
who cares about the extra S units?)

2. "The antenna tuner is another tuned circuit, hence more selectivity,
which should be helpful given all the QRM on 40 and 20 meters." (Approx
quote.) But when people talk about the "QRM on 40 and 20" they are
talking about QRM on the SAME FREQ or within a couple of KHz of the

desired signal. No antenna tuner is going to help with that.
(If you have a kilowatt xmtr a few hundred yards away, operating a
few hundred KHz away from the signal you're trying to copy, the
extra tuned ckt could help, but that is clearly a special case.)

Dan Kahn, K1DK
Bell Communications Research
Murray Hill, NJ

From -7526393073459090662
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b88df74c03994b99,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-22 12:43:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: TS-430 frequency display; mods
Message-ID: <157@mouton.UUCP>
Date: Sat, 22-Sep-84 15:43:25 EDT
Article-I.D.: mouton.157
Posted: Sat Sep 22 15:43:25 1984
Date-Received: Wed, 26-Sep-84 03:58:13 EDT
References: <12149@sri-arpa.UUCP>
Organization: Bell Communications Research, Inc
Lines: 22

I don't know about the TS-430, but on synthesized VHF radios such
as the Kenwood TR-9000 (which I have) there is a mechanism which
explains small frequency calibration errors.

Very few radios are actually synthesized to such small frequency
steps such as 100 hz; this makes the phase lock loop design much
more difficult. Instead, they typically have two oscillators which
are mixed to generate the final LO signal: a "coarse" synthesized generator
which operates on, say, 10 khz steps, and a "fine" conventional analog VCO
which is operated over a relatively small range (10 khz) with a control
voltage generated by a D/A converter. This means that while the
frequency accuracy over a wide range will be fairly good, there may
be small (several hundred hertz) errors which cyclically repeat due to
nonlinearities in the D/A converter or the VCO (which is often a crystal
oscillator and a variable capacitance diode.) There can also be
nonlinearities when tuning through a "coarse" frequency step, e.g.,
a 10 khz boundary on the TR-9000 when the PLL synthesizer changes
its output by one step and the analog VCO must sweep from one end of
its range to the other. This is particularly noticeable on the TR-9000
in lower sideband.

Phil Karn

From -4842710075740834744
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a0605d89cc2e602
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-24 06:20:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!
mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Antenna Tuners on Receivers
Message-ID: <52800034@trsvax.UUCP>
Date: Mon, 24-Sep-84 09:20:00 EDT
Article-I.D.: trsvax.52800034
Posted: Mon Sep 24 09:20:00 1984
Date-Received: Thu, 27-Sep-84 06:04:50 EDT
References: <239@whuxl.UUCP>
Lines: 18
Nf-ID: #R:whuxl:-23900:trsvax:52800034:000:798
Nf-From: trsvax!mikey   Sep 24 08:20:00 1984

Oh oh!! Time for my two cents. (Is that really worth that much?)

I have a book on radio theory from National. They go to some great
lengths about the front end circuits for their broadcast radio
circuits. They claim that there is a certain amount of extra gain
that you can get by making the antenna appear as a capacitive load
to the radio systems front end. I don't have the book in front of
me but if anyone is interested, I'll reference the article and get the
National book number. Back to the subject at hand, it applied in
the article only to antennas on a large ground plane on receivers
with inductively tuned RF sections (i.e. your standard detroit car
radio) but I wonder how much of their principles would apply to
the case of tuners on receivers?

mikey at trsvax (KA5MJQ)

From 2542908942525113396
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a0238e2a4ebbdba4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-24 06:59:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!hpda!fortune!amd!decwrl!decvax!mcnc!ecsvax!udougc
From: udougc@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: Info needed on Uniden CR-2021

Message-ID: <3293@ecsvax.UUCP>
Date: Mon, 24-Sep-84 09:59:28 EDT
Article-I.D.: ecsvax.3293
Posted: Mon Sep 24 09:59:28 1984
Date-Received: Thu, 4-Oct-84 03:58:10 EDT
Lines: 13

<----------   bugs away   -------------->

   I am very interested in the reviews of the Uniden CR-2021.

   Pleas coudl someone tell me if it uses a battery pack and if so the voltage. It looks as if it would make a fine emergenecy/survivalist radio. Solar cells of the 6v/12v type are reasonably priced and are quite capable of recharging NiCads for intermittent use.

Doug. C.
Medical School
University of N Carolina
Chapel Hill

From -8187830723236870765
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c9cb42f06d488b36,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-09-24 16:24:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxj!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 79 (new net directory available)
Message-ID: <12542@mgweed.UUCP>
Date: Mon, 24-Sep-84 19:24:19 EDT
Article-I.D.: mgweed.12542
Posted: Mon Sep 24 19:24:19 1984
Date-Received: Wed, 26-Sep-84 19:54:58 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

qst de k9eui
hr arrl bulletin nr 79 from arrl headquarters
newington ct september 21, 1984
to all radio amateurs bt

the new edition of the arrl net directory is now available, listing over 1200 public service nets by location and frequency, as well as many computer and maritime service nets, this newly revised booklet is also packed with information on all the basics of traffic handling and net operation. you may obtain a copy by sending a self addreessed nine by twelve inch

envelope with eighty eight cents u.s. postage to arrl net
directory, 225 main street, newington, ct 06111 ar

From 3822895942973513526
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cba6d02b34a6f550
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-25 10:41:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site auvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!ihnp4!alberta!auvax!tech
From: tech@auvax.UUCP (Richard Loken)
Newsgroups: net.ham-radio
Subject: Re: Code | technical competence
Message-ID: <428@auvax.UUCP>
Date: Wed, 25-Jul-84 13:41:30 EDT
Article-I.D.: auvax.428
Posted: Wed Jul 25 13:41:30 1984
Date-Received: Sat, 28-Jul-84 19:34:40 EDT
References: <1382@ucf-cs.UUCP>
Organization: Athabasca U, Alberta
Lines: 3

oh shut up

From 7125269660430409705
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f2ad4d84dbea8d4d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-25 11:22:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!kk9w
From: kk9w@pur-ee.UUCP (Andersen)
Newsgroups: net.ham-radio
Subject: Amateur Radio Exam Announcement
Message-ID: <1991@pur-ee.UUCP>
Date: Wed, 25-Jul-84 14:22:00 EDT
Article-I.D.: pur-ee.1991
Posted: Wed Jul 25 14:22:00 1984
Date-Received: Fri, 27-Jul-84 05:21:36 EDT
Organization: Electrical Engineering Department , Purdue University
Lines: 25

UB 40

There will be volunteer examinations conducted at the Lafayette
Hamfest in Lafayette, Indiana on August 19,1984. Exams given
include Novice through Extra. The exams will be given in the
YMCA Building just north of the Tippecanoe County Fairgrounds on
Teal Road in Lafayette, starting at 12:00 noon sunday.

To reserve a spot for yourself, send a note (hardcopy) to:

David Andersen
3240 McCormick Rd.
W. Lafayette, IN 47906

containing the following information:

License class currently held (or if you don't have a license, say so)
License class desired for this test session.
Any special problems that we should know about pertaining to your
exam session.
Your name.

Hope to see lots of new upgrades that sunday.

Dave, kk9w

From 5405770702797867678
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,251c202e8bc0b4eb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-25 11:24:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!kk9w
From: kk9w@pur-ee.UUCP (Andersen)
Newsgroups: net.ham-radio
Subject: Amateur Radio Exam Announcement2
Message-ID: <1992@pur-ee.UUCP>
Date: Wed, 25-Jul-84 14:24:44 EDT
Article-I.D.: pur-ee.1992
Posted: Wed Jul 25 14:24:44 1984
Date-Received: Fri, 27-Jul-84 05:22:19 EDT
Organization: Electrical Engineering Department , Purdue University
Lines: 7

UB 40

I neglected to add that the reservations must be received in W. Lafayette
by August 12, 1984.

Dave, kk9w

From -6147766022884115237
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2430fd81e7b3cfd7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-25 14:04:03 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin 83/84
Message-ID: <111@mouton.UUCP>
Date: Wed, 25-Jul-84 17:04:03 EDT
Article-I.D.: mouton.111
Posted: Wed Jul 25 17:04:03 1984
Date-Received: Fri, 27-Jul-84 05:13:17 EDT
Organization: Bell Communications Research, Inc
Lines: 396

**** UoSAT Bulletin-83/84   20th July 1984 ****

** UoSAT-OSCAR-9 Status **

Following problems encountered loading the bootstrap loader last Friday (the 13th!), Oscar-9 was left generating an all-too-familiar tone as the corrupted loader branched around its checksumming routine, turned the 145MHz beacon on and then promptly crashed! Valiant efforts - including the modification and use of Oscar-11 command equipment - were made at Guildford to remedy the problem using the 438MHz uplink, but due to a design feature, this uplink is dependent on the 144MHz squelch, which frequently stays open for prolonged periods. Persistence paid off, however, and the beacon was finally turned off on Thursday 19/7/84. Normal service according to the schedule below will hopefully be restored.

** UoSAT-OSCAR-11 Status **

This report combines the news from the past fortnight's operations...

The past fortnight has primarily been one of consolidation prior to boom deployment operations, expected within the next two or three weeks. The opportunity has been taken to test a number of the other experiments on the spacecraft, although most of these will not be operated further until the craft is locked pointing downwards. Much more analysis of the spacecraft's attitude both now and after gravity-gradient boom deployment has been performed, and software to run in real time on the ground-station computers has been written and tested.

The pyrotechnic bolt-cutters securing the boom tip-mass to the top of the spacecraft were fired on orbit 1909.

A daily account follows:

Friday 6/7/84

Monitored the TORQUEC automatic magnetorquing program and collected more data in dwell mode to analyse.

Saturday 7/7/84

More monitoring

Sunday 8/7/84

Yet more monitoring

Monday 9/7/84

Loaded the ODATA whole-orbit telemetry recording program at 20:21:46, recording channels 1,2,3,10,50,52. Analysis shows that the spacecraft remains adequately 'locked' to the earth's magnetic field for only about 15-20 minutes after the automatic magnetorquing program is turned off - this affects our planning for boom deployment. Automatic magnetorquing was re-enabled on next pass.

Tuesday 10/7/84

The boom tip-mass release pyrotechnics were fired on orbit 1909.

During the evening, a new version of TORQUEC with an interruption facility was tested. This allows updates to the magnetorquer firing parameters to be loaded without re-loading the whole program. The test was successful.

Wednesday 11/7/84

ODATA was run at 18:25:34 to look at the temperatures of the top and bottom panels of the spacecraft as an independent measurement of attitude. The channels monitored were 1,2,3,19,29,59. Again, TORQUEC was re-loaded on the subsequent pass.

Thursday 12/7/84

TORQUED was loaded and tested successfully. This program contains an additional loop which allows a sequence of commands to be uploaded and sent to the telecommand system at pre-determined intervals. This will allow us to deploy the boom under automatic control, possibly allowing the operation to be performed elsewhere than over England. This will allow more flexibility in the boom deployment planning.

Friday 13/7/84

The Digital Store and Readout experiment was powered up on orbit 1958, and data from the 1802 computer UART was recorded

and re-played successfully. Apart from the serial input, the DSR also has very fast parallel inputs from the CCD camera and the Radiation experiments and is the only device which can store the data from these (at least in the short term). The DSR features an extremely sophisticated readout mechanism, complete with synchronisation characters, a Hamming-encoded memory address, data protected by a CRC code and the whole block enclosed in a Fire code for burst error correction. A datasheet explaining these is under preparation, but the initial checking of the downlink data received is taking lower priority than many other current activities.

Also on Friday 13/7/84, the 435MHz beacon was tested briefly, and found to be working well. Due to the initial command problems, this beacon will not be activated again until after g-g stabilisation, when the effects of blocking the 438MHz uplink will be measured.

Saturday 14/7/84

TORQUEE - the latest of the automated magnetorquing programs - was loaded and run. This program has the added feature of concurrent ODATA storage and playback, so that the effect of magnetorquing over the whole orbit can be evaluated without interrupting it. After an orbit with a decoy checksum, the first successful run was on orbit 1973, recording channels 1,2,3,10,50,52.

Also on orbit 1973, the 2.4GHz beacon was powered up for the first time. This beacon also performed well, and was used a few times over the weekend. It is hoped, after more checks of possible effects on the uplinks, to be able to leave this beacon powered for longer periods when the power budget allows.

Sunday 15/7/84

TORQUEG was tested. This version allows the ODATA recording to be reset by ground command, preventing the program from having to be re-loaded. This worked well. The ODATA was reset after various tests at 21:03:10, this time displaying channels 1,2,3,35,50,52.

Monday 16/7/84

Further ODATA resets (using channels 1,2,3,35,50,52) were done at 08:48:25 and 11:59:50 as 2.4GHz tests continued.

TORQUEH - outputting ODATA with non-sequential channel numbers - was run during the evening - details of timing unavailable.

The evening was also spent testing the Radiation detectors, but this was not particularly successful - as expected - because they draw more current than the supply trips allow at this

temperature. More tests will be done after stabilisation is complete.

Tuesday 17/7/84

The CCD camera, dumping to the DSR, was tested for the first time. After a few false starts configuring the memories, a test image was taken. Analysis of the DSR downlink format and development of the decoder and display are in progress, but the initial results look promising.

Wednesday 18/7/84

This was spent running some uplink and receiver tests.

Thursday 19/7/84

The ODATA section of TORQUEH was reset at 09:02:14, which highlighted a problem in the program. The program was re-run around 12:20, but the reason for the earlier problem is not yet fully known. The program was again reset at 20:13:45, to channels 1,2,3,35,50,52.

** UoSAT-OSCAR-11 Operations Schedule **

We will be using dwell telemetry, with channels 01, 02, 03, 61 and 67 transmitted in a one-line frame with the standard checksum, thus providing very fast data for ground analysis. (Note channel 67 has been added to monitor the computer command. The MSB of channel 67 is the magnetorquer demand flag (set when commands sent if they are enabled), the other 3 bits in the first digit giving type of firing (based on a z-field change or a transverse field change) and the bottom 8 bits giving a measure of the transverse change.)

** UoSAT-Oscar-9 Schedule **

The 2.4GHz beacon will be in use this weekend.

Friday	Load bulletin
Saturday	Bulletin / 1200 bd telemetry / Digitalker
Sunday	Bulletin / 1200 bd telemetry / Digitalker
Monday	Whole-orbit radiation data
Tuesday	Checksummed telemetry
Wednesday	CCD image
Thursday	Whole-orbit telemetry data
Friday	Load bulletin

Based on the response to our questionnaire, we are considering generating Digitalker for the educational 'market' on Mondays, now that we have started transmitting CCD images on Wednesdays. Radiation data will be scheduled occasionally.

** UoSAT-Oscar-9 bulletin #82 **

Last week's bulletin filled the memory of the 1802 computer leaving only 3 bytes spare! More notably, a new cross assembler written by G8NEF made it possible to alter the bulletin slightly, compile it, load 16kb onto the spacecraft and run it all during a 32 degree elevation pass, lasting some 12 minutes. The compilation time of around 30 seconds compares very favourably with the 20 or 25 minutes typically taken with the previous facility. The assembler also features UoSAT checksum generation and loader support routines.

** General News - UoSAT Newsletters **

The following information has finally been printed at UoS. The full pack will be sent to all enquirers who have written to us since February this year, just ask for individual sheets if you want them!

Newsletter - General status of UoSAT activities at June 1984
Datasheet 1 - UoSAT Project Summary
Datasheet 2 - UoSAT-1 Technical Data Summary
Datasheet 3 - UoSAT-1 Orbit Geometry, Tracking and Groundstation details
Datasheet 4 - UoSAT-1 Telemetry
Datasheet 5 - UoSAT-2 Project Summary
Datasheet 6 - UoSAT-2 Technical Description
Datasheet 7 - UoSAT-2 Reception, Data formats and Telemetry equations
Datasheet 8 - UoSAT-2 FSK demodulation using BBC Micro.
Questionnaire - As transmitted on this bulletin

Sheets describing the DSR data format and how to assemble this data to make up CCD images are under preparation as time allows.

** Weather Satellite Status **

* The NOAA-8 spacecraft is being decommissioned following a failure of the primary oscillator which commands the timing of the gyros and attitude control system. Engineers have not been able to switch over to the redundant oscillator as the primary oscillator has not yet failed completely.
* The NOAA-6 spacecraft has been re-activated to replace the failed NOAA-8 data.

* NOAA-7 will complete its planned operational lifetime this summer, but is continuing to perform well.

* The NOAA-9 spacecraft is currently scheduled for launch on 23 October 1984.

* METEOR-2-7 remains active on 137.3 MHz

* METEOR-2-9 has not been heard recently.

* METEOR-2-8 is now active on 137.85 MHz.

** Thanks for Reports & Questionnaire Returns **

ZL1MO, G6AAL, IV3TKI, ZL1AOX, G3WDI / Kessingland VCP School, G4BZB, OZ1RO, HB9AYX, K1KSY, Sir William Turner's 6th Form College, G3TKW, G3UVC / Southampton C.H.E., Birger Lindholm.

OZ1WN, G3FIJ, ON1BTH, JA2WO.

This week: HB9RJV / HB9RKR, PY2NKW, KDX1A, G3VOM, DD2OJ / DB2OS.

** Keplerian Orbital Elements - from KA9Q **

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84188.40501187
Fri Jul 6 09:43:13.25 1984 UTC
Element set: 660
Inclination: 97.5947 deg
RA of node: 163.2729 deg
Eccentricity: 0.0004512
Arg of perigee: 57.4152 deg
Mean anomaly: 302.7513 deg
Mean motion: 15.26041520 rev/day
Decay rate: 2.864e-05 rev/day^2
Epoch rev: 15247
Semi major axis: 6862.762 km
Anom period: 94.361784 min
Apogee: 502.631 km
Perigee: 496.438 km
Ref perigee: 2378.41543257
Fri Jul 6 09:58:13.373 1984 UTC
Beacon: 145.8250 mhz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84177.96936827
Mon Jun 25 23:15:53.418 1984 UTC
Element set: 107
Inclination: 25.5969 deg
RA of node: 192.2384 deg
Eccentricity: 0.6084343
Arg of perigee: 283.3262 deg
Mean anomaly: 18.9696 deg
Mean motion: 2.05846041 rev/day
Decay rate: 2e-07 rev/day^2
Epoch rev: 779
Semi major axis: 26106.433 km
Anom period: 699.551953 min

```
Apogee:          35616.117 km
Perigee:          3848.018 km
Ref perigee:      2367.94376985
   Mon Jun 25 22:39:01.715 1984 UTC
Beacon:           145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84182.80563673
   Sat Jun 30 19:20:07.13  1984 UTC
Element set:     33
Inclination:       98.2397 deg
RA of node:       244.9611 deg
Eccentricity:    0.0012098
Arg of perigee:   246.8929 deg
Mean anomaly:     113.1014 deg
Mean motion:   14.61880279 rev/day
Decay rate:       1.45e-06 rev/day^2
Epoch rev:            1769
Semi major axis:  7062.326 km
Anom period:     98.503278 min
Apogee:            710.445 km
Perigee:           693.357 km
Ref perigee:      2372.78414588
   Sat Jun 30 18:49:10.203 1984 UTC
Beacon:           145.8260 mhz




** Spacecraft orbital data **

Orbits for 20th July

            UoSAT          UoSAT-2        NOAA-8
Orbit no :  15462           2057           6823
Eqx time :  15:11:20       14:04:24       14:16:37       GMT
Eqx long :  348.1          244.6          287.8          deg.w
Mean hgt :   490.9          689.9          850.0         km
Period   :   94.4043523     98.5601585    101.2702550    mins
P-drag   :  4.318E-05      2.914E-06      9.000E-06      *N-ref
Long inc :  23.5991958     24.6391120     25.3298590     degs
L-drag   :  1.086E-05      7.331E-07      2.000E-07      *N-ref
Incl     :   97.590         98.242         98.900        degs
Freq     :  145.825        145.825        137.500        MHz




Larry,
   ** UOSAT-OSCAR-11 Gravity Gradient Boom Deployment **

   Following several days final preparation and rehearsals,
```

the UO-11 gravity gradient boom was deployed under on-board computer (OBC) control at 10:35 gmt today 24 July on orbit 2113.

The automatic magnetorquing manoeuvres continuously executed by the OBC over the last few weeks, had aligned the spacec closely to the geomagnetic field vector and reduced residual motions (wobble) to a very low value. Following final confirmation at AOS at Surrey on orbit 2113, the OBC was given instructions to terminate the magnetorquing routines and deploy the boom for 15 minutes taking the spacecraft out of range of UoS. Spacecraft telemetry indicated reasonable boom motor current and correct operation of the OBC. The OBC recorded X,Y,Z, +5V current and boom & computer status channels automatically throughout the following orbit, whilst the boom was being deployed, to monitor gravity gradient capture.

The stored data was dumped at UoS on the next orbit (2114) and confirmed the correct operation of the OBC routines and preliminary analysis of the stored Navigation Magnetometer data indicates successful gravity gradient capture.

NOTE

Gravity capture may occur successfully WITHOUT correct boom extension due to the excellent initial attitude of the spacecraft reliant solely on the asymmetric body shape - residual energy and the effect of perturbing forces, however, are likely to cause this condition to deteriorate quite rapidly if the boom has not deployed to a significant extent.

Data gathered over the next day or so will confirm successful (or otherwise) gravity gradient stabilisation and will indicate the degree of libration.

The most obvious effect of gravity gradient capture is that the spacecraft will now make only one rotation around the earth - rather than two when magnetiacally stabilised. Residual energy before boom deployment will translate itself into subsequent libration after GG-lock.

More news will be forthcoming as we have it!!

Martin, Neville, Roger, Stephen + UO-11!

END

From -3078261755115912327
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,10fa5bbb74b826a1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-25 19:56:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ucf-cs.UUCP
Path: utzoo!linus!decvax!mcnc!duke!ucf-cs!giles
From: giles@ucf-cs.UUCP (Bruce Giles)
Newsgroups: net.ham-radio
Subject: "hams" vs. "hackers" -- vote request
Message-ID: <1409@ucf-cs.UUCP>

Date: Wed, 25-Jul-84 22:56:31 EDT
Article-I.D.: ucf-cs.1409
Posted: Wed Jul 25 22:56:31 1984
Date-Received: Sat, 28-Jul-84 05:56:15 EDT
References: <159@sri-arpa.UUCP>
Organization: UCF, Orlando, FL
Lines: 121

In my anger I forgot one of the fundamental rules of the net: no sarcasm. So, for those of you who did not read the message for the words, here they are with in black & green. (vote card at end of article).

(1): I oppose the code as archaic, but I can see the need for it as an emergency communication means. It was generally agreed that 5 wpm is acceptable. *I* am currently working on a computer program so I will learn code at *25* wpm, therefore several years in the future I will still be able to copy emergency transmissions. However, that is a personal choice, rather than one I would force on others.

(2): Whether you like it or not, a lot of traffic is going to travel in packet & digital form, and there will even be transceivers that can send *only* digital signals. Therefore, if everyone agrees that Morse is required for emergencies, it follows that digital should also be available for emergencies. I specified the digital control of transceivers because that is the easiest way of ensuring that if you are the only station in range of a digital emergency transmission, all you need to do is press the 'ascii' button in and copy the message.

(3): That heavy sarcasm on my earlier messages was because of the point recently made my another author -- a large number of you come across to non-hams as the playground bullies who don't want to let the new kids in. Quite honestly, I was just about to throw away all of my books on ham radio after monitoring this new group for the last year, and had posted my previous article (of several months ago) in a last, desperate attempt to disprove my suspicions. I had been planning to remove this group from my .newsrc file and discard all of my ham books when this discussion came up. Frankly, it was only because of those who at least considered the no-code option (even if they decided they still believed code is best) that I decided to start seriously studying for the exams. But, once again I have a sick feeling in my stomach; that all I see implies:

(4): Within 25 years, ham radio operators will have lost almost all bandwidth below 220 MHz, unless things change very rapidly.

I grew interested in ham radio not because of the prospect of talking to someone around the world (or in orbit), but

> because in college I saw just how much of radio we now take
> for granted was developed by hams. As I recall, it was hams
> who developed AM (as opposed to spark-gap generators), SSB,
> spread-spectrum, and several other important techniques.
>
> Now, the hardware is unable to progress much further (because
> of Nyquist's theorem), at least below the microwave range, so
> *needed* progress must come from a different source -- the
> `software'. Packet promises to offer better capabilities than
> Morse, and I can think of several ways to improve telephony by
> using techniques developed for speech sythesis. Yes, these
> techinques will require years to perfect, but there is the
> promise of fitting far more hams within the same bandwidth.
>
> I fit in because I am in that very narrow age group that feels
> confortable with both analog & digital equipment. (I was born
> in 1961). The computer classes at the local university had just
> begun to offer something besides card-input to the remote mainframe
> the year I entered (and you could still see slide-rules), and the
> year I graduated the CS dept. was running some intro courses on
> Apples & IBM PCs. (1978 vs. 1983) This is important because in
> very few years nearly all prospective hams will be interested in
> digital communication *only*, and they will turn away if they do
> not see it there. (Packet would be the *main* mode, not phone).
> To them, anything that doesn't involve bytes and registers will
> seem just as baffling as the 8080 must have first seemed to people
> who grew up with vacuum tubes, but they (the current teens and
> beyond) won't have the same incentive to learn.

In summary, I am willing to work with you (the ham community), if
you are willing to work with me (part of the `hacker' community).

If you feel that the heavy computer `flavor' I and my type will
bring in will destroy the ham community you know and love, let me
know now and I will toss my books and warn all others who would
intrude on your turf. And for *my* children, I will watch so that
when the FCC decides that ham radio no longer is serving its
various purposes (including R&D of new techniques), I or my friends
will be there to step with the INCN (independent node computer
network).

Finally, I know that hams have already developed packet, but you
must realize that that is only a first step. What you need to make
packet a useful tool is not a digital AMSAT, but software & system
engineers who can bring these independent transceivers together
into a working system. I don't consider two hams connected my
packet a working system, not when compared to the potential of all
local hams being connected into a coherent whole.

Bruce Giles

{decvax, duke}!ucf-cs!giles
giles.ucf-cs@Rand-Relay

For those who wish to respond directly, here is the voting card:

[9 8 7 6 5 4 3 2 1] Should code be required?

[9 8 7 6 5 4 3 2 1] Should more or less knowledge of analog devices be reqd?

[9 8 7 6 5 4 3 2 1] Should more or less knowledge of digital devices be reqd?

9 = much more 5 = about the same 1 = much less.

For example, my vote would look like this:

[9 8 7 6 5 4 3<*>1] Should code be required? (5 wpm min, more encouraged)
(but not reqd for any license).
[9 8<*>6 5 4 3 2 1] Should more or less knowledge of analog devices be reqd?

[9<*>7 6 5 4 3 2 1] Should more or less knowledge of digital devices be reqd?

From 8709421016081672584
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fea2ea9b970b3d51,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-25 21:25:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cp1.UUCP
Path: utzoo!linus!decvax!tektronix!hplabs!hao!seismo!rlgvax!cvl!umcp-cs!aplvax!
cp1!hart
From: hart@cp1.UUCP
Newsgroups: net.ham-radio
Subject: dc packet radio activity
Message-ID: <743@cp1.UUCP>
Date: Thu, 26-Jul-84 00:25:44 EDT
Article-I.D.: cp1.743
Posted: Thu Jul 26 00:25:44 1984
Date-Received: Sat, 28-Jul-84 21:12:30 EDT
Organization: C & P Tel. Co., Balto., Md.
Lines: 150

RECENTLY I HAVE NOTICED A GROWING INTEREST IN PACKET RADIO ON
USENET. IN ORDER TO SHOW WHAT IS HAPPENING IN THE WASHINGTON D.C.
AREA I HAVE CAPTURED A SAMPLE SESSION ON THE AMRAD BRIDGE OR HF/VHF
GATEWAY SYSTEM. THE SYSTEM WAS DEVELOPED BY BOB BRUNIGA, WB4APR/W3
AND IS ACCESSED VIA THE TWO LOCAL DIGIPEATERS (WB4JFI5 - AMRAD AND
W3VD - AMSAT/JOHNS HOPKINS APPLIED PHYSICS LAB).

THE BRIDGE HAS PROVEN VERY EFFECTIVE AT ALLOWING 2 MTR STATIONS TO

COMMUNICATE WITH DISTANT STATIONS ON 10 MTRS.

HOPEFULLY THIS DATA WILL BE SELF-EXPLANATORY. I WOULD BE HAPPY TO
ANSWER QUESTIONS, BUT IT WOULD PROBABLY BE BETTER TO ADDRESS THEM TO
EITHER AMRAD OR AMSAT. PLEASE BE ADVISED, I CAN NOT RESPOND TO QUESTIONS
COMING FROM THE ARPANET.

```
VADCG LIPM-05.1 TIPM-05.1                <-------- RESET VADCG TNC

W3VD  5                                  <-------- SET DIGIPEATER ID
WB4APR5                                  <-------- SET HF/VHF GATEWAY ID

WB4APR5WA3MEZ0W3VD  u?*CNCT**WB4APR5W3VD <-------- CONNECT PACKETS

[*** AMRAD EASTNET HF BRIDGE ***]
[SET TRACE 1080 & LFADD.  USE U/C ONLY]  <-------- DIGIPEATER SIGNON
[MONITOR 10MHZ AND DO NOT OVERFLOW HF.]
[* TYPE HELP FOR USEFUL INFORMATION. *]

=>-HELP                                  <-------- USER REQUEST

[** HELP FILE **]
VISUALIZE THIS BRIDGE AS TWO VADCG TNCS
CONNECTED BK-TO-BK VIA AN RS-232  RELAY
SWITCH.  A VIC20 MONITORS THE FIRST TNC
WHICH CONNECTS. ALL COMMANDS ARE TO THE
VIC  WHICH  CONTROLS THE RELAY AND  THE
OTHER TNC.  A LIST OF COMMANDS FOLLOWS:
[** COMMANDS **]                         <-------- GATEWAY HELP FILE
HELP,  NEWS, STATUS,  COMMANDS,  LOG
USERS HF (OR VHF),    DETAILS
MONITOR ON (OR OFF),  CQ (5 TIMES)
CONNECT W4XYZ,        DISCONNECT
MESSAGE (TO SYSOP),   BYE

=>-NEWS                                  <-------- USER REQUEST

[** NEWS **]
THE VADIC-MODEM/TAPR PROBLEM IS SOLVED.
LOWPASS FILTER ON TXD INTO MODEM DID IT. <-------- SYSTEM NEWS
ERGO ELK NECK RPT WILL GO UP THIS WKEND

=>-STATUS                                <-------- USER REQUEST

[WA3MEZ>=<BRIDGE CLOSED: 2326]           <-------- STATUS OF HF/VHF BRIDGE

=>-LOG                                   <-------- USER REQUEST

*INIT* 2302 JUL 25                       <-------- SYSTEM LOG
WA3MEZ 2324 JUL 25

=>-USERS HF                              <-------- USER REQUEST
```

```
CALL   NAME   BRD CITY
------ ------ --- ----------
WB4APR BOB     V  WASH DC
W9TD   GARY    T  CHICAGO
W0RPK  RALPH   T  INDIANOLA IA
VE1PAC RANDY   T  ALBERTA
W9HLY  VERN    T  DECATUR IN
W3TMZ  JACK    T  MT AIRY MD            <-------- HF USER LIST
N0AN   HASAN   T  IOWA
K7PYK          T  SCTSDLE AZ
K7NO   DAN     T  PHEONIX AZ
K8KA   JEFF    T  HARTFORD CT
WA4SZK DON     T  FLORENCE SC
WB6MLC KEN     T  FREMONT CA

=>-USERS VHF

CALL   NAME   BRD CITY
------ ------ --- ----------
WB4APR BOB     V  BOWIE MD
W3IWI  TOM     T  COLUMBIA
K1HTV  RICH    T  GLEN DALE
KA1GD  ANDY    T  GLEN DALE
K3HOI  JOHN    V  SAVAGE MD
WA3MEZ ROD     V  RANDLSTWN
AJ9X   MIKE    V  COLUMBIA
K8MMO  DAVE    V  DULLES
WB4JFI TERRY   V  MCLEAN VA
W4CQI  CLIFF  V,T WARRENTON
WB4NFB BILL    V  BURKE VA
W4MIB  BILL    V  VIENNA VA              <-------- HF USER LIST
WD5DBC HOWARD  V  BURKE VA
K3VPZ  CHUCK   T  SHIELA WEST
WA3WQZ CHUCK   V  SLVR SPRING
W3AUN  BILL    T  LANHAM MD
K3TCT  BOB     T  MARYLAND
K3LLL  JOE     T  LARGO MD
W4PUJ  DICK    T  ARLINGTON
W3TMZ  JACK    T  MT ARIY MD
W3GXT  LES     T  REISTERTOWN

=>-DETAILS                              <-------- USER REQUEST

[** DETAILS **]
IN STANDBY MODE THE BRIDGE WILL USUALLY
BE OPEN IF CHANNEL ACTIVITY IS LIGHT,
OTHERWISE, CLOSED.  WHEN U CONNECT,  IT
CLOSES UNTIL U REOPEN IT VIA MONITOR ON
OR A CONNECT COMMAND.  THE TIME  STATUS  <-------- ADDITIONAL SYSTEM INFO.
MESSAGE INFORMS U OF BRIDGE STATUS.  IF
BRIDGE IS OPEN, TEXT BOTH WAYS WILL  BE
RELAYED. SYSTEM RESETS AFTER 4 MINUTES.
DONT DISC UR SIDE EXCEPT USING BYE CMD!
```

```
=>-MONITOR ON                              <-------- USER REQUEST

[WA3MEZ>=<BRIDGE OPEN: 2328]               <-------- PATH TO HF (10 MTRS OPENED)

=>-CQ                                      <-------- USER REQUEST

[CQ GATEWAY DE WA3MEZ 2328]
[CQ GATEWAY DE WA3MEZ 2328]
[CQ GATEWAY DE WA3MEZ 2329]                <-------- CALLING CQ
[CQ GATEWAY DE WA3MEZ 2329]
[CQ GATEWAY DE WA3MEZ 2329]

[WA3MEZ>=<BRIDGE OPEN: 2329]               <-------- STATUS MESSAGE

=>-CONNECT K7NO                            <-------- USER REQUEST

[TRYING CNCT WITH K7NO]                    <-------- TRYING TO CONNECT WITH K7NO

[ NO CONNECT DETECTED ]                    <-------- STATUS MESSAGE

BYE                                        <-------- BRIDGE DISCONNECT

*DISC**WB4APR5W3VD  usWB4APR5WA3MEZ0W3VD  <-------- DISCONNECT PACKETS


--


======================================================================
signed: Rod Hart (wa3mez)
        Chesapeake & Potomac Tel. Co.
        Bell Atlantic Inc.
        Silver Spring, Md.
        gamma!cp1!hart - umcp-cs!cp1!hart - aplvax!cp1!hart
======================================================================


From -6815814208440565295
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,605ff445205b76b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-25 21:51:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site orca.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!orca!tomk
From: tomk@orca.UUCP
Newsgroups: net.ham-radio
Subject: The FCC Rule Book - ARRL Publication
Message-ID: <949@orca.UUCP>
Date: Thu, 26-Jul-84 00:51:40 EDT
Article-I.D.: orca.949
```

Posted: Thu Jul 26 00:51:40 1984
Date-Received: Sat, 21-Jul-84 03:19:25 EDT
Sender: tomk@orca.UUCP
Organization: Tektronix, Wilsonville OR
Lines: 15

For those in need of an inexpensive and readable copy of the FCC regs
and related stuff I'd like to recommend this publication. It presents
rule interpretations using QST's "Washington Mailbox" format as well as
band plans, exam info, technical standards, etc. For those who want
the actual regs, the last 35 pages are a complete reprint of part 97.

Not a bad buy for 3 dollars, but make sure you get the 2nd (1984)
edition. How many remember when the "License Manual" was 50 cents?

-Tom Kloos, WA7NJK, Tektronix, Wilsonville, Oregon
                  Ignore paths in header. Use this:
uucp: ..{ucbvax,decvax,uw-beaver,hplabs,allegra}!tektronix!orca!tomk
ARPA: tekecs!tomk.tek@rand-relay

From -7218119973232465964
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,da141b37bb2481cc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-26 05:56:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: FCC Service Code list available free
Message-ID: <2332@ihuxf.UUCP>
Date: Thu, 26-Jul-84 08:56:00 EDT
Article-I.D.: ihuxf.2332
Posted: Thu Jul 26 08:56:00 1984
Date-Received: Sat, 28-Jul-84 19:35:44 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 15

x
         FCC Service Code List Available

  The August 1984 issue of the Monitoring Times (pg. 11) con-
  tains   a complete list of FCC Service Codes,   as used
    in the
  microfiche sold to the public.

  A copy is available at no charge by sending an SASE with
  your   request   to Grove Enterprises, Box 98, Brasstown, NC
  28902.

--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -6311852603934673166
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c62b967eeefc96a3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-26 07:43:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site homxa.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!homxa!nd2k
From: nd2k@homxa.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: Re: Desecheo Island
Message-ID: <303@homxa.UUCP>
Date: Thu, 26-Jul-84 10:43:49 EDT
Article-I.D.: homxa.303
Posted: Thu Jul 26 10:43:49 1984
Date-Received: Sat, 28-Jul-84 20:06:50 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 12

Somebody mentioned Desecheo Island; worked it on
Mon. July 23 at about 0000z on 14025. Call was WP4ATF/KP5.
Haitian call/KP5 (I forget the call) was heard on SSB.
Didn't bother since I got the cw operation. (I just go
for mixed DXCC, saves lots of grief :-))

Al Schwarz ND2K

From 8813735289172200992
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c62b967eeefc96a3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-26 08:46:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site homxa.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!homxa!nd2k
From: nd2k@homxa.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: Re: Desecheo Island
Message-ID: <304@homxa.UUCP>
Date: Thu, 26-Jul-84 11:46:54 EDT
Article-I.D.: homxa.304

Posted: Thu Jul 26 11:46:54 1984
Date-Received: Sat, 28-Jul-84 20:16:32 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 5

Please excuse. It was a Dominican Republic call,
not a Haitian call, on SSB.

From 1682726845580242906
X-Google-Language: Unknown,Unknown
X-Google-Thread: 151e61,b04bf44783d5bca9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-26 09:45:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 9/27/83; site hplabs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!paull
From: paull@hplabs.UUCP (KA6SFV)
Newsgroups: net.ham-radio
Subject: What else? Morse code .... ..
Message-ID: <642@hplabs.UUCP>
Date: Thu, 26-Jul-84 12:45:44 EDT
Article-I.D.: hplabs.642
Posted: Thu Jul 26 12:45:44 1984
Date-Received: Sat, 28-Jul-84 10:00:51 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 14

From -4757966863753079210
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,987f6c01d4960d3b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-26 13:32:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxr.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxr!dmdoyle
From: dmdoyle@ihuxr.UUCP (Dan Doyle, WB9JXN @ AT&T Bell Laboratories,
Naperville,IL)
Newsgroups: net.ham-radio
Subject: Re: Code vs NO Code
Message-ID: <1154@ihuxr.UUCP>
Date: Thu, 26-Jul-84 16:32:12 EDT
Article-I.D.: ihuxr.1154
Posted: Thu Jul 26 16:32:12 1984
Date-Received: Fri, 27-Jul-84 06:50:19 EDT
References: <203@sdchema.UUCP> <3459@brl-tgr.ARPA>
Organization: AT&T Bell Labs, Naperville, IL

Lines: 18

--

Let's give a NO Code test.
Give em all amateur privileges but only A1 emission!!!

--
==
Dan Doyle, AT&T Bell Laboratories - ihnp4!ihuxr!dmdoyle - (312)979-2946
  WB9JXN   Naperville, IL   *8-367-2946

--
                        thanx
--
==
Dan Doyle, AT&T Bell Laboratories - ihnp4!ihuxr!dmdoyle - (312)979-2946
  WB9JXN   Naperville, IL   *8-367-2946

From -1931444794168025965
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,59e588b6c3f07664,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-26 14:07:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxr.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxr!dmdoyle
From: dmdoyle@ihuxr.UUCP (Dan Doyle, WB9JXN)
Newsgroups: net.ham-radio
Subject: ICOM IC-751 Looking for comments
Message-ID: <1155@ihuxr.UUCP>
Date: Thu, 26-Jul-84 17:07:09 EDT
Article-I.D.: ihuxr.1155
Posted: Thu Jul 26 17:07:09 1984
Date-Received: Fri, 27-Jul-84 06:53:46 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 13

--
     I'm thinking about purchasing the ICOM IC-751 XCVR.
I would like to here from anyone who has this rig.

     Are there any problems with it?
     Is it as good as ICOM says?
--

--
==
Dan Doyle, AT&T Bell Laboratories - ihnp4!ihuxr!dmdoyle - (312)979-2946
  WB9JXN   Naperville, IL   *8-367-2946

From 4376221255069289273
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a821af6d251c59b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-26 18:10:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!inuxg!wheatley
From: wheatley@inuxg.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Descheo off the air
Message-ID: <317@inuxg.UUCP>
Date: Thu, 26-Jul-84 21:10:21 EDT
Article-I.D.: inuxg.317
Posted: Thu Jul 26 21:10:21 1984
Date-Received: Sat, 28-Jul-84 07:32:46 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 7

heard on the air, 7/26, that the guys on descheo ..../kp5, were
flown from the island via helicopter, due to a big storm down that
way. if anyone knows that they will return, please post or send me
mail...thats what i get for not getting on a night or two ago...sigh

ku9c, steve wheatley, inuxg!wheatley

From -8654586024293498305
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6bd573ad27043e31,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-27 12:37:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!sdcrdcf!sdcsvax!akgua!whuxle!harpo!decvax!mcnc!ecsvax!hes
From: hes@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: Morse as seen here.
Message-ID: <3003@ecsvax.UUCP>
Date: Fri, 27-Jul-84 15:37:26 EDT
Article-I.D.: ecsvax.3003
Posted: Fri Jul 27 15:37:26 1984
Date-Received: Wed, 8-Aug-84 19:20:22 EDT
Lines: 9

Let's see if I have this straight. Morse code is being sent
in this newsgroup by having .'s and -'s encoded in ASCII,
embedded within text messages, packed in various protocols
(certainly uucp, maybe TCP/IP, probably packets over various
Ethernet links) and read on CRTs and printers all over the
world. I think this is a wonderful commentary on something.

--henry schaffer
##What's so terribly wrong about questions about vacuum tubes?
##Have transistors replaced the 6L6GC?

From 6258440423304331968
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ec297294b93d24b7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-27 16:24:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin 85
Message-ID: <116@mouton.UUCP>
Date: Fri, 27-Jul-84 19:24:31 EDT
Article-I.D.: mouton.116
Posted: Fri Jul 27 19:24:31 1984
Date-Received: Sat, 28-Jul-84 10:51:07 EDT
Organization: Bell Communications Research, Inc
Lines: 252

**** UoSAT Bulletin-85   27th July 1984 ****

** UOSAT-OSCAR-11 Gravity Gradient Boom Deployment **

Following several days final preparation and rehearsals, the UO-11 gravity gradient boom was deployed under on-board 1802 computer control at 10:35 gmt during orbit 2113 on 24th July.

The automatic magnetorquing manoeuvres, continuously executed by the 1802 over the last few weeks, had aligned the spacecraft closely to the geomagnetic field vector and reduced residual motions (wobble) to a very low value. Following final confirmation of auspicious deployment conditions at AOS at Surrey on orbit 2113, the 1802 was given instructions to terminate the magnetorquing routines and deploy the boom for 15 minutes taking the spacecraft out of range of UoS. Spacecraft telemetry indicated reasonable boom motor current and correct operation of the 1802. The 1802 simultaneously recorded X,Y,Z, +5V current and boom & computer status channels automatically throughout the operation whilst the boom was being deployed and during the following orbit, to monitor gravity gradient capture and spacecraft operations.

The stored data was dumped at UoS on the next orbit (2114) and examination confirmed the correct operation of the deployment routine and preliminary analysis of the stored Navigation Magnetometer data indicated successful gravity gradient capture.

Gravity capture could, however, occur successfully WITHOUT correct boom extension due to the excellent initial controlled attitude of the spacecraft reliant solely on the asymmetric body shape - any residual energy and the effect of perturbing forces, however, would be likely to cause this condition to deteriorate quite rapidly if the boom had not deployed to a significant extent.

Data gathered over the following days confirmed, however, that the spacecraft maintained successful gravity gradient stabilisation and showed no evidence of severe libration.

The most obvious effect of gravity gradient capture is that the spacecraft will now maintain the communication antennas and camera pointing at the earth. Residual energy before boom deployment will translate itself into subsequent libration after GG-lock which will be monitored and minimised using magnetorquing routines similar to those used during initial attitude control manoeuvres. The digital sun and earth horizon sensors will now be activated to determined the spacecraft's attitude and degree of libration.

Once the spacecraft GG attitude behaviour has been analysed, it is probable that the spacecraft will be spun very slowly around the Z-axis in order to improve the internal temperatures - currently running somewhat cool. Introducing a very slow Z-spin does, of course, interact with the GG stabilising forces but only to impart a small forward or backward 'tilt' of a few degrees dependent on spin rate.

Gravity gradient stabilisation of UO-11 is the culmination of many months of preparation and many weeks of spacecraft activities - most of which has not been visible to the outside world! It has been very demanding and has necessitated the use of considerable facilities and required a particular, dedicated effort from the UOSAT Team - particularly Stephen (Attitude, Stabilisation & Navigation Analysis), Roger G8NEF (Spacecraft Software) and Neville G8NOB (Ground Station Software). A more detailed account of the Attitude Control and GG activities will be prepared in due course.

A day-by-day account follows:

Saturday 21/7/84

TORQUEH (the 1802 program which actively controls the magnetorquers in conjunction with reading the navigation magnetometer, records and replays whole orbit data and runs command timing loops) was further exercised as well as re-initialising its ODATA function at 21:29:40.

Sunday 22/7/84

TORQUEH was re-loaded following minor modifications. Yet further confirmations of spacecraft attitude taken!

Monday 23/7/84

Morning - tests of final ground "deployment decision" software were made by switching the magnetometer on permanently and watching the fields changing. Residual oscillations of under 10 degrees were encouraging.

Evening - A full rehearsal of the boom deployment operation was run over 3 passes. The boom deployment commands were substituted by commands which were equally visible on the telemetry status points but otherwise harmless! After the ODATA was dumped, active magnetorquing was re-enabled.

Tuesday 24/7/84 - Boom deployment

Orbit 2112 - While holding the telemetry system in dwell mode (which prevents ODATA from recording since all channels are not found), the TORQUEH ODATA segment was reset, and active magnetorquing resumed. The spacecraft was left until LOS transmitting dwell telemetry to the ground analysis software.

Orbit 2113 - Sending one command told the 1802 to turn the z-magnetorquer on continuously, to allow the ground software to take a precise fix of the spacecraft attitude. After about 3 minutes of data, Stephen finally confirmed a suitable attitude, and the telemetry system was switched out of dwell mode to enable ODATA recording to start at 10:35:00 (approx). The channels recorded were 1,2,3,41,61,67. The last two record hexadecimal numbers - sorry if your ODATA program expired at this new facility!

At 10:35:20, a command to the 1802 turned the boom motor on for a 15.0 minute deployment and we watched the telemetry anxiously. An anomaly on the 5v current sensor prevented us seeing the true current, but the 14v bus was as expected and the motor was left running as the spececraft disappeared below our horizon.

Orbit 2114 - Telemetry at AOS looked good, with the boom motor off and a good battery voltage. After taking the stored ODATA dump, the magnetorquers were disarmed and ODATA was reset at 12:19:23 to record channels 1,2,3 and 52. The real-time dump of the ODATA looked most encouraging.

By the evening, the next ODATA dump to be analysed confirmed a stable gravity gradient lock. More rapid dumps (always using channels 1,2,3,52) were made after resets at 18:37:53 and 20:09:45.

Wednesday 25/7/84

Another ODATA dump was initialised at 09:35:30.

The DSR was powered up on orbit 2127 and a CCD image taken. This was blank (following a day's analysis with hastily-assembled test equipment!) due either to incorrect pointing (we still have an unquantified amount of libration) or incorrect exposure. More experiments will be scheduled as soon as possible.

ODATA resets were initiated at 11:19:23 and 12:53:44 and 19:12:00.

Thursday 26/7/84

ODATA resets were at 10:12:00 (approx) and 11:58:18. Attempts to power up the sun sensors were partially successful due to a known problem with their current trips. During the evening, the spacecraft was set to re-transmit audio from the 438MHz uplink to test this uplink at the new attitude. Results were most encouraging.

Friday 27/7/84

The 2.4GHz beacon was tested and found to be much improved in the new attitude. This downlink should prove to be very useful for engineering and high speed data for ground stations which are well-equipped with good receiving and decoding equipment.

** UO-11 Mission Plan **

Gravity gradient stabilisation marks the end of the major spacecraft commissioning phase of UO-11 and now allows us to progress with the commissioning of the experiments. This will commence with evaluation of the DCE and CCD Camera, however a more detailed Plan will be available shortly.

** UoSAT-Oscar-9 Schedule **

The 2.4GHz beacon will be in use this weekend.

```
Friday    Load bulletin
Saturday  Bulletin / 1200 bd telemetry / Digitalker
Sunday    Bulletin / 1200 bd telemetry / Digitalker
Monday    Whole-orbit radiation data
Tuesday   Checksummed telemetry
Wednesday CCD image
Thursday  Whole-orbit telemetry data
Friday    Load bulletin
```

Based on the response to our questionnaire, we are considering generating Digitalker for the educational 'market' on Mondays, now that we have started transmitting CCD images on Wednesdays.

Radiation data will be scheduled occasionally.

** General News - UoSAT Newsletters **

The following information has been printed at UoS. The full pack has been sent to all enquirers who have written to us since February this year. It is available on request.

Newsletter - General status of UoSAT activities at June 1984
Datasheet 1 - UoSAT Project Summary
Datasheet 2 - UoSAT-1 Technical Data Summary
Datasheet 3 - UoSAT-1 Orbit Geometry, Tracking and Groundstation details
Datasheet 4 - UoSAT-1 Telemetry
Datasheet 5 - UoSAT-2 Project Summary
Datasheet 6 - UoSAT-2 Technical Description
Datasheet 7 - UoSAT-2 Reception, Data formats and Telemetry equations
Datasheet 8 - UoSAT-2 FSK demodulation using BBC Micro.
Questionnaire - As transmitted on this bulletin

Sheets describing the DSR data format and how to assemble this data to make up CCD images are under preparation as time allows.

** Weather Satellite Status **

* The NOAA-8 spacecraft is being decommissioned following a failure of the primary oscillator which commands the timing of the gyros and attitude control system. Engineers have not been able to switch over to the redundant oscillator as the primary oscillator has not yet failed completely.

* The NOAA-6 spacecraft has been re-activated to replace the failed NOAA-8 data.

* NOAA-7 will complete its planned operational lifetime this summer, but is continuing to perform well.

* The NOAA-9 spacecraft is currently scheduled for launch on 23 October 1984.

* METEOR-2-7 remains active on 137.3 MHz

* METEOR-2-9 has not been heard recently.

* METEOR-2-8 is now active on 137.85 MHz.

** Thanks for Reports & Questionnaire Returns **

ZL1MO, G6AAL, IV3TKI, ZL1AOX, G3WDI / Kessingland VCP School, G4BZB, OZ1RO, HB9AYX, K1KSY, Sir William Turner's 6th Form College, G3TKW, G3UVC / Southampton C.H.E., Birger Lindholm.

OZ1WN, G3FIJ, ON1BTH, JA2WO.

HB9RJV / HB9RKR, PY2NKW, KDX1A, G3VOM, DD2OJ / DB2OS.

This week: PE1HLB, VK2ZYE, I2KBD, VK2RX, VK2XPW, VK2AVH,
ON4HW.

** Keplerian Orbital Elements - from KA9Q **

see OPS bb!!

From 3172332622021788461
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,67930c7da09e3f7b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-28 14:33:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site convex.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!convex!parris
From: parris@convex.UUCP
Newsgroups: net.ham-radio
Subject: Search for R22 ARC-5 Receivers - (nf)
Message-ID: <36200002@convex.UUCP>
Date: Sat, 28-Jul-84 17:33:00 EDT
Article-I.D.: convex.36200002
Posted: Sat Jul 28 17:33:00 1984
Date-Received: Sun, 29-Jul-84 23:55:45 EDT
Lines: 12
Nf-ID: #N:convex:36200002:000:374
Nf-From: convex!parris   Jul 28 16:33:00 1984

#N:convex:36200002:000:374
convex!parris   Jul 28 16:33:00 1984

My neighbor, Walt Evanyk W8KSW, is looking for receivers
from the military R22 ARC-5 family. He tells me that he wants
to purchase these regardless of their condition. Even a
receiver that is beyond repair is of interest as a source
of spare parts. If you have one or more of these receivers
or know someone else that does, please tell me or Walt.

Keith Parris
WB5RBA

From 6698992579439787903
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1a3284cd9d31e770,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-31 16:31:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!uiucdcs!uok!
mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: Re Specious argument - (nf)
Message-ID: <2800014@uok.UUCP>
Date: Tue, 31-Jul-84 19:31:00 EDT
Article-I.D.: uok.2800014
Posted: Tue Jul 31 19:31:00 1984
Date-Received: Sat, 4-Aug-84 01:47:02 EDT
References: <451@sri-arpa.UUCP>
Lines: 19
Nf-ID: #R:sri-arpa:-45100:uok:2800014:000:937
Nf-From: uok!mpackard   Jul 31 18:31:00 1984

#R:sri-arpa:-45100:uok:2800014:000:937
uok!mpackard   Jul 31 18:31:00 1984

David, I'm serious, and wondering if hams are limiting themselves
by only requiring 5WPM. If you are really serious then in order to
improve efficiency you must demand a higher speed. Something on the
order of 20 WPM or higher. This would allow traffic to be passed
almost as fast as ASCII. I believe all hams should be required to
demonstrate 20 WPM minimum if they want morse code. Any less would
cause tremendous delays. That poor bastard on the highway, with his
blood draining out as he taps SOS with his battery cables at 5 WPM
would wish he had improved his speed.

PS To those people who have been complaining about my spelling,
    I didn't realize that you demanded so much english accuracy
    on this note. I think I'm doing pretty good since I just
    learned the language 5 years ago. (Russian) And I would
    like to relay something I learned on the bus the other day:
    /////net news expletive deleted/////

From -7069159806187016648
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b02ab74578caedc5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-01 10:18:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!linus!decvax!decwrl!amd!dual!zehntel!ihnp4!inuxc!pur-ee!ecn-ee!wn9nbt
From: wn9nbt@ecn-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: Desecheo Island
Message-ID: <2007@pur-ee.UUCP>
Date: Wed, 1-Aug-84 13:18:21 EDT
Article-I.D.: pur-ee.2007
Posted: Wed Aug 1 13:18:21 1984
Date-Received: Fri, 3-Aug-84 02:22:42 EDT

Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University
Lines: 4
Nf-ID: #R:inuxg:-31600:ecn-ee:14900004:000:267
Nf-From: ecn-ee!wn9nbt   Aug 1 11:08:00 1984

I worked HI3RST/KP5 a week or so ago, sorry, don't have my log here.
Was on 14.195 at around 0400 zulu if my memory serves me correctly.
I heard that they had to be evacuated from the island due to weather
problems from another ham here at Purdue.....Dave -- wn9nbt

From -3078827784991849319
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cd6723564f7c8d9e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-01 11:31:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site iddic.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!hplabs!tektronix!orca!iddic!
brucec
From: brucec@iddic.UUCP
Newsgroups: net.ham-radio
Subject: IC 745 vs FT 757 vs TS 430
Message-ID: <1781@iddic.UUCP>
Date: Wed, 1-Aug-84 14:31:57 EDT
Article-I.D.: iddic.1781
Posted: Wed Aug 1 14:31:57 1984
Date-Received: Sat, 4-Aug-84 00:24:55 EDT
Organization: Tektronix, Beaverton OR
Lines: 107

Here are some responses to the questions of HF Transceivers. It appears
that the   ICOM IC 745   YAESU FT 757   KENWOOD TS 430 are all
in a similar class of General coverage receiver, hamband (WARC,too)
transmitter. We've heard from owners of the FT 757, how about anyone
with an IC 745 or TS 430?

By the way here are some prices:

	IC 745	FT 757	TS 430	
Portland Radio	$789	$769	?	over the counter
ege		$760		mail order (QST)
AES	$770			mail order (QST)
Moory	$649		$669	mail order (QST)

In the past I've had mixed results mail ordering electronic equipment.
I prefer dealing over the counter.

  NI7M Bruce Cheney   ...tektronix!iddic!brucec

********** Previously posted comments **********

> In response to the question:
>
> > "...Does any one have something NICE or NASTY to say about any transceivers that would be appropriate? Please post it or UNIX mail it to iddic!brucec. TNX."
>
> The Indian Hill Amateur Radio Club here at AT&T Bell Laboratories has Kenwood's top of the line TS-930S general coverage transceiver, and an older pair of Drake R4B/T4XB twins.
>
> The general coverage and digital features on the Kenwood are neat, but it lacks:
>
> 1. scanning of memory channels
> 2. provision for FM detector
> 3. memorizing of mode along with frequency
> 4. all-mode squelch control
>
> Leaving aside all the nice digital control circuitry, the Kenwood is "left in the dust" by the older R4B when trying to copy a signal in the presence of other strong signals (e.g. Field Day). There is an odd asymmetry in the type of controls available for use in CW and SSB. As an example, the dual variable bandwidth control functions in SSB but not CW mode.

--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

****

I have a Yaesu FT757-GX and I think it is terrific.

It has general coverage receive, dual vfo's, full breakin (QSK), eight memories, USB, LSB, CW wide, CW narrow, AM, FM; modes all as standard features.

I have noticed that Kenwood and Icom are lowering the prices of the 430S and the 745, obviously to compete better with the 757, but they still cost more and do not have the narrow CW filter, FM and AM (430S) built in.

Just in case anyone thinks that I am total biased against Icom and Kenwood, if you do not want general coverage receive capability, then I think that the Icom 730 is an execellent transceiver for pure ham band work.

Peter Allan
Kitt Peak National Observatory
Tucson, Az
****
Lines: 19

PETER...

I ALSO HAVE A 757. MINE IS AT YAESU FOR REPAIR AFTER A 61ST DAY FAILURE. I ATTENDED THE HAMCOM CONVENTION HERE IN DALLAS RECENTLY ES THE YAESU BOOTH WAS ATTACKED BY ANGRY HAMS COMPLAINING ABOUT THEIR 757'S. IT SEEMS THAT MANY OF THE 757'S WIL OSCILLATE WHEN OPPERATING 10 ES 15 METERS. BE SURE AND CHECK YOURS FOR THIS. SOME OF THE PEOPLE WERE ALSO SAYING THE FM DIDN'T WORK. TOWARDS THE
END OF THE CONVENTION, THE YAESU PEOPLE WERE GETTING VERY FRUSTRATED WHEN ANYBODY EVEN MENTIONED THE 757. I STILL THINK IT HAS THE POTENTIAL OF BEING A VERY GOOD RIG BUT THEY ARE QUITE OBVIOUSLY HAVING SOME PROBLEMS WITH IT. ANY WAY, I HAVE BEEN ASSURED BY THE YAESU SERVICE MANAGER THAT MINE WIL RETURNED WITH THE LATEST UPDATES WHICH IS REASSURING. YAESU CLAIMS THESE RADIOS ARE PUT TOGETHER BY ROBOTICS....PERHAPS MY RADIO WAS ASSEMBLED BY A ROBOT WITH A SAKE HANGOVER??

W5PPUT
DALLAS, TX

From 4580079776969007788
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,45de8d5e36017407,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-01 12:28:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbneb.UUCP
Path: utzoo!linus!decvax!decwrl!amd!dual!zehntel!ihnp4!cbosgd!cbscc!cbneb!adm
From: adm@cbneb.UUCP
Newsgroups: net.ham-radio
Subject: for sale TS520
Message-ID: <1141@cbneb.UUCP>
Date: Wed, 1-Aug-84 15:28:28 EDT
Article-I.D.: cbneb.1141
Posted: Wed Aug 1 15:28:28 1984
Date-Received: Fri, 3-Aug-84 02:26:30 EDT
Sender: adm@cbneb.UUCP

Organization: AT&T Bell Laboratories, Columbus, OHIO
Lines: 21
Nf-ID: #N:cbnap:14800004:000:575
Nf-From: cbnap!gws   Aug 1 13:41:00 1984

FOR SALE

Kenwood TS 520 Transciever with CW filter and external speaker.
This is the orginal 520 and has the 12v and 117v power supplies
inside the cabinet. Also has tube finals to help out in high
SWR areas. Great rig for anyone, also makes a good backup rig.
exec. shape inside and out. Asking $475.00 will consider trades
for small moble HF radio or who knows.

Gary W. Sanders N8EMR
1057 #B Bridgeway circle
Columbus,Ohio 43220

PH: 614-457-4595 (h)
    614-860-5960 (w)
      8-353-5965 (w cornet)

UUCP: cbnap!gws

ATT Bell labs Columbus,Ohio

From -2049211695094736625
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a97b349939ad674,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-02 05:37:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site tesla.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!tesla!
brucef
From: brucef@tesla.UUCP
Newsgroups: net.ham-radio
Subject: R 390A/URR
Message-ID: <412@tesla.UUCP>
Date: Thu, 2-Aug-84 08:37:24 EDT
Article-I.D.: tesla.412
Posted: Thu Aug 2 08:37:24 1984
Date-Received: Sat, 4-Aug-84 01:44:37 EDT
Sender: brucef@tesla.UUCP
Organization: Cornell Electrical Eng.
Lines: 16

From: brucef (Bruce Fingerhood)

I am trying to find a schematic/service manual for an R 390A/URR receiver. Can
anyone tell me where I might be able to get one? I currently have an

"Organizational Maintenance Manual" p/n TM 11-5820-358-20, but it really isnt much of a
technical manual. I am also interested in any mods to the 390 that anyone has made. Thanks in advance.

Bruce Fingerhood
KA7I
240 Phillips Hall
School of Electrical Engineering
Cornell University
Ithaca,NY 14853
607 256 3601

From 7421540860902356176
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,52ff789730b019a6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-02 07:31:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: 220-222 mhz under attack!!
Message-ID: <117@mouton.UUCP>
Date: Thu, 2-Aug-84 10:31:40 EDT
Article-I.D.: mouton.117
Posted: Thu Aug 2 10:31:40 1984
Date-Received: Fri, 3-Aug-84 23:59:27 EDT
Organization: Bell Communications Research, Inc
Lines: 29

I just heard yesterday that the FCC has assigned an RM number to
a petition to allocate 216-222 mhz (including of course the bottom
2 mhz of the amateur band) to land mobile. This confirms speculation
based on Robert Foosaner's (FCC Private Radio Bureau Chief) comments
at the ARRL National Convention.

Needless to say, this is a grave development. We NEED that spectrum,
particularly for packet radio linking. There is nowhere else to go
for the high speed FSK links that are being built right now. In particular,
amateur satellite gateway stations NEED 220 mhz as all current
and future satellites use all of the other VHF/UHF bands and the
gateways have to operate in full duplex.

It is becoming pretty clear that this attack is at least partially
based on the rejection of no-code: the FCC considered no-code to
be the amateur's "last chance" to populate the bottom part of
the band. It is quite ironic that the ones who get hurt by this
proposed change (the technically oriented packeteers) are mostly

the ones who argued FOR a no-code license to increase technical
experimentation. However, I suspect that very few of the vocal
anti-no-code crowd ever used 220-222 mhz, or 420-430 mhz, or 1215-1240
mhz, or 2310-2380 mhz...

Anyway, enough sermonizing. I strongly urge everyone to protest this
move with the FCC as soon and as strenuously as possible, even if you
don't use 220. If we don't all hang together as a group when one interest's
spectrum is threatened, then before long we'll have lost much of everything.

73, Phil Karn, KA9Q

From -5202283527105535017
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d4f3ed6912e7772,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-02 22:37:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!uok!mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: RE: 220 too late complaint - (nf)
Message-ID: <2800015@uok.UUCP>
Date: Fri, 3-Aug-84 01:37:00 EDT
Article-I.D.: uok.2800015
Posted: Fri Aug 3 01:37:00 1984
Date-Received: Mon, 6-Aug-84 06:59:20 EDT
Lines: 8
Nf-ID: #N:uok:2800015:000:241
Nf-From: uok!mpackard   Aug 3 00:37:00 1984

#N:uok:2800015:000:241
uok!mpackard   Aug 3 00:37:00 1984

][
The way I figure it, all hams just want to use morse code and ragchew
about antennas and HF is all they need. Lets give the VHF and up
frequencys to someone who would put them to more efficient use than
the hams who don't use it anyway.

From 3706056968848153944
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d047e86d92cf88d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-03 09:02:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hogpc!4432jrm
From: 4432jrm@hogpc.UUCP (J.MASSI)
Newsgroups: net.ham-radio
Subject: Help ---- Oh where is the tube I need!

Message-ID: <442@hogpc.UUCP>
Date: Fri, 3-Aug-84 12:02:16 EDT
Article-I.D.: hogpc.442
Posted: Fri Aug 3 12:02:16 1984
Date-Received: Sat, 4-Aug-84 03:19:53 EDT
Lines: 9

<no funny saying to go here>

I'm trying, in vain, to find a 26A7GT for an R-392
receiver. Any leads?

Thanks, and 73 (reply by mail),

joe   kb2jg/aar2by
ihnp4!hogpc!4432jrm

From -5659204245852152095
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,380accbe6b71be40,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-03 09:05:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxr.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxr!dmdoyle
From: dmdoyle@ihuxr.UUCP (Dan Doyle, WB9JXN)
Newsgroups: net.ham-radio
Subject: ICOM IC-751 Looking for comments AGAIN!!!
Message-ID: <1161@ihuxr.UUCP>
Date: Fri, 3-Aug-84 12:05:27 EDT
Article-I.D.: ihuxr.1161
Posted: Fri Aug 3 12:05:27 1984
Date-Received: Sat, 4-Aug-84 03:16:00 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 17

--
CQ CQ CQ de WB9JXN

     My machine had some trouble with mail.(What else is new?)
So I am posting this again.

>   I'm thinking about purchasing the ICOM IC-751 XCVR.
>I would like to here from anyone who has this rig.
>
>   Are there any problems with it?
>   Is it as good as ICOM says?
>
>   73s
--
==
Dan Doyle, AT&T Bell Laboratories - ihnp4!ihuxr!dmdoyle - (312)979-2946

WB9JXN Naperville, IL *8-367-2946

From -7604953991522345742
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4759bc94133a83c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-03 09:25:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site auvax.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!alberta!auvax!tech
From: tech@auvax.UUCP (Richard Loken)
Newsgroups: net.ham-radio
Subject: Re: Ham call changes?
Message-ID: <436@auvax.UUCP>
Date: Fri, 3-Aug-84 12:25:48 EDT
Article-I.D.: auvax.436
Posted: Fri Aug 3 12:25:48 1984
Date-Received: Sun, 5-Aug-84 00:21:59 EDT
References: <3701@brl-tgr.ARPA> <3715@brl-tgr.ARPA>
Organization: Athabasca U, Alberta
Lines: 12

urp

I have wondered for twenty years now how Wayne Green has managed to remain
W2NSD/1 (I think thats it) for so long. No hostility is intended here, I
have been reading (and paying for) his rather right wing technical/political
magazine for the same twenty years.

Hmm. Yes I think that is related to ham call sign changes.

Richard Loken

From -7608488557316414285
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c3047afc1b16c59c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-03 15:17:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!ecn-ee!wn9nbt
From: wn9nbt@ecn-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: 52 as emergency meeting channel - (nf)
Message-ID: <2014@pur-ee.UUCP>
Date: Fri, 3-Aug-84 18:17:36 EDT
Article-I.D.: pur-ee.2014
Posted: Fri Aug 3 18:17:36 1984
Date-Received: Sat, 4-Aug-84 03:40:23 EDT
Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University

Lines: 11

#R:hplabs:-66800:ecn-ee:14900005:000:204
ecn-ee!wn9nbt   Aug 3 15:38:00 1984

There is such an organization already.   RACES   -   Radio Amateur Civil Emergency Service.....Some areas have more active groups than others.   You might check around your area to see.....Dave

From -7761268261649799604
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3abacb93b50ceffb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-03 18:07:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site dsd.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!dual!amd!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: First Book of Deviation
Message-ID: <322@dsd.UUCP>
Date: Fri, 3-Aug-84 21:07:33 EDT
Article-I.D.: dsd.322
Posted: Fri Aug 3 21:07:33 1984
Date-Received: Sun, 5-Aug-84 06:11:35 EDT
Organization: AMPEX DSD, Redwood City, CA.
Lines: 159

Forwarded from Compuserve. This also applies to VFH packet, N'est ce pas?

    Keywords: DEVIATION VHF-FM RTTY MODULATION INDEX MARK SPACE

    A commentary on control of modulation index in
    VHF-FM RTTY.

FROM W2JUP, FARMINGVILLE, NY
DECEMBER 7, 1983
2230 EST

PART 1-
TONIGHT'S LESSON IS FROM THE FIRST BOOK OF DEVIATION. WE WILL READ
THE PARABLE OF THE MARKS AND THE SPACES.

ONE NIGHT AS I MAINTAINED MY SHEPHERD'S PASTORAL WATCH OVER A LOCAL
REPEATER CHANNEL FLOCK, MY EAR WAS CAUGHT BY THE TWEEDLE-TWEEDLE SOUND
OF THE MARKS AND THE SPACES. I LOOKED TO SEE WHAT BYTES WERE THERE,
AND LO! THERE WERE NO BYTES! ONLY SCARS AND UGLY DISTORTIONS UPON
THE SCREEN AND UPON THE SCROLLS OF PARCHMENT THAT FROM MY PRINTER

FLEW.

I CONSULTED THE ORACLE, LIT TWO LEDS FOR CANDLES, AND THE ORACLE SPAKE UNTO ME SAYING, "CLOD, THERE ARE NO TRUE MARKS AND SPACES UPON THY CHANNEL! THESE ARE UNCLEAN AND MUST B SCOURGED FROM THY PAGE! SEEK THEM OUT AND DESTROY THEM, FOR THEY ARE FROM ANOTHER WORLD AND MUST BE CLEANSED!"

SO, AS THE ORACLE BAD ME, I WENT FORTH WITH SWORD AND SCREEN AND SOUGHT THE UNCLEAN BITS AND MARKS AND SPACES. AND, LO!! I DID FIND THEM DOWN A MERE 15 KHZ, ISSUING FORTH FROM ANOTHER REPEATER, FULL OF SOUND AND FURY, AND OF GREAT AND FULSOME VOLUME. SO I DID CAUSE THESE UNCLEAN MARKS AND SPACES TO APPEAR AS IF BY MAGIC UPON THE SCREEN AND SCROLL OF MY TABERNACLE, WHEREIN I DID EXAMINE THEM. AND TRUE AS SPAKE THE ORACLE, THEY WERE INDEED UNCLEAN AND FULL OF SORES AND THE BLEMISHES THAT ARE CALLED SQUARED WAVES.

AND AFTER INVOKING THE ORACLE ONCE AGAIN, I DID SEE THAT THESE UNCLEAN MARKS AND SPACES WERE FROM THE WESTERN SHORES, FROM THE HOUSE OF A FALSE PROPHET, A FRIEND, NEWLY COME UNTO THESE DIGITAL MODES. AND I WENT UNTO THIS FRIEND AND SAID, "FRIEND, WHYFOR ARE THY MARKS AND SPACES UNCLEAN, AND OF A FULSOME NOISE, AN A PLAGUE UPON OUR CHANNEL?" AND MY FRIEND SPAKE UNTO ME SAYING, "FORGIVE ME OH MASTER, I KNOW NOT WHAT I HAVE DONE. I AM NEWLY COME UNTO THIS RTTY ODE AND AM AS A STRANGER IN THE LAND. ANOINT ME WITH THY WISDOM SO THAT I MAY BE CLEANSED AND FIND LOVE ONCE MORE IN THE HEARTS OF MY FELLOW MEN."

SO I SAID UNTO THE NEWCOMER, "NEWCOMER, KNEEL AND LEARN. I WILL TELL THEE OF THE RULE OF CARSON, A GREAT SAGE FROM THE LABORATORIES OF BELL. HEAR! OH NOVICE, HOW IT IS MEET UPON YOU TO LOOK TO THY "MOD INDEX". FOR THY SIDEBANDS DOTH APPEAR UPON A CHANNEL IN THE EAST, AND THE PEASANTS ARE WROTH WITH THEE!. THOU ART TRULY A DEVIANT SOUL, GUILTY OF MAKING GREAT NOISES UPON THE AIR, AND THY MARKS AND THY SPACES DO GROW AND INFECT THE ADJACENT CHANNEL, WHICH IS NOT COOL!"

AND THE NEWCOMER KNELT IN SHAME, AND BEGGED FORGIVENESS. HE SAID, "TELL ME OF THIS RULE OF CARSON FROM THE LABORATORIES OF BELL, SO THAT I MAY CLEANSE MY ACT AND GET WITH THE PROGRAM 'ERE THEY CAST ME OUT AS AN UNBELIEVER AND AN INFIDEL!!"

AND I SPAKE UNTO THE NEWCOMER SAYING, "OH YE OF LITTLE SMARTS! GET THEE TO A TEXTBOOK HAVING WITHIN IT THE RULES OF THE INDICES OF MODULATION. FOR THEREIN LIES THE SECRET WHICH IS IN THE RULE OF CARSON, WHICH SAYS: "A GENERAL RULE FIRST STATED BY J.R. CARSON IN AN UNPUBLISHED MEMORANDUM AT BELL LABS DATED AUGUST 28, 1939 IS THAT THE MINIMUM BANDWIDTH REQUIRED FOR AN ANGLE-MODULATION SIGNAL IS EQUAL TO TWO TIMES (THE SUM OF THE PEAK DEVIATION AND TWICE THE HIGHEST MODULATING FREQUENCY) TO BE TRANSMITTED. IN THE NOTATION DEFINED AS-

BW EQUALS 2(DELTA F PLUS (2F SUB-M))

WHERE BW EQUALS BANDWIDTH, DELTA F EQUALS PEAK DEVIATION
AND F SUB-M IS THE MODULATING FREQUENCY.

THEREFORE, IT IS WRIT-

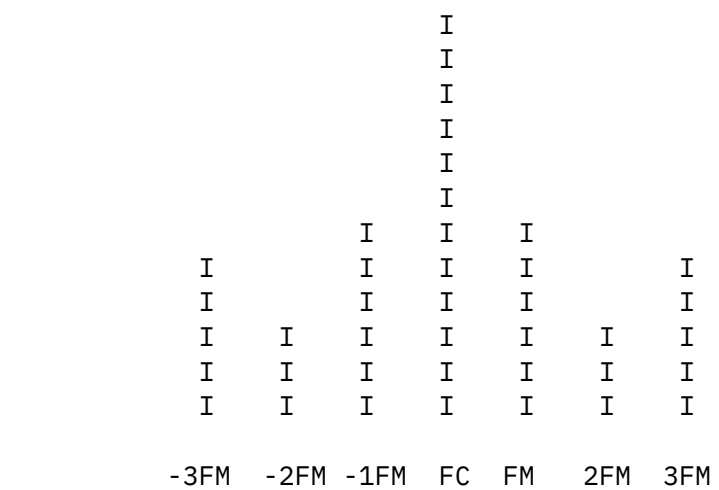
IF THY DEVIATION IS 5 KHZ, AND THY MODULATING FREQUENCY IS
2125 HERTZ FOR THY MARKS AND 2295 HERTZ FOR THY SPACES,
THE RULE OF CARSON SAYS THAT THY MINIMUM BANDWIDTH SHALL BE:

TWO TIMES THE SUM OF (9.250) WHICH COMES OUT TO 18.5 KHZ--
WHICH IS DAMNED WELL GONNA TAKE YOU INTO THE NEXT CHANNEL AND
PISS OFF THE TROOPS!!!

"THEREFORE, OH YE OF HALF A WIT, I SAY UNTO THEE, FORESOOTH!
DROP THY DEVIATION DOWN TO NO MORE THAN 2 KHZ ON SPACE TONE
AND THE BANDWIDTH OCCUPIED BY THY MARKS AND SPACES SHALL BE
ABOUT 13.2 KHZ, WHICH WILL STAY WITHIN THE REALM OF THINE OWN
CHANNEL AND NOT CAUSE BUBONIC SIDEBANDS TO SPREAD OVER THE LAND!!!"

AND I SPAKE UNTO THE NEWCOMER SAYING, "HEAR OH NEWCOMER!"
GAZE UPON THE FACE OF THY WONDROUS SPECTROUS ANALYZER AND
SEE THE TUBE THEREIN, AND JUDGE YE THE MAGNIUDE OF THY
SINS!! SEE WHEREIN AND WHEREFORE THOU CREATETH A FESTERING
AND A CANKERING UPON THE CHANNELS OF THY BAND AND UPON THE
BAND OF THY BROTHERS!!"

AND INVOKING THE ORACLE ONCE AGAIN, I RAISED MY HAND AND THERE
CAME A VISION UPON THE TUBE OF HIS SPECTROUS ANALYZER WHICH
DID APPEAR THUS AS IS SHOWN FOR 40-COLUMN DISPLAYS----



WHEREIN FC IS THE CARRIER FREQUENCY
FM IS THE MODULATING FREQUENCY

"LO THE RESULT THEREFROM IS THAT THOU TAKETH UP BUNCHA DUPA
MORE SPACE OF OUR HOLY SPECTRUM THAN THOU THINKETH, OH MENTAL
MIDGET! THOU HAST THE WIT OF A FENCE POST, THE INTELLECT OF A
HOCKEY PUCK!!"

AND THESE THINGS WHICH I COMMAND THEE THIS DAY SHALL BE FOR
A SIGN UNTO THEE, FOR THEY ARE WRITTEN DOWN IN THE FUNCTIONS
OF BESSEL, FROM WHICH THERE IS NO ESCAPE. YEAH, VERILY, WE ARE
ALL SLAVES TO THE RULE OF CARSON AND THE FUNCTIONS OF BESSEL,
AND WOE BE UNTO THSE WHO FLAUNT THEIR MIGHT AND RISK THEIR
WRATH.

AND THEREUPON I SPAKE ONCE MORE UNTO THE NEWCOMER SAYING,
"AND REMEMBER THIS- THERE IS SIGNIFICANT SIDEBAND ENERGY
AS LONG AS THE SIDEBANDS ARE STRONGER THAT 26 DB BELOW THE
UNMODULATED CARRIER, SAYETH THE FCC! HARK! THEY ARE THE HOLY
ONES, KEEPERS OF THE TICKETS AND GIVERS OF THE LAW. DO NOT ANGER
THEM, FOR THEY WILL SMITE THEE AND CAUSE THEE GRIEVOUS WOUNDS.
AND SHOULD THE FEDS IGNORE THEE, THEN THY BRETHREN ON THE CHANNELS
WILL SEEK THEE OUT AND CAST THEE INTO THE WILDERNESS FROM WHENCE
THEE CAME!!!"

"HEAR, OH NEWCOMER!! CLEANSE THY ACT AND GET THEE TO A DEVIATION
METER!! AND BE COOL FOR ALL TIMES."

AND THUS ENDS THE PARABLE OF THE MARKS AND THE SPACES AND THE
ETERNAL TRUTS OF THE RULE OF CARSON. LET THESE WORDS
BE UNTO YOU FOR A LESSON.

GIVEN UNDER MY HAND AND SEAL ON THIS THIRTEENTH DAY IN
THE MONTH OF DECEMBER IN THE YEAR OF OUR LORD 1983
ON THE ISLAND OF LONG---
BY W2JUP, THE PATRIARCH OF FARMINGVILLE.

FROM W2JUP, FARMINGVIILE, NY
4/8/84---0630EST

From -3452881876918354635
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b4586ee9f7ed8323,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-05 15:44:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cp1.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!rlgvax!cvl!umcp-cs!aplvax!cp1!hart
From: hart@cp1.UUCP
Newsgroups: net.ham-radio
Subject: vadcg daughter brd. manual
Message-ID: <754@cp1.UUCP>
Date: Sun, 5-Aug-84 18:44:59 EDT
Article-I.D.: cp1.754
Posted: Sun Aug 5 18:44:59 1984
Date-Received: Wed, 8-Aug-84 00:25:48 EDT
Organization: C & P Tel. Co., Balto., Md.
Lines: 1428

.op

AMATEUR RADIO RESEARCH AND DEVELOPMENT
CORPORATION (AMRAD)

VADCG TERMINAL NODE CONTROLLER (TNC)
DAUGHTER BOARD VDS-1

INSTRUCTION MANUAL

JULY 1, 1984

NOTICE NOTICE NOTICE

Amateu Radi Researc an Developmen (AMRAD i not-for-profi organization incorporate i th Stat o Virginia AMRA i dedicate t th advancemen o th state-of-the-ar o Amateu Radi communications Thi boar wa designe b AMRA an Terr Fox WB4JF t allo th continuatio o th us o th Vancouve Amateu Digita Communication Grou (V.A.D.C.G. Termina Nod Controlle (TNC) Thi boar i sol a retrofi subsyste t th VADC TNC an a such n warrantie ar expresse o implied eithe fo it prope operation o th proper operation of the host TNC board.

I i requeste tha al user o thi boar suppor AMRA b joinin thi organization Tha wa al user wil receiv th AMRA_Newsletter whic wil contai updates corrections an enhancement t th VDS-1 alon wit wealt o othe informatio regardin packe radio an Amateu Radi i general.

To join AMRAD, send $15.00 to:

Amateur Radio Research and Development Corporation
William P. Pala, WB4NFB, Secretary
5829 Parakeet Drive
Burke, VA 22015

.pa.pn3

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.PA CIRCUIT FEATURES

Recently Th Amateu Radi Researc an Developmen Corporatio (AMRAD) originator o th no popula AX.2 packe radi protocol develope retrofi boar fo th Vancouve Termina Nod Controlle board originall develope b Dougla Lockhart VE7APU Usin th daughte boar (par numbe VDS-1) system designer ar no free fro th memor constraint o th origina board Thi translate int bette operatio fo th Vancouver TNC packe radi enthusiast.

Som o th advantage o th AMRA Vancouve Daughte boar system are:

* No modifications (jumpers or traces cut) required on the Vancouver board for normal operation

* No jumper wires to hook between the two boards. All connections necessary are done via wire-wrap sockets.

* From 8k (using 2716's) to 32k (using 2764's) of EPROM

* From 8k (using 6116's) to 32k (using 8k by 8 chips) of RAM

* Software programmable baud rate generator (using Intel 8253)

   Optiona us o time interrupt fo bette softwar control
   (requires cutting two traces on the TNC board)

* Position for up to six 16-pin sockets for user kludging

* Position for one 24-pin socket for user kludging

* General kludge area of 11 by 17 tenth-inch spaced holes

* Uses only two additional IC's (other than RAM and EPROM)

* requires no additional power supplies (in fact the minus
   five volt supply needed for the 2708's can be eliminated)

* Full documentation available.

* Priced inexpensively at only $25.00 for the bare board.
   (which is a Mil-Spec quality board)

To order a VDS-1 board, send $25.00 Plus $2.25 for shipping
(US funds) to:

Technetronics Systems Inc.
ATTN: Charles O. Phillips
6134 Columbia Pike
Falls Church, VA 22041

.pa

VANCOUVER TNC BOARD CHANGES

I i no necessar t mak an change t th Vancouve TN board unless one or more of the following is true:

1. Use of timed interrupts from the 8253 are planned.

2. Th VADC TN boar wa originall assemble usin I socket wit smal holes Sinc th VDS- interface t th VADC TN throug wire-wra socket plugge int fou ke socket (U1 U9 U11 an U18 o th TNC thes socket mus b capabl o acceptin th large pin tha wire-wra socket have I thi i no th case th offendin socket(s mus b replace wit one that will work before using the VDS-1.

Thes change t th VADC TN ar easil accomplishe i necessary an wil no affec th operatio o th TN wit o withou th VDS- installed.

1. Allowing Timed Interrupts From The VDS-1 8253.

Th Inte 825 time chi contain thre indepententl programmabl timers On o thes i use t provid softwar

contro o th packe channe bau rate Th othe tw ar
availabl t th programme t provid time interrupt t th
TNC Time i optionall wire t th non-maskabl Tra
interrup inpu pi o th 808 CPU whil time i optionall
wire t th maskabl INT interrup pi o th 808 CPU.

     Unfortunately th VADC TN ha bot o thes pin shorte
directl t groun (i additio t havin pull-dow resistors)
I orde t us thes input t th CPU the mus firs b
disconnecte fro ground Thi i accomplishe b cuttin tw
trace o th TN board.

     Th trac tha mus b cu t allo th Tra interrup i
locate o th botto o th TN board nea pi o th 808
CP (U1) Se Figur 1 Cu 1 fo th exac locatio t plac
th cut.

     Figur als show th positio o th trac tha mus b
cu t allo th INT t b used I i locate b pi 1 o U2
the 8255 Parallel Port IC. Cut the board as shown by Cut 2.
.pa   VANCOUVER TNC BOARD CHANGES (CONTINUED)

2. TNC Socket Changes

     A previousl mentioned certai socket (U1 U9 U11 an
U1)o th TN boar MUS b abl t accep th large pin use
o wire-wra I sockets

     I an o th socket won' accep th wire-wra socke
pins chang th socke i question Thi ca b lo easie
than it sounds, using the following technique.

STEP 1 Remove the IC in the socket to be changed.

STEP 2 Tur th boar ove (componen sid down) an locat th
socke i question Usin solde-sucke (o solde
wick an low-wattag solderin iron carefull remov
a muc o th solde a possibl o eac pin Th mor
solde remove o eac pin th better bu don' spen
lo o tim o eac pin o th trac ma com loos fro
th board Afte al th pin hav bee hi once loo
ove eac pin an tr onc agai t remov an remainin
solder A thi point yo shoul b abl t se throug
th hole a leas mos o th socket pins.

STEP 3 Usin smal pai o needle-nos pliers hea eac pi
wit th solderin iron an wiggl tha pi wit th
pliers Kee wigglin th pi a yo remov th
solderin iro an th pi cool down I th solde wa
sufficientl remove i th las step th pi shoul
sta loos i th hol afte th pi cool down D thi
wit eac pi o th socket Don' worr i al th pin
don' becom loos a first a lon a mos are.

STEP 4 Tur th TN boar over Carefull pr ver smal blade screwdrive betwee th P boar an th I socket B carefu no t scratc th boar whil doin this Remember th socke yo ar removin i t b throw away s scratc i i necessar rathe tha th TN board Whil pryin th socke awa fro th board hea u an socke pin tha ma stil b soldere t th board B alternatin th hea betwee an pin tha ar stil soldere an carefull pryin wit th screwdriver the socket should be walked out of the PC board holes.

STEP 5 Onc th socke ha bee removed g ove th hole o th TN P boar wit solde wic t remov an solde left behind.

STEP 6 Plac th ne socke o th TN board an solde i i place Chec th ne socke t b sur ther ar n solde bridges I i goo practic t re-instal th remove I i th ne socke an chec th TN fo prope operatio befor installin th VDS-1.
.pa   VDS-1 BOARD ASSEMBLY

     Us th followin step-by-ste instruction t properl assembl th VDS- daughte board Plac chec mar besid each step as it is completed.

     I orde t us th wire-wra socket a jumper betwee th tw boards th hole o th daughte boar wer mad large tha normal Thi ma mak i harde t solde th socket ont th board Mak sur tha wheneve solderin socket t th daughte boar ther i sufficien solde betwee th P eyele an th socke pin Th us o small pointe ti o you solderin iro wil help.

1. Plac fou 2 pi solder-tai socket i th RA position (U34 U35 U36 an U37) Solde pin an 1 o eac socke t hol i i place Whe al fou socket ar i place solde th remainin pin o th fou sockets Chec for solder bridges and cold solder joints.

2. Pu th followin solder-tai socket i thei position o th boar an solde the i place:

A) 16 pin socket at U38.

B) 16 pin socket at U39.

C) 14 pin socket at U40.

D) 14 pin socket at U42.

E) 24 pin socket at U41.

3. Instal eithe fou 2 pi solder-tai sockets o fou 2
pi Zer Insertio Forc (ZIF socket a th fou EPRO
locations U30 U31 U32 an U33 Solde pin an 1 o
eac socke first t hol th socke i place The solde
the remaining pins. Check for solder bridges.
.pa   VDS-1 BOARD ASSEMBLY (CONTINUED)

NOTE: Whe installin th wire-wra socket i th nex steps
b sur the ar mounte flus t th board an th pin
ar no crooked I th socket ar no soldere dow
flus t th board th pin wil b crooked causin
alignmen problem durin boar installation.

4. Instal 4 pi wire-wra socke a U1 Notic tha pi
i i th opposit directio a th res o th socket o
th board Carefull solde th wire-wra socke t th
daughter board, making sure there are no solder bridges.

5. Instal 2 pi wire-wra socke a U18 Carefull solde
i t th daughte board makin sur ther ar n solde
bridges Plac piec o tap ove th socket sinc n I
will be installed in this socket.

6. Plac 1 pi wire-wra socke a U9 Not th placemen o
pi 1 Solde al pin ont th daughte board.

7. Instal 1 pi wire-wra socke a U11 notin th
placemen o pi 1 Solde th socke t th board checkin
fo solde bridges Plac piec o tap ove thi socket
since there will be no IC installed in it.

8. Instal th 4 uF 1 vol electrolyti capacito a positio
C (nex t U18 (th valu o thi componen i ver non-
critical) Solde th capacito t th board.

9. Instal th si . u bypas capacitor a C t C o th
board, and solder them in place.

10. Befor installin th VDS-1 mak sur th vol bu i no
shorte t groun a an poin b measurin th resistanc
betwee th vol bu an groun wit volt-ohm-meter I
shoul rea relativel lo a first the slowl ris t
hig resistanc leve (dependin o th valu o C1).

11. I th VDS- passe visua inspection procee t th nex
section of this manual (Installation and Checkout).
.pa   INSTALLATION AND CHECKOUT

     Thi sectio describe ho t instal th VDS- o th VADC
TN board B carefu no t ben an o th wire-wra pin ou
o alignment o th boar wil no fi a snugl a designed
A wit th VDS- assembl procedure chec of eac ste a i

is completed.

1. I th VDS- i t b altere fro it origina configuratio
a jumpe area JP-5 JP-6 JP-7 o th 8 RA device ar
t b used chec th Optio Setting sectio o thi manua
befor proceedin t th nex ste here Sinc thes jumpe
area ar "normalled o th bac o th VDS-1 th prese
jumpe trace mus b cu BEFOR th VDS- i installe ont
th TN board (except for JP-8).

2. Carefull remov th followin IC fro th VADC TN board
making sure they are not overly handled:

    A) U1, 8085, CPU chip.

B) U7, 74LS00, quad nand gate (part of memory decoding).

C) U8, 74LS138, one-of-eight decoder (memory decoder).

D) U9, 74LS138, one-of-eight decoder (port decoder).

E) U11, CD4024, binary counter (baud rate generator).
        (be careful with this IC, as it is very sensitive).

F) U15 thru U18, 2708 EPROM memory.

G) U19 thru U26, 2114 RAM memory.

3. Carefull positio th daughte boar ove th mai TN
board makin sur no t ben an o th wire-wra socke
pins Lin u th wire-wra pi sockets startin wit U1
D no pres th pin dow int th socket o th TN boar
yet jus hol the gentl i th socke holes Th daughte
boar ha bee designe ver carefull t mak sur tha th
wire-wra pin lin u properly I ther i proble wit
pi alignment on o mor o th socket ma hav bee
soldere i slightl crooke (thi happene o th VDS-
prototype) I th pin don' alig properly eithe th
socke shoul b re-soldered o th pin ca b ben
slightl usin pai o needle-nos pliers.
.pa   INSTALLATION AND CHECKOUT (CONTINUED)

4.Afte U ha bee aligned chec U1 t se i th pin o
th opposit en o th VDS- ar als comin int prope
alignment I the are loo betwee th tw board an mak
sur U i als line u properly Lastly chec U1 a th
to o th boar fo prope pi alignment I ma b
necessar t mov th daughte boar aroun slightl t
accomplis prope alignmen o al pin o al sockets Tak
th extr tim t b sur al pin lin u withou havin t
stres eithe board a thi wil hel i th boar eve
need t b remove an re-installed.

5. Onc al th wire-wra pin lin u properl t th hole i
th socket o th VADC TN board plac th boar o
hard fla surfac an gentl pres o eac wire-wra socke
usin th followin sequenc unti yo fee th pin botto
ou i th TN sockes below

A) Pres th U socke dow first sinc th 4 pi socke
wil b th hardes t alig properly.

B) Next pres th U1 socke down makin sur th res o
th socket ar stil line u properly.

C) Now pres th U socke int it socke o th TN
board.

D) Lastly pres th U1 socke int it socke o th TN
board.

6. Mak sur a leas on o th switche o di switc S- o
th TN boar i ON I doesn' matte which a al th
necessar pin o th U1 socke ar shorte togethe o th
VDS-1.

7.Perfor on fina chec befor installin th IC o th
daughter board, looking over the following:

A) Mak sur al th wire-wra pin ar properl line u i
thei socke holes Mak sur non o th pin ar ben
int wron holes tw pin ar shorte together o
any of the pins are missin thir hole completely.

B) I i goo ide t tak fina readin o th
resistanc betwee th fiv vol buse an ground makin
sur ther ar n direc shorts I ther are remov
th VDS- fro th TNC an chec eac boar separatel
fo shorts.
.pa   INSTALLATION AND CHECKOUT (CONTINUED)

7. Install the following Integrated Circuits in their sockets:

A) 8085 CPU at U1.

B) 74LS138 port decoder at U9.

C) 74LS138 EPROM decoder at U38.

D) 74LS138 RAM decoder at U39.

E) CD4024 binary counter at U40.
        (Note that this chip seems very sensitive to static)

F) 8253 timer at U41.

G) RAM memory chips (minimum of 2) at U34 to U37.
        (minimum 2k parts RAM are U34 at RAM0, U35 at RAM1)

H) EPROM's as necessary in sockets U30 through U33.
        (U30 is ROM0, address 0000H)

I) D NO INSTAL U4 A THI TIME I i use onl fo
timed-interrupts an shoul b lef of durin initia
board checkout.

8. I shoul b note tha sinc th memor addres ha bee
altere t allo expande EPRO an RAM an sinc th packe
channe bau rat i no controlle wit softwar rathe tha
S-2 ne sofwar mus b use wheneve usin th VDS-1
Detail o softwar alteration t suppor th VDS- ar
provided in the Software Support section of this manual.

I i goo ide t us monito progra t tes th TN
syste afte installin th VDS-1 Thi way an problem
wit packe radi cod no functionin properl ca b trace
t software rathe tha hardware Ther ar differen
monito program availabl fo th TN baord I yo canno
obtai on fro loca packe enthusiast contac AMRA fo
softwar suppor (eithe 808 typ assembl languag file
unde CP/M o burne EPROMs) Not tha sinc AMRA i
voluntar organization EPROM ma no b immediatel
availabl (i othe words expec th possibilit o sligh
delay)
.pa   INSTALLATION AND CHECKOUT (CONTINUED)

Wheneve requestin EPRO suppor fro AMRAD b sur t
includ al necessar informatio suc as:

A) Station Callsign, including SSID.

B) Repeate Callsign (includin SSID's o an repeater t
be used as a default condition during power-up.

C) Ar repeater ar t b defaulte o o of a powe up.

D) Termina configuration Thi include termina speed
parit on/off parit type numbe o sto bits an i
thi TN i t b use a termina o hos computer
Norma operatio i 120 baud n parity on sto bit
and no repeaters.

E) Defaul packe channe bau rat a powe on Thi i
normally set to 1200 baud.

9. Appl powe t th TN board I al goe properly sign-
o messag shoul appea o th terminal I i does
instal th EPROM containin th packe radi code an tr
the out I the functio properly you TN boar i onc

agai read t snatc frame fro th air Tr monitorin a
activ packe channe fo while an connec t someon t
b sur tha al o th packe function ar workin
properly.

10. I yo boar doe no operat properly usin eithe th
monito progra o th packe code se th Troubleshootin
and Theory of Operation sections of this manual.

11. I timed-interrupt ar t b used instal U4 (74LS00) an
apply power. Check for proper interrupt operation.
.pa   Option Settings

     Th VDS- daughte boar i designe t b flexibl i th
typ an amoun o RA an EPRO i wil support I wil als
allo th timed-interrupt an packe channe bau rat t b
programme unde softwar control Ther ar severa jumpe
area provide o th boar fo alteratio o th standar
configuration Eac o thes options thei associate jumpe
locations, and default settings will be discussed here.

EPROM TYPE   DEFAULT TYPE 2732

     Th VDS- i designe t us 2716 2732 o 276 typ
EPROMs T alte th VDS- fro th defaul 273 type jumpe
JP-5 must be changed. Use the following steps to alter JP-5:

1. Tur th VDS- boar ove an locat JP- (nex t th
74LS13 EPRO decoder U38) Notic tha ther ar P trace
betwee severa pin o JP- tha ar slightl thinne tha
mos o th other i tha are o th board Usin a Xact
knife carefull cu th followin trace betwee th tw
pin of JP-5 as listed:

A) Cut trace between JP-5 pins 1 and 14.

B) Cut trace between JP-5 pins 2 and 13.

C) Cut trace between JP-5 pins 3 and 12.

D) Cut trace between JP-5 pins 4 and 11.

Instal 1 pi solder-tai socke a JP- an solde i i
place.

Configur 1 pi DI heade fo th prope typ o EPRO
memory chips as follows:

A) 2716 type EPROMs. Wire the following pins together:

Pin 4 to pin 14 (Address line A11 to U38 address A0).
Pin 1 to pin 13 (Address line A12 to U38 address A1).
Pin 2 to pin 12 (Address line A13 to U38 address A2).

Pi 1 t pi 11 (+ volt t 271 pi 23).

B) 2732 type EPROMs. Wire the following pins together:

Pin 1 to pin 14 (Address line A12 to U38 address A0).
Pin 2 to pin 13 (Address line A13 to U38 address A1).
Pin 3 to pin 12 (Address line A14 to U38 address A2).
Pin 4 to pin 11 (Address line A11 to 2732 A11).
.pa OPTION SETTINGS (CONTINUED)

C) 2764 type EPROMs. Wire the following pins together:

Pin 2 to pin 14 (Address line A13 to U38 address A0).
Pin 3 to pin 13 (Address line A14 to U38 address A1).
Pin 5 to pin 12 (Address line A15 to U38 address A2).
Pin 4 to pin 11 (Address line A11 to 2764 A11).

Instal th DI heade i th socke locate a JP-5 Th
resulting memory maps are as follows:

A) 2716 EPROM memory map:

0000H-07FFH	U30 (EPROM 0).
0800H-0FFFH	U31 (EPROM 1).
1000H-17FFH	U32 (EPROM 2).
1800H-1FFFH	U33 (EPROM 3).

B) Default 2732 EPROM memory map:

0000H-0FFFH	U30 (EPROM 0).
1000H-1FFFH	U31 (EPROM 1).
2000H-2FFFH	U32 (EPROM 2).
3000H-3FFFH	U33 (EPROM 3).

C) 2764 EPROM memory map:

0000H-1FFFH	U30 (EPROM 0).
2000H-3FFFH	U31 (EPROM 1).
4000H-5FFFH	U32 (EPROM 2).
6000H-7FFFH	U33 (EPROM 3).

RAM TYPE DEFAULT: 6116 TYPE

I th RA memor chip use ar t b change fro th
default 6116 type devices, use the following procedure:

1. Tur th VDS- boar ove t th botto o th boar
(COPYRIGH 198 notice an locat JP- (nex t U39)
Locate and cut the following traces at JP-6:

A) Cut trace between JP-6 pins 1 and 14.

B) Cut trace between JP-6 pins 2 and 13.

C) Cut trace between JP-6 pins 3 and 12.

D) Cut trace between JP-6 pins 6 and 9.
.pa OPTION SETTINGS (CONTINUED)

2. Instal 1 pi solder-tai socke a locatio JP-6 an
solder it in place.

3. Wir DI heade fo th typ o RA memor t b use
according to the following:

A) If 6116 type (2k by 8) devices are being used:

1) Wire pin 1 to pin 14 (Address line A11 to U39 A0).

2) Wire pin 2 to pin 13 (Address line A12 to U39 A1).

3) Wire pin 3 to pin 12 (Address line A13 to U39 A2).

4) Wire pin 6 to pin 9 (WR* to 6116 WR* pin).

B) If 6264 or 2186 RAM chips (8k by 8) are being used:

1) Wire pin 3 to pin 14 (Address line A13 to U39 A0).

2) Wire pin 4 to pin 13 (Address line A14 to U39 A1).

3) Wire pin 5 to pin 12 (Address line A15 to U39 A2).

4) Wire pin 1 to pin 9 (Address line A11 to RAM A11).

4. Place the appropriate DIP header into the socket at JP-6.

5. I 218 RA chip ar bein used als instal jumper a
location JP-9 JP-10 JP-11 an JP-1 o th BOTTO o th
VDS- board Th 218 typ RA chip ar actuall psuedo-
stati devices whic ma requir synchronizatio wit th
808 CPU Thes jumper hoo th 218 read line t th
808 read pin allowin memor synchronization.

6. The resulting memory map for the RAM memory is:

A) For 6116 type (2k by 8) devices:

8000H-87FFH	U34	(RAM 0)
8800H-8FFFH	U35	(RAM 1)
9000H-97FFH	U36	(RAM 2)
9800H-9FFFH	U37	(RAM 3)

B) For 6264 and 2186 type (8k by 8) devices:

8000H-9FFFH U34   (RAM 0)
A000H-BFFFH U35   (RAM 1)
C000H-DFFFH U36   (RAM 2)
E000H-FFFFH U37   (RAM 3)

TIMER OPTIONS

Ther ar thre independent softwar programmabl timer i th 825 time IC Th onl time tha mus b use i suppor o th VDS- daughte boar i time 0 whic i use t generat th bau rat o th packe channel Fo prope operation th 825 inpu cloc canno excee MHz Unfortunately th Vancouve TN maste cloc frequenc i 2.457 MHz Thi mean th maste cloc mus b divide befor sendin i t an o th cloc input o th 8253

I addition sinc th maximu diviso o sixtee bi counte i 65,53 an th inpu cloc woul no b 1.228 MHz th slowes resultin interrupt woul b abou 1 pe second wit n tri contro i tha rang (nex slowes woul b doubl that o 3 interrupts/sec.) Ther need t b bette wa o trimmin th numbe i interrupt pe second i timed-interrupt ar t b use effectively Thi i accomplishe wit U4 an JP-7.

Th output o U4 (CD4024 ar wire t pin 1 an thr o JP-7 Eac o thes pin i successiv divide-by-tw o th previou pin' frequency Th followin pin a JP- hav th accompanyin frequencies an ar normall jumpere t th followin inpu clock o U41:

Pin 1	1.2288 MHz (Baud Rate Generator input)
Pin 3	6144 KHz (Trap timer, INTR timer inputs)
Pin 4	3072 KHz
Pin 5	1536 KHz
Pin 6	768 KHz
Pin 7	384 KHz

Pi 1 o JP- i normall jumpere t th inpu cloc o time i U41 Thi provide a acceptabl cloc frequenc t time 0 whic i use a th bau rat generato fo th packe channel Othe output coul b use i necessary bu th nee fo thi i no anticipated.

Pi 1 o JP- i th inpu cloc t time o U41 Time optionall drive th Tra interrup inpu t th 808 CPU Th tra interrup i non-maskable s ther i n wa o disablin thes interrupt i th hardwar i enabled Usin th secon outpu o U4 usuall give enoug contro o th resulting interrupt rate.

Pi 1 o JP- i th inpu cloc t time 2 an i als normall wire t th secon outpu o U40 Time optionall drive th INT interrup inpu t th 808 CPU Th INT pi generate maskabl interrupt whic allow th softwar t selectivel disabl thi interrupt A wit th Tra interrup above th secon outpu o U4 usuall give enoug contro ove the frequency of INTR interrupts.

I an o th timin parameter se b JP- ar t b altered i i recommende tha socke b installe a JP-7 an DI header b use t chang th defaul values Thi i accomplished as follows:

1. Tur th VDS- boar ove an locat jumoe JP- (nex t th U4 socket) Carefull cu th followin traces:

A) Pin 1 to pin 14

B) Pin 2 to pin 13

C) Pin 2 to pin 12

2. Plac 1 pi solder-tai socke a JP-7 an solde i i place.

3. Wire a DIP header as necessary for the alterations requied.

4. Plac th DI heade i th socke a JP-7 an tes ou th changes.

TIMED INTERRUPT ENABLES

Th outpu o th tw timer tha ar capab o generatin interrupt ar normall disable by no installin U4 (74LS00) I time interrupt ar t b used U4 shoul b installed Jumpe JP- i use t selectivel enabl onl on o th othe o th time interrupts a necessary JP- i normall jumpere o fo bot interrupts othe configuration ca b mad b cutting the traces ot the TOP of the board at JP-8 as follows:

1. Cut trace between pins 1 and 4 to disable Trap interrupts.

2. Cut trace between pins 2 and 3 to disable INTR interrupts.

Thes trace wer place o th TO o th VDS- boar t allow easy access to them.

Kee i min tha th timer MUS b properl programme befor time interrupt ar enabled otherwis improper operatio wil result Not tha timer an shoul b programme fo puls operation rathe tha squar wave sinc th interrupt are level sensitive.

.pa THEORY OF OPERATION

I orde t bette understan ho th VDS- daughte boar interface wit th VADC TNC w wil firs delv int th VADC TN itself Sinc th origina manua supplie wit th VADC TN di no contai theor o operatio section w wil tr t fill in that gap to some degree here.

TNC HARDWARE OVERVIEW

Th VADC TN i actuall singl boar compute dedicate t changin dat betwee tw differen transmissio format (usuall asynchronou ASCI an HDL typ frames) Lik mos othe singl boar computers th TN ha Centra Processin Uni (CPU tha act a th brain o th computer EPRO memor tha contain th instruction fo th CPU RA memor t hol dat an contro informatio temporarily an som inpu an outpu (I/O device wit whic t communicat t th outsid world Se Figur 2 fo bloc diagra o th VADC TNC.

.pa THEORY OF OPERATION (CONTINUED)

CPU AND AND CPU SUPPORT CIRCUITRY

Th VADC TN boar use th Inte 808 CP chip Th 808 i a improve versio o th popula 8080 I i softwar compatibl wit th 8080 whic mean program writte fo th 808 wil usuall ru fin o a 8085

Th 808 CP ha built-i cloc generator O th VADC TN board 4.915 MH crysta i use t determin th cloc rate Thi frequenc wa probabl chose becaus i i multipl o mos o th standar bau rates Th interna oscillato divide thi frequenc i half resultin i a actua cloc rat o 2.457 MH (bot interna t th 808 an th res of the board).

Th 808 use multiplexe dat an lo hal addres bus Thi mean tha th dat an lowe portio o th addresse shar th sam se o pin o th 8085 I orde t accomplis this th 808 send specia signa out calle Addres Latc Enable o ALE wheneve addres informatio i o th AD0-AD lines O th TN board a eight-bi latc (U6 74LS373 i use t latc an hol th lo addres wheneve tol t b th AL pi fro th 8085.

Th 808 CP ha severa pin tha ca b use t directl contro th CP actions Som o thes ar th sam a th 8080 whil other ar ne t th 8085.

Th rese pi cause th CP t sto whateve i wa doing an immediatel g t th beginnin o memory Thi pi shoul b hooke t pushbutto typ switc s tha th operato ca

recover the board in case of a failure in program control.

Ther ar severa interrup pin o th 8085 Interrupt ar jus wha th nam implies i th associate pi i asserted th CP wil temporaril suspen whateve i i doing an d somethin els (whateve th interrup requested o th CP i programme t do) Som interrupt ar controllabl (maskable a t whethe th CP wil acknowledg an hono them whil other th CP ha n contro ove (non-maskable) i whic cas th CP MUS hono th interrupt Sinc ther ar severa differen interrupts an eac ma occu a an time eac on i assigne a orde o precedence Th interrupt o th TN baor wil b discusse i increasin orde o importance.

Th lowes priorit interrup i th INT pi o th 808 (pi 10) Thi pi i leve sensitive hig indicate reques fo interrupt I i maskable allowin th CP t ignor an INT requests I a INT interrup i allowe b th CPU th CP wil indicat thi b assertin th Interrup Acknowledg pi (INTA* low Th requestin devic ca the forc a instructio (usuall cal o restart ont th dat bus an th CP wil excut tha instruction Th VADC TN normall ha thi pi tie low disablin th INT function.

Th nex grou o interrupt ar th RS pins Thes pin hav highe priorit tha th INT pin ar maskabl b th CPU bu the operat slightl differently Whe on o th RS pin i asserted i cause th CP t g t specifi locatio i memory an execut instruction startin a tha locatio a i cal t tha locatio wa requested Th memor locatio called th typ o signa used th orde o priority an sourc o th reques o th TN boar ar show below.

Interrupt	Memory	Signal	Priority	Interrupt Source
RST 5.5	002CH	High	Low	User Interface
RST 6.5	0034H	High	Middle	U10 (8273) TxINT
RST 7.5	003CH	Pulse	High	U10 (8273) RxINT

Th highes priorit interrup o th 808 i th Tra interrup (pi 6) I i non-maskable an generate restar t memor locatio 0024H I i bot edg an leve sentitive Th TN boar ha thi pi tie low disablin th Tra interrupt.

Th 808 CP als generate som timin signal neede fo proper computer operation. These include:

IO/M* Low for memory request, high for input/output
RD* Low indicated a read function from memory or I/O
WR* Low indicates a write function to memory or I/O
RESET OUT High indicates the CPU is being reset.

Ther i als pi calle Ready whic i use t synchroniz CP operatio wit slowe memory Thi pi i no used on the original VADCG TNC board.

.pa THEORY OF OPERATION (CONTINUED)

TNC EPROM MEMORY

I orde fo th TN boar t functio properly th CP mus b tol wha t d b program Thi progra i hel i Erasable-Programmable-Read-Only-Memor (EPROM) Th TN use fou 270 typ EPRO chips eac o whic hold 102 byte o program fo tota o 409 byte (4k o progra memory

Ther i memor decode circui mad u o U (74LS00 an U (74LS138 tha determine wher i th CP memor th EPRO (an RAM sinc th sam decode i use fo both i t reside

Th memor ma fo a unmodifie TN boar is:

0000H-03FFH	U15 (EPROM 0)
0400H-07FFH	U16 (EPROM 1)
0800H-0BFFH	U17 (EPROM 2)
0C00H-0FFFH	U18 (EPROM 3)
1000H-13FFH	U19, U20 (RAM 0)
1400H-17FFH	U21, U22 (RAM 1)
1800H-1BFFH	U23, U24 (RAM 2)
1C00H-1FFFH	U25, U26 (RAM 3)
2000H-FFFFH	Unused, copies of above map

Th 74LS0 (U7 i use wit th addres decoder 74LS13 (U8) t decod memor read-onl cycle fo th EPROM an memor read/write cycles for the RAM memory.

Not tha th EPRO chip ar i th opposit sequenc tha on woul assume tha i EPRO i th right-most no th left-mos EPROM Th 270 EPROM requir +5V -5V an +12 t operate properly.

TNC RAM MEMORY

Fo th TN t functio properly i additio t EPRO memor t stor th program ther mus als b som amoun o temporar memor tha wil b use t stor th dat i need t process Th TN boar use 211 typ RA chips whic ar 102 b bits Tw o thes chip ar neede t stor complet bit wort o data Ther i roo fo fou bank o thes chips fo tota o 409 byte o dat storage Th RA memor share th sam memor decode circuitr wit th EPROM an i discussed above.

Sinc th 808 CP use bidirectiona dat bus th IN/OU pin o th 211 chip ar connecte directl t th CP dat

bus.
.pa THEORY OF OPERATION (CONTINUED)

TNC INPUT/OUTPUT

I orde fo th TN boar t function i mus ge dat fro th outsid worl t process an the sen th processe dat bac t th outsid worl whe done Thi functio i provide b th inpu an outpu device o th TN board Ther ar tw differen "channels fo dat t transfe betwee th TN an device connecte t it Th firs i th "use interface" an th secon i th lin o packe channel Eac on o thes channel i connecte t th TN CP throug specia ICs whic occup certai por location i th CP por addres space Eac o thes IC i als capabl o generatin interrupt t th CPU when it needs to be serviced.

Th I/ port use ar decode b U9 74LS138 I decode onl I/ por addresses whic ar mappe a follows:

00H-07H U3 8250 Serial I/O Port (User Interface)
08H-0FH U2 8255 Parallel I/O Port (User Interface-Optional)
10H-17H U10 8273 HDLC Protocol Main Ports (Packet Channel)
18H-1FH U10 8273 HDLC Protocol TX Data Port (Packet Channel)
20H-27H U10 8273 HDLC Protocol RX Data Port (Packet Channel)
28H-FFH Unused.

Th use interface t th VADC TN boar eithe throug seria (RS-23 o curren loop o paralle port Mos o th softwar suppor fo th VADC TN use onl th seria interfac option an the onl a ASCII RS-23 typ o seria interface I woul hav bee nic t hav bee abl t us bot th seria an paralle chip simultaneously bu sinc the shar quit fe o th sam DB-2 connecto pins thi i impractica withou cuttin severa traces an addin anothe connector.

Serial User Interface

Th seria use interfac use a 825 Asynchronou Communication Elemen (ACE) Thi chi ha bot UAR an bau rat generato buil int it I additio t seria dat line i an out i als provide som o th handshakin line typicall foun i a RS-23 interfac (DSR DTR RTS CTS DCD an RI) Th TN boar ha RS-23 drive chip o i t optionall mak thes signal eithe TT o RS-23 voltag levels Sinc th AC chi i complicate device severa I/ port ar assigne t i fo prope programmin an operation
.pa THEORY OF OPERATION (CONTINUED)

These ports are designated as follows:

Port 00 Transmit/Receive Data Buffer Registers.
Port 01 Interrupt Enable Register (Write Only).

Port 02   Interrupt Identification Register (Read Only).
Port 03   Line Control Register (UART Functions).
Port 04   Modem Control Register.
Port 05   Line Status Register (UART Status).
Port 06   Modem Status Register.
Port 07   Baud Rate Divisor Latch Registers.

Parallel User Interface

     Th paralle use interfac use a 825 Programmabl Periphera Interfac (PPI) Thi devic ha 2 line o paralle data eac o whic i programmabl t b eithe input o outputs I addition som o thes line becom handshakin line whe programme properly allowin ful 1 bi paralle Input/Output system with complete strobing and acknowledgements.

     Th 2 line o th 825 ar organize a thre group o line (group A B an C) wit thir grou (C bein furthe divide int tw 4-bi subgroups Th programmin o thi chi i beyon th scop o thi manual howeve th Por ma fo thi device on the TNC is as follows:

Port 08H Port A Data Bus.
Port 09H Port B Data Bus
Port 0AH Port C Data Bus.
Port 0BH PPI Control Port.
Ports 0CH-0FH will be in same as above.

     Sinc virtuall n on i usin th paralle use interface these locations are generally ignored.

Packet Channel Interface

     Th packe channe interfac i handle b a Inte 827 HDL Protoco Controlle chip Th 827 i ver complicate inside i tha i automaticall handle lo o th HDL protoco functions suc a cloc recovery NRZ encoding/decoding zer bi insertion/removal an frame-check-sequenc (CRC generation/checking Sinc th packe channe send HDL frame i synchronou mod (n star o sto bits onc thi chi start sendin fram o data i mus continu unti al th dat o tha fram i sent Ther ca b n startin an stoppin i th middl o sendin frame Thi mean th 827 mus b capabl o gettin th attentio o th TN CP quickl wheneve fram i bein sen o received
.pa   THEORY OF OPERATION (CONTINUED)

     Becaus o this th 827 use th highes interrupt o th TN board Th transmi an receiv dat register als us separat port tha th res o th 8273 Th por ma o th 827 is:

10H 8273 Main Command/Status Register.

11H 8273 Parameter/Result Register.
12H 8273 Reset/Tx Interrupt Result Register.
13H 8273 Rx Interrupt Result Register.
14H-17H Same registers as above.
18H-1FH 8273 Transmit Data Register.
20H-27H 8273 Receive Data Register.

Th 827 doe no hav a interna bau rat generator s a externa divide mus b used U11 CD402 seve stag binar counte i use t divid dow th 2.4576MH cloc t th frequencie necessar fo th 827 t work Th 827 ha digita phase-lock-loo (DPLL tha i use t recove th dat timin o th packe channel Thi DPL need X3 cloc t functio properly Th output o U1 ar sen t switc S2 Onl on o th switche o S shoul b o a an give time Th output o U1 provid fo bau rate fro 38,40 bau t 60 baud.

Th 827 provide mos o th primar signal use i a RS-23 interfac (TXD RXD CTS RTS an DCD) I addition ther ar tw eac use programmabl inpu an outpu pins Th VADC TN feed thes signal t 1 pi DI socke a J4 Th othe hal o J lead t th RS-23 leve converte ICs whic the lead to the packet channel DB-25, J2.

Daughter Board Theory

Th VDS- daughte boar wa designe t replac th memor o th Vancouve TN board I addition i provide softwar contro ove th packe channe bau rate an th optio o tim generate interrupts.

Th VDS- interface t th Vancouve TN throug fou wire-wra socket tha plu int ke socket o th TN board Th firs one i at th CP socket U1 Th 808 CP no plug int th wire-wra socke o th daughte board Usin thi socket severa o th ke signal t an fro th CP ca b easil obtaine.

Th nex socke tha plug int th TN i a U18 Thi use t b on o th 270 EPRO sockets Thi socke i use t recove th latche low-orde addres bu fro th latc (U6 o th Vancouve TNC I wa possibl t ad anothe latc o th daughte board bu tha woul hav increase loadin o th dat bu unnecessarily I addition pluggin int U1 provide structura suppor fo th VDS-1 Sinc th socke a U1 i used only as a jumper, there is not an IC that plugs into U18.

Th thir wire-wra socke betwee th tw board i a U9 th I/ por decoder Thi socke i use t ge th additiona por decode outpu fo th 825 time I a U41 U4 use port

28 t 2FH Th I tha wa plugge int U o th TN no plug into the daughter board U9 instead.

Th fourt wire-wra socke i a U11 Thi positio use t hav th CD402 bau rat generato plugge int it Sinc th bau rat i no generate b U41 ther i n I plugge int th U1 socke o th daughte board Not tha al th ol outpu pin o th CD402 ar no shorte together i doesn' matte whic switc a S i closed a lon a a leas on is.

VDS-1 EPROM Memory

Th VDS- boar ha fou socket fo EPRO use Th type o EPROM acceptabl b th VDS- ar 2716 2732 o 2764 Al fou EPROM mus b o th sam type ne EPRO addres decode i use o th daughte boar a U38 Th addres input t U3 com fro jumpe JP-5 JP- i pre-wire fo 273 typ EPRO decoding I EPROM othe tha 2732' ar t b used th trace o th bac o th VDS- mus b cu befor usin JP-5 See the Option Settings section for further details.

Not tha al thre type o EPROM usabl o th VDS- ru o +5 only s th othe tw voltage use b th 270 EPROM ar no neede fo EPRO use Th -5 i n longe neede a all s i ca b eliminated Th +12 i use b th RS-23 interfaces s i i stil needed Anothe advantag o gettin ri o th 2708' i tha th newe type o EPROM ru a higher speed, reducing the potential of timing problems.
.pa THEORY OF OPERATION (CONTINUED)

VDS-1 RAM Circuitry

separat RA memor decode (U39 74LS138 i no use o th VDS-1 Thi allow th RA chi siz t b differen tha th EPROM allowin greate syste flexibility Lik th EPRO decoder th RA decode addres input com fro jumpe (JP-6) Thi jumpe i pre-wire fo 611 typ devices Optionally 626 o 218 typ (8 b 8 device ca b used i JP- i altered Sinc th 218 i psuedo-stati devic (i i reall dynamic bu al suppor circuitr i insid th chip) i need t tel th CP wheneve i i no ready Thi i wh th jumper JP- thr JP-1 ar needed The allo th RA chip t tel th CP whe the ar no read yet an th CP add wai state unti th RA chip ar ready.

VDS-1 Timing Circuitry

On o th problem wit th origina Vancouve TN i tha th use mus chang switche t alte th bau rat o th packe channel I addition th slowes spee th TN boar run withou modificatio i 60 baud Thi i stil to fas fo H packe operatio a th moment Th VDS- remove thi proble b replacin th CD402 binar counte an S wit

programmabl time I (U41 a 8253) Th 825 ha thre separat programmabl timers on o whic i use t creat th cloc fo th 827 Protoco Controller Unfortunately th 825 ca onl handl inpu cloc speed u t MHz Th TN board' cloc i divide b tw b U4 o th daughte boar (th no famou CD4024 whic i the sen t th 825 time cloc input Th outpu o time i the sen t th wire-wra socket at U11, which feeds it to the TNC board.

secon outpu o th CD402 i use t driv th 825 inpu cloc fo timer an 2 Thes timer ar optionall use t driv th tra (non-maskable an INT (maskable interrup input t th 808 CPU Sinc th output o th timer ar activ low the mus b inverte befor sendin the t th CPU Thi inversio i accomplishe b U42 74LS00 Thi I wa lef ove fro th origina Vancouve TN memor decoder I time interrupt ar no bein used the shoul b disable b removing U42.

Jumpe JP- i provide t allo th use t alte th standar inpu cloc rate t th 825 timer I i no anticipate tha thes nee t b changed s JP- i normall not altered.

Not tha i timer o ar use t generat time interrupts the mus b programme fo shor duratio pulse sinc th TRA an INT interrupt ar leve sensitive an wil continue to interrupt as long as the inputs are high.

.pa TROUBLESHOOTING

Sinc th Vancouve TN i complet microcompute system i ca b ver difficul t correc problem tha ma arise I ther i problem us th followin step a guidelin t troubleshoo th TN system I i helpfu t hav anothe TN board available for comparing, and also for chip swapping.

Certai o th followin step ca b ignore i tha par o th boar seem t b functioning If fo example th boar work wit th terminal bu wil no transmi o receiv ove th packe channel th whol TN i no defective bu rathe jus th HDL controlle o it suppor circuitry Th followin step ar mor t hel whe th whol TN seem t b out-to-lunch.

Step 1. Overall Tests

A.Mak sur tha al chip o th TN ar positione properly Th TN boar ha severa chip i differen orientations s i i eas t pu chi i backwards Als mak sur tha non o th pin o th chip i ben unde rathe tha i th socke hole Thi ca b don b lookin carefull dow th en o eac socket I pi i ben under remov th chip, bend the pin back, and re-install the chip.

B.I th TN function properl unti i trie t transmit
the eithe send stead tone o continua flag (th
eterna fram syndrome) replac th CD4024 an tr again
Thi chi i EXTREMEL sensitiv t static an i th numbe
one cause of TNC malfunctions that AMRAD has encountered.

C. Chec th powe suppl lines bot wit mete AN scope
Thre termina regulator hav habi o goin int
oscillation, which won't show up on a meter.

D.Chec th TN syste wit monito RO tha i know t
work Sometime EPROM forge bi her o there causin
strange results.

E. Doubl chec th jumper o bot boards I i no
immediatel obviou wha th prope jumpe configuratio o
th Vancouve TN boar should be i al cases.

F.Remov th daughte boar an re-instal th IC remove fro
th TNC Tr bringin u th TN withou th daughte boar
t identif wher th proble is preferabl usin monito
progra i 270 an RA a 1000H-1FFFH I th TN
functions normally, proceed to step 3, VDS-1 Troubleshooting.

.pa   TROUBLESHOOTING (CONTINUED)

Step 2. Vancouver Board Troubleshooting

A. Appl powe t th TN board Usin scope chec pi 3 o
U fo 2.457 MH clock Th actua frequenc i no
importan a thi time a lon a i i nice clea squar
wave I not tr installin coupl 20p capacitor fro
U pin an t ground Sometime th 808 need thes
capacitor t functio properly I tha doesn' correc th
problem replac th 808 (U1) an the th crysta i stil
no clock.

B.Pus th Rese button A lon a th butto i hel down
U pi 3 shoul b low an U pi shoul b high Th
following should also be true as long as reset is held down:

1) Data lines (pins 12-19) should be high.
2) Address lines (pins 21-28) should be 1V. or less.
3) Pins 31, 32, and 35 should be held high.
4) Pins 30, 34, 6, and 10 should be low.
5) Pins 7, 8, and 9 should be low, depending on other chips.

C.Consul you schemati i on o thes pin i no a th
proper level, and look over the TNC board for shorts.

D. Releas th Rese button U pi 3 shoul no g high an
pi shoul g low Th followin shoul als b checke

(sinc th addres an dat buse ar no buffered thes
signal wil no b idealy shape pulses):

1) Data lines should have alternating high-low pulses.
2) Address lines should have alternating ihgh-low pulses.
3) Chec th outpu pin o th addres latc (U6 t mak
sure it is latching the low-half address properly.
4) Mak sur th pin 30 31 32 an 3 als hav pulse
whe the are supposed to.
5) Typ character o th consol (assumin seria inter
face an loo fo U pi (RST5.5 t g hig o eac
keystroke.

E.Chec fo active-lo transition o th chi selec pin o
a leas th lo EPRO (U1 pi 20) Ther shoul als b
intermitten transition o th RA chi selec lines
depending on the program being run.

F. I nothin obviou ha be foun a thi point usuall th
nex ste i t star swappin chip betwee functiona TN
an th defectiv board I al th chip hav bee changed
an th boar stil fail t operate i i tim t chec th
boar wit mete fo short o ba sockets
.pa   TROUBLESHOOTING (CONTINUED)

Step 3. Daughter Board Troubleshooting

     Not tha al pi number fo EPRO an RA chip mentione
belo (excep fo U18 ar assumin 2 pi sockets sinc tha i
wha th daughte boar i laye ou for Tak thi int accoun
when testing 24 pin devices in the 28 pin sockets.

A. Mos problem associate wit th daughte boar hav t d
wit th interconnection betwee i an th TN board Mak
sur onc agai tha al socket ar soldere properly an
that all the pins line up in the proper holes.

B.Remov U42 i installed Thi wil mak sur n spuriou
interrupt ar bein generate b th 825 timers U4
shoul b installe ONL i softwar i include t suppor
timed interrupts.

C.Mak sur tha al th jumper o th daughte boar ar
correc fo th typ o memor bein used Th VDS- i
normall jumpere fo 273 EPROMs an 611 RAMs Se th
Options Setting section for more information.

D. Follo throug D i Ste above Perfor th test firs
o th 808 itself the o th botto o th TN board' U
socke t mak sur al th signal ar makin i throug th
jumpers ok.

E.Chec U1 pin t t mak sur al bit o th low-orde

address bus are getting from the TNC to the daughter board.

F. Chec th outpu o th addres decoders A minimum U30
pi 2 (EPRO chi select shoul b periodicall pulsin
low I addition U3 pi 2 shoul als b pulsin low
depending on the software being used.

G. A wit th TN boar itself th easies metho t procee
a thi poin i t swa al IC o th daughte boar wit
on tha i functiona (i migh b goo t tr th othe
daughte boar first) I problem persist carefull g
over the daughter board for shorts of bad solder joints.

.pa   SOFTWARE SUPPORT

     Ther ar fe modification tha mus b mad t an
softwar befor runnin i o Vancouve TN wit th VDS-
installed Thes hav t d wit large EPRO space relocate
an large RAM softwar contro o th packe channe speed an
optionally timed interrupts.

EPROM SUPPORT

     Actually n change nee t b mad fo th EPRO spac
itself bu th additiona EPRO spac mean tha al RA
location equates need to be changed.

RAM SUPPORT

     Mos o th program writte fo th Vancouve TN us tw
equate fo th RAM on fo th beginnin an th othe en o
RA memory Al othe reference t RA memor location ar
mad base o thes tw equates Whe usin th VDS-1 al RA
start a locatio 8000H Usin fou 611 typ RA chips RA
wil en a 9FFFH Thi mean th tw equate ar no a
follows:

```
     LORAM     EQU  8000H     ; Start of RAM memory
     HIRAM     EQU  9FFFH     ; End of RAM memory
```

     I addition tw othe equate mus b change i th
LIPM.AS fil t mak i wor properly Th orde o thes
equates is now reversed, and they MUST be in this sequence:

```
     LBALEN    EQU  (HIRAM-LBA)/2  ; LENGTH OF LINE BUFFER AREA
     LBAEND    EQU  (LBA+LBALEN)   ; NEXT BYTE AFTER LINE BUFFER
```

TIMER SUPPORT

     Sinc th packe channe bau rat i no controlle b
software som softwar mus b provide t se th packe speed
I addition th time mus b initialize befor an spee ca
b selected Th mos rudimentar for o cod t d thes

functions at 1200 baud is as follows:

```
     CTR0      EQU  28H  ; COUNTER 0 PORT
     CTR1      EQU  29H  ; COUNTER 1 PORT
     CTR2      EQU  2AH  ; COUNTER 2 PORT
     CTRPRM    EQU  2BH  ; COUNTER PARAMETER PORT

CTRIN:    MVI  A,36H     ; CTR0, SQUARE WAVE, BINARY MODE
          OUT  CTRPRM    ; SEND IT TO THE PARAMETER PORT
          MVI  A,20H     ; LOW HALF DIVIDER FOR 1200 BAUD
          OUT  CTR0      ; SEND LOW HALF TO COUNTER 0
          MVI  A,0       ; HIGH HALF DIVIDER 0
          OUT  CTR0      ; AND SEND IT TO COUNTER 0
.pa                  SOFTWARE SUPPORT (CONTINUED)
```

Th followin i som informatio o programmin th 825 chip I i give i assembl forma t ai i installin i i software.

```
     CNTR02    EQU  80H  ; SELECT COUNTER 2 FOR PROGRAMMING
     CNTR01    EQU  40H  ; SELECT COUNTER 1 FOR PROGRAMMING
     CNTR00    EQU  00H  ; SELECT COUNTER 0 FOR PROGRAMMING
     RDLDBH    EQU  30H  ; READ/LOAD LOW BYTE FIRST, THEN HIGH
                         ; OF DIVIDER IN COUNTER SPECIFIED
     RDLDHI    EQU  20H  ; READ/LOAD HIGH BYTE ONLY OF DIVIDER
     RDLDLO    EQU  10H  ; READ/LOAD LOW BYTE ONLY OF DIVIDER
     CNTLAT    EQU  00H  ; LATCH THE COUNTER AT PRESENT COUNT
     MODE05    EQU  0AH  ; MODE 5 (HWARE TRIGGERED STROBE)
     MODE04    EQU  08H  ; MODE 4 (SWARE TRIGGERED STROBE)
     MODE03    EQU  06H  ; MODE 3 (SQUARE WAVE GENERATOR)
     MODE02    EQU  04H  ; MODE 2 (PULSE RATE GENERATOR)
     MODE01    EQU  02H  ; MODE 1 (PROGRAMMABLE ONE-SHOT)
     MODE00    EQU  00H  ; MODE 0 (INTERRUPT ON TERMINAL CNT)
     BCDCNT    EQU  01H  ; BCD COUNTER MODE (4 DECADES)
     BINCNT    EQU  00H  ; BINARY MODE (16 BITS).
```

I shoul b note tha eac counte i programme vi th contro port an tha th actua counte port ar use onl fo loading or reading the count of the timer.

Consul th Inte 825 dat sheet fo mor informatio o programming the 8253.

Th nex tabl contain th BINAR divide t loa int th 8253 timer 0 for most common baud rates.

SPEED	Low Half Divider	High Half Divider
9600	04H	00
4800	08H	00

```
     !   2400      !         10H       !         00        !
     !   1200      !         20H       !         00        !
     !    600      !         40H       !         00        !
     !    300      !         80H       !         00        !
     !    150      !         00H       !         01H       !
     !     75      !         00H       !         02H       !
     ----------------------------------------------------

.PA                         VDS-1 PARTS LIST


     Th followin i  lis o part necessar fo th
construction of the AMRAD VDS-1 Daughter Board.


QUANTITY  PART NUMBER         DESCRIPTION
-------------------------------------------------------------

     1    VDS-1               AMRAD Daughter PC Board.
     1    74LS138             1 of 8 Decoder IC
     1    8253                Programmable Interval Timer IC
     1-4  2716,2732,2764      EPROM Memory IC (depending on size)
     1-4  6116,6264,2186      RAM Memory IC (depending on size)
     1    40 Pin Wire-Wrap    IC Socket
     1    24 Pin Wire-Wrap    IC Socket
     1    16 Pin Wire-Wrap    IC Socket
     1    14 Pin Wire-Wrap    IC Socket
     8    28 Pin Solder-Tail  IC Socket (optionally 4 Solder-Tail
                              an  ZI socket fo EPROMs)
     1    24 Pin Solder-Tail  IC Socket
     2    16 Pin Solder-Tail  IC Socket
     2    14 Pin Solder-Tail  IC Socket
     3    14 Pin Solder-Tail  IC Socket (Options)
     3    14 Pin DIP Headers  (Options)
     1    47uF 10V Electrolytic Capacitor (value not critical)
     6    .1uF 50V  Disc Capacitor

.pa--


=====================================================================
signed: Rod Hart (wa3mez)
        Chesapeake & Potomac Tel. Co.
        Bell Atlantic Inc.
        Silver Spring, Md.
        gamma!cp1!hart - umcp-cs!cp1!hart - aplvax!cp1!hart
=====================================================================


From 9009226477235757911
X-Google-Language: ENGLISH,ASCII-7-bit
```

X-Google-Thread: 151e61,4759bc94133a83c1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-05 20:49:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mit-athena.ARPA
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!dual!amd!decwrl!decvax!mit-athena!yba
From: yba@mit-athena.ARPA (Mark H Levine)
Newsgroups: net.ham-radio
Subject: Re: Ham call changes?
Message-ID: <229@mit-athena.ARPA>
Date: Sun, 5-Aug-84 23:49:36 EDT
Article-I.D.: mit-athe.229
Posted: Sun Aug 5 23:49:36 1984
Date-Received: Wed, 8-Aug-84 19:13:36 EDT
References: <436@auvax.UUCP>
Organization: MIT, Project Athena, Cambridge, Ma.
Lines: 12

I don't understand; FCC only changes a call if you request it these
days. In the old days they only changed your district if you moved
your primary station license. An up to date mailing address and a
secondary station in portable operation would keep your call.

I've only been at it about ten years, but mostly in New England, in
two license classes, in ten locations, with the same call always.
What's confusing? A call sign should say something about the
licensee? (de WA2YBA/1).

--
yba%mit-heracles@mit-mc.ARPA   UUCP: decvax!mit-athena!yba

From -4643349661203702851
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a97b349939ad674
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-06 08:05:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!linus!philabs!cmcl2!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Re: R 390A/URR
Message-ID: <3821@brl-tgr.ARPA>
Date: Mon, 6-Aug-84 11:05:44 EDT
Article-I.D.: brl-tgr.3821
Posted: Mon Aug 6 11:05:44 1984
Date-Received: Wed, 8-Aug-84 00:28:10 EDT
References: <412@tesla.UUCP>
Organization: Ballistics Research Lab
Lines: 8

There's a newsletter out that was originally devoted to the R-390, and which has recently expanded to cover all varieties of tube receivers. It is now named "The Hollow State Newsletter" (as opposed to solid-state, of course). I don't have the address handy, but it was in a recent issue of Review of International Broadcasting. I'll post it as soon as I find it.

Will

From -4748951484150612639
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cf61f19533c64121,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-06 09:32:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 9/27/83; site hplabsc.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!hplabs!hplabsc!labelle
From: labelle@hplabsc.UUCP (WB6YZZ La Belle)
Newsgroups: net.ham-radio
Subject: 2 meter multimode rig -Yaesu ft290r
Message-ID: <2068@hplabsc.UUCP>
Date: Mon, 6-Aug-84 12:32:45 EDT
Article-I.D.: hplabsc.2068
Posted: Mon Aug 6 12:32:45 1984
Date-Received: Wed, 8-Aug-84 19:38:50 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 24

I have had a Yaesu FT-290R multimode portable 2-meter rig for 2yrs now and am still thoroughly pleased with it!

Don't like-
1) Does not remember repeater offset.

Do like-
1) Fully self contained, I use it mobile from the cigarette lighter, base from a power supply, and portable with the 8 self contained C cells.

2) One knob memory channel select for quick mobile QSY

3) Backlit LCD display- superior to LED's in sunlight and lower in power consumption when portable.

4) multimode capability

GEORGE WB6YZZ

From 8820916820563074824
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3e6feee9e0439dd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-06 11:28:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: 220 mhz RM numbers
Message-ID: <119@mouton.UUCP>
Date: Mon, 6-Aug-84 14:28:02 EDT
Article-I.D.: mouton.119
Posted: Mon Aug 6 14:28:02 1984
Date-Received: Wed, 8-Aug-84 08:08:12 EDT
Organization: Bell Communications Research, Inc
Lines: 24

Thanks to Mike, K6ICS for this information.

There are actually TWO RM's (Rulemaking petitions) involved. The first
is RM 4829, "Reassignment of 220-225 MHz to Land Mobile", and the second
is RM 4831, "Reassignment of 216-222 Mhz for Sideband Technology
Development". I do not have copies yet of the two RMs, but will get
them ASAP. However, from what I've seen in the trade press, I believe
the LMCC (the Land Mobile industry trade group) is behind these. Their
demands don't stop at 220 mhz; they also want the 900 mhz "reserve" bands
which are already being requested by land mobile satellite developers,
along with more UHF TV channels.

My personal feeling is that the best place to get spectrum for land mobile
IS UHF TV -- at least we agree there. Even in large metropolitan areas,
most of the spectrum is idle. With the enormous success of cable TV,
MDS and video recorders, the demand for commercial TV broadcast spectrum
is (or should be) much reduced.

I suspect that if we all sing the same tune ("Get it from the broadcasters!")
then we might get the message across. Even if they got the whole 220 mhz
band, that's still less than ONE television channel, and there are a lot
of 'em above 470 mhz...

73, Phil

From 7079042302551037273
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f698c60444f0926,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-06 21:51:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pitt.UUCP

Path: utzoo!linus!decvax!mcnc!idis!pitt!hoffman
From: hoffman@pitt.UUCP
Newsgroups: net.ham-radio
Subject: NYC area packet/simplex coordination
Message-ID: <595@pitt.UUCP>
Date: Tue, 7-Aug-84 00:51:57 EDT
Article-I.D.: pitt.595
Posted: Tue Aug 7 00:51:57 1984
Date-Received: Thu, 9-Aug-84 01:05:51 EDT
Organization: Univ. of Pittsburgh, C. S. Dept.
Lines: 77

The following item was forwarded from the CompuServe HamNet SIG
bulletin board. I thought it might be of interest to the net,
especially in light of the 220 MHz controversy.

     73,
     ---Bob/N3CVL

 #: 22496   Sec. 9 - Packet/RTTY/AMTOR
Sb: Coordination changes
    03-Aug-84 20:15:15
Fm: NORM W2JUP 74055,140
To: ALL

On 8/1/84, the Board of Directors of TSARC, the Tri-State Amateur Repeater
Council, meeting in Executive session, took the unprecedented step of
reversing its original position on the coordination of non-traditional modes
such as packet radio, RBBS and MSO systems and simplex auto-patches. TSARC had
originally decided that such operations, because of their simplex,
single-emitter concepts, did not really relate to the coordination philosophy
already in place for repeaters using the classic two-channel input/output
frequency structures and principles, and that consideration of requests for
coordination would have been inappropriate.

After much discussion and deliberation, the Board voted to give full
consideration to the coordination of such simplex operations as packet radio,
radio bulletin board systems (RBBS), message storage operations (MSOs),
mailbox systems, and legitimate simplex autopatches, and resolved to:

1. Establish the concept of the coordination of certain specific
    VHF and UHF channels based on the mode of operation, as well as
    geographical area and physical separation considerations;

2. Recognize, acknowledge and support the use of the frequency
    145.010 as a de facto East Coast standard, and to formally
    recommend that 145.010 be reserved for exclusive use by stations
    operating packet radio systems;

3. Recognize the requirements for a special wide-band channel
    coordination and allocation in the 220 MHz band, and establish
    and coordinate a single 100-KHz wide channel from 220.500 to
    220.600 MHz for exclusive use by packet radio systems, possibly

for 56 kbit/s packet radio trunk and backbone services.

This last item was given exceptional urgent emphasis and attention in view of the recent public statements by Robert Foosaner, Chief of the FCC's Private Radio Branch. In his speech at the FCC Forum at the recent ARRL National Convention in New York City, Mr. Foosaner clearly outlined the need for allocations of additional new channels in the Land Mobile Service, and that the Commission would be looking at all parts of the spectrum for suitable frequencies, including the possible re-assignment of some portions of the amateur radio band at 220 MHz. The Board noted that certain commercial interests had already filed formal petitions asking specifically that the Commission re-assign the frequencies 216 to 222 MHz to the Land Mobile Service.

It was the Board's very strong feeling that the coordination of the 100-KHz channel 220.500 to 220.600 MHZ would conform to the requests and needs of amateur operators working in the most sophisticated technologies, and clearly demonstrate to the Commission that the Amateur Service's most advanced technologies were finding a home in the lower portion of the 220 MHz band, establishing maximum visibility and credibility, something that has not been noteworthy in past years on 220.

The Board also established a requirement for the re-evaluation, and revision of existing TSARC recommended technical operating standards, including immediate efforts to study and incorporate new technical operating information appropriate to the packet radio, RBBS/MSO and other non-voice operating modes. TSARC welcomes and encourages input, comment and suggestions from other coordinating councils in these matters. Comments of a technical nature can be mailed to:

Norman Sternberg, W2JUP Vice-Director (516), TSARC Box 125, Farmingville, NY 11738
--
Bob Hoffman
Pitt Computer Science

From 4630187285461505311
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a97b349939ad674
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-07 06:12:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!tektronix!hplabs!hao!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: More on R 390A/URR (Hollow-State Newsletter address)
Message-ID: <3848@brl-tgr.ARPA>
Date: Tue, 7-Aug-84 09:12:51 EDT
Article-I.D.: brl-tgr.3848

Posted: Tue Aug 7 09:12:51 1984
Date-Received: Sun, 12-Aug-84 01:41:20 EDT
References: <412@tesla.UUCP>, <3821@brl-tgr.ARPA>
Organization: Ballistics Research Lab
Lines: 17

Here is the info on the Hollow State Newsletter, from the February '84
issue of Review of International Broadcasting, pg 11:

HOLLOW STATE NEWSLETTER is new name for R390 Newsletter, reflecting its
expansion to cover technical information about all tube-type receivers,
the R390 having been pretty well exhausted in first three issues. Covers
modifications, where to get parts, anecdotes, etc. $4 for one year/ four
issues. At least four back issues available for $1 each. Subscription
address: Chris Hansen, PO Box 1226, New York, NY 10159

(Editorial address: Skip Arey, PO Box 421, Mount Holly, NJ 08060)

This ought to be of use to anyone with a tube-type receiver. I intend to
subscribe and order all the back issues, myself. Now if I would just
get around to doing it...

Will

From -5247206025776542381
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f6b74884621a15b1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-07 13:43:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 28
Message-ID: <11320@mgweed.UUCP>
Date: Tue, 7-Aug-84 16:43:21 EDT
Article-I.D.: mgweed.11320
Posted: Tue Aug 7 16:43:21 1984
Date-Received: Wed, 8-Aug-84 08:34:23 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 46

qst de k9eui
hr dx bulletin nr 28   from arrl headquarters   newington ct
august 3 1984   to all radio amateurs bt

cambodia. xu1ss is again being worked from the east coast on
sundays at 1200z on 14245 khz. he has been weak but workable.

ethiopia. there has been activity from et3ps on 14170 khz at

0130z.

wallis island. fw0bj has been worked on 14170 khz at 0500z and on 21290 khz between 2000 and 2200z.

haiti. joe, hh2q, expects to be active through august 10 and then from september through the remainder of the year. qsls go to i2yae.

crete. w0pu/sv9 has been worked on 7007 khz at 0100z.

st. martin. mort, pj8uq, plans to operate ssb and rtty until early september. qsl via w3hnk.

corsica. look for f0ch/tk at 2200z on 14195 khz.

niger. 5u7ld was very active over the weekend on 14218 khz around 2230z.

swaziland. fred, 3d6am, was worked long path last weekend on 14170 khz at 1230z.

india. vu2sv has been worked on 40 cw. watch 7006 khz at 0100z.

mauritius. 3b8cd is active on 7002 khz at 0300z.

nigeria. look for kc7uu/5n8 at 1800z on 14028 khz.

paraguay. zp5xdw has been active on 14025 khz at 0200z. qsls go via n4dw.

algeria. 7x2fk may be found on 7001 khz at 0300z.

itu geneva. dk7ae, dk7ah and dk8ag plan to keep 4u1itu active during the wae contest on august 11 and 12. ar

From -8492196526145736573
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b20600e4116cc00a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-07 17:51:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: scanner law exemptions for hams
Message-ID: <2340@ihuxf.UUCP>
Date: Tue, 7-Aug-84 20:51:07 EDT
Article-I.D.: ihuxf.2340
Posted: Tue Aug 7 20:51:07 1984

Date-Received: Wed, 8-Aug-84 08:44:38 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 29

x

State Scanner Law Exemptions for Hams

In a new one page summary sheet of state scanner laws published by SCAN, the following states accord radio amateurs exemptions from scanner prohibition laws:

Florida, Indiana, Michigan, New Jersey (Tech Class or higher), New York

There are, however, several states that do not include any exclusion for radio amateurs.

This chart is available for $1 by writing:

SCAN Scanner Laws
240 Fencl Lane
Hillside, IL 60162

The July/August 1984 issue of SCAN Magazine contains a more detailed article, "Mobile Scanner Laws", by C. Keith Pettigrew, Attorney at Law. This article contains statute/state code numbers for several laws.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -2581506850255849407
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,98dc71d25cd9219f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-07 19:16:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site noao.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!down!astrovax!noao!jacoby
From: jacoby@noao.UUCP
Newsgroups: net.ham-radio
Subject: Propagation Prediction Codes
Message-ID: <372@noao.UUCP>
Date: Tue, 7-Aug-84 22:16:20 EDT
Article-I.D.: noao.372
Posted: Tue Aug 7 22:16:20 1984
Date-Received: Thu, 9-Aug-84 03:07:05 EDT
Organization: Natl. Optical Astronomy Obs. Tucson AZ USA
Lines: 10

Does anyone have a good (reasonably accurate) program
for predicting propagation on HF?

Any language will do (BASIC, C, FORTRAN, Pascal).

Thanks in advance,
George
WD6BBQ
ihnp4!noao!jacoby

From 5766449168425967533
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b183f473dab3846e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-08 06:45:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxf!signal
From: signal@houxf.UUCP (J.BODDIE)
Newsgroups: net.ham-radio
Subject: Space Operation
Message-ID: <766@houxf.UUCP>
Date: Wed, 8-Aug-84 09:45:18 EDT
Article-I.D.: houxf.766
Posted: Wed Aug 8 09:45:18 1984
Date-Received: Thu, 9-Aug-84 03:10:54 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 26

x

In reviewing the FCC regulations recently, I ran across the following
question:

> 97.403 (a) Definition of Space Operation.
> Space-to-earth and space-to-space, Amateur Radio communication
> from a station which is beyond, is intended to go beyond, or
> has been beyond the major portion of the earth's atmosphere.
>
> 97.407 Eligibility for space operation.
> Amateur Radio stations licensed to Amateur Extra Class operators
> are eligible for space operation (see 97.403(a)). The station
> licensee may permit any Amateur Radio operator to be the control
> operator, subject to the privileges of the control operator's
> class of license (see 97.7).

My 1983 Callbook lists W5LFL as an Advanced Class licensee. Did Owen
get a waver of 97.407 from the FCC, or am I missing something here?

-73-
Jim Boddie
KC2VQ

houxf!signal

From 2248045890276703886
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7d97b57e5df3d8fd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-08 15:21:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbneb.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!cbosgd!cbscc!cbneb!adm
From: adm@cbneb.UUCP
Newsgroups: net.ham-radio
Subject: wanted transmitter - (nf)
Message-ID: <1194@cbneb.UUCP>
Date: Wed, 8-Aug-84 18:21:27 EDT
Article-I.D.: cbneb.1194
Posted: Wed Aug 8 18:21:27 1984
Date-Received: Thu, 9-Aug-84 04:53:58 EDT
Sender: adm@cbneb.UUCP
Organization: AT&T Bell Laboratories, Columbus, OHIO
Lines: 19

#N:cbnap:14800005:000:381
cbnap!gws   Aug 8 16:25:00 1984

WANTED TRANSMITTER

I am looking for a 227 KHZ <- note KHZ.. transmitter. It need be
but a few mili-watts at the most. need a range of about 20 feet.
Also it would be nice if it could be put into a small package
and be battery powered.

cbnap!gws
Gary W. Sanders N8EMR
AT&T Bell LAbs Columbus,Ohio
PH: 614-457-4595 (h)
PH: 614-860-4595 (w)

From 4805633779155216585
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9125141fee940b37,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-08 21:49:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 (Tek) 9/26/83; site tektronix.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!dual!amd!decwrl!decvax!
tektronix!lfarr
From: lfarr@tektronix.UUCP (Larry Farr)
Newsgroups: net.ham-radio
Subject: R-4A for sale in Portland,OR
Message-ID: <3257@tektronix.UUCP>
Date: Thu, 9-Aug-84 00:49:00 EDT
Article-I.D.: tektroni.3257
Posted: Thu Aug 9 00:49:00 1984
Date-Received: Sat, 4-Aug-84 01:41:08 EDT
Organization: Tektronix, Beaverton OR
Lines: 9

Drake R-4A receiver with manual less speaker - $175.00
Overall condition is very good, tubes fine, all standard crystals.

I purchased an R-4C/T-4XC and don't need it anymore.

Larry Farr N7EYM   tektronix!lfarr

From 2451295985903396342
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c626d78c0027ac6,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,8c626d78c0027ac6,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1984-08-09 06:30:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site rdin.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!hao!seismo!cmcl2!philabs!rdin!abs
From: abs@rdin.UUCP
Newsgroups: net.ham-radio,net.wanted
Subject: Collins shortwave receiver for sale
Message-ID: <447@rdin.UUCP>
Date: Thu, 9-Aug-84 09:30:34 EDT
Article-I.D.: rdin.447
Posted: Thu Aug 9 09:30:34 1984
Date-Received: Mon, 13-Aug-84 00:21:41 EDT
Organization: Resource Dynamics Inc., New York
Lines: 16

For sale:

    ~1954 vintage Collins R-388 rack-mount general coverage
    shortwave receiver (military version of 51J3). Receives
    0.5-30.5 MHz in 30 bands, with 1 KHz dial precision. Still has
    original alignment tools and 51J3 instruction/service manual.
    Weighs about 40 lbs. Excellent condition. Serial number 227.

Price: $275 (negotiable). I will ship.

Andrew Siegel, N2CN
philabs!rdin!abs
home: 1235 First Ave. #7
New York, NY 10021
(212)535-2467
work: (212)486-9150

From -3968173742765156364
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e54f206c486d4880,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-09 10:39:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <123@mouton.UUCP>
Date: Thu, 9-Aug-84 13:39:22 EDT
Article-I.D.: mouton.123
Posted: Thu Aug 9 13:39:22 1984
Date-Received: Fri, 10-Aug-84 02:24:25 EDT
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84211.41941103
   Sun Jul 29 10:03:57.112 1984 UTC
Element set: 667
Inclination: 97.5941 deg
RA of node: 186.6578 deg
Eccentricity: 0.0002272
Arg of perigee: 8.5472 deg
Mean anomaly: 351.5773 deg
Mean motion: 15.26156843 rev/day
Decay rate: 1.696e-05 rev/day^2
Epoch rev: 15598
Semi major axis: 6862.416 km
Anom period: 94.354653 min
Apogee: 486.294 km
Perigee: 483.176 km
Ref perigee: 2401.42094406
   Sun Jul 29 10:06:09.566 1984 UTC
Beacon: 145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84211.48473784

```
   Sun Jul 29 11:38:01.349 1984 UTC
Element set:     112
Inclination:       25.7334 deg
RA of node:       186.4173 deg
Eccentricity:    0.6078114
Arg of perigee:   292.8558 deg
Mean anomaly:      15.6016 deg
Mean motion:    2.05850258 rev/day
Decay rate:      -1.35e-06 rev/day^2
Epoch rev:             848
Semi major axis: 26106.063 km
Anom period:    699.537622 min
Apogee:          35598.904 km
Perigee:          3863.779 km
Ref perigee:      2401.46368478
   Sun Jul 29 11:07:42.365 1984 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84215.24883283
   Thu Aug  2 05:58:19.156 1984 UTC
Element set:     38
Inclination:       98.2407 deg
RA of node:       277.3037 deg
Eccentricity:    0.0013666
Arg of perigee:   137.8962 deg
Mean anomaly:     222.3275 deg
Mean motion:   14.61888599 rev/day
Decay rate:        8.4e-07 rev/day^2
Epoch rev:            2243
Semi major axis:  7062.299 km
Anom period:     98.502718 min
Apogee:            703.221 km
Perigee:           683.919 km
Ref perigee:      2405.27499239
   Thu Aug  2 06:35:59.342 1984 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84198.33595451
   Mon Jul 16 08:03:46.469 1984 UTC
Element set:     99
Inclination:       82.9582 deg
RA of node:       116.9244 deg
Eccentricity:    0.0058083
Arg of perigee:   288.3767 deg
Mean anomaly:      71.0990 deg
Mean motion:   12.15587401 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11447
Semi major axis:  7987.329 km
```

```
Anom period:    118.461248 min
Apogee:           1674.547 km
Perigee:          1581.761 km
Ref perigee:      2388.31970745
   Mon Jul 16 07:40:22.723 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84209.02402404
   Fri Jul 27 00:34:35.677 1984 UTC
Element set:     211
Inclination:       82.9645 deg
RA of node:       120.1398 deg
Eccentricity:    0.0017974
Arg of perigee:   352.4837 deg
Mean anomaly:       7.5968 deg
Mean motion:   12.06671774 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11489
Semi major axis:  8026.650 km
Anom period:    119.336511 min
Apogee:           1663.293 km
Perigee:          1634.438 km
Ref perigee:      2399.02227524
   Fri Jul 27 00:32:04.581 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      84209.05746243
   Fri Jul 27 01:22:44.753 1984 UTC
Element set:     179
Inclination:       82.9595 deg
RA of node:       121.6148 deg
Eccentricity:    0.0010434
Arg of perigee:    25.9046 deg
Mean anomaly:     334.2556 deg
Mean motion:   12.05053139 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11474
Semi major axis:  8033.841 km
Anom period:    119.496805 min
Apogee:           1668.099 km
Perigee:          1651.334 km
Ref perigee:      2399.06339679
   Fri Jul 27 01:31:17.482 1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84198.75313849
   Mon Jul 16 18:04:31.165 1984 UTC
Element set:     85
Inclination:       82.9588 deg
RA of node:       118.7414 deg
```

```
Eccentricity:    0.0049938
Arg of perigee:   306.6685 deg
Mean anomaly:      52.9793 deg
Mean motion:   12.13562679 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11430
Semi major axis:  7996.217 km
Anom period:    118.658890 min
Apogee:           1671.555 km
Perigee:          1591.692 km
Ref perigee:      2388.74101182
   Mon Jul 16 17:47:03.421 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      84209.01207502
   Fri Jul 27 00:17:23.281 1984 UTC
Element set:     165
Inclination:       82.9588 deg
RA of node:       117.9368 deg
Eccentricity:    0.0021449
Arg of perigee:   310.4865 deg
Mean anomaly:      49.4372 deg
Mean motion:   12.08683717 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11508
Semi major axis:  8017.735 km
Anom period:    119.137867 min
Apogee:           1668.972 km
Perigee:          1634.577 km
Ref perigee:      2399.00071344
   Fri Jul 27 00:01:01.641 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      84212.22357436
   Mon Jul 30 05:21:56.824 1984 UTC
Element set:     284
Inclination:       82.9592 deg
RA of node:       121.9268 deg
Eccentricity:    0.0020570
Arg of perigee:    64.9866 deg
Mean anomaly:     295.3329 deg
Mean motion:   12.02946293 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11492
Semi major axis:  8043.225 km
Anom period:    119.706092 min
Apogee:           1698.923 km
Perigee:          1665.833 km
Ref perigee:      2402.23850693
   Mon Jul 30 05:43:26.999 1984 UTC
```

```
Satellite: noaa-7
Catalog number: 12553
Epoch time:      84196.35294411
   Sat Jul 14 08:28:14.371 1984 UTC
Element set:     268
Inclination:       99.0509 deg
RA of node:       168.0299 deg
Eccentricity:    0.0014288
Arg of perigee:    22.3125 deg
Mean anomaly:     337.8666 deg
Mean motion:   14.13060045 rev/day
Decay rate:       1.65e-06 rev/day^2
Epoch rev:           15769
Semi major axis:  7224.240 km
Anom period:    101.906498 min
Apogee:            859.423 km
Perigee:           838.779 km
Ref perigee:      2386.35729507
   Sat Jul 14 08:34:30.293 1984 UTC
Beacon:           137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84212.17103781
   Mon Jul 30 04:06:17.666 1984 UTC
Element set:     89
Inclination:       98.7051 deg
RA of node:       242.6561 deg
Eccentricity:    0.0015930
Arg of perigee:   292.3258 deg
Mean anomaly:      67.6231 deg
Mean motion:   14.22425282 rev/day
Decay rate:        5.8e-07 rev/day^2
Epoch rev:            6958
Semi major axis:  7192.454 km
Anom period:    101.235546 min
Apogee:            843.647 km
Perigee:           820.732 km
Ref perigee:      2402.15783206
   Mon Jul 30 03:47:16.689 1984 UTC
Beacon:           137.5000 MHz


From -9365849190407798
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a4d7da96b6f9323,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-09 15:19:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!ecn-ee!mahler
From: mahler@ecn-ee.UUCP
Newsgroups: net.ham-radio
```

Subject: packet inquire - (nf)
Message-ID: <2026@pur-ee.UUCP>
Date: Thu, 9-Aug-84 18:19:43 EDT
Article-I.D.: pur-ee.2026
Posted: Thu Aug 9 18:19:43 1984
Date-Received: Sat, 11-Aug-84 00:19:25 EDT
Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University
Lines: 21

#N:ecn-ee:14900006:000:519
ecn-ee!mahler   Aug 9 17:08:00 1984

[vox open delay]

Packet radio lives in West Lafayette Indiana. With
wb9qpg, kf9a, and n9drr up and running and n9nc waiting
on kit delivery. For those of you close by, try 146.580 MHZ.

Do any of the TAPR core group have access to uucp/usenet?
Do they read this group?

Is anybody working on, or know who is working on defining
or implementing above the ISO link layer? Who can I contact
to offer some time/help?

Please mail your reply. I will repost if alot of interest is shown.

tnxs & 73 ... Steve, N9DRR

From -1683837456760922257
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de3daa6621c00208,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-09 18:31:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cp1.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!dual!amd!decwrl!decvax!
mcnc!philabs!cmcl2!seismo!rlgvax!cvl!umcp-cs!aplvax!cp1!hart
From: hart@cp1.UUCP
Newsgroups: net.ham-radio
Subject: reposting of amrad vadcg doc
Message-ID: <756@cp1.UUCP>
Date: Thu, 9-Aug-84 21:31:47 EDT
Article-I.D.: cp1.756
Posted: Thu Aug 9 21:31:47 1984
Date-Received: Sun, 19-Aug-84 02:16:25 EDT
Organization: C & P Tel. Co., Balto., Md.
Lines: 1432

********* REQUESTED REPOSTING *********
.op

AMATEUR RADIO RESEARCH AND DEVELOPMENT CORPORATION (AMRAD)

VADCG TERMINAL NODE CONTROLLER (TNC) DAUGHTER BOARD VDS-1

INSTRUCTION MANUAL

JULY 1, 1984

NOTICE NOTICE NOTICE

Amateu Radi Researc an Developmen (AMRAD i not-for-profi organization incorporate i th Stat o Virginia AMRA i dedicate t th advancemen o th state-of-the-ar o Amateu Radi communications Thi boar wa designe b AMRA an Terr Fox WB4JF t allo th continuatio o th us o th Vancouve Amateu Digita Communication Grou (V.A.D.C.G. Termina Nod Controlle (TNC) Thi boar i sol a retrofi subsyste t th VADC TNC an a such n warrantie ar expresse o implied eithe fo it prope operation o th proper operation of the host TNC board.

I i requeste tha al user o thi boar suppor AMRA b joinin thi organization Tha wa al user wil receiv th AMRA_Newsletter whic wil contai updates corrections an enhancement t th VDS-1 alon wit wealt o othe informatio regardin packe radio an Amateu Radi i general.

To join AMRAD, send $15.00 to:

Amateur Radio Research and Development Corporation
William P. Pala, WB4NFB, Secretary
5829 Parakeet Drive
Burke, VA 22015

.pa.pn3

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.PA CIRCUIT FEATURES

Recently Th Amateu Radi Researc an Developmen Corporatio (AMRAD) originator o th no popula AX.2 packe radi protocol develope retrofi boar fo th Vancouve Termina Nod Controlle board originall develope b Dougla Lockhart VE7APU Usin th daughte boar (par numbe VDS-1) system designer ar no free fro th memor constraint o th origina board Thi translate int bette operatio fo th Vancouver TNC packe radi enthusiast.

Som o th advantage o th AMRA Vancouve Daughte boar system are:

* No modifications (jumpers or traces cut) required on the Vancouver board for normal operation

* No jumper wires to hook between the two boards. All connections necessary are done via wire-wrap sockets.

* From 8k (using 2716's) to 32k (using 2764's) of EPROM

* From 8k (using 6116's) to 32k (using 8k by 8 chips) of RAM

* Software programmable baud rate generator (using Intel 8253)

  Optiona us o time interrupt fo bette softwar control
  (requires cutting two traces on the TNC board)

* Position for up to six 16-pin sockets for user kludging

* Position for one 24-pin socket for user kludging

* General kludge area of 11 by 17 tenth-inch spaced holes

* Uses only two additional IC's (other than RAM and EPROM)

* requires no additional power supplies (in fact the minus
  five volt supply needed for the 2708's can be eliminated)

* Full documentation available.

* Priced inexpensively at only $25.00 for the bare board.
  (which is a Mil-Spec quality board)

To order a VDS-1 board, send $25.00 Plus $2.25 for shipping
(US funds) to:

Technetronics Systems Inc.
ATTN: Charles O. Phillips
6134 Columbia Pike
Falls Church, VA 22041

.pa VANCOUVER TNC BOARD CHANGES

I i no necessar t mak an change t th Vancouve TN board unless one or more of the following is true:

1. Use of timed interrupts from the 8253 are planned.

2. Th VADC TN boar wa originall assemble usin I socket wit smal holes Sinc th VDS- interface t th VADC TN throug wire-wra socket plugge int fou ke socket (U1 U9 U11 an U18 o th TNC thes socket mus b capabl o acceptin th large pin tha wire-wra socket have I thi i no th case th offendin socket(s mus b replace wit one that will work before using the VDS-1.

Thes change t th VADC TN ar easil accomplishe i necessary an wil no affec th operatio o th TN wit o withou th VDS- installed.

1. Allowing Timed Interrupts From The VDS-1 8253.

Th Inte 825 time chi contain thre indepententl programmabl timers On o thes i use t provid softwar contro o th packe channe bau rate Th othe tw ar availabl t th programme t provid time interrupt t th TNC Time i optionall wire t th non-maskabl Tra interrup inpu pi o th 808 CPU whil time i optionall wire t th maskabl INT interrup pi o th 808 CPU.

Unfortunately th VADC TN ha bot o thes pin shorte directl t groun (i additio t havin pull-dow resistors) I orde t us thes input t th CPU the mus firs b disconnecte fro ground Thi i accomplishe b cuttin tw trace o th TN board.

Th trac tha mus b cu t allo th Tra interrup i locate o th botto o th TN board nea pi o th 808 CP (U1) Se Figur 1 Cu 1 fo th exac locatio t plac th cut.

Figur als show th positio o th trac tha mus b cu t allo th INT t b used I i locate b pi 1 o U2 the 8255 Parallel Port IC. Cut the board as shown by Cut 2.
.pa VANCOUVER TNC BOARD CHANGES (CONTINUED)

2. TNC Socket Changes

A previousl mentioned certai socket (U1 U9 U11 an U1)o th TN boar MUS b abl t accep th large pin use o wire-wra I sockets

I an o th socket won' accep th wire-wra socke pins chang th socke i question Thi ca b lo easie than it sounds, using the following technique.

STEP 1 Remove the IC in the socket to be changed.

STEP 2 Tur th boar ove (componen sid down) an locat th socke i question Usin solde-sucke (o solde wick an low-wattag solderin iron carefull remov a muc o th solde a possibl o eac pin Th mor solde remove o eac pin th better bu don' spen lo o tim o eac pin o th trac ma com loos fro th board Afte al th pin hav bee hi once loo ove eac pin an tr onc agai t remov an remainin solder A thi point yo shoul b abl t se throug th hole a leas mos o th socket pins.

STEP 3 Usin smal pai o needle-nos pliers hea eac pi wit th solderin iron an wiggl tha pi wit th pliers Kee wigglin th pi a yo remov th solderin iro an th pi cool down I th solde wa sufficientl remove i th las step th pi shoul sta loos i th hol afte th pi cool down D thi

wit eac pi o th socket Don' worr i al th pin
don' becom loos a first a lon a mos are.

STEP 4 Tur th TN boar over Carefull pr ver smal
blade screwdrive betwee th P boar an th I
socket B carefu no t scratc th boar whil doin
this Remember th socke yo ar removin i t b
throw away s scratc i i necessar rathe tha th
TN board Whil pryin th socke awa fro th board
hea u an socke pin tha ma stil b soldere t th
board B alternatin th hea betwee an pin tha ar
stil soldere an carefull pryin wit th screwdriver
the socket should be walked out of the PC board holes.

STEP 5 Onc th socke ha bee removed g ove th hole o
th TN P boar wit solde wic t remov an solde
left behind.

STEP 6 Plac th ne socke o th TN board an solde i i
place Chec th ne socke t b sur ther ar n
solde bridges I i goo practic t re-instal th
remove I i th ne socke an chec th TN fo prope
operatio befor installin th VDS-1.
.pa   VDS-1 BOARD ASSEMBLY

Us th followin step-by-ste instruction t properl
assembl th VDS- daughte board Plac chec mar besid
each step as it is completed.

I orde t us th wire-wra socket a jumper betwee th
tw boards th hole o th daughte boar wer mad large tha
normal Thi ma mak i harde t solde th socket ont th
board Mak sur tha wheneve solderin socket t th daughte
boar ther i sufficien solde betwee th P eyele an th
socke pin Th us o small pointe ti o you solderin
iro wil help.

1. Plac fou 2 pi solder-tai socket i th RA position
(U34 U35 U36 an U37) Solde pin an 1 o eac
socke t hol i i place Whe al fou socket ar i
place solde th remainin pin o th fou sockets Chec
for solder bridges and cold solder joints.

2. Pu th followin solder-tai socket i thei position o
th boar an solde the i place:

A) 16 pin socket at U38.

B) 16 pin socket at U39.

C) 14 pin socket at U40.

D) 14 pin socket at U42.

E) 24 pin socket at U41.

3. Instal eithe fou 2 pi solder-tai sockets o fou 2 pi Zer Insertio Forc (ZIF socket a th fou EPRO locations U30 U31 U32 an U33 Solde pin an 1 o eac socke first t hol th socke i place The solde the remaining pins. Check for solder bridges.

.pa

NOTE: Whe installin th wire-wra socket i th nex steps b sur the ar mounte flus t th board an th pin ar no crooked I th socket ar no soldere dow flus t th board th pin wil b crooked causin alignmen problem durin boar installation.

4. Instal 4 pi wire-wra socke a U1 Notic tha pi i i th opposit directio a th res o th socket o th board Carefull solde th wire-wra socke t th daughter board, making sure there are no solder bridges.

5. Instal 2 pi wire-wra socke a U18 Carefull solde i t th daughte board makin sur ther ar n solde bridges Plac piec o tap ove th socket sinc n I will be installed in this socket.

6. Plac 1 pi wire-wra socke a U9 Not th placemen o pi 1 Solde al pin ont th daughte board.

7. Instal 1 pi wire-wra socke a U11 notin th placemen o pi 1 Solde th socke t th board checkin fo solde bridges Plac piec o tap ove thi socket since there will be no IC installed in it.

8. Instal th 4 uF 1 vol electrolyti capacito a positio C (nex t U18 (th valu o thi componen i ver non-critical) Solde th capacito t th board.

9. Instal th si . u bypas capacitor a C t C o th board, and solder them in place.

10. Befor installin th VDS-1 mak sur th vol bu i no shorte t groun a an poin b measurin th resistanc betwee th vol bu an groun wit volt-ohm-meter I shoul rea relativel lo a first the slowl ris t hig resistanc leve (dependin o th valu o C1).

11. I th VDS- passe visua inspection procee t th nex section of this manual (Installation and Checkout).

.pa

INSTALLATION AND CHECKOUT

Thi sectio describe ho t instal th VDS- o th VADC TN board B carefu no t ben an o th wire-wra pin ou

o alignment o th boar wil no fi a snugl a designed
A wit th VDS- assembl procedure chec of eac ste a i
is completed.

1. I th VDS- i t b altere fro it origina configuratio
a jumpe area JP-5 JP-6 JP-7 o th 8 RA device ar
t b used chec th Optio Setting sectio o thi manua
befor proceedin t th nex ste here Sinc thes jumpe
area ar "normalled o th bac o th VDS-1 th prese
jumpe trace mus b cu BEFOR th VDS- i installe ont
th TN board (except for JP-8).

2. Carefull remov th followin IC fro th VADC TN board
making sure they are not overly handled:

    A) U1, 8085, CPU chip.

B) U7, 74LS00, quad nand gate (part of memory decoding).

C) U8, 74LS138, one-of-eight decoder (memory decoder).

D) U9, 74LS138, one-of-eight decoder (port decoder).

E) U11, CD4024, binary counter (baud rate generator).
        (be careful with this IC, as it is very sensitive).

F) U15 thru U18, 2708 EPROM memory.

G) U19 thru U26, 2114 RAM memory.

3. Carefull positio th daughte boar ove th mai TN
board makin sur no t ben an o th wire-wra socke
pins Lin u th wire-wra pi sockets startin wit U1
D no pres th pin dow int th socket o th TN boar
yet jus hol the gentl i th socke holes Th daughte
boar ha bee designe ver carefull t mak sur tha th
wire-wra pin lin u properly I ther i proble wit
pi alignment on o mor o th socket ma hav bee
soldere i slightl crooke (thi happene o th VDS-
prototype) I th pin don' alig properly eithe th
socke shoul b re-soldered o th pin ca b ben
slightl usin pai o needle-nos pliers.

4.Afte U ha bee aligned chec U1 t se i th pin o
th opposit en o th VDS- ar als comin int prope
alignment I the are loo betwee th tw board an mak
sur U i als line u properly Lastly chec U1 a th
to o th boar fo prope pi alignment I ma b
necessar t mov th daughte boar aroun slightl t
accomplis prope alignmen o al pin o al sockets Tak
th extr tim t b sur al pin lin u withou havin t
stres eithe board a thi wil hel i th boar eve

need t b remove an re-installed.

5. Onc al th wire-wra pin lin u properl t th hole i
th socket o th VADC TN board plac th boar o
hard fla surfac an gentl pres o eac wire-wra socke
usin th followin sequenc unti yo fee th pin botto
ou i th TN sockes below

A) Pres th U socke dow first sinc th 4 pi socke
wil b th hardes t alig properly.

B) Next pres th U1 socke down makin sur th res o
th socket ar stil line u properly.

C) Now pres th U socke int it socke o th TN
board.

D) Lastly pres th U1 socke int it socke o th TN
board.

6. Mak sur a leas on o th switche o di switc S- o
th TN boar i ON I doesn' matte which a al th
necessar pin o th U1 socke ar shorte togethe o th
VDS-1.

7.Perfor on fina chec befor installin th IC o th
daughter board, looking over the following:

A) Mak sur al th wire-wra pin ar properl line u i
thei socke holes Mak sur non o th pin ar ben
int wron holes tw pin ar shorte together o
any of the pins are missin thir hole completely.

B) I i goo ide t tak fina readin o th
resistanc betwee th fiv vol buse an ground makin
sur ther ar n direc shorts I ther are remov
th VDS- fro th TNC an chec eac boar separatel
fo shorts.
.pa   INSTALLATION AND CHECKOUT (CONTINUED)

7. Install the following Integrated Circuits in their sockets:

A) 8085 CPU at U1.

B) 74LS138 port decoder at U9.

C) 74LS138 EPROM decoder at U38.

D) 74LS138 RAM decoder at U39.

E) CD4024 binary counter at U40.
        (Note that this chip seems very sensitive to static)

F) 8253 timer at U41.

G) RAM memory chips (minimum of 2) at U34 to U37.
        (minimum 2k parts RAM are U34 at RAM0, U35 at RAM1)

H) EPROM's as necessary in sockets U30 through U33.
        (U30 is ROM0, address 0000H)

I) D NO INSTAL U4 A THI TIME I i use onl fo
timed-interrupts an shoul b lef of durin initia
board checkout.

8. I shoul b note tha sinc th memor addres ha bee
altere t allo expande EPRO an RAM an sinc th packe
channe bau rat i no controlle wit softwar rathe tha
S-2 ne sofwar mus b use wheneve usin th VDS-1
Detail o softwar alteration t suppor th VDS- ar
provided in the Software Support section of this manual.

I i goo ide t us monito progra t tes th TN
syste afte installin th VDS-1 Thi way an problem
wit packe radi cod no functionin properl ca b trace
t software rathe tha hardware Ther ar differen
monito program availabl fo th TN baord I yo canno
obtai on fro loca packe enthusiast contac AMRA fo
softwar suppor (eithe 808 typ assembl languag file
unde CP/M o burne EPROMs) Not tha sinc AMRA i
voluntar organization EPROM ma no b immediatel
availabl (i othe words expec th possibilit o sligh
delay)
.pa   INSTALLATION AND CHECKOUT (CONTINUED)

Wheneve requestin EPRO suppor fro AMRAD b sur t
includ al necessar informatio suc as:

A) Station Callsign, including SSID.

B) Repeate Callsign (includin SSID's o an repeater t
be used as a default condition during power-up.

C) Ar repeater ar t b defaulte o o of a powe up.

D) Termina configuration Thi include termina speed
parit on/off parit type numbe o sto bits an i
thi TN i t b use a termina o hos computer
Norma operatio i 120 baud n parity on sto bit
and no repeaters.

E) Defaul packe channe bau rat a powe on Thi i
normally set to 1200 baud.

9. Appl powe t th TN board I al goe properly sign-
o messag shoul appea o th terminal I i does

instal th EPROM containin th packe radi code an tr
the out I the functio properly you TN boar i onc
agai read t snatc frame fro th air Tr monitorin a
activ packe channe fo while an connec t someon t
b sur tha al o th packe function ar workin
properly.

10. I yo boar doe no operat properly usin eithe th
monito progra o th packe code se th Troubleshootin
and Theory of Operation sections of this manual.

11. I timed-interrupt ar t b used instal U4 (74LS00) an
apply power. Check for proper interrupt operation.
.pa   Option Settings

     Th VDS- daughte boar i designe t b flexibl i th
typ an amoun o RA an EPRO i wil support I wil als
allo th timed-interrupt an packe channe bau rat t b
programme unde softwar control Ther ar severa jumpe
area provide o th boar fo alteratio o th standar
configuration Eac o thes options thei associate jumpe
locations, and default settings will be discussed here.

EPROM TYPE   DEFAULT TYPE 2732

     Th VDS- i designe t us 2716 2732 o 276 typ
EPROMs T alte th VDS- fro th defaul 273 type jumpe
JP-5 must be changed. Use the following steps to alter JP-5:

1. Tur th VDS- boar ove an locat JP- (nex t th
74LS13 EPRO decoder U38) Notic tha ther ar P trace
betwee severa pin o JP- tha ar slightl thinne tha
mos o th other i tha are o th board Usin a Xact
knife carefull cu th followin trace betwee th tw
pin of JP-5 as listed:

A) Cut trace between JP-5 pins 1 and 14.

B) Cut trace between JP-5 pins 2 and 13.

C) Cut trace between JP-5 pins 3 and 12.

D) Cut trace between JP-5 pins 4 and 11.

Instal 1 pi solder-tai socke a JP- an solde i i
place.

Configur 1 pi DI heade fo th prope typ o EPRO
memory chips as follows:

A) 2716 type EPROMs. Wire the following pins together:

Pin 4 to pin 14 (Address line A11 to U38 address A0).

Pin 1 to pin 13 (Address line A12 to U38 address A1).
Pin 2 to pin 12 (Address line A13 to U38 address A2).
Pi 1 t pi 11 (+ volt t 271 pi 23).

B) 2732 type EPROMs. Wire the following pins together:

Pin 1 to pin 14 (Address line A12 to U38 address A0).
Pin 2 to pin 13 (Address line A13 to U38 address A1).
Pin 3 to pin 12 (Address line A14 to U38 address A2).
Pin 4 to pin 11 (Address line A11 to 2732 A11).
.pa   OPTION SETTINGS (CONTINUED)

C) 2764 type EPROMs. Wire the following pins together:

Pin 2 to pin 14 (Address line A13 to U38 address A0).
Pin 3 to pin 13 (Address line A14 to U38 address A1).
Pin 5 to pin 12 (Address line A15 to U38 address A2).
Pin 4 to pin 11 (Address line A11 to 2764 A11).

Instal th DI heade i th socke locate a JP-5 Th
resulting memory maps are as follows:

A) 2716 EPROM memory map:

0000H-07FFH	U30 (EPROM 0).
0800H-0FFFH	U31 (EPROM 1).
1000H-17FFH	U32 (EPROM 2).
1800H-1FFFH	U33 (EPROM 3).

B) Default 2732 EPROM memory map:

0000H-0FFFH	U30 (EPROM 0).
1000H-1FFFH	U31 (EPROM 1).
2000H-2FFFH	U32 (EPROM 2).
3000H-3FFFH	U33 (EPROM 3).

C) 2764 EPROM memory map:

0000H-1FFFH	U30 (EPROM 0).
2000H-3FFFH	U31 (EPROM 1).
4000H-5FFFH	U32 (EPROM 2).
6000H-7FFFH	U33 (EPROM 3).

RAM TYPE   DEFAULT: 6116 TYPE

     I th RA memor chip use ar t b change fro th
default 6116 type devices, use the following procedure:

1. Tur th VDS- boar ove t th botto o th boar
(COPYRIGH 198 notice an locat JP- (nex t U39)
Locate and cut the following traces at JP-6:

A) Cut trace between JP-6 pins 1 and 14.

B) Cut trace between JP-6 pins 2 and 13.

C) Cut trace between JP-6 pins 3 and 12.

D) Cut trace between JP-6 pins 6 and 9.
.pa   OPTION SETTINGS (CONTINUED)

2. Instal 1 pi solder-tai socke a locatio JP-6 an
solder it in place.

3. Wir DI heade fo th typ o RA memor t b use
according to the following:

A) If 6116 type (2k by 8) devices are being used:

1) Wire pin 1 to pin 14 (Address line A11 to U39 A0).

2) Wire pin 2 to pin 13 (Address line A12 to U39 A1).

3) Wire pin 3 to pin 12 (Address line A13 to U39 A2).

4) Wire pin 6 to pin 9 (WR* to 6116 WR* pin).

B) If 6264 or 2186 RAM chips (8k by 8) are being used:

1) Wire pin 3 to pin 14 (Address line A13 to U39 A0).

2) Wire pin 4 to pin 13 (Address line A14 to U39 A1).

3) Wire pin 5 to pin 12 (Address line A15 to U39 A2).

4) Wire pin 1 to pin 9 (Address line A11 to RAM A11).

4. Place the appropriate DIP header into the socket at JP-6.

5. I 218 RA chip ar bein used als instal jumper a
location JP-9 JP-10 JP-11 an JP-1 o th BOTTO o th
VDS- board Th 218 typ RA chip ar actuall psuedo-
stati devices whic ma requir synchronizatio wit th
808 CPU Thes jumper hoo th 218 read line t th
808 read pin allowin memor synchronization.

6. The resulting memory map for the RAM memory is:

A) For 6116 type (2k by 8) devices:

8000H-87FFH	U34	(RAM 0)
8800H-8FFFH	U35	(RAM 1)
9000H-97FFH	U36	(RAM 2)
9800H-9FFFH	U37	(RAM 3)

B) For 6264 and 2186 type (8k by 8) devices:

8000H-9FFFH	U34	(RAM 0)
A000H-BFFFH	U35	(RAM 1)
C000H-DFFFH	U36	(RAM 2)
E000H-FFFFH	U37	(RAM 3)

TIMER OPTIONS

Ther ar thre independent softwar programmabl timer i th 825 time IC Th onl time tha mus b use i suppor o th VDS- daughte boar i time 0 whic i use t generat th bau rat o th packe channel Fo prope operation th 825 inpu cloc canno excee MHz Unfortunately th Vancouve TN maste cloc frequenc i 2.457 MHz Thi mean th maste cloc mus b divide befor sendin i t an o th cloc input o th 8253

I addition sinc th maximu diviso o sixtee bi counte i 65,53 an th inpu cloc woul no b 1.228 MHz th slowes resultin interrupt woul b abou 1 pe second wit n tri contro i tha rang (nex slowes woul b doubl that o 3 interrupts/sec.) Ther need t b bette wa o trimmin th numbe i interrupt pe second i timed-interrupt ar t b use effectively Thi i accomplishe wit U4 an JP-7.

Th output o U4 (CD4024 ar wire t pin 1 an thr o JP-7 Eac o thes pin i successiv divide-by-tw o th previou pin' frequency Th followin pin a JP- hav th accompanyin frequencies an ar normall jumpere t th followin inpu clock o U41:

Pin 1	1.2288 MHz (Baud Rate Generator input)
Pin 3	6144 KHz (Trap timer, INTR timer inputs)
Pin 4	3072 KHz
Pin 5	1536 KHz
Pin 6	768 KHz
Pin 7	384 KHz

Pi 1 o JP- i normall jumpere t th inpu cloc o time i U41 Thi provide a acceptabl cloc frequenc t time 0 whic i use a th bau rat generato fo th packe channel Othe output coul b use i necessary bu th nee fo thi i no anticipated.

Pi 1 o JP- i th inpu cloc t time o U41 Time optionall drive th Tra interrup inpu t th 808 CPU Th tra interrup i non-maskable s ther i n wa o disablin thes interrupt i th hardwar i enabled Usin th secon outpu o U4 usuall give enoug contro o th

resulting interrupt rate.
.pa OPTION SETTINGS (CONTINUED)

Pi 1 o JP- i th inpu cloc t time 2 an i als normall wire t th secon outpu o U40 Time optionall drive th INT interrup inpu t th 808 CPU Th INT pi generate maskabl interrupt whic allow th softwar t selectivel disabl thi interrupt A wit th Tra interrup above th secon outpu o U4 usuall give enoug contro ove the frequency of INTR interrupts.

I an o th timin parameter se b JP- ar t b altered i i recommende tha socke b installe a JP-7 an DI header b use t chang th defaul values Thi i accomplished as follows:

1. Tur th VDS- boar ove an locat jumoe JP- (nex t th U4 socket) Carefull cu th followin traces:

A) Pin 1 to pin 14

B) Pin 2 to pin 13

C) Pin 2 to pin 12

2. Plac 1 pi solder-tai socke a JP-7 an solde i i place.

3. Wire a DIP header as necessary for the alterations requied.

4. Plac th DI heade i th socke a JP-7 an tes ou th changes.

TIMED INTERRUPT ENABLES

Th outpu o th tw timer tha ar capab o generatin interrupt ar normall disable by no installin U4 (74LS00) I time interrupt ar t b used U4 shoul b installed Jumpe JP- i use t selectivel enabl onl on o th othe o th time interrupts a necessary JP- i normall jumpere o fo bot interrupts othe configuration ca b mad b cutting the traces ot the TOP of the board at JP-8 as follows:

1. Cut trace between pins 1 and 4 to disable Trap interrupts.

2. Cut trace between pins 2 and 3 to disable INTR interrupts.

Thes trace wer place o th TO o th VDS- boar t allow easy access to them.

Kee i min tha th timer MUS b properl programme befor time interrupt ar enabled otherwis improe operatio wil result Not tha timer an shoul b programme fo

puls operation rathe tha squar wave sinc th interrupt are level sensitive.

.pa THEORY OF OPERATION

I orde t bette understan ho th VDS- daughte boar interface wit th VADC TNC w wil firs delv int th VADC TN itself Sinc th origina manua supplie wit th VADC TN di no contai theor o operatio section w wil tr t fill in that gap to some degree here.

TNC HARDWARE OVERVIEW

Th VADC TN i actuall singl boar compute dedicate t changin dat betwee tw differen transmissio format (usuall asynchronou ASCI an HDL typ frames) Lik mos othe singl boar computers th TN ha Centra Processin Uni (CPU tha act a th brain o th computer EPRO memor tha contain th instruction fo th CPU RA memor t hol dat an contro informatio temporarily an som inpu an outpu (I/O device wit whic t communicat t th outsid world Se Figur 2 fo bloc diagra o th VADC TNC.

.pa THEORY OF OPERATION (CONTINUED)

CPU AND AND CPU SUPPORT CIRCUITRY

Th VADC TN boar use th Inte 808 CP chip Th 808 i a improve versio o th popula 8080 I i softwar compatibl wit th 8080 whic mean program writte fo th 808 wil usuall ru fin o a 8085

Th 808 CP ha built-i cloc generator O th VADC TN board 4.915 MH crysta i use t determin th cloc rate Thi frequenc wa probabl chose becaus i i multipl o mos o th standar bau rates Th interna oscillato divide thi frequenc i half resultin i a actua cloc rat o 2.457 MH (bot interna t th 808 an th res of the board).

Th 808 use multiplexe dat an lo hal addres bus Thi mean tha th dat an lowe portio o th addresse shar th sam se o pin o th 8085 I orde t accomplis this th 808 send specia signa out calle Addres Latc Enable o ALE wheneve addres informatio i o th AD0-AD lines O th TN board a eight-bi latc (U6 74LS373 i use t latc an hol th lo addres wheneve tol t b th AL pi fro th 8085.

Th 808 CP ha severa pin tha ca b use t directl contro th CP actions Som o thes ar th sam a th 8080 whil other ar ne t th 8085.

Th rese pi cause th CP t sto whateve i wa doing

an immediatel g t th beginnin o memory Thi pi shoul
b hooke t pushbutto typ switc s tha th operato ca
recover the board in case of a failure in program control.

     Ther ar severa interrup pin o th 8085 Interrupt
ar jus wha th nam implies i th associate pi i
asserted th CP wil temporaril suspen whateve i i doing
an d somethin els (whateve th interrup requested o th
CP i programme t do) Som interrupt ar controllabl
(maskable a t whethe th CP wil acknowledg an hono them
whil other th CP ha n contro ove (non-maskable) i whic
cas th CP MUS hono th interrupt Sinc ther ar severa
differen interrupts an eac ma occu a an time eac on i
assigne a orde o precedence Th interrupt o th TN baor
wil b discusse i increasin orde o importance.
.pa   THEORY OF OPERATION (CONTINUED)

     Th lowes priorit interrup i th INT pi o th 808
(pi 10) Thi pi i leve sensitive hig indicate
reques fo interrupt I i maskable allowin th CP t
ignor an INT requests I a INT interrup i allowe b th
CPU th CP wil indicat thi b assertin th Interrup
Acknowledg pi (INTA* low Th requestin devic ca the
forc a instructio (usuall cal o restart ont th dat
bus an th CP wil excut tha instruction Th VADC TN
normall ha thi pi tie low disablin th INT function.

     Th nex grou o interrupt ar th RS pins Thes pin
hav highe priorit tha th INT pin ar maskabl b th
CPU bu the operat slightl differently Whe on o th RS
pin i asserted i cause th CP t g t specifi locatio
i memory an execut instruction startin a tha locatio a
i cal t tha locatio wa requested Th memor locatio
called th typ o signa used th orde o priority an
sourc o th reques o th TN boar ar show below.

Interrupt	Memory	Signal	Priority	Interrupt Source
RST 5.5	002CH	High	Low	User Interface
RST 6.5	0034H	High	Middle	U10 (8273) TxINT
RST 7.5	003CH	Pulse	High	U10 (8273) RxINT

     Th highes priorit interrup o th 808 i th Tra
interrup (pi 6) I i non-maskable an generate restar
t memor locatio 0024H I i bot edg an leve sentitive
Th TN boar ha thi pi tie low disablin th Tra
interrupt.

     Th 808 CP als generate som timin signal neede fo
proper computer operation. These include:

IO/M*   Low for memory request, high for input/output
RD*   Low indicated a read function from memory or I/O

WR*   Low indicates a write function to memory or I/O
RESET OUT High indicates the CPU is being reset.

     Ther i als pi calle Ready whic i use t
synchroniz CP operatio wit slowe memory Thi pi i no
used on the original VADCG TNC board.
.pa   THEORY OF OPERATION (CONTINUED)

TNC EPROM MEMORY

     I orde fo th TN boar t functio properly th CP
mus b tol wha t d b program Thi progra i hel i
Erasable-Programmable-Read-Only-Memor (EPROM) Th TN use
fou 270 typ EPRO chips eac o whic hold 102 byte o
program fo tota o 409 byte (4k o progra memory

     Ther i memor decode circui mad u o U (74LS00 an
U (74LS138 tha determine wher i th CP memor th EPRO
(an RAM sinc th sam decode i use fo both i t reside

     Th memor ma fo a unmodifie TN boar is:

          0000H-03FFH   U15 (EPROM 0)
          0400H-07FFH   U16 (EPROM 1)
          0800H-0BFFH   U17 (EPROM 2)
          0C00H-0FFFH   U18 (EPROM 3)
          1000H-13FFH   U19, U20 (RAM 0)
          1400H-17FFH   U21, U22 (RAM 1)
          1800H-1BFFH   U23, U24 (RAM 2)
          1C00H-1FFFH   U25, U26 (RAM 3)
          2000H-FFFFH   Unused, copies of above map

     Th 74LS0 (U7 i use wit th addres decoder 74LS13
(U8) t decod memor read-onl cycle fo th EPROM an memor
read/write cycles for the RAM memory.

     Not tha th EPRO chip ar i th opposit sequenc tha
on woul assume tha i EPRO i th right-most no th
left-mos EPROM Th 270 EPROM requir +5V -5V an +12 t
operate properly.

TNC RAM MEMORY

     Fo th TN t functio properly i additio t EPRO
memor t stor th program ther mus als b som amoun o
temporar memor tha wil b use t stor th dat i need t
process Th TN boar use 211 typ RA chips whic ar 102
b bits Tw o thes chip ar neede t stor complet
bit wort o data Ther i roo fo fou bank o thes chips
fo tota o 409 byte o dat storage Th RA memor share
th sam memor decode circuitr wit th EPROM an i
discussed above.

Sinc th 808 CP use bidirectiona dat bus th IN/OU pin o th 211 chip ar connecte directl t th CP dat bus.

.pa THEORY OF OPERATION (CONTINUED)

TNC INPUT/OUTPUT

I orde fo th TN boar t function i mus ge dat fro th outsid worl t process an the sen th processe dat bac t th outsid worl whe done Thi functio i provide b th inpu an outpu device o th TN board Ther ar tw differen "channels fo dat t transfe betwee th TN an device connecte t it Th firs i th "use interface" an th secon i th lin o packe channel Eac on o thes channel i connecte t th TN CP throug specia ICs whic occup certai por location i th CP por addres space Eac o thes IC i als capabl o generatin interrupt t th CPU when it needs to be serviced.

Th I/ port use ar decode b U9 74LS138 I decode onl I/ por addresses whic ar mappe a follows:

00H-07H	U3	8250 Serial I/O Port (User Interface)
08H-0FH	U2	8255 Parallel I/O Port (User Interface-Optional)
10H-17H	U10	8273 HDLC Protocol Main Ports (Packet Channel)
18H-1FH	U10	8273 HDLC Protocol TX Data Port (Packet Channel)
20H-27H	U10	8273 HDLC Protocol RX Data Port (Packet Channel)
28H-FFH	Unused.	

Th use interface t th VADC TN boar eithe throug seria (RS-23 o curren loop o paralle port Mos o th softwar suppor fo th VADC TN use onl th seria interfac option an the onl a ASCII RS-23 typ o seria interface I woul hav bee nic t hav bee abl t us bot th seria an paralle chip simultaneously bu sinc the shar quit fe o th sam DB-2 connecto pins thi i impractica withou cuttin severa traces an addin anothe connector.

Serial User Interface

Th seria use interfac use a 825 Asynchronou Communication Elemen (ACE) Thi chi ha bot UAR an bau rat generato buil int it I additio t seria dat line i an out i als provide som o th handshakin line typicall foun i a RS-23 interfac (DSR DTR RTS CTS DCD an RI) Th TN boar ha RS-23 drive chip o i t optionall mak thes signal eithe TT o RS-23 voltag levels Sinc th AC chi i complicate device severa I/ port ar assigne t i fo prope programmin an operation

.pa THEORY OF OPERATION (CONTINUED)

These ports are designated as follows:

Port 00   Transmit/Receive Data Buffer Registers.
Port 01   Interrupt Enable Register (Write Only).
Port 02   Interrupt Identification Register (Read Only).
Port 03   Line Control Register (UART Functions).
Port 04   Modem Control Register.
Port 05   Line Status Register (UART Status).
Port 06   Modem Status Register.
Port 07   Baud Rate Divisor Latch Registers.

Parallel User Interface

     Th paralle use interfac use a 825 Programmabl Periphera Interfac (PPI) Thi devic ha 2 line o paralle data eac o whic i programmabl t b eithe input o outputs I addition som o thes line becom handshakin line whe programme properly allowin ful 1 bi paralle Input/Output system with complete strobing and acknowledgements.

     Th 2 line o th 825 ar organize a thre group o line (group A B an C) wit thir grou (C bein furthe divide int tw 4-bi subgroups Th programmin o thi chi i beyon th scop o thi manual howeve th Por ma fo thi device on the TNC is as follows:

Port 08H Port A Data Bus.
Port 09H Port B Data Bus
Port 0AH Port C Data Bus.
Port 0BH PPI Control Port.
Ports 0CH-0FH will be in same as above.

     Sinc virtuall n on i usin th paralle use interface these locations are generally ignored.

Packet Channel Interface

     Th packe channe interfac i handle b a Inte 827 HDL Protoco Controlle chip Th 827 i ver complicate inside i tha i automaticall handle lo o th HDL protoco functions suc a cloc recovery NRZ encoding/decoding zer bi insertion/removal an frame-check-sequenc (CRC generation/checking Sinc th packe channe send HDL frame i synchronou mod (n star o sto bits onc thi chi start sendin fram o data i mus continu unti al th dat o tha fram i sent Ther ca b n startin an stoppin i th middl o sendin frame Thi mean th 827 mus b capabl o gettin th attentio o th TN CP quickl wheneve fram i bein sen o received
.pa   THEORY OF OPERATION (CONTINUED)

     Becaus o this th 827 use th highes interrupt o th TN board Th transmi an receiv dat register als us separat port tha th res o th 8273 Th por ma o th 827 is:

10H 8273 Main Command/Status Register.
11H 8273 Parameter/Result Register.
12H 8273 Reset/Tx Interrupt Result Register.
13H 8273 Rx Interrupt Result Register.
14H-17H Same registers as above.
18H-1FH 8273 Transmit Data Register.
20H-27H 8273 Receive Data Register.

Th 827 doe no hav a interna bau rat generator s a externa divide mus b used U11 CD402 seve stag binar counte i use t divid dow th 2.4576MH cloc t th frequencie necessar fo th 827 t work Th 827 ha digita phase-lock-loo (DPLL tha i use t recove th dat timin o th packe channel Thi DPL need X3 cloc t functio properly Th output o U1 ar sen t switc S2 Onl on o th switche o S shoul b o a an give time Th output o U1 provid fo bau rate fro 38,40 bau t 60 baud.

Th 827 provide mos o th primar signal use i a RS-23 interfac (TXD RXD CTS RTS an DCD) I addition ther ar tw eac use programmabl inpu an outpu pins Th VADC TN feed thes signal t 1 pi DI socke a J4 Th othe hal o J lead t th RS-23 leve converte ICs whic the lead to the packet channel DB-25, J2.

Daughter Board Theory

Th VDS- daughte boar wa designe t replac th memor o th Vancouve TN board I addition i provide softwar contro ove th packe channe bau rate an th optio o tim generate interrupts.

Th VDS- interface t th Vancouve TN throug fou wire-wra socket tha plu int ke socket o th TN board Th firs one i at th CP socket U1 Th 808 CP no plug int th wire-wra socke o th daughte board Usin thi socket severa o th ke signal t an fro th CP ca b easil obtaine.
.pa THEORY OF OPERATION (CONTINUED)

Th nex socke tha plug int th TN i a U18 Thi use t b on o th 270 EPRO sockets Thi socke i use t recove th latche low-orde addres bu fro th latc (U6 o th Vancouve TNC I wa possibl t ad anothe latc o th daughte board bu tha woul hav increase loadin o th dat bu unnecessarily I addition pluggin int U1 provide structura suppor fo th VDS-1 Sinc th socke a U1 i used only as a jumper, there is not an IC that plugs into U18.

Th thir wire-wra socke betwee th tw board i a U9

th I/ por decoder Thi socke i use t ge th additiona por decode outpu fo th 825 time I a U41 U4 use port 28 t 2FH Th I tha wa plugge int U o th TN no plug into the daughter board U9 instead.

Th fourt wire-wra socke i a U11 Thi positio use t hav th CD402 bau rat generato plugge int it Sinc th bau rat i no generate b U41 ther i n I plugge int th U1 socke o th daughte board Not tha al th ol outpu pin o th CD402 ar no shorte together i doesn' matte whic switc a S i closed a lon a a leas on is.

VDS-1 EPROM Memory

Th VDS- boar ha fou socket fo EPRO use Th type o EPROM acceptabl b th VDS- ar 2716 2732 o 2764 Al fou EPROM mus b o th sam type ne EPRO addres decode i use o th daughte boar a U38 Th addres input t U3 com fro jumpe JP-5 JP- i pre-wire fo 273 typ EPRO decoding I EPROM othe tha 2732' ar t b used th trace o th bac o th VDS- mus b cu befor usin JP-5 See the Option Settings section for further details.

Not tha al thre type o EPROM usabl o th VDS- ru o +5 only s th othe tw voltage use b th 270 EPROM ar no neede fo EPRO use Th -5 i n longe neede a all s i ca b eliminated Th +12 i use b th RS-23 interfaces s i i stil needed Anothe advantag o gettin ri o th 2708' i tha th newe type o EPROM ru a higher speed, reducing the potential of timing problems.
.pa THEORY OF OPERATION (CONTINUED)

VDS-1 RAM Circuitry

separat RA memor decode (U39 74LS138 i no use o th VDS-1 Thi allow th RA chi siz t b differen tha th EPROM allowin greate syste flexibility Lik th EPRO decoder th RA decode addres input com fro jumpe (JP-6) Thi jumpe i pre-wire fo 611 typ devices Optionally 626 o 218 typ (8 b 8 device ca b used i JP- i altered Sinc th 218 i psuedo-stati devic (i i reall dynamic bu al suppor circuitr i insid th chip) i need t tel th CP wheneve i i no ready Thi i wh th jumper JP- thr JP-1 ar needed The allo th RA chip t tel th CP whe the ar no read yet an th CP add wai state unti th RA chip ar ready.

VDS-1 Timing Circuitry

On o th problem wit th origina Vancouve TN i tha th use mus chang switche t alte th bau rat o th packe channel I addition th slowes spee th TN boar run withou modificatio i 60 baud Thi i stil to fas

fo H packe operatio a th moment Th VDS- remove thi proble b replacin th CD402 binar counte an S wit programmabl time I (U41 a 8253) Th 825 ha thre separat programmabl timers on o whic i use t creat th cloc fo th 827 Protoco Controller Unfortunately th 825 ca onl handl inpu cloc speed u t MHz Th TN board' cloc i divide b tw b U4 o th daughte boar (th no famou CD4024 whic i the sen t th 825 time cloc input Th outpu o time i the sen t th wire-wra socket at U11, which feeds it to the TNC board.

secon outpu o th CD402 i use t driv th 825 inpu cloc fo timer an 2 Thes timer ar optionall use t driv th tra (non-maskable an INT (maskable interrup input t th 808 CPU Sinc th output o th timer ar activ low the mus b inverte befor sendin the t th CPU Thi inversio i accomplishe b U42 74LS00 Thi I wa lef ove fro th origina Vancouve TN memor decoder I time interrupt ar no bein used the shoul b disable b removing U42.

Jumpe JP- i provide t allo th use t alte th standar inpu cloc rate t th 825 timer I i no anticipate tha thes nee t b changed s JP- i normall not altered.

Not tha i timer o ar use t generat time interrupts the mus b programme fo shor duratio pulse sinc th TRA an INT interrupt ar leve sensitive an wil continue to interrupt as long as the inputs are high.

.pa TROUBLESHOOTING

Sinc th Vancouve TN i complet microcompute system i ca b ver difficul t correc problem tha ma arise I ther i problem us th followin step a guidelin t troubleshoo th TN system I i helpfu t hav anothe TN board available for comparing, and also for chip swapping.

Certai o th followin step ca b ignore i tha par o th boar seem t b functioning If fo example th boar work wit th terminal bu wil no transmi o receiv ove th packe channel th whol TN i no defective bu rathe jus th HDL controlle o it suppor circuitry Th followin step ar mor t hel whe th whol TN seem t b out-to-lunch.

Step 1. Overall Tests

A.Mak sur tha al chip o th TN ar positione properly Th TN boar ha severa chip i differen orientations s i i eas t pu chi i backwards Als mak sur tha non o th pin o th chip i ben unde rathe tha i th socke hole Thi ca b don b lookin carefull dow

th en o eac socket I pi i ben under remov th
chip, bend the pin back, and re-install the chip.

B.I th TN function properl unti i trie t transmit
the eithe send stead tone o continua flag (th
eterna fram syndrome) replac th CD4024 an tr again
Thi chi i EXTREMEL sensitiv t static an i th numbe
one cause of TNC malfunctions that AMRAD has encountered.

C. Chec th powe suppl lines bot wit mete AN scope
Thre termina regulator hav habi o goin int
oscillation, which won't show up on a meter.

D.Chec th TN syste wit monito RO tha i know t
work Sometime EPROM forge bi her o there causin
strange results.

E. Doubl chec th jumper o bot boards I i no
immediatel obviou wha th prope jumpe configuratio o
th Vancouve TN boar should be i al cases.

F.Remov th daughte boar an re-instal th IC remove fro
th TNC Tr bringin u th TN withou th daughte boar
t identif wher th proble is preferabl usin monito
progra i 270 an RA a 1000H-1FFFH I th TN
functions normally, proceed to step 3, VDS-1 Troubleshooting.

.pa   TROUBLESHOOTING (CONTINUED)

Step 2. Vancouver Board Troubleshooting

A. Appl powe t th TN board Usin scope chec pi 3 o
U fo 2.457 MH clock Th actua frequenc i no
importan a thi time a lon a i i nice clea squar
wave I not tr installin coupl 20p capacitor fro
U pin an t ground Sometime th 808 need thes
capacitor t functio properly I tha doesn' correc th
problem replac th 808 (U1) an the th crysta i stil
no clock.

B.Pus th Rese button A lon a th butto i hel down
U pi 3 shoul b low an U pi shoul b high Th
following should also be true as long as reset is held down:

1) Data lines (pins 12-19) should be high.
2) Address lines (pins 21-28) should be 1V. or less.
3) Pins 31, 32, and 35 should be held high.
4) Pins 30, 34, 6, and 10 should be low.
5) Pins 7, 8, and 9 should be low, depending on other chips.

C.Consul you schemati i on o thes pin i no a th
proper level, and look over the TNC board for shorts.

D. Releas th Rese button U pi 3 shoul no g high an pi shoul g low Th followin shoul als b checke (sinc th addres an dat buse ar no buffered thes signal wil no b idealy shape pulses):

1) Data lines should have alternating high-low pulses.
2) Address lines should have alternating ihgh-low pulses.
3) Chec th outpu pin o th addres latc (U6 t mak sure it is latching the low-half address properly.
4) Mak sur th pin 30 31 32 an 3 als hav pulse whe the are supposed to.
5) Typ character o th consol (assumin seria inter face an loo fo U pi (RST5.5 t g hig o eac keystroke.

E.Chec fo active-lo transition o th chi selec pin o a leas th lo EPRO (U1 pi 20) Ther shoul als b intermitten transition o th RA chi selec lines depending on the program being run.

F. I nothin obviou ha be foun a thi point usuall th nex ste i t star swappin chip betwee functiona TN an th defectiv board I al th chip hav bee changed an th boar stil fail t operate i i tim t chec th boar wit mete fo short o ba sockets
.pa   TROUBLESHOOTING (CONTINUED)

Step 3. Daughter Board Troubleshooting

     Not tha al pi number fo EPRO an RA chip mentione belo (excep fo U18 ar assumin 2 pi sockets sinc tha i wha th daughte boar i laye ou for Tak thi int accoun when testing 24 pin devices in the 28 pin sockets.

A. Mos problem associate wit th daughte boar hav t d wit th interconnection betwee i an th TN board Mak sur onc agai tha al socket ar soldere properly an that all the pins line up in the proper holes.

B.Remov U42 i installed Thi wil mak sur n spuriou interrupt ar bein generate b th 825 timers U4 shoul b installe ONL i softwar i include t suppor timed interrupts.

C.Mak sur tha al th jumper o th daughte boar ar correc fo th typ o memor bein used Th VDS- i normall jumpere fo 273 EPROMs an 611 RAMs Se th Options Setting section for more information.

D. Follo throug D i Ste above Perfor th test firs o th 808 itself the o th botto o th TN board' U socke t mak sur al th signal ar makin i throug th jumpers ok.

E.Chec U1 pin t t mak sur al bit o th low-orde address bus are getting from the TNC to the daughter board.

F. Chec th outpu o th addres decoders A minimum U30 pi 2 (EPRO chi select shoul b periodicall pulsin low I addition U3 pi 2 shoul als b pulsin low depending on the software being used.

G. A wit th TN boar itself th easies metho t procee a thi poin i t swa al IC o th daughte boar wit on tha i functiona (i migh b goo t tr th othe daughte boar first) I problem persist carefull g over the daughter board for shorts of bad solder joints.

.pa

SOFTWARE SUPPORT

Ther ar fe modification tha mus b mad t an softwar befor runnin i o Vancouve TN wit th VDS-installed Thes hav t d wit large EPRO space relocate an large RAM softwar contro o th packe channe speed an optionally timed interrupts.

EPROM SUPPORT

Actually n change nee t b mad fo th EPRO spac itself bu th additiona EPRO spac mean tha al RA location equates need to be changed.

RAM SUPPORT

Mos o th program writte fo th Vancouve TN us tw equate fo th RAM on fo th beginnin an th othe en o RA memory Al othe reference t RA memor location ar mad base o thes tw equates Whe usin th VDS-1 al RA start a locatio 8000H Usin fou 611 typ RA chips RA wil en a 9FFFH Thi mean th tw equate ar no a follows:

```
LORAM     EQU  8000H     ; Start of RAM memory
HIRAM     EQU  9FFFH     ; End of RAM memory
```

I addition tw othe equate mus b change i th LIPM.AS fil t mak i wor properly Th orde o thes equates is now reversed, and they MUST be in this sequence:

```
LBALEN    EQU  (HIRAM-LBA)/2  ; LENGTH OF LINE BUFFER AREA
LBAEND    EQU  (LBA+LBALEN)   ; NEXT BYTE AFTER LINE BUFFER
```

TIMER SUPPORT

Sinc th packe channe bau rat i no controlle b software som softwar mus b provide t se th packe speed

I addition th time mus b initialize befor an spee ca
b selected Th mos rudimentar for o cod t d thes
functions at 1200 baud is as follows:

```
     CTR0      EQU  28H  ; COUNTER 0 PORT
     CTR1      EQU  29H  ; COUNTER 1 PORT
     CTR2      EQU  2AH  ; COUNTER 2 PORT
     CTRPRM    EQU  2BH  ; COUNTER PARAMETER PORT

CTRIN:    MVI  A,36H     ; CTR0, SQUARE WAVE, BINARY MODE
          OUT  CTRPRM    ; SEND IT TO THE PARAMETER PORT
          MVI  A,20H     ; LOW HALF DIVIDER FOR 1200 BAUD
          OUT  CTR0      ; SEND LOW HALF TO COUNTER 0
          MVI  A,0       ; HIGH HALF DIVIDER 0
          OUT  CTR0      ; AND SEND IT TO COUNTER 0
```


Th followin i som informatio o programmin th 825
chip I i give i assembl forma t ai i installin i i
software.

```
     CNTR02    EQU  80H  ; SELECT COUNTER 2 FOR PROGRAMMING
     CNTR01    EQU  40H  ; SELECT COUNTER 1 FOR PROGRAMMING
     CNTR00    EQU  00H  ; SELECT COUNTER 0 FOR PROGRAMMING
     RDLDBH    EQU  30H  ; READ/LOAD LOW BYTE FIRST, THEN HIGH
                         ; OF DIVIDER IN COUNTER SPECIFIED
     RDLDHI    EQU  20H  ; READ/LOAD HIGH BYTE ONLY OF DIVIDER
     RDLDLO    EQU  10H  ; READ/LOAD LOW BYTE ONLY OF DIVIDER
     CNTLAT    EQU  00H  ; LATCH THE COUNTER AT PRESENT COUNT
     MODE05    EQU  0AH  ; MODE 5 (HWARE TRIGGERED STROBE)
     MODE04    EQU  08H  ; MODE 4 (SWARE TRIGGERED STROBE)
     MODE03    EQU  06H  ; MODE 3 (SQUARE WAVE GENERATOR)
     MODE02    EQU  04H  ; MODE 2 (PULSE RATE GENERATOR)
     MODE01    EQU  02H  ; MODE 1 (PROGRAMMABLE ONE-SHOT)
     MODE00    EQU  00H  ; MODE 0 (INTERRUPT ON TERMINAL CNT)
     BCDCNT    EQU  01H  ; BCD COUNTER MODE (4 DECADES)
     BINCNT    EQU  00H  ; BINARY MODE (16 BITS).
```

I shoul b note tha eac counte i programme vi th
contro port an tha th actua counte port ar use onl fo
loading or reading the count of the timer.

Consul th Inte 825 dat sheet fo mor informatio o
programming the 8253.

Th nex tabl contain th BINAR divide t loa int th
8253 timer 0 for most common baud rates.

SPEED	Low Half Divider	High Half Divider

```
     !   9600      !         04H       !         00        !
     !   4800      !         08H       !         00        !
     !   2400      !         10H       !         00        !
     !   1200      !         20H       !         00        !
     !    600      !         40H       !         00        !
     !    300      !         80H       !         00        !
     !    150      !         00H       !         01H       !
     !     75      !         00H       !         02H       !
     ------------------------------------------------------
```

.PA VDS-1 PARTS LIST

Th followin i lis o part necessar fo th construction of the AMRAD VDS-1 Daughter Board.

QUANTITY	PART NUMBER	DESCRIPTION
1	VDS-1	AMRAD Daughter PC Board.
1	74LS138	1 of 8 Decoder IC
1	8253	Programmable Interval Timer IC
1-4	2716,2732,2764	EPROM Memory IC (depending on size)
1-4	6116,6264,2186	RAM Memory IC (depending on size)
1	40 Pin Wire-Wrap	IC Socket
1	24 Pin Wire-Wrap	IC Socket
1	16 Pin Wire-Wrap	IC Socket
1	14 Pin Wire-Wrap	IC Socket
8	28 Pin Solder-Tail	IC Socket (optionally 4 Solder-Tail an ZI socket fo EPROMs)
1	24 Pin Solder-Tail	IC Socket
2	16 Pin Solder-Tail	IC Socket
2	14 Pin Solder-Tail	IC Socket
3	14 Pin Solder-Tail	IC Socket (Options)
3	14 Pin DIP Headers	(Options)
1	47uF 10V Electrolytic Capacitor	(value not critical)
6	.1uF 50V Disc Capacitor	

.pa--
--

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signed: Rod Hart (wa3mez)
Chesapeake & Potomac Tel. Co.
Bell Atlantic Inc.
Silver Spring, Md.
gamma!cp1!hart - umcp-cs!cp1!hart - aplvax!cp1!hart

==========

From -6524798213467253013
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,37418ac75e562461,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-10 09:09:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Amplifier filament choke question
Message-ID: <11423@mgweed.UUCP>
Date: Fri, 10-Aug-84 12:09:49 EDT
Article-I.D.: mgweed.11423
Posted: Fri Aug 10 12:09:49 1984
Date-Received: Sat, 11-Aug-84 00:34:51 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

I am going to modify an old grid-driven power amplifier, which has a
pair of 4-400A's, to a grounded grid input. Has anyone used toroidal
cores such as the Amidon T-200 (commonly used for baluns) for a
filament choke? Most all units I have seen use a ferrite rod for this.
I want this amp to go down to 160 meters.

Many years ago I built an amp using a single 4-400A and used a rod for
the choke. To get enough inductance to be effective on 80 meters,
I had to wind 3 layers of wire on it and the wire had to be at least
no. 10 to keep the voltage drop at a minimum.

My old Hallicrafters "Loudenboomer" amp uses a tap on one winding
of their choke to get a proper impedance match and I hope to do
the same thing to eliminate the need for any input tanks.

Bob K9EUI

From 3604589907591966488
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b4c6744298868c27,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-10 09:42:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site noao.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!noao!allan
From: allan@noao.UUCP
Newsgroups: net.ham-radio
Subject: Re: other countries & no-code - (nf)
Message-ID: <374@noao.UUCP>
Date: Fri, 10-Aug-84 12:42:16 EDT
Article-I.D.: noao.374

Posted: Fri Aug 10 12:42:16 1984
Date-Received: Sat, 11-Aug-84 01:00:37 EDT
References: <12153@sri-arpa.UUCP>
Organization: Natl. Optical Astronomy Obs. Tucson AZ USA
Lines: 14

Yuki,
Your article on no-code in Japan was very interesting. What are the requirements and privileges of the other three classes?
In Great Britain there are 2 classes of licence, known as class A and class B. Class B only requires a written exam and gives all privileges above 144MHz (and maybe on 70 MHz too, I forget). Class A requires the same written test and also a 12wpm code test (sending as well as receiving), and gives full privileges on all bands.
Can anyone else out there give information on the situation in other countries.

Peter Allan (KA7RFO)
Kitt Peak National Observatory
Tucson, Az

From 1908807095897726613
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,29fa2367c6ca3348,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-10 10:31:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!hplabs!sdcrdcf!sdcsvax!akgua!mcnc!ecsvax!dgary
From: dgary@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: smallest antennas in the world
Message-ID: <3095@ecsvax.UUCP>
Date: Fri, 10-Aug-84 13:31:09 EDT
Article-I.D.: ecsvax.3095
Posted: Fri Aug 10 13:31:09 1984
Date-Received: Tue, 14-Aug-84 00:55:19 EDT
References: sri-arpa.12234
Lines: 4

<>
I have seen it suggested that certain tiny insects may "receive" light waves by means of microscopic antennas on their bodies. I'd like to hear more about this.

From 2085739403353614625
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d80bd0bfa055d234,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-12 18:26:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: Re: other countries & no-code
Message-ID: <75@sask.UUCP>
Date: Sun, 12-Aug-84 21:26:58 EDT
Article-I.D.: sask.75
Posted: Sun Aug 12 21:26:58 1984
Date-Received: Tue, 14-Aug-84 00:37:33 EDT
References: <12318@sri-arpa.UUCP>
Organization: U of Saskatchewan, Canada
Lines: 36

Canada has three amateur licenses: amateur, advanced amateur and digital.
The amateur exam consists of a multiple choice exam on regulations,
a written theory exam and 10wpm code test.
This gives you access to all bands but only morse code is permitted on HF.
(There are a couple of endorsements you can get on your license but they
aren't important here)
The advanced amateur exam has a multiple choice regulations test (again),
a harder, written theory test and 15wpm morse code test.
This gives you access to all bands and all modes except pulse modulation.
The digital exam consists of the same regulations and written theory as
the advanced amateur exam, but the code test is replaced by a further written
exam on digital techniques.
If you already have the advanced license then you only need to take the written
digital part and this also gives you pulse modulation
on top of everything else.
If you only have the digital license then it gives you all permitted modes
on all bands from 2 meters and up.

I have all three licenses. The digital license seems to focus on
packet radio theory and VHF/UHF propagation and although the math is quite
simple you have to know what you are doing to answer the questions on
packet radio throughput. The digital license certainly was not as popular as
the DOC probably hoped. For what it is worth, my opinion is that
studying for a reasonable technical exam takes as much effort as learning the
code and therefore anyone too lazy to do one is also too lazy to do the other.
I do NOT believe that the digital exam requires a B.Sc. to be able
to pass it ... it is just as technical as the advanced exam but the focus is on
digital techniques instead of analogue.

The DOC has recently issued a notice in Part I of the Canada Gazette
that it intends to change the amateur licensing system. If anyone has details
of what they are up to I'd like to hear from you. My guess is that they will
do away with the digital license and perhaps make our system similar to the
British one with class A and B licenses. They may even change the written exams
to multiple choice.

Pete Hardie VE5BEL
MAIL via ihnp4!sask!hardie

From 4035311378447576403

X-Google-Language: Unknown,Unknown
X-Google-Thread: 151e61,6a12b3fbdc7ba47e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-09 13:55:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 Fluke 1/4/84; site fluke.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
ssc-vax!fluke!fdt1
From: fdt1@fluke.UUCP (Frank Tomlinson)
Newsgroups: net.ham-radio
Subject: radio moscow
Message-ID: <1121@vax2.fluke.UUCP>
Date: Mon, 9-Jul-84 16:55:29 EDT
Article-I.D.: vax2.1121
Posted: Mon Jul 9 16:55:29 1984
Date-Received: Wed, 11-Jul-84 01:02:51 EDT
Distribution: net
Organization: John Fluke Mfg. Co., Everett, WA
Lines: 13

From 6854649104678648953
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-09 19:42:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pixadv.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!hao!seismo!harvard!wjh12!pixel!pixadv!cmm
From: cmm@pixadv.UUCP (cmm)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks - (nf)
Message-ID: <24@pixadv.UUCP>
Date: Mon, 9-Jul-84 22:42:23 EDT
Article-I.D.: pixadv.24
Posted: Mon Jul 9 22:42:23 1984
Date-Received: Thu, 12-Jul-84 04:45:33 EDT
References: <1430@sri-arpa.UUCP>
Organization: Pixel Computer Inc., Wilmington, Mass.
Lines: 28

I am for the morse code requirement. As a child, I watched my mother (K1UZG)
learn the code, and she had no particular problem with it. In fact, once
she got her license, she rarely used voice.

It seems from watching her during her active days, that morse almost entered
her brain through a channel completely unrelated to verbal speech. On many
occasions, she would be cooking supper with three attention hungry children
talking with her simultaneously, while she was carrying on a 60wpm+ QSO with
a friend on 80 meters. In spite of the sensory assault she was under, she
was still able to copy the code.

After I got my license (then WA1JMS), I found that I could communicate with people whose signals weren't far enough above the noise to make a perceptable beat note. I could copy signals that just barely changed the "texture" of the noise, if they were slow enough.

I have found that code is a reliable communications means, working when all else fails. Even the space missions, Mercury at least, had morse as a backup.

Yours, (KA1ZF)

--

____
cmm   (carl m mikkelsen) | (617)657-8720x2310
Pixel Computer Incorporated |
260 Fordham Road | {allegra|ihnp4|cbosgd|ima|genrad|amd|harvard}\
Wilmington, Ma. 01887 | !wjh12!pixel!pixadv!cmm

From 1903269910669456825
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a2c816073a7ff79b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-09 20:03:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!wd9get
From: wd9get@pur-ee.UUCP (Brandt)
Newsgroups: net.ham-radio
Subject: Re: scanner crap & Amateur-related scanner query
Message-ID: <1960@pur-ee.UUCP>
Date: Mon, 9-Jul-84 23:03:09 EDT
Article-I.D.: pur-ee.1960
Posted: Mon Jul 9 23:03:09 1984
Date-Received: Tue, 10-Jul-84 07:48:55 EDT
References: <1685@sri-arpa.UUCP>
Organization: Electrical Engineering Department , Purdue University
Lines: 26

[:::::*::::] "Squad 51..."

flame() {
  I think this `scanner war' is getting a bit out of hand, and you are
  missing Dave's (kk9w@pur-ee) point. The question is *not* is the scanner
  information worthwile, but does it belong in net.ham-radio. I agree
  with Dave that it is not ham related and shouldn't be in this newsgroup.
  If you want to share your valuable frequencies for Northern Outer
  Slavabobia's Doggie Doo Patrol, by all means that information should
  be distributed. However, I think it should have its own net.scanner
  to do so. It is *not* amateur radio (even though many hams have scanners,
  including myself) and does not belong in this newsgroup.}   /* END FLAME */

Now, on to an amateur radio related scanner question. I would like

to know what states have exemptions for amateur radio operators
to carry scanners in their cars and other mobile situations. If you would
mail replies to me I will post the results to the net when I get a
reasonable amount of information. If you have the exact wording of the
law or the state code number, it would be appreciated. For example,
 in Indiana, we are exempt from the prohibition of carring
``portable police radios'' by Indiana Code 35-44-3-12 paragraph 6.

Keith E. Brandt, WD9GET
pur-ee!wd9get

From -1776117839309713628
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ccdf678e3171acb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-09 21:11:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site akgua.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!sdcrdcf!sdcsvax!akgua!glc
From: glc@akgua.UUCP (G.L. Cleveland [Lindsay])
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks, League Policy
Message-ID: <864@akgua.UUCP>
Date: Tue, 10-Jul-84 00:11:25 EDT
Article-I.D.: akgua.864
Posted: Tue Jul 10 00:11:25 1984
Date-Received: Sat, 7-Jul-84 01:31:35 EDT
References: <2812@ecsvax.UUCP>, <858@akgua.UUCP> <187@mit-athena.ARPA>
Organization: AT&T Technologies/Bell Labs, Atlanta
Lines: 30

Mark Levine, WA2YBA, raised some interesting points. At this time
I shall not reply to them, but would like to comment on his question:

> I'd really like to know what drives League policy here, as the
> FCC seemed ready to go for this idea [no-code experimenter's
> license] before ARRL started lobbying--does anyone think that
> impression wrong?

At the time of that proposal, I had the opportunity to quietly talk
with the ARRL Director from our Section. His comment was that the
League Headquarters staff and the Directors initially "kept quiet"
as far as recommending "yea" or "nay" to no-code. The purpose was
to see what the response was from the Ham community and in
particular from League members. The response was (according to
him) quite lop-sided against the no-code proposal.

Since the League is really all us dues-paying members (not the
Headquarters Staff as some seem to think), the Directors then
publically came out against no-code, reflecting the views and

opinions of the large majority of the members.

Whether no-code was good or bad isn't what I want to bring out in
this posting. The point to make is: the League membership is what
drives League policy.

73,   Lindsay   W4IZI

Lindsay Cleveland (...{ihnp4|mcnc|sdcsvax|clyde}!akgua!glc)
AT&T Technologies/Bell Laboratories ... Atlanta, Ga
(404) 447-3909 ... Cornet 583-3909

From 7167889918551343421
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2cace3a975a2a11b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-09 21:46:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!cbosgd!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Bulletins, Morse Code, and other stuff
Message-ID: <2301@ihuxf.UUCP>
Date: Tue, 10-Jul-84 00:46:36 EDT
Article-I.D.: ihuxf.2301
Posted: Tue Jul 10 00:46:36 1984
Date-Received: Thu, 5-Jul-84 00:11:39 EDT
References: <1953@pur-ee.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 32

> From: kk9w@pur-ee.UUCP (Andersen)
> Organization: Electrical Engineering Department , Purdue University
>   ....
> Re: all of the complaints about the stuff on net.ham-radio
>   ....
> ....if you want to complain, I vote we get rid of all of the
> scanner crap that is on the net. That's not ham radio.
>
> Sincerely, Dave

Okokokokokok, I'm really terribly sorry that you
don't like the free, scanner-related information we post.

You're SO right!

From now on, I PROMISE to try and keep any information
I have a SECRET, or post it within AT&T newsgroups only!

Please find it within your merciful heart, however,

to forgive me if I slip up now and then, and ACCIDENTLY
share some information with the rest of the world.

And by all means, keep your constructive suggestions coming!

I thank you from the heart of my bottom. :-)

--
==
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 2932295125757655750
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5056c911aee81fe5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-10 06:58:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)
Newsgroups: net.ham-radio
Subject: Re no code and emergencies
Message-ID: <35@whuxl.UUCP>
Date: Tue, 10-Jul-84 09:58:47 EDT
Article-I.D.: whuxl.35
Posted: Tue Jul 10 09:58:47 1984
Date-Received: Wed, 11-Jul-84 01:04:24 EDT
Organization: Bell Communications Research, Inc.
Lines: 24

<munchies??>
While we're discussing code requirements and emergency communications, let's
also consider the need for equipment that can operate without 120 (or 230 if
you're in Europe) VAC power. Most 2m hand helds meet this requirement
(especially if you have spare charged battery packs for them) but what about
your low band rig (if you operate on 160 thru 10)?? Field day is a good time
to try emergency power operation and know you're ready if it should happen.
I agree that 2m FM is a viable means of emergency communications IF the repeater
has emergency power.
As for the exam, I'd like to see the technical part of the test reflect modern
amateur practice. The General/Technician and especially the Advanced exams
should have some digital questions on them.
As for tubes in 1984, let's face it - those little glass bottles are more
resistant to electrical abuse (such as EMP among other things) and more cost
effective for use in ham transmitter power stages than are transistors.
If you have a tube rig and you inadvertantly try to run it into a mismatch, you
probably won't damage the rig - on the other hand, a solid state final is likely
to be on its way to the service bench (hopefully on the other side of your shack)
Not that I'm a CW type - I used it when I was a Novice, and I'll use it if its
the only way to get through, but there's plenty of room in ham radio for all of

us. CW is one option of many that hams can use to communicate but it is one that can be quite useful at times
73's,
Bill Mitchell (whuxl!wjm) WB2IAU

From 2494716376343217799
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-10 13:25:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabsc.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!tektronix!hplabs!hplabsc!labelle
From: labelle@hplabsc.UUCP (WB6YZZ La Belle)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks
Message-ID: <2005@hplabsc.UUCP>
Date: Tue, 10-Jul-84 16:25:59 EDT
Article-I.D.: hplabsc.2005
Posted: Tue Jul 10 16:25:59 1984
Date-Received: Fri, 13-Jul-84 03:41:38 EDT
References: uok.2800004 <570@uofm-cv.UUCP> <366@noao.UUCP>
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 18

How about 5 wpm to obtain any class license, with the higher classes being obtained through tougher technical and maybe operational examination? That would fulfill the emergency-jury rigged cw station requirement while making it much easier for the technically qualified (badly needed in our hobby) to get into amateur radio.

I would have had a ham license 5 yrs before I finally obtained one if not for cw. I used to have an exclusively homebrew station! GEORGE

From 6012378066701788819
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,870e0ea50dd07bbc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-10 18:26:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some 17 - 25 MHz business freqs
Message-ID: <2313@ihuxf.UUCP>
Date: Tue, 10-Jul-84 21:26:26 EDT
Article-I.D.: ihuxf.2313
Posted: Tue Jul 10 21:26:26 1984
Date-Received: Wed, 11-Jul-84 02:42:23 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 24

f   17.535 KYS583   Lorac Service Corp (USA-wide)
f   17.700 KM2XET   SRI International, experimental (USA-wide)
f   17.9859 KYS583   Lorac Service Corp (USA-wide)
f   17.9865 KYS583   Lorac Service Corp (USA-wide)
f   21.450 KM2XET   SRI International, experimental (USA-wide)
f   21.7285 KM2XLF   Rockwell International, experimental (USA-wide)
f   22.000 KM2XRR   Navidyne Corp, experimental (USA-wide)
f   22.1254 KA2XTH   Harris Corp, experimental (USA-wide)
f   22.1285 KA2XTH   Harris Corp, experimental (USA-wide)
f   22.1285 KYQ835   Brown & Root Inc (USA-wide)
f   22.1285 KYQ836   Brown & Root Inc (USA-wide)
f   22.1285 KYQ837   Brown & Root Inc (USA-wide)
f   22.1316 KA2XTH   Harris Corp, experimental (USA-wide)
f   22.1316 KXR992   Santa Fe International (USA-wide)
f   22.1347 KA2XTH   Harris Corp, experimental (USA-wide)
f   22.1378 KA2XTH   Harris Corp, experimental (USA-wide)
f   24.1500 KA60648 Godwin Chris (USA-wide)
f   24.1500 KA91095 SPS Enterprises (USA-wide)
f   24.9285 KB2XXP   Federal Electric Corp, experimental (USA-wide)
f   24.9300 KB2XXP   Federal Electric Corp, experimental (USA-wide)
--
==
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 3449934477259653729
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5ce0fd5bd1c5087,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-10 18:29:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 28
Message-ID: <10679@mgweed.UUCP>
Date: Tue, 10-Jul-84 21:29:08 EDT
Article-I.D.: mgweed.10679
Posted: Tue Jul 10 21:29:08 1984

Date-Received: Wed, 11-Jul-84 01:29:24 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 24

qst de k9eui
hr propagation forecast bulletin nr 28 from arrl headquarters
newngton ct july 9, 1984
to all radio amateurs bt

during the past week the solar flux varied between 97 and 104, too small a range to have an observable effect on radio propagation. the earths magnetic field was relatively quiet. the net result was a week of fairly good conditions for mid summer, except for frequent periods of high noise levels from electrical storms.

no large change is expected during the forecast week. the solar flux should rise slightly, peaking around 112. propagation on high latitude circuits will be at its best july 9 through 11. conditions will be more unstable for several days thereafter, through about the 18th.

conditions on 21 and 28 mhz will be near their summer minimum, with activity confined to transequatorial paths and the low latitudes. sporadic e skip will continue on 28 and 50 mhz, but it will be less frequent after the middle of july ar

From 7951129755209879120
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7efee17edebbb64d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-10 19:16:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mit-athena.ARPA
Path: utzoo!linus!decvax!mit-athena!yba
From: yba@mit-athena.ARPA (Mark H Levine)
Newsgroups: net.ham-radio
Subject: Codeless License Summary
Message-ID: <205@mit-athena.ARPA>
Date: Tue, 10-Jul-84 22:16:44 EDT
Article-I.D.: mit-athe.205
Posted: Tue Jul 10 22:16:44 1984
Date-Received: Thu, 12-Jul-84 01:20:28 EDT
Organization: MIT, Project Athena, Cambridge, Ma.
Lines: 70

I would like to summarize the mail sent to me and as follow-ups on the net.

The overall response was pretty evenly divided: 8 for and 7 against a codeless license.

Several people would not stay within the contenxt of a VHF/UHF only license in their comments, but were counted anyway (they were all against).

Following the discussion caused me to notice some things: the Derry, NH 2 m repeater on 6.25/85 is using a voice id where code used to be. On the occasion I served in an emergency with the National Guard up here (ending up as net control for Sector 1B Civil Defense EN as I recall, for about 18 hrs) I used 2 m fm phone exclusively. When my microphone failed, and could only send code, I repaired it--no one out there had a bfo, and I couldn't get my IC230 into the cw portion of the band. FCC is removing two amateur UHF band allocations to other services.

In responses I did not count, becuase they were verbal, I heard a story about ex-WB1CZM, who might read this, as having heard a fellow at a ham fest say, as did many of the con letters: 5 wpm is easy to pick up--anyone can do it in a short while!. He replied "Then it is silly to require it for a license--anyone who needs it will just pick it up!".

Another was from WA2NKL, who told of a club meeting where he asked those assembled: "would everyone opposed to a codeless license for 1 GHz and up please raise one hand." Every hand went up. "Now, would those who have stations operating on 1 GHz and up please raise the other hand?" 1 hand went up.

It seems clear that many of us against the codeless license base our opinions on a fear that we will soon overcrowd the HF bands with lids, and that we will not render a service to the country by failing to know code. The only "good" reasons given were "it is most efficient" and that "when everything else fails, it will still work with two wires." The first is just wrong: QPSK (quadrature phase shift keying), especially with some error correcting code, is more reliable and more efficient--need I add that if we had some no-code but good tech types they'd know that? The second is undeniable if you have the technical competence to build a transmitter; now if you were the one in trouble, would you send SOS, which every child knows, or QRRR and hope a ham heard you?

I know now that the taxpayers get what they want. I also remember that the last I checked there were more CBers than hams. We better keep making rational decisions, not just popular ones. We could otherwise lose more bands to other services.

I was going to try and keep this short. Mind you I do respect the opinions of all concerned. I just think this is worth talking about periodically until all the gut (knee-jerk, I think they call it) reactions are replaced on BOTH sides of this issue by reason. I am sure that I could not get ARRL to recommend a no-code UHF license right now, and I want to see that day. I am sort of bothered that ARRL officers feel they would not be able to be re-elected if they had such a view. At least until I hear some better reasons!

Thanks much to those who answered: WA2IAA (ret.), KD7LZ, ron@brl-tgr, uok!mpackard, sde@mitre-bedford, N2XS, NF4T, W4IZI, W3IKG, Hobbit,

nathanm!hp-pcd, N6JLJ, K3MC, W5USJ, WA7NJK, KN9K, stephenc@tektronix,
KK9W, WA3MEZ, and WA2NKL.

(As soon as I replace my HF exciter, and I get a transmatch, I'll look
for you guys on the air. I have this old Collins 30S1 getting dusty,
and haven't worked cw since leaving Maine. Don't look for me in the
extra class portions until September!)

WA2YBA

--
yba%mit-heracles@mit-mc.ARPA   UUCP: decvax!mit-athena!yba

From 2738974501182793566
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2cace3a975a2a11b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-11 07:58:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!sdcrdcf!sdcsvax!akgua!mcnc!ecsvax!dgary
From: dgary@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Bulletins, Morse Code, and other stuff
Message-ID: <2902@ecsvax.UUCP>
Date: Wed, 11-Jul-84 10:58:43 EDT
Article-I.D.: ecsvax.2902
Posted: Wed Jul 11 10:58:43 1984
Date-Received: Sat, 14-Jul-84 01:20:02 EDT
References: ihuxf.2301 <1953@pur-ee
Lines: 3

<>
If people object to scanner frequencies and similar items in net.ham-radio,
why not create net.swl?

From -2941582447670070970
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a4fdf4f8d3c3454,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-11 09:11:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!sdcrdcf!sdcsvax!akgua!mcnc!ecsvax!dgary
From: dgary@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: In support of Morse code requirements.
Message-ID: <2906@ecsvax.UUCP>
Date: Wed, 11-Jul-84 12:11:40 EDT
Article-I.D.: ecsvax.2906
Posted: Wed Jul 11 12:11:40 1984

Date-Received: Sat, 14-Jul-84 01:20:33 EDT
References: sri-arpa.1443
Lines: 9

<>
Morse code proficiency and swimming (preferably "drownproofing") should be
required for graduation from high school. Make that elementary school!!

A non-swimming, non-ham with many regrets re a misspent youth,
D Gary Grady
Duke University Computation Center, Durham, NC 27706
(919) 684-4146
USENET: {decvax,ihnp4,akgua,etc.}!mcnc!ecsvax!dgary

From 1541511689540309058
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1889466a6fde1508,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-11 09:15:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!sdcrdcf!sdcsvax!akgua!mcnc!ecsvax!dgary
From: dgary@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Code requirements
Message-ID: <2908@ecsvax.UUCP>
Date: Wed, 11-Jul-84 12:15:29 EDT
Article-I.D.: ecsvax.2908
Posted: Wed Jul 11 12:15:29 1984
Date-Received: Sat, 14-Jul-84 01:20:52 EDT
References: sri-arpa.1688
Lines: 15

>From: AWalker@RUTGERS.ARPA Fri Jul 6 19:23:40 1984
>
>>From: jhs@Mitre-Bedford
>>It is also in our PERSONAL interest, because knowing the code could (as
>>in the case mentioned above) save you own personal life someday.
>
>So could seat belts, but does everyone use them all the time?

So! The anti-Morse forces are also opposed to seatbelts?? Don't
worry, evolution will take care of YOU!! :-)

D Gary Grady
Duke University Computation Center, Durham, NC 27706
(919) 684-4146
USENET: {decvax,ihnp4,akgua,etc.}!mcnc!ecsvax!dgary

From 7207678198708175856
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,bab5ea4f7b95d6b3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-11 17:09:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site noao.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!noao!jacoby
From: jacoby@noao.UUCP
Newsgroups: net.ham-radio
Subject: Propagation Prediction Code
Message-ID: <367@noao.UUCP>
Date: Wed, 11-Jul-84 20:09:27 EDT
Article-I.D.: noao.367
Posted: Wed Jul 11 20:09:27 1984
Date-Received: Fri, 13-Jul-84 04:39:53 EDT
Organization: Natl. Optical Astronomy Obs. Tucson AZ USA
Lines: 12

I've been asked to check around for a program used
to predict propagation, called IONCAP. Does anyone
have a copy or know anything about it?

I believe it comes from the Institute for Telecommunications
Sciences, Boulder, Colorado.

Any info would be very much appreciated. Thanks.

George
ihnp4!noao!jacoby

From 8951285694913278259
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,79269d88964f1312,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-11 19:41:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mit-athena.ARPA
Path: utzoo!linus!decvax!mit-athena!yba
From: yba@mit-athena.ARPA (Mark H Levine)
Newsgroups: net.ham-radio
Subject: Re: Say 'goodbye' to tomorrow!
Message-ID: <208@mit-athena.ARPA>
Date: Wed, 11-Jul-84 22:41:54 EDT
Article-I.D.: mit-athe.208
Posted: Wed Jul 11 22:41:54 1984
Date-Received: Fri, 13-Jul-84 01:18:19 EDT
References: <196@sdchema.UUCP>
Organization: MIT, Project Athena, Cambridge, Ma.
Lines: 16

<WA6LBV de WA2YBA>

Either you do not read too well, or you just got justifiably upset.
The whole thrust of the no-code debate is to get people into ham
radio who would develop that portion of the spectrum, at least on
the pro side.

We largely lost it because there are many more people in aerospace
who are willing and able to use the spectrum space than there were hams.
Do you really think that just yelling at FCC or Congress would have
preserved the bands? We have to USE them.

Me, I'm pretty upset, too. Let's not get confused as well.

--
yba%mit-heracles@mit-mc.ARPA   UUCP: decvax!mit-athena!yba

From 2247005700023948132
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7f3b4f616875155,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-12 04:43:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT3.3 7/10/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!sdcrdcf!sdcsvax!akgua!mcnc!decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: Shuttle Television Receiver Info Request
Message-ID: <355@vortex.UUCP>
Date: Thu, 12-Jul-84 07:43:55 EDT
Article-I.D.: vortex.355
Posted: Thu Jul 12 07:43:55 1984
Date-Received: Wed, 18-Jul-84 03:39:40 EDT
References: <1763@sri-arpa.UUCP>
Organization: Vortex Technology, Los Angeles
Lines: 22

Except in the special case where local ham groups rebroadcast
space transmissions such as Voyager images (in which case you
can get devices to convert the fast scan ham TV freqs to
normal broadcast VHF/UHF for your TV -- but they still cost lots
more than $14) there aren't any simple ways to receive "space flight"
transmissions. The actual shuttle transmissions are all at
disgustingly high frequencies (e.g. S-band) and are not to
be received with cheap equipment. More and more of these
transmissions are digitized in any case. There is no generalized
"local rebroadcasting" of these images. NASA often uses a
satellite transponder to feed events to the media, but you will
see what they want you to see, not what's coming directly from the
shuttle. Still, it's a lot more than any single media source will
ever show you, and it doesn't have the blabbing commentators. You
need a regular satellite earth station to receive it, and the
feed isn't always there -- only when something significant is

happening. Probably not worth the effort to receive.

That business about generalized local retransmission and $14
converters is bull.

--Lauren--

From 3348362139695015671
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9807e871b7e3b56
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-12 10:34:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabsc.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!hplabsc!labelle
From: labelle@hplabsc.UUCP
Newsgroups: net.ham-radio
Subject: Re: Morse Code?
Message-ID: <2006@hplabsc.UUCP>
Date: Thu, 12-Jul-84 13:34:38 EDT
Article-I.D.: hplabsc.2006
Posted: Thu Jul 12 13:34:38 1984
Date-Received: Sat, 14-Jul-84 13:44:38 EDT
References: <1469@sri-arpa.UUCP>
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 9

    "... use of the airwaves is a privlege not a right..."

         Baloney!! Everyone has a right to the use of the electromagnetic
  spectrum. The only regulation taking place should be the control of who
  gets how much and where.

                 GEORGE

From 237781456372082663
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ccdf678e3171acb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-12 10:42:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site auvax.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!alberta!auvax!tech
From: tech@auvax.UUCP (Richard Loken)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks
Message-ID: <425@auvax.UUCP>
Date: Thu, 12-Jul-84 13:42:35 EDT
Article-I.D.: auvax.425
Posted: Thu Jul 12 13:42:35 1984

Date-Received: Fri, 13-Jul-84 23:46:21 EDT
References: <2812@ecsvax.UUCP>, <858@akgua.UUCP> <187@mit-athena.ARPA>
Organization: Athabasca U, Alberta
Lines: 17

I obtained the Canadian Amateur Operator's Certificate in 1969 - this
licence allows only HF CW and most modes above 6 metres. I have never
bothered to get a higher class licence because in my rather caustic
view, phone is B-O-R-I-N-G.

Why not have licences that do not have CW privileges so you upgrade to CW?

In spite of Wayne Green's wild views about wildly complex equipment saving
us all during a nuclear war...I see only CW being much use when the chips
are down. I can build a CW transmitter or receiver out of just about
anything if I have to. We will all die in the year long winter anyway.

Eliminate the code exam. If a person is interested in morse, he will
learn the code.

Richard Loken

From -3281914388761122991
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2cace3a975a2a11b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-12 10:48:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site auvax.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!alberta!auvax!tech
From: tech@auvax.UUCP (Richard Loken)
Newsgroups: net.ham-radio
Subject: Re: Bulletins, Morse Code, and other stuff
Message-ID: <426@auvax.UUCP>
Date: Thu, 12-Jul-84 13:48:05 EDT
Article-I.D.: auvax.426
Posted: Thu Jul 12 13:48:05 1984
Date-Received: Fri, 13-Jul-84 23:46:33 EDT
References: <1953@pur-ee.UUCP> <2301@ihuxf.UUCP>
Organization: Athabasca U, Alberta
Lines: 5

Bob, are you suggesting that you will bow to the demands of a vocal minority
of one? The western world is indeed governed by lobby.

Richard Loken

From -3516218061151852432
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d4b904b4eb390d49,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-07-12 12:20:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbneb.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!cbosgd!cbscc!cbneb!adm
From: adm@cbneb.UUCP
Newsgroups: net.ham-radio
Subject: Re: Re: scanner crap & Amateur-related s - (nf)
Message-ID: <1011@cbneb.UUCP>
Date: Thu, 12-Jul-84 15:20:34 EDT
Article-I.D.: cbneb.1011
Posted: Thu Jul 12 15:20:34 1984
Date-Received: Fri, 13-Jul-84 05:19:46 EDT
Sender: adm@cbneb.UUCP
Organization: AT&T Bell Laboratories, Columbus, OHIO
Lines: 31

#R:pur-ee:-196000:cbnap:14800001:000:1379
cbnap!gws   Jul 12 14:26:00 1984

/***** cbnap:net.ham-radio / pur-ee!wd9get / 9:56 am Jul 11, 1984 */
[:::::*::::] "Squad 51..."

flame() {
  I think this `scanner war' is getting a bit out of hand, and you are
  missing Dave's (kk9w@pur-ee) point. The question is *not* is the scanner
  information worthwile, but does it belong in net.ham-radio. I agree
  with Dave that it is not ham related and shouldn't be in this newsgroup.
  If you want to share your valuable frequencies for Northern Outer
  Slavabobia's Doggie Doo Patrol, by all means that information should
  be distributed. However, I think it should have its own net.scanner
  to do so. It is *not* amateur radio (even though many hams have scanners,
  including myself) and does not belong in this newsgroup.}   /* END FLAME */

Now, on to an amateur radio related scanner question. I would like
to know what states have exemptions for amateur radio operators
to carry scanners in their cars and other mobile situations. If you would
mail replies to me I will post the results to the net when I get a
reasonable amount of information. If you have the exact wording of the
law or the state code number, it would be appreciated. For example,
 in Indiana, we are exempt from the prohibition of carring
``portable police radios'' by Indiana Code 35-44-3-12 paragraph 6.

Keith E. Brandt, WD9GET
pur-ee!wd9get
/* ---------- */

From -630586795899320674
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d4b904b4eb390d49
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-12 12:20:43 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbneb.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!cbosgd!cbscc!cbneb!adm
From: adm@cbneb.UUCP
Newsgroups: net.ham-radio
Subject: Re: Re: scanner crap & Amateur-related s - (nf)
Message-ID: <1012@cbneb.UUCP>
Date: Thu, 12-Jul-84 15:20:43 EDT
Article-I.D.: cbneb.1012
Posted: Thu Jul 12 15:20:43 1984
Date-Received: Fri, 13-Jul-84 05:20:08 EDT
Sender: adm@cbneb.UUCP
Organization: AT&T Bell Laboratories, Columbus, OHIO
Lines: 33

#R:pur-ee:-196000:cbnap:14800002:000:1457
cbnap!gws   Jul 12 14:27:00 1984

/***** cbnap:net.ham-radio / gws / 2:26 pm Jul 12, 1984 */
/***** cbnap:net.ham-radio / pur-ee!wd9get / 9:56 am Jul 11, 1984 */
[:::::*::::] "Squad 51..."

flame() {
  I think this `scanner war' is getting a bit out of hand, and you are
  missing Dave's (kk9w@pur-ee) point. The question is *not* is the scanner
  information worthwile, but does it belong in net.ham-radio. I agree
  with Dave that it is not ham related and shouldn't be in this newsgroup.
  If you want to share your valuable frequencies for Northern Outer
  Slavabobia's Doggie Doo Patrol, by all means that information should
  be distributed. However, I think it should have its own net.scanner
  to do so. It is *not* amateur radio (even though many hams have scanners,
  including myself) and does not belong in this newsgroup.}   /* END FLAME */

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to know what states have exemptions for amateur radio operators
to carry scanners in their cars and other mobile situations. If you would
mail replies to me I will post the results to the net when I get a
reasonable amount of information. If you have the exact wording of the
law or the state code number, it would be appreciated. For example,
 in Indiana, we are exempt from the prohibition of carring
``portable police radios'' by Indiana Code 35-44-3-12 paragraph 6.

Keith E. Brandt, WD9GET
pur-ee!wd9get
/* ---------- */
/* ---------- */

From 2920207530602698641
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b17827449f695963,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-07-12 12:20:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbneb.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!cbosgd!cbscc!cbneb!adm
From: adm@cbneb.UUCP
Newsgroups: net.ham-radio
Subject: this/that/hello - (nf)
Message-ID: <1013@cbneb.UUCP>
Date: Thu, 12-Jul-84 15:20:53 EDT
Article-I.D.: cbneb.1013
Posted: Thu Jul 12 15:20:53 1984
Date-Received: Fri, 13-Jul-84 05:20:32 EDT
Sender: adm@cbneb.UUCP
Organization: AT&T Bell Laboratories, Columbus, OHIO
Lines: 21

#N:cbnap:14800003:000:390
cbnap!gws   Jul 12 14:35:00 1984

Responds to some of the recient comments:

CW (yes/no): I dont think that a 5WPM cw speed
          is all that hard. I enjoy cw,but
          I never would call myself a CW
          person. (enough)

Scanner: MY vote is to keep the scanner info
          comming, as well as the HF/SWL info

ETC: Hello from a new USENET user in
          Columbus, Oh. N8EMR Gary Sanders

          address: cbnap!gws

          AT&T Bell Labs Columbus

From 6124459274720197060
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e8042a4ac525234d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-12 13:46:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mit-athena.ARPA
Path: utzoo!linus!decvax!mit-athena!yba
From: yba@mit-athena.ARPA (Mark H Levine)
Newsgroups: net.ham-radio
Subject: Re: No-code: the search for reason (longish flame)
Message-ID: <209@mit-athena.ARPA>
Date: Thu, 12-Jul-84 16:46:18 EDT
Article-I.D.: mit-athe.209
Posted: Thu Jul 12 16:46:18 1984

Date-Received: Sat, 14-Jul-84 02:01:21 EDT
References: <1768@sri-arpa.UUCP>
Organization: MIT, Project Athena, Cambridge, Ma.
Lines: 12

My major reason for upgrading to Extra is to join the Volunteer Examiner
Program. Not only do we have to recruit and train, now we have to test.
It takes three licensed amateurs, at least one of whom is an Extra to
give exams. Exams for Extra Class require all three to be Extra Class
licensees. I am interested in how the VEs will be organized, and whether
ARRL or Wayne Green will be my regional VEC (volunteer examiner co-ordinator).

Any info on the program and how it is going in other areas would be most
appreciated.

--
yba%mit-heracles@mit-mc.ARPA   UUCP: decvax!mit-athena!yba

From -5203282334881586151
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f1cc977f02e38024
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-12 18:20:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!uiucdcs!uok!
mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: RE: CODE - (nf)
Message-ID: <2800008@uok.UUCP>
Date: Thu, 12-Jul-84 21:20:00 EDT
Article-I.D.: uok.2800008
Posted: Thu Jul 12 21:20:00 1984
Date-Received: Sun, 15-Jul-84 01:54:59 EDT
References: <28@whuxl.UUCP>
Lines: 7
Nf-ID: #R:whuxl:-2800:uok:2800008:000:146
Nf-From: uok!mpackard   Jul 12 20:20:00 1984

#R:whuxl:-2800:uok:2800008:000:146
uok!mpackard   Jul 12 20:20:00 1984

Bill,
  I believe your argument holds up when you are talking about HF but
is not a real concern when using VHF and up due to its limited range.

From -4965418909482524138
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-12 18:43:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!uiucdcs!uok!
mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks - (nf)
Message-ID: <2800009@uok.UUCP>
Date: Thu, 12-Jul-84 21:43:00 EDT
Article-I.D.: uok.2800009
Posted: Thu Jul 12 21:43:00 1984
Date-Received: Sun, 15-Jul-84 01:54:24 EDT
References: <2800003@uok.UUCP>
Lines: 9
Nf-ID: #R:uok:2800003:uok:2800009:000:197
Nf-From: uok!mpackard   Jul 12 20:43:00 1984

#R:uok:2800003:uok:2800009:000:197
uok!mpackard   Jul 12 20:43:00 1984

()

I don't know why you guys insist on operating in the 60's.
It's 1984 and any repeater worth the name uses an IC to send
a voice identification. Just because it uses CW doesn't mean
it has to.

From -2820525694765445621
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1f5b574db15c9ccb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-13 08:24:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!ihnp4!inuxc!inuxg!wjl
From: wjl@inuxg.UUCP (Wm Lumpkin)
Newsgroups: net.ham-radio
Subject: NASA TRACKING ANTENNA
Message-ID: <311@inuxg.UUCP>
Date: Fri, 13-Jul-84 11:24:40 EDT
Article-I.D.: inuxg.311
Posted: Fri Jul 13 11:24:40 1984
Date-Received: Sat, 14-Jul-84 01:37:16 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 16

I have returned from a trip to visit the Kennedy Space Center. During my
visit I saw several unusual things, one in particular was a tracking antenna.

The reason it caught my eye was that on a plaque in front of the display is an explanation of how it was used at 148MHZ for to collect tracking information. The thing that confuses me is that this display also calls this antenna a UHF antenna. Has the UHF band always been defined as it is today?

I would also be interested in hearing a more detailed explanation of operation. Did these tracking antennas just track the radio emissions from spacecraft? Did these antenna systems operate duplex in two different bands?

The tour guides were unsure of what the correct response might be.

From 530122889056873853
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9b870dc6dfd3f509,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-13 09:06:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!sri-unix!andy@aids-unix
From: andy%aids-unix@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: No-code reprise (yet another longish diatribe)
Message-ID: <1960@sri-arpa.UUCP>
Date: Fri, 13-Jul-84 12:06:00 EDT
Article-I.D.: sri-arpa.1960
Posted: Fri Jul 13 12:06:00 1984
Date-Received: Thu, 19-Jul-84 02:25:48 EDT
Lines: 125

From: Andy Cromarty <andy@aids-unix>

In no particular order:

> "Morse code proficiency and swimming (preferably "drownproofing") should be required for graduation from high school. Make that elementary school!!"

Hear, hear! In fact, let's also have government requirements for carrying an HT wherever we go, mandatory driver's licenses, demonstrable tree-climbing ability, dog ownership, wearing of lifevests at all times, and the indispensible facility of being able to open bottles of Perrier with our teeth. Surely the survival value must be obvious. In fact, if a radio transmitter and a case of Perrier floated along while I was stranded on a small hot desert island, I can tell you without hesitation which skill I would appreciate more.

Or to put it another way: how many readers feel so intellectually incapacitated that they need the government to identify for them, and then require them to learn, life's important survival skills? Raise those hands high....

The point? It's all too simple to fabricate examples of the utility, even the survival value, of CW or any other skill. Apart from their occasional entertainment value, however, such constructions are largely irrelevant to assessments of the value of the no-code license. If a survival skill, whether it's swimming or CW, is of self-evident value to the learners, then they will learn it out of their own rational self-interest. In fact, whether or not they learn it should be taken as a prima facie *definition* of what is in their own self-interest. We all lead complex lives, and no one is better equipped than we are ourselves to make the decision about what is the best investment of our time and energy. [Admittedly a personal belief, but how would you go about generating a rigorous disproof for such a broad claim? :-)]

By the way, has anyone noticed that you really only need to be able to *send* CW -- and only at 2 wpm -- to transmit a distress signal, and yet the FCC only tests for evidence of *receiving* capability? And no one has yet suggested that mastery of CW should be a legal requirement for scanner devotees, airport controllers, taxicab drivers, broadcast listeners, automotive radiotelephone owners, or marine pleasure craft enthusiasts, even though many of them are required to have some sort of FCC-granted license to operate and all are at least as likely to hear our hypothetical distress signals as hams are. Even the local fire department, the police, and the Red Cross, to whom frequencies are allocated and licenses granted and who have an obvious interest in supporting emergency communications, suffer no legal requirement to demonstrate mastery of this mode. Hence it is not our unique position among spectral occupants as emergency communicators that, um, qualifies us for a CW examination requirement; we have no such unique position. ...And I do read QST (and 73, and CQ) nearly cover-to-cover every month, and I just don't see the "ham, lost at sea, finds salvation in rusty CW skills" headlines people keep alluding to. What I DO see is dozens of stories like "John Doe saved the lives of 4 people in a burning car wreck because he had the foresight to carry his 2-meter FM handheld with him and knew the local repeater frequencies." Something is lacking in this mandatory "CW survival skill requirement" line of reasoning. I propose that it is content.

> "Amateur Radio is the only *sucessful* 'self-policed' organization that I know of and the need to learn Morse code does weed out those who are not interested enough to be bothered with 'something they will never use'."
>
> and
>
> > "Now that the argument is over as far as the FCC is concerned for (I am told) at least twelve years, we should all pitch in and try to help and encourage aspiring hams to get past the very minor obstacle that the code represents."
>
> "I've tried. When I show my packet station to any of my friends, they are always impressed by it, and always ask what it takes to get licensed. When I say they have to learn morse code, that is the end of it."

I have had precisely the same experience. I know of a number of people who are interested in packet radio and emergency communications who are actively deterred by the code requirement. In light of this experience, I find the "emergency communications value" argument somewhat ironic. Here is a body of sincere, competent individuals whom I have personally heard say that they would like to get involved in packet radio and emergency communications, but for whom the CW requirement constitutes a sufficient impediment that they probably won't do it. I am personally offended by the frequently-heard smug retort that such individuals "don't measure up" or "didn't really want it". Is this a hobby or a competition? Why should they be expected to demonstrate the same sort of loyalty to apparently arbitrary examination requirements the ham radio service as self-selected old-timers? After all, the ham radio service is working hard to exclude them, and in as pompous and self-serving a fashion as possible. For that matter, the message you are reading at this moment is itself a testimony to the observation that we hams can't even agree among ourselves as to whether the code requirement is a good thing. I suspect that there was more than a little truth in the comment that many rather elitist hams really don't want the ranks to grow. (Crowds the bands, dontchaknow.) I know no better term for this than greed.

So what? If none of those lazy slouches can cut the mustard, what's the cost to ham radio? Potentially immense. A non-ham no-code license is not excluded by the recent FCC no-code response, as I understand their decision. If a separate no-code radio service is established that (unlike CB) does have a theory test as a part of the licensing process, all those competent, sincere, interested potential hams will gravitate towards the service that meets their needs without imposing additional irrelevant (and perhaps capricious) requirements. This will include not only those who would never have become hams because of the CW requirement, but also those who probably could have been coaxed into learning CW well enough to pass the test and then forget it (which is an accurate description of an awful lot of hams I know). Further, these people will not just be bodies to swell the ranks; they'll be the people who are pushing the communications frontiers, the people who have given ham radio its historical and (until recently) deserved reputation as playing a significant role in advancing the state of the communications art. We'll very nearly be losing the wheat and keeping the chaff, if you believe that ham radio exists in part to advance communications. (Everyone on this net better realize by now that ham radio is about a decade BEHIND the state of the art in "advanced" techniques such as packet. After all, how do you think this message reached your mailbox? We're still playing catch-up at the moment.) Somehow there must be some larger and more meaningful set of goals for ham radio than merely "keeping the CBers out"; what's the

Sender closed connection

=== Network Mail from host simtel20.arpa on Fri Jul 13 18:47:15 ===

From 3195183243119649235
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ce39ac93a5e61839,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-13 09:15:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles - hp 1.2 08/01/83; site hp-pcd.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!hp-pcd!nathanm
From: nathanm@hp-pcd.UUCP
Newsgroups: net.ham-radio
Subject: Etc. and code
Message-ID: <7000003@hp-pcd.UUCP>
Date: Fri, 13-Jul-84 12:15:00 EDT
Article-I.D.: hp-pcd.7000003
Posted: Fri Jul 13 12:15:00 1984
Date-Received: Tue, 17-Jul-84 06:18:12 EDT
Organization: Hewlett-Packard - Corvallis, OR
Lines: 19
Nf-ID: #N:hpcvre:7000003:000:730
Nf-From: hpcvre!nathanm   Jul 13 11:15:00 1984

I must say that I've been impressed with the quality of
the code/no-code discussion, although it's probably time
to put the subject to bed. Having contributed my own
(anti-code) two cents worth, I received an excellent reply
by mail and have learned a lot from the discussion here.

I'm a non-ham who has entertained a longtime dream to join
the fraternity. Realistically, I know that code is no
obstacle. The bigger obstacle is the time and expense of
setting up a station. And it's damn hard to home-brew
equipment approaching the quality of modern commercially-
available stuff.

But I never did get an answer to my one question... Are they
still asking about triodes on the tests?

Nathan Meyers
hp-pcd!nathanm

From 2770990835658292767
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1433a8,5921e589d2eef895,start
X-Google-Attributes: gid1433a8,public
X-Google-Thread: 151e61,5921e589d2eef895,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-13 09:18:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site iddic.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!hplabs!sdcrdcf!sdcsvax!
akgua!mcnc!decvax!tektronix!orca!iddic!brucec

From: brucec@iddic.UUCP
Newsgroups: net.ham-radio,net.sport
Subject: Western States 100 and Ham Radio
Message-ID: <1755@iddic.UUCP>
Date: Fri, 13-Jul-84 12:18:07 EDT
Article-I.D.: iddic.1755
Posted: Fri Jul 13 12:18:07 1984
Date-Received: Mon, 16-Jul-84 07:38:18 EDT
Organization: Tektronix, Beaverton OR
Lines: 27

This past weekend I was in Auburn, CA and the Lake Tahoe area for the Western States 100 Mile Endurance Run. This is generally acknowledged as the TOUGHEST physical endurance contest in the world, leaving the Ironman, Tour de France, Swim around Manhattan, etc. in the dust (or waves). The race is 100 miles in the Sierra Nevada's in 24 hours, with an altitude gain of 17,000 feet and a loss of 22,000. The temperature ranges from below freezing to 100+ degrees.

I was 'crew' for a runner and of course, took along my handheld. Sure enough there was a net on 2 meters covering the race, dispensing and collecting all sorts of useful information. At one aid station a ham had a speaker rigged up to his mobile and had a real crowd listening to runner position information.

In terms of EMERGENCY SIMULATIONS, running races are excellent. We had 350 + 'victims' here, with all sorts of medical problems. The logistics problems range from getting food and water to some extremely remote locations to supplying medical aid for: heat stroke, hypothermia, hypoglycemia, and all sorts of foot and leg problems to getting clothing. The analogy to a disaster simulation is quite apt. This was a remote and rural locale, but the large marathons in major cities would represent an urban emergency.

So next time you hear of a 10 K or Marathon or Triathlon in your city, why not offer to do race day communications on a local repeater (or emergency one if you have it)? Try to get involved with the logistics as well as keeping track of the leaders and laggers. Be sure to have lots of 'listen only' stations around the race to relay BY WORD OF MOUTH to the crowd near them the progress of the race. This one-on-one interaction with an amateur radio operator generates all sorts of good PR, and increases the respect and visibility of your club.

From 5917274199647259371
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9807e871b7e3b56
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-13 10:09:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!hao!seismo!brl-tgr!ron
From: ron@brl-tgr.UUCP
Newsgroups: net.ham-radio
Subject: Re: Morse Code?
Message-ID: <3251@brl-tgr.ARPA>

Date: Fri, 13-Jul-84 13:09:38 EDT
Article-I.D.: brl-tgr.3251
Posted: Fri Jul 13 13:09:38 1984
Date-Received: Mon, 16-Jul-84 04:47:53 EDT
References: <1454@sri-arpa.UUCP>
Organization: Ballistics Research Lab
Lines: 5

Oh, bullshit about the twelve year old boy having an easier time of it.
The only reason is that he is probably more inspired to do it. The age
influence on ease of learing arguement rolls off at less than six years.

-Ron

From -1421484946111929510
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7b196bd335f7cc52
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-13 10:12:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!hao!seismo!brl-tgr!
ron
From: ron@brl-tgr.UUCP
Newsgroups: net.ham-radio
Subject: Re: In support of Morse code requirements.
Message-ID: <3252@brl-tgr.ARPA>
Date: Fri, 13-Jul-84 13:12:38 EDT
Article-I.D.: brl-tgr.3252
Posted: Fri Jul 13 13:12:38 1984
Date-Received: Mon, 16-Jul-84 04:49:53 EDT
References: <1474@sri-arpa.UUCP>
Organization: Ballistics Research Lab
Lines: 7

The story I heard was an airplane pilot who used morse on his Push to
talk switch because the audio was out in his radio. I'll admit that all
I use CW for is decoding identifiers on repeaters and navigation transmitters
but I'd feel better if the people who I'm sharing the airwaves with also know
it.

-Ron

From 1043495197792821637
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,21b301c42ed23e69,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,21b301c42ed23e69,start
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1984-07-13 11:58:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site opus.UUCP
Path: utzoo!linus!decvax!mcnc!philabs!cmcl2!seismo!hao!cires!nbires!opus!scott
From: scott@opus.UUCP (Scott Wiesner)
Newsgroups: net.aviation,net.ham-radio
Subject: Frequency interference info needed
Message-ID: <608@opus.UUCP>
Date: Fri, 13-Jul-84 14:58:42 EDT
Article-I.D.: opus.608
Posted: Fri Jul 13 14:58:42 1984
Date-Received: Tue, 17-Jul-84 06:47:09 EDT
Distribution: net
Organization: NBI, Boulder
Lines: 19

I'm in the process of getting (re)started in radio controlled airplanes.
I'm looking for an explanation of what to watch out for in the way of
frequency interference. I know it is quite possible for someone to be
flying on freq. A, and have someone else on freq. B shoot him down. What
I'd like to know is what causes this (in layman's terms) and which frequencies
have such conflicts. Also, how are the problems compounded when more than
two radios are involved? I have seen problems at our field where three
different frequencies are being used, in which one person is getting lots
of glitches. If only two of the planes are flying, everything is fine.

The radio I have on order is on one of the new channels specifically for
flying. The channel number is 54. (Sorry, don't know exact freq.) Anything
I should know about this specific frequency?

Any help in this area is greatly appreciated.

Scott Wiesner
..allegra!nbires!scott
..ucbvax!nbires!scott

From -7059549253315912381
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1ef00cf3b7794538,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,1ef00cf3b7794538,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 14023a,1ef00cf3b7794538,start
X-Google-Attributes: gid14023a,public
X-Google-ArrivalTime: 1984-07-13 21:23:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)
Newsgroups: net.ham-radio,net.consumers,net.audio
Subject: Another Form of ID
Message-ID: <44@whuxl.UUCP>
Date: Sat, 14-Jul-84 00:23:32 EDT
Article-I.D.: whuxl.44

Posted: Sat Jul 14 00:23:32 1984
Date-Received: Sun, 15-Jul-84 01:34:29 EDT
Organization: Bell Communications Research, Inc.
Lines: 27

<gulp,gulp>
I agree, Operation ID is a great idea. Often you can borrow an engraver to mark a permanent ID on your valuables from your local police department. Whatever you do, DONT use your Social Security Number as the ID, it can't be traced, since the law prohibits the Social Security Administration from releasing SSN's to the police.
A driver's license number is one option, but since some of us don't (or can't) drive, there are several other options.
1) If you are a ham, use your ham call - an option I use myself, since the call can easily be looked up in the Radio Amateur Callbook or traced through the FCC.
2) Unfortunately, the serial numbers on much electronic gear is not permanently marked on it (I've noticed this with much stereo equipment). Engrave the serial number on the chassis of the equipment. Then record the serial numbers and give the police a copy of the list if the things are ripped off.
One advantage of this approach is that it does not destroy the resale value of the equipment. In fact it can be a selling feature ---
Case history:
A friend of mine bought some stereo gear from me (a receiver and a pair of speakers) a while ago. Like all my stereo equipment, the serial numbers were quite permanently and prominently engraved on the items. Unfortunately, he was ripped off and the thieves took his brand new tape deck and turntable. However, they left the receiver and speakers after seeing the ID eq engraved on them. Operation ID works - It can keep your stuff from being taken and can help you get it back if it is swiped.
Bill Mitchell
(whuxl!wjm)

From -7361508319782324387
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cba6d02b34a6f550,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-14 05:31:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ucf-cs.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!akgua!mcnc!duke!ucf-cs!giles
From: giles@ucf-cs.UUCP
Newsgroups: net.ham-radio
Subject: Code | technical competence
Message-ID: <1382@ucf-cs.UUCP>
Date: Sat, 14-Jul-84 08:31:57 EDT
Article-I.D.: ucf-cs.1382
Posted: Sat Jul 14 08:31:57 1984
Date-Received: Mon, 16-Jul-84 05:20:19 EDT
Organization: University of Central Florida
Lines: 71

Okay -- I am strongly anti-code (as in code-for-the-sake-of-code), but as someone pointed out, *I* may be the only one receiving a signal so I have a responibility to have at least a minimal skill in code. 5 wpm has been generally agreed upon as a acceptable speed, so I can live with that as a requirement for a license.

BUT -- IT WILL COST!

(1): 5 wpm on *all* classes. This worship of code-for-the-sake-of-code is *extremely* repugnant to a lot of us you need to keep your upper bands. My personal interests are on *development*, not the actual communication. Perhaps in a few years I my tastes will change to where I enjoy rag-chewing on CW, but the emergency communication argument for CW is the only one I (and a lot of others) will accept.

(2): You want technical competence required -- demand it. For a general class license, all new *and* renewed licensees must build, from components, one major subsystem of a radio. Included must be design notes, assembly records (photographs of partially assembled board and licensee), and testing results. Furthermore, each licensee must undergo verbal examination by the volunteer examineers. And I mean questions like: if your FM transmitter (if that is what they built) changes the modulation level by the amount dm, how does this affect the n-th sideband ? (by J' sub(n) (m) * dm). How is total bandwidth affected? (Dependent upon the location of the zeroes of the Bessel functions) While a person could still learn this by reading a book (sin that that is!), the fact it is a verbal exam will ensure that the licensee *must* have an adequate technical expertise.

For the advanced licenses -- you guessed it -- design and build a complete transceiver. This radio must include *both* digital and voice capacities. Furthermore, this radio must be operated under the control of both the operator (via the front panel) and a computer (via keyboard entries). Because of the scale of this project, individual modules can be purchased pre-assembled (e.g., power supplies, low-level computer i/o, various filters), but a significant amount of assembly must be done solely by the licensee.

(3): Serious discussion is started about removing archaic requirements for a license. Included in that is a no-code/digital-only/high frequency license. Everyone keeps saying "not for another 12 years", well to me that is "in only 12 years." And you better believe that if I suffer through the higher code speeds (for the advanced license -> the technical aspects I want to free from archaic demands) that I will be a vocal member concerning such policy. It will be far better to approach the FCC in 1995 united with a new license requirement than divided and sharply quarreling.

A comment I frequently see, "If you don't have to overcome obstacles, it wasn't as satisfying when you succeed" overlooks one important fact: THEY MUST BE NATURAL OBSTACLES! I have been working (on and off) for 2 1/2 years to get in shape to jog over 12 miles along pristine Florida

coast. That is a very large natural obstacle, as I will be forced to jog in either soft, loose sand or in the breaking surf (or both). And after all this time, I am still doing well to travel 4 miles in a jog. After I run it, yes, I will be extremely happy. But if someone came to me and said "Miss June says she wants to see you *now*, follow this path" and it is a torturous path which takes a considerable amount of effort to complete, and when I finish I find out that a different path (which the original person knew) was far shorter and more direct, then when I next see the person who sent me on the long path he had best run for his life. I'm not lazy, but I feel *I* am the best judge of how my time is best spent, and overcoming artifical obstacles is just above transporting the Atlantic Ocean into the Pacific via a teaspoon in priority.

Bruce Giles
{decvax, duke}!ucf-cs!giles
giles.ucf-cs@Rand-Relay

From -2880605398937468377
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f7373ef6c360946e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-14 10:06:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: TRACKING ANTENNA and UHF question
Message-ID: <10790@mgweed.UUCP>
Date: Sat, 14-Jul-84 13:06:29 EDT
Article-I.D.: mgweed.10790
Posted: Sat Jul 14 13:06:29 1984
Date-Received: Sun, 15-Jul-84 02:34:33 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 23

Someone on the net wondered if 148 MHz was UHF. Well, it's not.

I don't know if I have this all correct but the general spectrum is as follows:

kHz	"Band"
.3 to 3 kHz	ELF
3 to 30 kHz	VLF
30 to 300 kHz	LF
300 to 3000 kHz	MF
3 to 30 MHz	HF

```
     30  to   300 MHz   VHF
     300 to  3000 MHz   UHF
        3   to    30 gHz    SHF
     30  to   300 gHz   EHF
```

I don't remember where it goes from there.

Bob K9EUI

From 8180956443687466162
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a64827bba6d2f0a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-14 10:12:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Frequency lists and other comments
Message-ID: <10791@mgweed.UUCP>
Date: Sat, 14-Jul-84 13:12:57 EDT
Article-I.D.: mgweed.10791
Posted: Sat Jul 14 13:12:57 1984
Date-Received: Sun, 15-Jul-84 02:34:47 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 16

I like to see the "scanner" and other frequency lists. I would not
object to a net.swl group either. If that is not practical for some
reason, then it best belongs here, I think.

By the way, last nite I heard a station on 179 kHz. It was WGU20
and they gave the time every 10 seconds..

I have heard this station in years past. I think they are in New Jersey
and it is run by NOAA. Anyone got any info on it???????

(They were 10 over S-9 on my R-1000 with a 25 foot vertical and a tuner
but I could not find them on my early 70's vintage Zenith Transoceanic).

Bob K9EUI

From 1719744805680115236
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a64827bba6d2f0a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-14 15:54:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP

Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Frequency lists and other comments
Message-ID: <2319@ihuxf.UUCP>
Date: Sat, 14-Jul-84 18:54:12 EDT
Article-I.D.: ihuxf.2319
Posted: Sat Jul 14 18:54:12 1984
Date-Received: Sun, 15-Jul-84 02:44:16 EDT
References: <10791@mgweed.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 17

> ...last nite I heard a station on 179 kHz. It was WGU20
> and they gave the time every 10 seconds..
>
> I have heard this station in years past. I think they are in New Jersey
> and it is run by NOAA. Anyone got any info on it???????
>
> Bob K9EUI

WGU20 is a US Government station operated on 179.0 KHz by the Federal
Emergency Management Agency (FEMA). WGU20 is authorized to run 50,000
watts using emissions of type 0.60F1, 6A3, and 6A9.

The station location is listed as Edgewood Arsenal, Maryland.

--
==
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 4668186683900435785
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f89385b39fe07440,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-15 14:38:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)
Newsgroups: net.ham-radio
Subject: Re: Code, et.al.
Message-ID: <45@whuxl.UUCP>
Date: Sun, 15-Jul-84 17:38:02 EDT
Article-I.D.: whuxl.45
Posted: Sun Jul 15 17:38:02 1984
Date-Received: Sun, 15-Jul-84 23:58:28 EDT
Organization: Bell Communications Research, Inc.
Lines: 31

<munch, munch>
As I once told a friend of mine who is considering getting his Novice ticket...

"Ham Radio isn't one hobby, it is many". To many people, hams are people who work DX and rag chew on the HF bands, but as we know there's more to hamming than that. There is CW operation (either informal rag chews or formal traffic operation - actually most traffic nets prefer CW, due to the natural ambiguities of copying phone - letters sounding alike, etc,) and there are those who make CW proficiency a goal to be achieved (the League runs high speed (at least to 60 wpm) tests on W1AW several times a year - check QST for details).
Of course if you're not into CW or phone, there's always slow scan TV, amateur TV (on the 432 MHz band), moonbounce, ASCII operation, etc.
Some people concentrate on contests, some on traffic, while others just like to ragchew, and I think there's room on the ham bands for all of us. However, we must not lose sight of why the FCC has granted us all this spectrum:

1) Hams have been pioneers in the use of radio, developing useful new communications techniques (who found that the shortwave bands were useful for DX and that moonbounce was feasible?)
2) Hams are a national resource of people trained in communication techniques that can be used in an emergency.

Given those two things, I'd like to see the exams encourage a wide range of technical skills, but would also like to see the code requirement kept, since one never knows when you or the country may need it.
As for mpackards comment that CW is less useful on VHF due to its limited range, I respectfully disagree. There are several long distance means of 2m propagation like aurora that really can't be used with anything BUT CW due to the wavering Doppler shifts of the aurora. Also, if I have to operate 2m simplex in an emergency where most of the repeaters are knocked off the air with a 1 watt hand-held with a "rubber duck", I need all the help I can get to get through, and I'm going to use CW.
73's
Bill Mitchell, WB2IAU (whuxl!wjm)

From 3984545884960432128
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b164b60d3aa2210d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-15 15:10:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!uiucdcs!uok!
mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Morse Code again - (nf)
Message-ID: <2800010@uok.UUCP>
Date: Sun, 15-Jul-84 18:10:00 EDT
Article-I.D.: uok.2800010
Posted: Sun Jul 15 18:10:00 1984
Date-Received: Sat, 21-Jul-84 04:26:15 EDT
Lines: 22
Nf-ID: #N:uok:2800010:000:1110
Nf-From: uok!mpackard Jul 15 17:10:00 1984

#N:uok:2800010:000:1110

uok!mpackard   Jul 15 17:10:00 1984

[] <--Eat Me

I've been working on radars since 1972 and currently am a crewmember
on the E3 AWACS and during all that time I've never broke or failed
to operate the equipment within specs because I didn't know morse code.
I believe what the hams want is competent operators and technicians.
They don't want some puke splattering or intentionally jamming his
fellow amatuers. They want a pure spectrum where everyone can talk
or key a conversation. I think the code has a perfect place in HF but
is only a nuiscence in the bands after 10 meters. In Oklahoma all the
popular repeaters use voice ID. I first got interested in amatuer
radio in high school and this guy told me that I couldn't use it unless
I learned code. So we listened to HF and some of us eventially got
profficient but 95% of the group went on to metal shop and said screw
this! In USAF tech schools these guys are refered to as ditty boppers
and most of them can't even tie thier shoes yet. I agree morse is
easy to learn, so then why require it as then you'll get a bunch of
people who got their liscenses the easy way!
uok!mpackard

From 9133251971623866950
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-16 08:13:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!linus!decvax!tektronix!hplabs!hao!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks
Message-ID: <3303@brl-tgr.ARPA>
Date: Mon, 16-Jul-84 11:13:52 EDT
Article-I.D.: brl-tgr.3303
Posted: Mon Jul 16 11:13:52 1984
Date-Received: Wed, 18-Jul-84 06:14:17 EDT
References: <2800003@uok.UUCP> <2800009@uok.UUCP>
Organization: Ballistics Research Lab
Lines: 6

Sorry, but voice id's are obnoxious. If they are loud enough to be legal
they will obliterate the traffic on the repeater. The reason for CW besides
being easy to build and easy to set remotely, is that most people, who are
uninterested in the ID, can mentally tune it out.

-Ron

From 2292133696885205494
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,cba6d02b34a6f550
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-16 08:18:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!linus!decvax!tektronix!hplabs!hao!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Code | technical competence
Message-ID: <3304@brl-tgr.ARPA>
Date: Mon, 16-Jul-84 11:18:18 EDT
Article-I.D.: brl-tgr.3304
Posted: Mon Jul 16 11:18:18 1984
Date-Received: Wed, 18-Jul-84 06:14:29 EDT
References: <1382@ucf-cs.UUCP>
Organization: Ballistics Research Lab
Lines: 4

Give me a break, the FCC can't even handle the damn multiple choice
code test that they give now, let alone practical engineering tests.

-Ron

From -2005918852499384869
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,85cc5c9f43b7b15d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-16 10:22:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!ecn-ee!wn9nbt
From: wn9nbt@ecn-ee.UUCP
Newsgroups: net.ham-radio
Subject: other countries & no-code - (nf)
Message-ID: <1968@pur-ee.UUCP>
Date: Mon, 16-Jul-84 13:22:09 EDT
Article-I.D.: pur-ee.1968
Posted: Mon Jul 16 13:22:09 1984
Date-Received: Tue, 17-Jul-84 01:59:51 EDT
Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University
Lines: 14

#N:ecn-ee:14900002:000:418
ecn-ee!wn9nbt   Jul 16 09:51:00 1984

I've heard that the Canadians have a no-code packet license and
have had very few applicants. Something was posted to the net
recently about the Japanese no-code license and I heard a few
verbal comments that it had a very negative impact over there.

These are things that I've heard, but does anyone have any facts
on the 2 situations ? I'd be interested in hearing them.
__... ...__   Dave pur-ee!wn9nbt

From -8398409159623060435
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bd0b6cc6799b4597,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-16 10:32:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site iddic.UUCP
Path: utzoo!linus!decvax!tektronix!orca!iddic!brucec
From: brucec@iddic.UUCP
Newsgroups: net.ham-radio
Subject: Toyotas and 2 meter radios
Message-ID: <1756@iddic.UUCP>
Date: Mon, 16-Jul-84 13:32:44 EDT
Article-I.D.: iddic.1756
Posted: Mon Jul 16 13:32:44 1984
Date-Received: Tue, 17-Jul-84 06:42:19 EDT
Organization: Tektronix, Beaverton OR
Lines: 16

  I vaguely remember reading somewhere (QST?) about problems with
Toyota ignition systems in cars equipped with 2 meter radios. I am
considering buying a Toyota and would GREATLY appreciate any info
such as:

      1) A source for the original article

      2) Your experiences with 2 meters (or any other band) in
         your Toyota

Thanks in advance!

NI7M   Bruce Cheney Tektronix, Wilsonville, OR
                    UUCP ...!tektronix!iddic!brucec

From 3660012042405747285
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ccdf678e3171acb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-16 11:04:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: CODE IS NECESSARY

Message-ID: <579@inuxd.UUCP>
Date: Mon, 16-Jul-84 14:04:51 EDT
Article-I.D.: inuxd.579
Posted: Mon Jul 16 14:04:51 1984
Date-Received: Tue, 17-Jul-84 01:53:25 EDT
References: <7000002@hp-pcd.UUCP>
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 25
To: inuxc!ihnp4!houxm!houxz!vax135!cornell!uw-beaver!tektronix!hplabs!hp-pcd!
nathanm

Your comments on NO CODE are good and the guys that say "I did it so should you" are appropriately cited. I like CODE and as many others have testified, in an emergency (by the way this is what Amateur Radio is about except for those hobbiest only guys) CW is the answer . A basic question on the FCC test asks what HAM radio is to be used for. The answer is to further develope technical skills in communications and for "PUBLIC SERVICE".

All in all I believe that CODE is quite important "NOT" to "KEEP OUT the CB'ers" but to insure the necessary skills to perform the REAL Amateur Radio Tradition to serve the public.

NO the HAM RADIO has not lost it's thunder!!!!! We are very much in the news on sattelite communinications, over seas message delivery(by the way I have had to resort to CODE to get important messages through that other methods failed), disater communications, PACKET RADIO, SPREAD SPECTRUM, etc,etc,etc.

The bottom line is , HAM radio is a hobby SECOND and a service first. To do that and do it well we must know the basic modes of opereation to get the job done. By the way I have taught several quote "CBers" and they are all first class operaters as HAMS.

73's RICH KN9K

From 8080239252434060591
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,df9aa615926c77db,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-16 14:59:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxa.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxa!mstach
From: mstach@ihuxa.UUCP (Dan Hoelker)
Newsgroups: net.ham-radio
Subject: Re: Morse Code
Message-ID: <599@ihuxa.UUCP>
Date: Mon, 16-Jul-84 17:59:55 EDT
Article-I.D.: ihuxa.599
Posted: Mon Jul 16 17:59:55 1984

Date-Received: Tue, 17-Jul-84 02:00:24 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 26

Into the fray ....

I can't quite see the argument that Morse code is too much work to
learn. I got my Novice license when I was 22, and thought it was a
heck of a lot easier than taking the test that I took 2 years earlier
to get my 2nd Class Radio-telephone license.
Besides, the 2nd class doesn't require any code. It was just the volume
of information that needed to be learned to pass the written test
that made it difficult.

I think it is just that old human problem of doing what you really want
to do and griping about the rest. If a person REALLY wants to do
something they will re-arrange schedules, make the effort, and do
whatever else is necessary to get it done. I don't think that
Morse code is so difficult that anyone can't learn. To get the
5 WPM all you have to do is memorize the characters. I bet you have
to learn 26 new tasks when you buy a new IBM PC. In this case you
have to memorize 26 new characters. (I suppose for the flamers I
should add that you have to learn 10 numbers and a few punctuation
marks.)

Anyway, I feel better now.

Dan Hoelker
ihuxa!mstach
KA9MHK

From 8360908000050724950
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8f8a393bcb4f181,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-16 15:37:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabs.UUCP
Path: utzoo!linus!decvax!tektronix!hplabs!faunt
From: faunt@hplabs.UUCP (Doug Faunt)
Newsgroups: net.ham-radio
Subject: CW receiving software for a Sinclair
Message-ID: <610@hplabs.UUCP>
Date: Mon, 16-Jul-84 18:37:03 EDT
Article-I.D.: hplabs.610
Posted: Mon Jul 16 18:37:03 1984
Date-Received: Wed, 18-Jul-84 06:17:21 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 5

I am looking for CW recieving software (and hardware) for a
Sinclair/Timex. I have seen references to it's existence, in

magazines, but nothing definite. Thanks
     ....!ihnp4!hplabs!faunt
     faunt%hp-labs@csnet.relay

From 2425259694128740376
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4f769bc1ddad830d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-17 05:19:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL DX bulletin nr 25
Message-ID: <10865@mgweed.UUCP>
Date: Tue, 17-Jul-84 08:19:03 EDT
Article-I.D.: mgweed.10865
Posted: Tue Jul 17 08:19:03 1984
Date-Received: Wed, 18-Jul-84 02:40:25 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 40

qst de k9eui
hr dx bulletin nr 25   from arrl headquarters   newington ct
july 13 1984   to all radio amateurs   bt

chagos. vq9bc has been active around 14157 khz at 2300z. the station has a new 100 foot tower which will hold a new tribander along with inverted vees for 40 and 80 meters and possibly a 160 meter antenna.

aland islands. k5kg/oh0 has been very active, mostly on cw. he will operate the radiosport contest this weekend.

pakistan. ap2mq, monseur, now has cw capabilities. he has been worked at 0200z on 14153 khz and will make cw contacts on request.

lord howe island. vk9lm has been active on 7004 khz. they have been on for two days of a one week stay. the operators are g3cwi and g3zay, and operation will be on 40 through 10 meters. qsl to box 146, cambridge england.

desecheo. seven operators will man wp4atf/kp5 and hi3rst/kp5 from july 23 through 30 on 80 through 10 meters, ssb and cw, with possibly some 160 meter operation. operators in addition to wp4atf and hi3rst will be wp4b, kp4bz, np4c, kp4hc and np4ka.

egypt. ka4sbe/su is still active on 14207 khz at 0100z. bert reports antenna problems keep him off 40 meters but he is still available on 20 and 15.

greenland. ik0cak/ox will operate between july 25 and august 20. they will operate through oscar 10 on orbits 834, 836, 838, 873 and 877. receive frequencies will be 145.87 mhz for cw and 145.91 mhz for phone. an hf station will also be active between 2200 and 0600z, 80 through 10 meter ssb and cw with 160 meter activity on 1840 khz cw. ar

From 6894882275535447832
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,1ef00cf3b7794538
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,1ef00cf3b7794538
X-Google-Attributes: gid151e61,public
X-Google-Thread: 14023a,1ef00cf3b7794538
X-Google-Attributes: gid14023a,public
X-Google-ArrivalTime: 1984-07-17 06:11:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxl.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxl!seifert
From: seifert@ihuxl.UUCP (D.A. Seifert)
Newsgroups: net.ham-radio,net.consumers,net.audio
Subject: Re: Another Form of ID
Message-ID: <1236@ihuxl.UUCP>
Date: Tue, 17-Jul-84 09:11:30 EDT
Article-I.D.: ihuxl.1236
Posted: Tue Jul 17 09:11:30 1984
Date-Received: Wed, 18-Jul-84 02:41:14 EDT
References: <44@whuxl.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 20

> 1) If you are a ham, use your ham call - an option I use myself, since the
> call can easily be looked up in the Radio Amateur Callbook or traced through
> the FCC.

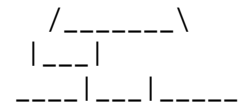
This is fine, except that most of us won't recognize it as a ham call.

> 2) Unfortunately, the serial numbers on much electronic gear is not permanently
> marked on it (I've noticed this with much stereo equipment).

This is fairly stupid. (although maybe it helps them sell more units as replacements :-))

Putting the serial mumber on it permanently sounds like the best idea.
Especially if you might sell it in the future.
--

     _____
       /_____\   "Get out there and keep moving forward!"



- Leo Franchi
Snoopy
ihnp4!ihuxl!seifert

From -2810343352271005535
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1ef00cf3b7794538
X-Google-Attributes: gid151e61,public
X-Google-Thread: 14023a,1ef00cf3b7794538
X-Google-Attributes: gid14023a,public
X-Google-Thread: 15c702,1ef00cf3b7794538
X-Google-Attributes: gid15c702,public
X-Google-ArrivalTime: 1984-07-17 09:42:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pucc-h
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!CS-Mordred!Pucc-H:abo
From: abo@pucc-h (Doll)
Newsgroups: net.ham-radio,net.consumers,net.audio
Subject: Re: Another Form of ID
Message-ID: <847@pucc-h>
Date: Tue, 17-Jul-84 12:42:00 EDT
Article-I.D.: pucc-h.847
Posted: Tue Jul 17 12:42:00 1984
Date-Received: Thu, 19-Jul-84 02:40:05 EDT
References: <44@whuxl.UUCP>
Organization: Purdue University Computing Center
Lines: 15

The National Crime Information Computer (or something similar) is a nation wide network tying all law inforcement agencies together. The standard approach for identifying an individual is by either their social security number or their name and date of birth. If you have ever legally driven a car or earned money in the US, you are in there along with your address, description and any crime, misdeminor or parking ticket. The base key for the data base is your social security number (which is why they tell you to put your social security number on property for protection, if recovered by the police anywhere in the US, you will get notified).

Lew Doll
Purdue University Computing Center

From 1819307402797737241
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6d6d941dcd1c0e5b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-17 14:39:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)

Newsgroups: net.ham-radio
Subject: ARRL Bulletin nr 54 (FCC adopts several NPRMs)
Message-ID: <10876@mgweed.UUCP>
Date: Tue, 17-Jul-84 17:39:47 EDT
Article-I.D.: mgweed.10876
Posted: Tue Jul 17 17:39:47 1984
Date-Received: Wed, 18-Jul-84 03:22:01 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 43

qst de k9eui
hr bulletin nr 54 from arrl headquarters newington ct
july 12 1984 to all radio amateurs bt

fcc today acted on four items of interest to amateurs,

1. the commission adopted rules to permit the recoupment of expenses by volunteer examiners, ves, and volunteer exam coordinators , vecs. the rules provide for considerable flexibility on the part of ves and vecs and do not require that either party be necessarily reimbursed. vecs will be permitted to make estimates of anticipated expenses to establish a fee structure. if actual expenses are less for the year, the vec will be allowed to simply reduce fees accordingly in the following year.

2. acting on a number of petitions for reconsideration of its volunteer examination rules, the commission adopted a number of minor changes. the most significant of these is that vecs will be permitted to design their own exams in accordance with a commission supplied formula. the revised rules envision, two years in the future, permitting ves themselves to design exams.

3. fcc adopted a notice of proposed rulemaking, nprm, in which it is proposed that non-government hf broadcasters licensed by the fcc in itu region 3, for example guam, be permitted for the first time to use 7100 to 7300 khz.

4. fcc adopted another nprm that proposes to revise part 73 of its rules to eliminate the existing requirement that broadcast stations obtain prior fcc permission before rebroadcasting amateur radio transmissions. at the same time, fcc proposes to clarify its amateur radio rules to make it clear that amayeur radio stations may not, even in an emergency situation, be used to supply communications on behalf of the media.

the full texts of these actions are expected to be released within 10 days. both nprms will allow 60 days from the date of their publication for comments. prospective commenters should refrain from filing comments until they have seen the full text. ar

From -7902847036350772891
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,573540ccc7312dc6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-13 09:30:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: LOOKING for a RIG
Message-ID: <603@inuxd.UUCP>
Date: Mon, 13-Aug-84 12:30:20 EDT
Article-I.D.: inuxd.603
Posted: Mon Aug 13 12:30:20 1984
Date-Received: Tue, 14-Aug-84 01:58:54 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 10

I am interested in buying a used TS830 or equivelent
If anyone knows of one , please let me know.

Also my HW101 is for sale with PWR supply/SWR meter, CW filter
and a home brew digital frequency (dial) display. New
finals and in excellent condition with many spare tubes .

Thanks in advance! KN9K RICH

From -2063363199143932345
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f6b74884621a15b1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-13 15:44:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 28
Message-ID: <11491@mgweed.UUCP>
Date: Mon, 13-Aug-84 18:44:52 EDT
Article-I.D.: mgweed.11491
Posted: Mon Aug 13 18:44:52 1984
Date-Received: Tue, 14-Aug-84 02:53:06 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 46

qst de k9eui

hr dx bulletin nr 28 from arrl headquarters newington ct
august 3 1984 to all radio amateurs bt

cambodia. xu1ss is again being worked from the east coast on
sundays at 1200z on 14245 khz. he has been weak but workable.

ethiopia. there has been activity from et3ps on 14170 khz at
0130z.

wallis island. fw0bj has been worked on 14170 khz at 0500z and
on 21290 khz between 2000 and 2200z.

haiti. joe, hh2q, expects to be active through august 10 and
then from september through the remainder of the year. qsls go
to i2yae.

crete. w0pu/sv9 has been worked on 7007 khz at 0100z.

st. martin. mort, pj8uq, plans to operate ssb and rtty until
early september. qsl via w3hnk.

corsica. look for f0ch/tk at 2200z on 14195 khz.

niger. 5u7ld was very active over the weekend on 14218 khz
around 2230z.

swaziland. fred, 3d6am, was worked long path last weekend on
14170 khz at 1230z.

india. vu2sv has been worked on 40 cw. watch 7006 khz at
0100z.

mauritius. 3b8cd is active on 7002 khz at 0300z.

nigeria. look for kc7uu/5n8 at 1800z on 14028 khz.

paraguay. zp5xdw has been active on 14025 khz at 0200z. qsls
go via n4dw.

algeria. 7x2fk may be found on 7001 khz at 0300z.

itu geneva. dk7ae, dk7ah and dk8ag plan to keep 4u1itu active
during the wae contest on august 11 and 12. ar

From 7254098985366660762
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8cd1f6fb314859e6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-13 15:45:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr

From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast nr 33
Message-ID: <11492@mgweed.UUCP>
Date: Mon, 13-Aug-84 18:45:22 EDT
Article-I.D.: mgweed.11492
Posted: Mon Aug 13 18:45:22 1984
Date-Received: Tue, 14-Aug-84 02:53:36 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 26

qst de k9eui
hr propagation forecast bulletin nr 33 from arrl headquarters
newington ct august 13, 1984
to all radio amateurs bt

the solar flux reached a peak of 93 on august 10 and then turned downward, to 86 on the 12th. it is expected to continue downward for several days. as in recent weeks, variations in the flux level are not expected to be a major propagation factor. we have had some good days already in august, and a seasonal pickup has been observable on 21 and 28 mhz.

fluctuations in the earths magnetic field will influence propagation to a greater extent. magnetic k and a indices were rising at bulletin time, with high latitude circuits suffering accordingly. generally low signal levels will prevail early in the forecast week, but propagation will improve after august 15. fair to good signal levels and reduced fading will be observed most of the time august 16 through 24, but more trouble is likely august 28 through 31. no large changes in the solar flux are expected until early september.

american sunspot numbers for august 2 through 8 were between 10 and 26 with a mean of 20.0 ar

From 8801085591505935009
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8ef38f577ff2105a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-13 15:46:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 63 (2 220 mhz petitions)
Message-ID: <11493@mgweed.UUCP>
Date: Mon, 13-Aug-84 18:46:02 EDT
Article-I.D.: mgweed.11493
Posted: Mon Aug 13 18:46:02 1984

Date-Received: Tue, 14-Aug-84 02:54:06 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 25

qst de k9eui
hr arrl bulletin nr 63 from arrl headquarters
newington ct august 6, 1984
to all radio amateurs bt

the fcc has received two petitions for rulemaking requesting that the 220 mhz band be shared with land mobile radio services. remember, these are petitions for rulemaking and not fcc notices of proposed rulemaking. see qst march 1982, page 66, for comment proceedures.

rm 4829, filed by the land mobile communications council, lmcc, principally seeks frequencies in the 800 mhz band, but says that portions of the 220 to 225 mhz band could also be used for land mobile radio services.

rm 4831, filed by a manufacturer of amplitude compandored sideband equipment, sideband technology, inc., asks the commission for 216 to 225 mhz for narrow band ascb channels for private and government land mobile systems.

comment deadlines for both petitions are august 29, with reply comments due on or before september 13. ar

From -2554571795421706821
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b183f473dab3846e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-13 19:02:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site akgua.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!hplabs!sdcrdcf!sdcsvax!akgua!glc
From: glc@akgua.UUCP (G.L. Cleveland [Lindsay])
Newsgroups: net.ham-radio
Subject: Re: Space Operation
Message-ID: <935@akgua.UUCP>
Date: Mon, 13-Aug-84 22:02:48 EDT
Article-I.D.: akgua.935
Posted: Mon Aug 13 22:02:48 1984
Date-Received: Wed, 15-Aug-84 07:01:43 EDT
References: <766@houxf.UUCP>
Organization: AT&T Technologies/Bell Labs, Atlanta
Lines: 38

Jim Boddie (KC2VQ) raised the question about Owen Garriott
operating in space without an Extra-Class license. I thought I

might see someone else respond, but nothing so far. So here is the quote from the "W5YI REPORT", July 15, 1983:

> Astronaut Dr. Owen Garriott, W5LFL, scheduled later this uear aboard the NASA "Spacelab 1" on the Space Suttle Columbia wrote the FCC on June 1, and 13. He explained the operation in technical detail and requested waivers of certain provisions of the Amateur-Satellite Service Rules to permit him to operate a ham radio station aboard Space Transport System flight 9.
>
> Garriott sought the approval on the basis that it "will advance the long tradition of achievement in the Amateur Radio Service." STS-9 is scheduled to take place between September 30 and October 8, 1983. Dr. Garriott is a licensed Advancded Class amateur radio operator and will be the first ham to operate from space.
>
> .
> .
> .
>
> In favorably ruling on the Garriott request, the FCC's Jim McKinney (Chief of the Private Radio Bureau) said that waivers were "in keeping with our statutory mandate to provide experimental uses of radio frequencies, and to encourage the larger and more effective use of radio in the public interest." The Temporary Waiver Order was signed by McKinney on June 27 and specifically acknowledged the pioneering nature of Dr. Garriott's venture.

Hope this clears thinks up.

73,
  Lindsay W4IZI

Lindsay Cleveland (...{ihnp4|mcnc|sdcsvax|clyde}!akgua!glc)
AT&T Technologies/Bell Laboratories ... Atlanta, Ga
(404) 447-3909 ... Cornet 583-3909

From -1291506133269832869
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eae8b0dc5b7be97e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-15 13:44:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 SMI; site sun.uucp
Path: utzoo!linus!decvax!decwrl!sun!gnu
From: gnu@sun.uucp (John Gilmore)
Newsgroups: net.ham-radio
Subject: The Satellite Viewing Rights Act
Message-ID: <1624@sun.uucp>
Date: Wed, 15-Aug-84 16:44:29 EDT
Article-I.D.: sun.1624
Posted: Wed Aug 15 16:44:29 1984

Date-Received: Sun, 19-Aug-84 09:52:51 EDT
Organization: Sun Microsystems, Inc.
Lines: 25

Forwarded with edits from triton1!condor (Rick Kawala; I forget his callsign)

Right now, there are two acts pending before Congress that would protect the rights of people to use satellite dishes to receive whatever they can. Call your Senator and urge her to support S.2437. Call your Representative and urge him to support H.R.5176. It's quite easy; all you do is call them (get the number from the Federal Information Center in your town) and say "I want to voice my support for bill number ...". They'll take your name and say thank you very much.

If you think that's bullshit, remember this. There is a lot of neat stuff up there. And it's getting very cheap; $4K buys you a really good earth station, and $2K can buy you a relatively poor one. These prices are somewhat retail, and do not include installation. If you hunt and can do some work yourself, [or ask Lauren --gnu] I'll bet you could do it even cheaper. And if you don't call, they're gonna eventually have it set up so that you have to get permission to receive FM in your car. These things just sort of creep up on you; it never happens at once, but instead it happens thing by thing. Eighty years ago, it was quite OK to walk around with a loaded gun. That's gone today. Do something about it now.

Enjoy, Rick [& John, KB6DQC]

From -2267345363839338028
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ac4517923876790,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-15 23:53:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: "hams" vs. "hackers" -- vote request
Message-ID: <126@mouton.UUCP>
Date: Thu, 16-Aug-84 02:53:39 EDT
Article-I.D.: mouton.126
Posted: Thu Aug 16 02:53:39 1984
Date-Received: Thu, 16-Aug-84 07:21:45 EDT
References: <12457@sri-arpa.UUCP>
Organization: Bell Communications Research, Inc
Lines: 15

I'm not sure I saw the original note that prompted Joe's response, but I do have some observations on what he said.

Saying (in effect) that automatic digital communications is just

a mechanized form of CW is like saying jet airplanes just do the same thing that people do with their feet. Even though the basic job may be the same, the speed, reliability and cost of the job makes all the difference.

Even if the differences between two systems are quantitative instead of qualitative doesn't mean that a newer, faster way of doing something can't make major changes in our lives and allow us to do completely new things that were previously impossible.

Phil Karn, KA9Q

From 5789470493062598608
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2081a23bf02ace50,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-16 10:43:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: GATEWAY #1
Message-ID: <127@mouton.UUCP>
Date: Thu, 16-Aug-84 13:43:48 EDT
Article-I.D.: mouton.127
Posted: Thu Aug 16 13:43:48 1984
Date-Received: Fri, 17-Aug-84 01:16:24 EDT
Organization: Bell Communications Research, Inc
Lines: 465

GATEWAY: The ARRL Packet-Radio Newsletter
Issue 1
Electronic

WELCOME

Welcome to Gateway, the ARRL packet-radio newsletter. Some of you reading this are deeply involved in amateur packet radio, some of you are just getting started on this exciting new mode, and some of you aren't quite sure what "packet radio" is. We hope that Gateway will have something to offer each of you.

WHAT IS A "GATEWAY?"

A gateway is a station that links two communications networks. In amateur packet radio, gateway stations are being used communicate between VHF and HF networks, and between VHF networks and satellite channels. Eventually, users of local VHF networks will use gateways to connect to an international packet-

radio network. We have called this newsletter Gateway because we hope that it will, like a gateway station, facilitate communications between amateurs interested in packet radio.

Gateway will not be a technical newsletter; there are already several fine packet-radio newsletters covering technical issues. This will be a "news" newsletter. At ARRL Headquarters we have many sources of news not all of which are available to each of you. This newsletter will bring together notes from these sources. Overseas and domestic packet-radio club newsletters, the FCC, the IARU, on-line conferences and on-the-air bulletin boards will contribute. You may see items that you've seen elsewhere, but you should also see things that are new and interesting.

Some of you are receiving this packet-radio newsletter and have never even considered what packet radio can do for you, or what fun you could have on packet. We hope to provide you with an overview of the state of amateur packet radio, explaining what is being done and what can be done on this new mode.

It seems as though every packet-radio club is undertaking some project that will advance amateur packet radio. To make these projects fruitful, we must make the most of the limited resources available to amateurs. By telling a large audience about various packet-radio development efforts, Gateway should help organizers direct their efforts, and help volunteers find the groups that need them.

Perhaps when there is a worldwide amateur packet-radio network there will be no need for packet-radio newsletters. Until then, we hope that Gateway informs and interests you.

PACKET METEOR SCATTER

Last weekend's Persieds meteor shower provided a good opportunity to experiment with packet-radio meteor-scatter operation. Rich Zwirko, K1HTV, set forth some experimental guidelines, and stations throughout the U.S. attempted MS QSOs.

On August 1, well before the peak of the Persieds, W0RPK, the station of the Central Iowa Technical Society, held schedules with Bob Carpenter, W3OTC, in Maryland. The skeds were on 6 meters. Bob received about 2% of the packets sent from Iowa. Four nights later, again on 6 meters, W3OTC and W0RPK had what is believed to be the first amateur packet-radio meteor-scatter QSO.

As the Persieds approached, stations tried their luck on the 2-meter band. Stations in the East included K1HTV; Vern Riportella, WA2LQQ; Tom Clark, W3IWI; Hank Oredson, W0RLI; and Mark Wilson, AA2Z. In the West were Ralph Wallio, W0RPK; Bob McCaffrey, K0CY; Ron Dunbar, W0PN; Mike McQuiston, WA0WYW; Bob Schiers, N0AN; and Terry Van Benschoten, W0VB. Several of these stations copied beacons and connect requests via MS. On the morning of August 12, during the peak of the shower, W0RPK and K1HTV completed the first packet MS QSO on 2 meters. Congratulations are in order for all stations involved in these tests, and I hope that I haven't left anyone out.

These tests were performed at 1200 bauds, using AFSK FM. While it was necessary to use this mode in order to include as many stations as possible in the experiments, a performance sacrifice was made. We should organize further tests at higher transmission rates with more efficient modulation techniques.

ARRL APPOINTED IARU PACKET CENTER

The ARRL has been appointed IARU packet radio "information clearing house." The following is exerpted from the minutes of the IARU meeting in late July: "ARRL is nominated as the international clearing house of information relating to packet radio on behalf of the IARU, with a view to encouraging common standards and regulations."

This points the way toward international understanding and acceptance of packet radio standards generated in the United States and Canada. Several European amateurs have hesitated to get involved in packet radio because they were not sure which standards would "catch on." The appointment should help to alleviate this confusion abroad as to what is really happening in North American packet radio.

PACKET RADIO ON NETWORK TV

On July 16 at 0745 PDT, a packet from N6ECT was heard throughout the nation on the CBS Morning News show. Curtis Spangler, N6ECT, was being interviewed by CBS for a piece on the Haight/Ashbury and the film crew focused on his CRT. As luck would have it, Curtis was transmitting packets through the KA6M

digipeater. The audio from one of the packets came through loud and clear, and the frame was heard in all 50 states and throughout half the world! Via KA6M.

220 MHz and PACKET RADIO

The 220-MHz band is crucial to packet radio for a couple of reasons. Because it is the lowest frequency band on which we can exceed 19,600 bauds, it is going to be used for the initial high-speed intercity linking. It is not being used for any satellite uplinks or downlinks, and so it is essential for full-duplex teleport stations. With these considerations in mind, we note the following:

The Tri-State Amateur Repeater Council has coordinated a 100-kHz channel from 220.5 MHz to 220.6 MHz for wideband digital communications. This council coordinates VHF frequencies in northern New Jersey, southwestern New York (including Long Island) and Connecticut. This paves the way for EASTNET linking to begin as soon as hardware and software are ready.

On the negative side are two petitions for rule making which threaten the 220-MHz amateur band. The first is RM-4829 from the Land Mobile Communications Council. This petition calls for the FCC "to explore the potential use of vacant spectrum in the UHF TV bands, spectrum allocated for Fedral Government use, or assignments from the band 220-225 MHz to satisfy the requirements of land mobile users." This may sound worse than it is, since the petition goes on to say "Because of the limited number of channels that the 220-225 MHz band will provide, however, it is not anticipated that this spectrum can meet the immediate requirements of land mobile licensees."

Another petition (RM 4831), from a manufacturer of amplitude compandored sideband equipment, explicitly requests reallocation of the band 216-225 MHz. This petition poses a serious threat to the 220-MHz amateur band.

Packet radio needs the 220-MHz band. Be sure to read these petitions and send your comments to the FCC. The comment procedure was outlined in QST, March, 1982. The comment deadline for these two petitions is August 29, 1984.

WHAT'S BREWING AT TAPR?

This piece came from Harold Price's answer to the question "Is TAPR up to something?" Harold is part of the TAPR software design team, and he made these comments while he was "Member of the Month" on Compuserve's HAMNET.

"The following views are mine alone, and do not necessarily refect those of TAPR, AMSAT, VITA, LAPG the staff, management, or janitorial departments.

"The TAPR folks are indeed up to something. We have the TAPR Pascal code running happily under a simulated environment again. The software, with only one change, runs under TURBO Pascal on the Pronto-16. This will vastly speed up development, which has slowed down as of late.

"The plan is to come up with version 4.0 of the TAPR TNC software which will allow testing of both datagram and virtual connection protocols. I think the level two wars are over. With 1300 TNCs in the field from 6 "manufactuers" all running the same level two, anyone proposing a switch now is just rocking the boat. The few proposals I've seen for different level twos offer no concrete advantages over what we've got now anyway. Besides, level two is boring (now that we have one that works). The real fun is level three.

"For the newcomer, level two refers to a point to point protocol, linking one TNC to another with no TNCs in the middle. There is currently a necessary kludge in AX.25 called digipeating which is a very demented level three feature. Digipeating allows two TNCs to be connected using a third as a relay. Without this simple addition to AX.25, packet may not have taken off as it did, since digipeating allows many more users to reach each other. If you haven't got a wide-coverage duplex repeater (or even if you have), digipeating is your best bet for now.

"Anyway, level two is point to point, with level two+ in current style, multihop dumb repeating. The + in level two will die a happy death when we get level three up and running. Level three links two end points thru multiple intermediate TNCs. The linking is done in an intelligent manner. ACKing is node to node rather than end to end. In level two digipeating, each intermediate point simply regenerates the packet. It does not

ACK it. The final end point ACKs it, and the ACK is blindly repeated back to the starting point. If any repeat of the packet, or the ACK, is stepped on or dropped, the packet must start over from the beginning.

"In level three, an ACK can occur at each step of the way. Thus, a packet may only have to be re-sent between relay points five and six, rather than starting again at point one. So why don't we get on with it, you might ask?

"There are many problems involved in design and implementation of a level three network -- flow control, network blocking, routing, on and on. What is TAPR doing?

1) A node in a level three network will want to be connected to more than one other node. We will allow the TAPR TNC to maintain multiple level two connects. This has several implications. First, you can carry on two or more concurrent conversations. Not so good for rag chewing maybe, but great for emergency communications. Imagine a TNC in the local disaster center. Currently you can carry on a conversation with only one other TNC, with limited possibility of a priority break-in from another TNC. With all outlying TNCs connected to the central node at the same time you get closer to what you want, high reliability connections with each of the field guys at the same time.

"Next, and even better, you can automatically route one connection stream to another. Maybe an example is called for. The syntax below is probably not what we'll end up with, but the idea is:

```
 MYCALL NK6K
 [1] CONNECT WB6YMH
     [1] CONNECTED TO WB6YMH
 [2] CONNECT WA6JPR
     [2] CONNECTED TO WA6JPR
 ROUTE [1] TO [2]
```

"Your TNC is now a network node. Anything that comes in from stream [1] gets ACKed at level two. The data from the packet gets routed to stream [2] where it gets sent out and saved until an ACK comes in on stream [2]. The reverse is also true, incoming from [2] goes to [1].

"Now, wouldn't it be great if you could cause the other guys board to make a connection? If I could tell WA6JPR to make a level two connection to WB5EKU? Then what we have is the level three function, endpoints linked thru multiple intermediate points. A lot of things are missing, but this simple mechanism allows testing of level three concepts without a lot of hassle on the users part. We will also design an interface (based on asyncronous LABP) between the TNC and its attached computer to allow the computer full control over the link process. This permits the use of the TAPR TNC as a level two black box, with level three functions done in your host.

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2) we're having a good time.

"Are we having fun yet? You bet!

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P.O. Box 8251
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Central Iowa Technical Society (CITS)
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Rural Route 4
Indianola, IA 50125

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1829 N. W. Pinetree Way
Stuart, FL 33494

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c/o Harold Price, NK6K
1211 Ford Ave.
Redondo Beach, CA 90278

Minnesota Amateur Packet Radio (MAPR)
c/o Philip S. Plumbo, N0DFT
1128 Dayton Avenue
St. Paul, MN 55104

New England Packet Radio Assn. (NEPRA)
P.O. Box 15
Bedford, MA 01730

Rocky Mountain Packet Amateur Radio Assn. (RMPAR)
c/o Andy Freeborn, N0CCZ
52222 Borrego Drive
Colorado Springs, CO 80918

San Diego Packet Group (SDPG)
c/o Mike Brock, WB6HHV
10230 Mayor Circle
San Deigo, CA 92126

Tucson Amateur Packet Radio Corp. (TAPR)
P.O. Box 22888
Tucson, AZ 85734

Vancouver Amateur Digital Communications Group
(VADCG)

9531 Odin Road
Richmond, BC V6X 1E1
CANADA

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Doug Baker, K4CLE
8724 Cumbernauld Circle
Germantown, TN 38138

Voice Nets Concerning Packet Radio

The following voice nets are devoted to discussion of packet radio.

Day	Time	Frequency	Coverage	Sponsor
Mon	2000 PDT	145.36	Los Angeles	LAPG
Tue	2100 PDT	144.76	San Diego	SDPG
Tue	2200 EDT	3.850	Eastern U.S.	AMSAT
Thu	2000 EDT	147.12/72	Boston area	NEPRA
Sun	1900 UTC	14.235	National	TAPR
Sun	2100 UTC	7.158	National	TAPR
Sun	0800 EDT	3.958	Regional	FADCA
Sun	1900 EDT	147.165	Tampa area	FADCA
Sun	2100 EDT	147.285	Orlando area	FADCA
Sun	1500 CDT	7.158	Central U.S.	CITS

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American Radio Relay League
225 Main Street
Newington, CT 06111

Larry E. Price, W4RA
President

David Sumner, K1ZZ
General Manager

Jeff W. Ward, K8KA
Editor

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  In the U.S.
      ARRL Member $6.00
      Nonmember $9.00
  In U.S., Canada, and Mexico by First Class Mail
      ARRL Member $11.00
      Nonmember $14.00
  Elsewhere by Airmail
      ARRL Member $14.00
      Nonmember $17.00.

Prices are subject to change without notice. Remittance must be in U.S. funds, and checks must be drawn on a bank in the U.S.

From 6353438400021895152
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf82fcd58fe27cd8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-17 08:12:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pitt.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!uwvax!harvard!wjh12!genrad!decvax!mcnc!idis!pitt!copper
From: copper@pitt.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Element Algorithm Wanted!
Message-ID: <600@pitt.UUCP>
Date: Fri, 17-Aug-84 11:12:34 EDT
Article-I.D.: pitt.600
Posted: Fri Aug 17 11:12:34 1984
Date-Received: Fri, 24-Aug-84 02:55:56 EDT
Organization: Univ. of Pittsburgh, C. S. Dept.
Lines: 13

Would anyone out there happen to have a program or even an algorithm for computing the (absolute or relative) position of a satellite at a particular time, given the Keplerian orbital elements? I'd appreciate a copy of it, if that's possible. If there seems to be a demand for it, I'll post a copy to the net (if I ever get one! :-))

Thanks in advance!

73's

Chip Copper, N8ECQ

From -3560016772570221462
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63cef1b7ba254b46,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-17 13:24:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site burl.UUCP
Path: utzoo!watmath!clyde!burl!ars
From: ars@burl.UUCP (Shuff Allen R.)
Newsgroups: net.ham-radio
Subject: 2 - Meter Repeaters in Jamaica, W. I.
Message-ID: <532@burl.UUCP>
Date: Fri, 17-Aug-84 16:24:51 EDT
Article-I.D.: burl.532
Posted: Fri Aug 17 16:24:51 1984
Date-Received: Sun, 19-Aug-84 01:11:17 EDT
Organization: AT&T Technologies; Burlington, NC
Lines: 9

I am planning a trip to Jamaica in December and was wondering if
anyone on the net knows of Two Meter repeaters on the Island. I
would also be interested in knowing if they have reciprocal
operating arrangements with the USA and if there are any problems
with customs on getting a hand-held in and out of the country.
Thanks -
--
Allen R. Shuff -- AI4G -- 919-279-7138 (Cornet 292)
...![floyd clyde ihnp4 mhuxv]!burl!ars

From 5299340949772872836
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc654bce49d47922,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-17 14:46:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: TAPR Grand Opening
Message-ID: <128@mouton.UUCP>
Date: Fri, 17-Aug-84 17:46:51 EDT
Article-I.D.: mouton.128
Posted: Fri Aug 17 17:46:51 1984
Date-Received: Sun, 19-Aug-84 01:32:39 EDT
Organization: Bell Communications Research, Inc
Lines: 24

******GRAND OPENING******

Tucson Amateur Packet Radio (TAPR) is proud to announce the opening
of their Headquarters. The office will be open from 8:30 A.M. to
5:00 P.M. Mon thru Fri. The group's first full time employee will
be on hand to answer the phone and run the organization's daily chores.
If you can't wait to get a TNC kit simply call Karen at the number below
with Visa or Master Charge and it will go out same day UPS!!! This is
a big boost for TAPR as it will help to speed up the turn around time on
correspondence. TAPR main P.O. box will still be used and all mail
should be sent there as usual. If you get a chance take a minute to give them
a call and say hi!
-Pete-

Tucson Amateur Packet Radio
Suite 302
1016 E. Pennsylvania
Tucson, AZ 85714

Tel (602) 746-1166

From 4166915173524572144
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,54c094502e60efcb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-17 14:53:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!kk9w
From: kk9w@pur-ee.UUCP (Andersen)
Newsgroups: net.ham-radio
Subject: Re: Re: smallest antennas in the world
Message-ID: <2056@pur-ee.UUCP>
Date: Fri, 17-Aug-84 17:53:36 EDT
Article-I.D.: pur-ee.2056
Posted: Fri Aug 17 17:53:36 1984
Date-Received: Sun, 19-Aug-84 01:44:12 EDT
Organization: Electrical Engineering Department , Purdue University
Lines: 6

UB 40

I think they call those small antennas 'eyes'

Dave

From -7251374676836797101
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ffcc232fc345562,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-17 15:51:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site dsd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!hplabs!hpda!fortune!
dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: GATEWAY: The ARRL Packet-Radio Newsletter #1
Message-ID: <324@dsd.UUCP>
Date: Fri, 17-Aug-84 18:51:15 EDT
Article-I.D.: dsd.324
Posted: Fri Aug 17 18:51:15 1984
Date-Received: Mon, 20-Aug-84 01:24:29 EDT
Organization: AMPEX DSD, Redwood City, CA.
Lines: 432

GATEWAY: The ARRL Packet-Radio Newsletter
Issue 1
Electronic

WELCOME

Welcome to Gateway, the ARRL packet-radio newsletter. Some of you reading this are deeply involved in amateur packet radio, some of you are just getting started on this exciting new mode, and some of you aren't quite sure what "packet radiolocal VHF networks will use gateways to connect to an international packet-radio network. We have called this newsletter Gateway because we hope that it will, like a gateway station, facilitate communications between amateurs interested in packet radio.

Gateway will not be a technical newsletter; there are already several fine packet-radio newsletters covering technical issues. This will be a "news" newsletter. At ARRL Headquarters we have many sources of news not all of which are available to each of you. This newsletter will bring together notes from these sources. Overseas and domestic packet-radio club newsletters, the FCC, the IARU, on-line conferences and on-the-air bulletin boards will contribute. You may see items that you've seen elsewhere, but you should also see things that are new and interesting.

Some of you are receiving this packet-radio newsletter and have never even considered what packet radio can do for you, or what fun you could have on packet. We hope to provide you with an overview of the state of amateur packet radio, explaining what

is being done and what can be done on this new mode.

It seems as though every packet-radio club is undertaking some project that will advance amateur packet radio. To make these projects fruitful, we must make the most of the limited resources available to amateurs. By telling a large audience about various packet-radio development efforts, Gateway should help organizers direct their efforts, and help volunteers find the groups that need them.

Perhaps when there is a worldwide amateur packet-radio network there will be no need for packet-radio newsletters. Until then, we hope that Gateway informs and interests you.

PACKET METEOR SCATTER

Last weekend's Persieds meteor shower provided a good opportunity to experiment with packet-radio meteor-scatter operation. Rich Zwirko, K1HTV, set forth some experimental guidelines, and stations throughout the U.S. attempted MS QSOs.

On August 1, well before the peak of the Persieds, W0RPK, the station of the Central Iowa Technical Society, held schedules with Bob Carpenter, W3OTC, in Maryland. The skeds were on 6 meters. Bob received about 2% of the packets sent from Iowa. Four nights later, again on 6 meters, W3OTC and W0RPK had what is believed to be the first amateur packet-radio meteor-scatter QSO.

As the Persieds approached, stations tried their luck on the 2-meter band. Stations in the East included K1HTV; Vern Riportella, WA2LQQ; Tom Clark, W3IWI; Hank Oredson, W0RLI; and Mark Wilson, AA2Z. In the West were Ralph Wallio, W0RPK; Bob McCaffrey, K0CY; Ron Dunbar, W0PN; Mike McQuiston, WA0WYW; Bob Schiers, N0AN; and Terry Van Benschoten, W0VB. Several of these stations copied beacons and connect requests via MS. On the morning of August 12, during the peak of the shower, W0RPK and K1HTV completed the first packet MS QSO on 2 meters. Congratulations are in order for all stations involved in these tests, and I hope that I haven't left anyone out.

These tests were performed at 1200 bauds, using AFSK FM. While it was necessary to use this mode in order to include as many stations as possible in the experiments, a performance sacrifice was made. We should organize further tests at higher transmission rates with more efficient modulation techniques.

ARRL APPOINTED IARU PACKET CENTER

The ARRL has been appointed IARU packet radio "information clearing house." The following is exerpted from the minutes of the IARU meeting in late July: "ARRL is nominated as the international clearing house of information relating to packet radio on behalf of the IARU, with a view to encouraging common standards and regulations."

This points the way toward international understanding and acceptance of packet radio standards generated in the United States and Canada. Several European amateurs have hesitated to get involved in packet radio because they were not sure which standards would "catch on." The appointment should help to alleviate this confusion abroad as to what is really happening in North American packet radio.

PACKET RADIO ON NETWORK TV

On July 16 at 0745 PDT, a packet from N6ECT was heard throughout the nation on the CBS Morning News show. Curtis Spangler, N6ECT, was being interviewed by CBS for a piece on the Haight/Ashbury and the film crew focused on his CRT. As luck would have it, Curtis was transmitting packets through the KA6M digipeater. The audio from one of the packets came through loud and clear, and the frame was heard in all 50 states and throughout half the world! Via KA6M.

220 MHz and PACKET RADIO

The 220-MHz band is crucial to packet radio for a couple of reasons. Because it is the lowest frequency band on which we can exceed 19,600 bauds, it is going to be used for the initial high-speed intercity linking. It is not being used for any satellite uplinks or downlinks, and so it is essential for full-duplex teleport stations. With these considerations in mind, we note the following:

The Tri-State Amateur Repeater Council has coordinated a 100-

kHz channel from 220.5 MHz to 220.6 MHz for wideband digital communications. This council coordinates VHF frequencies in northern New Jersey, southwestern New York (including Long Island) and Connect This petition calls for the FCC "to explore the potential use of vacant spectrum in the UHF TV bands, spectrum allocated for Fedral Government use, or assignments from the band 220-225 MHz to satisfy the requirements of land mobile users." This may sound worse than it is, since the petition goes on to say "Because of the limited number of channels that the 220-225 MHz band will provide, however, it is not anticipated that this spectrum can meet the immediate requirements of land mobile licensees."

Another petition (RM 4831), from a manufacturer of amplitude compandored sideband equipment, explicitly requests reallocation of the band 216-225 MHz. This petition poses a serious threat to the 220-MHz amateur band.

Packet radio needs the 220-MHz band. Be sure to read these petitions and send your comments to the FCC. The comment procedure was outlined in QST, March, 1982. The comment deadline for these two petitions is August 29, 1984.

WHAT'S BREWING AT TAPR?

This piece came from Harold Price's answer to the question "Is TAPR up to something?" Harold is part of the TAPR software design team, and he made these comments while he was "Member of the Month" on Compuserve's HAMNET.

"The following views are mine alone, and do not necessarily refect those of TAPR, AMSAT, VITA, LAPG the staff, management, or janitorial departments.

"The TAPR folks are indeed up to something. We have the TAPR Pascal code running happily under a simulated environment again. The software, with only one change, runs under TURBO Pascal on the Pronto-16. This will vastly speed up development, which has slowed down as of late.

"The plan is to come up with version 4.0 of the TAPR TNC software which will allow testing of both datagram and virtual connection protocols. I think the level two wars are over. With 1300 TNCs in the field from 6 "manufactuers" all running the same level two, anyone proposing a switch now is just rocking the boat. The few proposals I've seen for different level twos offer no concrete advantages over what we've got now anyway. Besides, level two is boring (now that we have one that works). The real

fun is level three.

"For the newcomer, level two refers to a point to point protocol, linking one TNC to another with no TNCs in the middle. There is currently a necessary kludge in AX.25 called digipeating which is a very demented level three feature. Digipeating allows two TNCs to be connected using a third as a relay. Without this simple addition to AX.25, packet may not have taken off as it did, since digipeating allows many more users to reach each other. If you haven't got a wide-coverage duplex repeater (or even if you have), digipeating is your best bet for now.

"Anyway, level two is point to point, with level two+ in current style, multihop dumb repeating. The + in level two will die a happy death when we get level three up and running. Level three links two end points thru multiple intermediate TNCs. The linking is done in an intelligent manner. ACKing is node to node rather than end to end. In level two digipeating, each intermediate point simply regenerates the packet. It does not

ACK it. The final end point ACKs it, and the ACK is blindly repeated back to the starting point. If any repeat of the packet, or the ACK, is stepped on or dropped, the packet must start over from the beginning.

"In level three, an ACK can occur at each step of the way. Thus, a packet may only have to be re-sent between relay points five and six, rather than starting again at point one. So why don't we get on with it, you might ask?

"There are many problems involved in design and implementation of a level three network -- flow control, network blocking, routing, on and on. What is TAPR doing?

1) A node in a level three network will want to be connected to more than one other node. We will allow the TAPR TNC to maintain multiple level two connects. This has several implications. First, you can carry on two or more concurrent conversations. Not so good for rag chewing maybe, but great for emergency communications. Imagine a TNC in the local disaster center. Currently you can carry on a conversation with only one other TNC, with limited possibility of a priority break-in from another TNC. With all outlying TNCs connected to the central node at the same time you get closer to what you want, high reliability connections with each of the field guys at the same time.

"Next, and even better, you can automatically route one connection stream to another. Maybe an example is called for. The syntax below is probably not what we'll end up with, but the idea is:

```
 MYCALL NK6K
 [1] CONNECT WB6YMH
```

```
     [1] CONNECTED TO WB6YMH
 [2] CONNECT WA6JPR
     [2] CONNECTED TO WA6JPR
 ROUTE [1] TO [2]
```

"Your TNC is now a network node. Anything that comes in from stream [1] gets ACKed at level two. The data from the packet gets routed to stream [2] where it gets sent out and saved until an ACK comes in on stream [2]. The reverse is also true, incoming from [2] goes to [1].

"Now, wouldn't it be great if you could cause the other guys board to make a connection? If I could tell WA6JPR to make a level two connection to WB5EKU? Then what we have is the level three function, endpoints linked thru multiple intermediate points. A lot of things are missing, but this simple mechanism allows testing of level three concepts without a lot of hassle on the users part. We will also design an interface (based on asyncronous LABP) between the TNC and its attached computer to allow the computer full control over the link process. This permits the use of the TAPR TNC as a level two black box, with level three functions done in your host.

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1) there is a niche for us and
2) we're having a good time.

"Are we having fun yet? You bet!

"One final note. A for-profit company would be crazy to discuss future products like this before the product is ready to ship. But we're a nonprofit R&D company, trying to make packet the mode of the future. And remember, you saw it here first." Via HAMNET.

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Indianola, IA 50125

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Stuart, FL 33494

Los Angeles Area Packet Group (LAPG)
c/o Harold Price, NK6K

1211 Ford Ave.
Redondo Beach, CA 90278

Minnesota Amateur Packet Radio (MAPR)
c/o Philip S. Plumbo, N0DF
San Diego Packet Group (SDPG)
c/o Mike Brock, WB6HHV
10230 Mayor Circle
San Deigo, CA 92126

Tucson Amateur Packet Radio Corp. (TAPR)
P.O. Box 22888
Tucson, AZ 85734

Vancouver Amateur Digital Communications Group
(VADCG)

9531 Odin Road
Richmond, BC V6X 1E1
CANADA

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Doug Baker, K4CLE
8724 Cumbernauld Circle
Germantown, TN 38138

	U.S.	AMSAT		
Thu	2000 EDT	147.12/72	Boston area	NEPRA
Sun	1900 UTC	14.235	National	TAPR
Sun	2100 UTC	7.158	National	TAPR
Sun	0800 EDT	3.958	Regional	FADCA
Sun	1900 EDT	147.165	Tampa area	FADCA
Sun	2100 EDT	147.285	Orlando area	FADCA
Sun	1500 CDT	7.158	Central U.S.	CITS

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Editor

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  Elsewhere by Airmail
      ARRL Member $14.00
      Nonmember $17.00.

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From 1805640241629592820
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7b3cf8d307413f1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-19 17:52:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: White House radios prevent eavesdropping
Message-ID: <2357@ihuxf.UUCP>
Date: Sun, 19-Aug-84 20:52:09 EDT
Article-I.D.: ihuxf.2357
Posted: Sun Aug 19 20:52:09 1984
Date-Received: Mon, 20-Aug-84 02:06:14 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 42

United Press International

White House Radios Prevent Eavesdropping

SANTA BARBARA, Calif. - The White House, irked that reporters and others eavesdrop on its communications when President Reagan is traveling, has turned to new high-tech radios that leave snoops listening to static.

When Reagan flew to California recently, his staff and security forces were carrying smaller, more sophisticated versions of the two-way radios they use to case the problems of presidential travel.

Until these new radios were brought in, news agencies and others could monitor the White House frequencies to keep track of the President's movements and quickly detect any sign of trouble.

The practice is legal but White House officials were angered last fall when reporters heard - and recorded - a radiotelephone conversation between Reagan and a gunman holding hostages at Augusta National Golf Club in Georgia, where the President was spending the weekend.

White House spokesman Mark Weinberg said the new "encrypted radios" use technology that codes a radio transmission as it comes over the wire so it can be understood only by radios that have the same equipment.

Anyone else receiving the coded transmission hears only static, and for additional protection the codes are changed from time to time.

--
==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -3155737172794655434
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b0444b02b2ef9eb4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-20 08:57:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 9/27/83; site hplabsc.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!hplabsc!labelle
From: labelle@hplabsc.UUCP (WB6YZZ La Belle)
Newsgroups: net.ham-radio
Subject: "Illegal" reception of HBO broadcasts via MDS

Message-ID: <2099@hplabsc.UUCP>
Date: Mon, 20-Aug-84 11:57:50 EDT
Article-I.D.: hplabsc.2099
Posted: Mon Aug 20 11:57:50 1984
Date-Received: Wed, 22-Aug-84 04:48:12 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 30

In the S.F. bay area, Premier Channel is attempting to eliminate the unsubscribed reception of their HBO broadcasts via the MDS service. (2152 MHz) They hired college students to drive all over the bay area looking for "suspicious" antennas, writing down the address, and sending these people (~18,000) a letter saying-

1) Take down your antenna.
2) Sign this form agreeing never to put it back up.
3) Send $300.00 as an "out of court settlement"

or be added to litigation for damages in excess of $1000.00.

Amateurs who contact the law firm sending the letters (addressed from a P.O. box, but postmarked from another city) are removed from any litigation.

The reason is that the grounds for the suit are based on section 605 of the Communications Act of 1934 which say it is illegal to receive private communications without authorization. In 1982 president Reagan signed a bill which, among other things, exempted radio amateurs from that (605) section of the act obstensibly to enable amateurs to police their own bands.

GEORGE (WB6YZZ) hplabsc!labelle

From -452401822989128852
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de3daa6621c00208
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-20 09:44:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!ron
From: ron@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: reposting of amrad vadcg doc - (nf)
Message-ID: <52800029@trsvax.UUCP>
Date: Mon, 20-Aug-84 12:44:00 EDT
Article-I.D.: trsvax.52800029

Posted: Mon Aug 20 12:44:00 1984
Date-Received: Thu, 23-Aug-84 01:11:20 EDT
References: <756@cp1.UUCP>
Lines: 6
Nf-ID: #R:cp1:-75600:trsvax:52800029:000:149
Nf-From: trsvax!ron   Aug 20 11:44:00 1984

#R:cp1:-75600:trsvax:52800029:000:149
trsvax!ron   Aug 20 11:44:00 1984

I agree. And do us another favor. When you FINALLY get your stupid
word processor working right so the document is READABLE, DON'T SEND
IT AGAIN!!

From 8390013284716489043
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,278be9ef643540c5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-20 16:20:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbneb.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!cbosgd!cbscc!cbneb!adm
From: adm@cbneb.UUCP
Newsgroups: net.ham-radio
Subject: NEW YAESU handheld - (nf)
Message-ID: <1240@cbneb.UUCP>
Date: Mon, 20-Aug-84 19:20:44 EDT
Article-I.D.: cbneb.1240
Posted: Mon Aug 20 19:20:44 1984
Date-Received: Tue, 21-Aug-84 03:34:39 EDT
Sender: adm@cbneb.UUCP
Organization: AT&T Bell Laboratories, Columbus, OHIO
Lines: 29

#N:cbnap:14800006:000:1350
cbnap!gws   Aug 20 18:18:00 1984

A new full feature YAESU 2 meter HT is now out..

     The local candy store now has a demo model of the YAESU FT 209
full feature 2 meter handheld. Its kind of a cross between the KENWOOD
2500 KENWOOD 2600 and YAESU 208. It has a 5 watts plus power output
with a standard slip on battery pack (ala 2500). A large keypad lets
enter frequency and functions and a very large LCD display shows all
function and states that the the rig is in. Some improvements over the
FT 208R is that the transmit offset is now stored with the recieve
frequency an optional PL frequency can also stored. A much need reverse
switch is now included. A combination transmit/recieve/battery analog
meter lets you keep track of your rig. The best thing I noticed is that
the audio is very clean as well as being louder, (many 208 users have
noticed that the audio level is very low). A "maybe" feature is a vox
operated mic, much like that of the YAESU FT 203. Some of the bad things

I have found is that none of the 208/708 options will be compadable with the
new 209. I had only had a short period of time to play with the unit,
but with this town being very "PRO" YAESU i will probably be seeing
and hearing may of the units on the air. Anyone got one yet, comments??????

Thanks 73
Gary W. Sanders N8EMR
AT+T Bell Labs.
Columbus,Ohio
address cbnap!gws

From -3080485384419577171
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,278be9ef643540c5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-21 05:34:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: NEW YAESU handheld - (nf)
Message-ID: <2358@ihuxf.UUCP>
Date: Tue, 21-Aug-84 08:34:11 EDT
Article-I.D.: ihuxf.2358
Posted: Tue Aug 21 08:34:11 1984
Date-Received: Wed, 22-Aug-84 01:30:08 EDT
References: <1240@cbneb.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 16

x
Three comments:

1. The optional PL deck available for this new Yaesu will
be encode/decode.

2. The soft vinyl case is much like a thin glove. It
takes a while to remove the radio from this case.

3. As more and more chip components are used in
these
newer radios, the price and size are being reduced,
but home repair will become much more difficult.

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==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 6458922525951476888
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,c4db05ec9e4c2539,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-21 13:13:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: Using FT101-zd with a transverter???
Message-ID: <79@sask.UUCP>
Date: Tue, 21-Aug-84 16:13:15 EDT
Article-I.D.: sask.79
Posted: Tue Aug 21 16:13:15 1984
Date-Received: Wed, 22-Aug-84 01:45:39 EDT
Organization: U of Saskatchewan, Canada
Lines: 11

Anyone have any experience hooking up a FT101ZD to a Microwave Modules
MMT-432/28s transverter. The transverter should put out 10 watts but I
get a max of about 7 watts (after tweaking the pot inside the transverter).
I suspect the 101 isn't putting out the 3 volts rms that's claimed in
the manual.
Anyone done it and got 10 out of the transverter??

TX+73
pete ve5bel

Mail: ihnp4!sask!hardie

From 1804213714446716649
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd46e9d130e4affc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-21 15:26:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!ecn-ee!wn9nbt
From: wn9nbt@ecn-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: White House radios prevent eavesdrop - (nf)
Message-ID: <2070@pur-ee.UUCP>
Date: Tue, 21-Aug-84 18:26:58 EDT
Article-I.D.: pur-ee.2070
Posted: Tue Aug 21 18:26:58 1984
Date-Received: Wed, 22-Aug-84 01:45:10 EDT
Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University
Lines: 13

#R:ihuxf:-235700:ecn-ee:14900007:000:228
ecn-ee!wn9nbt   Aug 21 13:33:00 1984

Anyone know the coding method they use ? I hope not the old
balanced modulator scheme that a lot of police departments use.

I've never listened to them, I'm just curious how they work...

.....Dave Chasey -- pur-ee!wn9nbt

From -3462160299943931805
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d741796b898dd456,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-21 16:09:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 26 (900 MHz, exam sked, qsl bureau)
Message-ID: <11676@mgweed.UUCP>
Date: Tue, 21-Aug-84 19:09:17 EDT
Article-I.D.: mgweed.11676
Posted: Tue Aug 21 19:09:17 1984
Date-Received: Wed, 22-Aug-84 01:46:39 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 25

qst de k9eui
hr crrl bulletin nr 26 from crrl headquarters
london ont august 14 1984
to all radio amateurs bt

doc has issued a new proposed spectrum utilization policy for
the 890 to 960 mhz band in addition to the present usage of
the 902 to 928 mhz portion using a3 or f3 only, other emissions
would be allowed. if the new policy is adopted, there will be
one condition for amateurs. they will have to contact a doc
district office before beginning to transmit on this band, to
ensure that their transmissions will not interfere with the
primary users of the band.

doc will hold amateur radio exams across canada on october 17.
if you plan to write, apply to doc by september 19. the next
examinations will be on february 13.

ve6vw is the new manager of the crrl ve6 incoming qsl bureau.
the new bureau address is general delivery morinville, alberta
t0g 1p0.

the new canadian representative on the arrl repeater advisory

committee is ve3gyq ar

From -704701917050909947
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5fa2753b1e61cdb5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-21 16:09:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 34
Message-ID: <11677@mgweed.UUCP>
Date: Tue, 21-Aug-84 19:09:53 EDT
Article-I.D.: mgweed.11677
Posted: Tue Aug 21 19:09:53 1984
Date-Received: Wed, 22-Aug-84 01:46:54 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 28

qst de k9eui
hr propagation forecast bulletin nr 34 from arrl headquarters
newington ct august 20, 1984
to all radio amateurs bt

the solar flux fell steadily after august 10, reaching a low of 74 on the 19th. the curve was similar to that for the same point in the previous solar rotation four weeks ago. the low of 74 was last reached on july 20, but we have to go back to july 1977, to find solar flux levels that low. only slight flux changes are expected until early september.

we are presently at the seasonal low point of the year for f layer useable frequency in the northern hemisphere. the daily muf will be rising slowly during the balance of august. high latitude propagation is reappearing on 21 mhz and 28 mhz will be coming to life in early september. the seasonal peak will come in late october with optimum conditions on all dx bands prevailing through early december. f layer dx on 50 mhz is unlikely for the balance of solar cycle 21.

geomagnetic disturbances and generally poor propagation on all dx bands are expected august 24 through 26 and 28 through 31.

american sunspot numbers for august 9 through 15 were between 15 and 32 with a mean of 25.1 ar

From -1266240456259368206
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,688f21f8214a82f3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-21 16:24:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <132@mouton.UUCP>
Date: Tue, 21-Aug-84 19:24:35 EDT
Article-I.D.: mouton.132
Posted: Tue Aug 21 19:24:35 1984
Date-Received: Wed, 22-Aug-84 01:43:49 EDT
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84225.38467259
   Sun Aug 12 09:13:55.711 1984 UTC
Element set: 671
Inclination: 97.5967 deg
RA of node: 200.8523 deg
Eccentricity: 0.0001035
Arg of perigee: 309.9638 deg
Mean anomaly: 50.1551 deg
Mean motion: 15.26219880 rev/day
Decay rate: 2.225e-05 rev/day^2
Epoch rev: 15811
Semi major axis: 6862.227 km
Anom period: 94.350756 min
Apogee: 497.135 km
Perigee: 495.715 km
Ref perigee: 2415.37554417
   Sun Aug 12 09:00:47.16 1984 UTC
Beacon: 145.8250 MHz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84226.05701250
   Mon Aug 13 01:22:05.880 1984 UTC
Element set: 118
Inclination: 25.6953 deg
RA of node: 183.8860 deg
Eccentricity: 0.6072894
Arg of perigee: 297.0121 deg
Mean anomaly: 14.3511 deg
Mean motion: 2.05848795 rev/day
Decay rate: -5.1e-07 rev/day^2
Epoch rev: 878
Semi major axis: 26106.185 km
Anom period: 699.542594 min

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Apogee:          35585.240 km
Perigee:          3877.222 km
Ref perigee:      2416.03764675
   Mon Aug 13 00:54:12.679 1984 UTC
Beacon:           145.8100 MHz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84224.62583417
   Sat Aug 11 15:01:12.72  1984 UTC
Element set:     39
Inclination:       98.2398 deg
RA of node:       286.6485 deg
Eccentricity:    0.0014313
Arg of perigee:   110.2293 deg
Mean anomaly:     250.0469 deg
Mean motion:   14.61891842 rev/day
Decay rate:       1.09e-06 rev/day^2
Epoch rev:            2380
Semi major axis:  7062.286 km
Anom period:     98.502499 min
Apogee:            712.691 km
Perigee:           692.474 km
Ref perigee:      2414.64672664
   Sat Aug 11 15:31:17.181 1984 UTC
Beacon:           145.8260 MHz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84225.99016673
   Sun Aug 12 23:45:50.405 1984 UTC
Element set:     100
Inclination:       82.9582 deg
RA of node:       101.5908 deg
Eccentricity:    0.0057778
Arg of perigee:   229.0399 deg
Mean anomaly:     130.5659 deg
Mean motion:   12.15587640 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11783
Semi major axis:  7987.328 km
Anom period:    118.461224 min
Apogee:           1667.344 km
Perigee:          1575.046 km
Ref perigee:      2415.96033070
   Sun Aug 12 23:02:52.572 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84226.02093525
   Mon Aug 13 00:30:08.805 1984 UTC
Element set:     212
Inclination:       82.9639 deg
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RA of node:       110.8869 deg
Eccentricity:    0.0017956
Arg of perigee:   318.7200 deg
Mean anomaly:      41.2501 deg
Mean motion:   12.06670964 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11694
Semi major axis:  8026.651 km
Anom period:    119.336592 min
Apogee:           1672.087 km
Perigee:          1643.262 km
Ref perigee:      2416.01143940
   Mon Aug 13 00:16:28.364 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      84225.16389331
   Sun Aug 12 03:56:00.381 1984 UTC
Element set:     183
Inclination:       82.9593 deg
RA of node:       112.8733 deg
Eccentricity:    0.0010628
Arg of perigee:   349.7983 deg
Mean anomaly:      10.2894 deg
Mean motion:   12.05056155 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11668
Semi major axis:  8033.828 km
Anom period:    119.496506 min
Apogee:           1664.882 km
Perigee:          1647.805 km
Ref perigee:      2415.16152150
   Sun Aug 12 03:52:35.457 1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84226.04121654
   Mon Aug 13 00:59:21.109 1984 UTC
Element set:     86
Inclination:       82.9587 deg
RA of node:       103.6695 deg
Eccentricity:    0.0049267
Arg of perigee:   248.5096 deg
Mean anomaly:     111.0709 deg
Mean motion:   12.13562429 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11761
Semi major axis:  7996.218 km
Anom period:    118.658914 min
Apogee:           1675.705 km
Perigee:          1596.915 km
Ref perigee:      2416.01579302
   Mon Aug 13 00:22:44.516 1984 UTC
```

```
Satellite: rs-7
Catalog number: 13001
Epoch time:      84213.15075999
   Tue Jul 31 03:37:05.663 1984 UTC
Element set:     166
Inclination:       82.9594 deg
RA of node:       115.6723 deg
Eccentricity:    0.0021377
Arg of perigee:   301.9486 deg
Mean anomaly:      57.9519 deg
Mean motion:   12.08684421 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11558
Semi major axis:  8017.732 km
Anom period:    119.137798 min
Apogee:           1671.892 km
Perigee:          1637.613 km
Ref perigee:      2403.13744158
   Tue Jul 31 03:17:54.952 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      84221.12257630
   Wed Aug  8 02:56:30.592 1984 UTC
Element set:     286
Inclination:       82.9608 deg
RA of node:       117.1137 deg
Eccentricity:    0.0020297
Arg of perigee:    48.9939 deg
Mean anomaly:     311.2916 deg
Mean motion:   12.02947724 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11599
Semi major axis:  8043.218 km
Anom period:    119.705950 min
Apogee:           1693.394 km
Perigee:          1660.743 km
Ref perigee:      2411.13382376
   Wed Aug  8 03:12:42.373 1984 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84226.02120021
   Mon Aug 13 00:30:31.698 1984 UTC
Element set:     270
Inclination:       99.0520 deg
RA of node:       198.0287 deg
Eccentricity:    0.0012608
Arg of perigee:   300.1570 deg
Mean anomaly:      59.8351 deg
Mean motion:   14.13070047 rev/day
Decay rate:       1.49e-06 rev/day^2
```

Epoch rev: 16188
Semi major axis: 7224.206 km
Anom period: 101.905776 min
Apogee: 870.762 km
Perigee: 852.545 km
Ref perigee: 2416.00943798
   Mon Aug 13 00:13:35.441 1984 UTC
Beacon: 137.6200 MHz

Satellite: noaa-8
Catalog number: 13923
Epoch time: 84221.24517582
   Wed Aug 8 05:53:03.190 1984 UTC
Element set: 90
Inclination: 98.7044 deg
RA of node: 251.6159 deg
Eccentricity: 0.0015665
Arg of perigee: 264.4266 deg
Mean anomaly: 95.5124 deg
Mean motion: 14.22426260 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 7087
Semi major axis: 7192.451 km
Anom period: 101.235476 min
Apogee: 846.271 km
Perigee: 823.737 km
Ref perigee: 2411.22652373
   Wed Aug 8 05:26:11.650 1984 UTC
Beacon: 137.5000 MHz

From -3975027248169228308
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6689a5bd0d7c241e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-21 16:25:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin 88
Message-ID: <133@mouton.UUCP>
Date: Tue, 21-Aug-84 19:25:46 EDT
Article-I.D.: mouton.133
Posted: Tue Aug 21 19:25:46 1984
Date-Received: Wed, 22-Aug-84 01:44:07 EDT
Organization: Bell Communications Research, Inc
Lines: 234

Posted: Tue Aug 21, 1984 12:35 PM GMT   Msg: DGIE-1880-3641
From: MSWEETING
To: DOCS

Subj: Uo-9 bulletin 88

**** UoSAT Bulletin-88   17th August 1984 ****

** UoSAT-Oscar-9 Schedule **

The daily operations of UoSAT-1 will continue to be disrupted next week, and this Bulletin will be transmitted, together with 1200 bd telemetry and Digitalker, until Wednesday - to be followed by check-summed telemetry. The preparation of the Bulletin is being re-organised to spread the workload - please bear with us!

Items of relevant interest for the Bulletin are always welcome - the weekly deadline is 10.30 local time each Friday - and should be sent to the UoSAT Team in writing.

The 2.4 GHz Beacon will be in use this week.

** General News **

Martin (G3YJO), Roger (G8NEF) and Tony (G8ONO) visited ESTEC (ESA) on Monday, Tuesday & Wednesday this week to give presentations on the UOSAT Programme and to discuss possible future collaboration and use of their facilities. The meeting was most profitable and interesting.

A Masters Degree in 'Satellite Communications Engineering', based heavily around the experience gained through the UoSAT Projects, will commence at the University of Surrey this October - although welcome, this adds, however, to the already overloaded UoSAT Team! Details avaliable from G3YJO.

Future UoSAT Missions are being proposed and studied, varying in scope from UO-9 & UO-11 orbits to Phase 111 and Geosynchronous orbits. We would be very interested to hear of any (reasonable!) suggestions or areas of interest that you may have - again please direct to G3YJO.

Three Active Magnetospheric Particle Tracer Expt. (AMPTE) spacecraft were launched successfully by NASA DELTA from Cape Canaveral on Thursday 16th August - after three aborted launch attempts following ground station computer malfunctions and the discovery of debris in the vehicle. A small UK spacecraft, contributed by the UK SERC, was mounted between the two large US & DL spacecraft - UoSAT contributed to the Particle Wave Experiment on this s/c.

** UoSAT-Oscar-11 Operations **

Harold Price, NK6K, has continued his efforts to commission the Digital Communications Experiment (DCE).

Whole-orbit data gathering has continued, interspersed with telemetry, to support analysis of the GG lock and libration.

The frequent dumps of data from the ODATA whole-orbit telemetry recording program indicate that the gravity-gradient lock is stable, and analysis now indicates that the libration (oscillation about the ideal downward-pointing direction) is currently contained within a 20 degree cone and with a very long period - of the order of hours. The simulations carried out at UoS before GG boom deployment indicated that we might expect about 38 to 42 degrees of libration, so this result is particularly pleasing. Work is now under way to consider spinning the spacecraft slowly (once every 5-10 mins) in order to improve the temperatures and also to develop de-libration algorithms to improve further the earth pointing. 'Thermal spin' manoeuvres are planned to commence next week.

A number of CCD Imager tests have been carried out (Thurs & Fri) - results will take some time to process, but will be announced a.s.a.p.!

** UOSAT-OSCAR-11 Gravity Gradient Boom Deployment **

Following several days final preparation and rehearsals, the UO-11 gravity gradient boom was deployed under on-board 1802 computer control at 10:35 gmt during orbit 2113 on 24th July.

The automatic magnetorquing manoeuvres, continuously executed by the 1802 OBC over the previous few weeks, had aligned the spacecraft closely to the geomagnetic field vector and reduced residual motions (wobble) to a very low value. Following final confirmation of auspicious deployment conditions at AOS at Surrey on orbit 2113, the OBC was given instructions to terminate the magnetorquing routines and deploy the boom for 15 minutes taking the spacecraft out of range of UoS. The OBC simultaneously recorded X,Y,Z, +5V current and boom & computer status channels automatically throughout the operation whilst the boom was being deployed and during the following orbit, to monitor gravity gradient capture and spacecraft operations.

The stored data was dumped at UoS on the next orbit (2114) and examination confirmed the correct operation of the deployment routine and preliminary analysis of the stored Navigation Magnetometer data indicated successful gravity gradient capture.

Data gathered regularly since then has confirmed that the spacecraft has maintained successful gravity gradient stabilisation and showed no evidence of severe libration. Residual energy before boom deployment translated itself into libration following GG-lock - which has been monitored and will be minimised using magnetorquing routines similar to those used during initial attitude control manoeuvres. The spacecraft

will soon be spun very slowly around the Z-axis in order to improve the internal temperatures - currently running somewhat cool. Introducing a very slow Z-spin does, of course, interact with the GG stabilising forces but only to impart a small forward or backward 'tilt' of a few degrees dependent on spin rate.

Gravity gradient stabilisation of UO-11 is the culmination of many months of preparation and many weeks of spacecraft activities - most of which has not been visible to the outside world! It has been very demanding and has necessitated the use of considerable facilities and required a particular, dedicated effort from the UOSAT Team - particularly Stephen (Attitude, Stabilisation & Navigation Analysis), Roger G8NEF (Spacecraft Software) and Neville G8NOB (Ground Station Software).

Deployment 'highlights' follow:

Saturday 21/7/84

TORQUEH (the 1802 program which actively controls the magnetorquers in conjunction with reading the navigation magnetometer, records and replays whole orbit data and runs command timing loops) was further exercised as well as re-initialising its ODATA function at 21:29:40.

Monday 23/7/84

Morning - tests of final ground "deployment decision" software were made by switching the magnetometer on permanently and watching the fields changing. Residual oscillations of under 10 degrees were encouraging.

Evening - A full rehearsal of the boom deployment operation was run over 3 passes. The boom deployment commands were substituted by commands which were equally visible on the telemetry status points but otherwise harmless! After the ODATA was dumped, active magnetorquing was re-enabled.

Tuesday 24/7/84 - Boom deployment

Orbit 2112 - While holding the telemetry system in dwell mode (which prevents ODATA from recording since all channels are not found), the TORQUEH ODATA segment was reset, and active magnetorquing resumed. The spacecraft was left until LOS transmitting dwell telemetry to the ground analysis software.

Orbit 2113 - Sending one command told the 1802 to turn the z-magnetorquer on continuously, to allow the ground software to take a precise fix of the spacecraft attitude. After about 3 minutes of data, Stephen finally confirmed a suitable attitude, and the telemetry system was switched out of dwell mode to enable ODATA recording to start at 10:35:00 (approx). The

channels recorded were 1,2,3,41,61,67. The last two record hexadecimal numbers - sorry if your ODATA program expired at this new facility!

At 10:35:20, a command to the 1802 turned the boom motor on for a 15.0 minute deployment and we watched the telemetry anxiously. An anomaly on the 5v current sensor prevented us seeing the true current, but the 14v bus was as expected and the motor was left running as the spececraft disappeared below our horizon.

Orbit 2114 - Telemetry at AOS looked good, with the boom motor off and a good battery voltage. After taking the stored ODATA dump, the magnetorquers were disarmed and ODATA was reset at 12:19:23 to record channels 1,2,3 and 52. The real-time dump of the ODATA looked most encouraging.

By the evening, the next ODATA dump to be analysed confirmed a stable gravity gradient lock. More rapid dumps (always using channels 1,2,3,52) were made after resets at 18:37:53 and 20:09:45.

Friday 27/7/84

The 2.4GHz beacon was tested and found to be much improved in the new attitude. This downlink should prove to be very useful for engineering and high speed data for ground stations which are well-equipped with good receiving and decoding equipment.

** UO-11 Mission Plan **

Gravity gradient stabilisation marks the end of the major spacecraft commissioning phase of UO-11 and now allows us to progress with the commissioning of the experiments. This will commence with evaluation of the DCE and CCD Camera, however a more detailed Plan will be available shortly.

** NOAA Spacecraft Status Update **

* NOAA-8, the first in a series of Advanced TIROS-N spacecraft, began exhibiting problems on June 12 when it experienced a 'clock interrupt' that caused the spacecraft's gyros to loose synchronism. Continued clock perturbations interfered with the meteorological instruments on June 13th. Over the weekend of June 30/July 1, the situation deteriorated to the extent that the spacecraft's attitude control systems were affected and NOAA-8 began tumbling. The spacecraft has no nitrogen attitude control fuel left after remedial manoeuvres following launch on March 28, 1983 aboard an ATLAS-E launcher. NOAA-8 weighes 3,775 lbs and carries six environmental monitoring instruments and a search-and-rescue experiment. Although the search-and-rescue facility will be lost if NOAA-8 cannot be recovered, much of the environmental monitoring is being

conducted by NOAA-6, still operational since launch on 27 June 1979.

Engineers are working to resolve the problem before the launch of NOAA-F, currently scheduled for 23 October 1984.

* NOAA-7 will complete its planned operational lifetime this summer, but is continuing to perform well.

** Thanks for Reports & Questionnaire Returns **

PE1HLB, VK2ZYE, I2KBD, VK2RX, VK2XPW, VK2AVH, ON4HW.

W2RS, M.D.Oslender, G8DGR, WB9ANQ, G8KTM, G4PSO, G6TRR, G8JUB. ON4AWV, OZ1IWS, G4ILN, G4SAQ, ON5EX, GM4CUX, G4MAB, G8AVH, I2KBD, G6FPX

This week: G3MBN, VK5HI, ON6RL, G1BUY, G5TU, G3SLI, Steve Hodson.

From 6207880596731739498
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd46e9d130e4affc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-21 20:28:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version VT3.4 8/17/84; site vortex.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!dual!amd!decwrl!decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: Re: White House radios prevent eavesdrop - (nf)
Message-ID: <391@vortex.UUCP>
Date: Tue, 21-Aug-84 23:28:30 EDT
Article-I.D.: vortex.391
Posted: Tue Aug 21 23:28:30 1984
Date-Received: Sat, 25-Aug-84 05:35:59 EDT
References: <2070@pur-ee.uucp>
Organization: Vortex Technology, Los Angeles
Lines: 5

Most of the new systems feed digitized audio through DES chips, and thus are "relatively" secure. How secure in REALITY depends on how far you trust DES.

--Lauren--

From 4976207923571904435
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b0fe48988349652,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-08-22 04:56:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: info hams mailing list
Message-ID: <2359@ihuxf.UUCP>
Date: Wed, 22-Aug-84 07:56:55 EDT
Article-I.D.: ihuxf.2359
Posted: Wed Aug 22 07:56:55 1984
Date-Received: Thu, 23-Aug-84 00:37:20 EDT
References: <12616@sri-arpa.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 5

What is the "info hams mailing list" ?

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==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 7955329914776380283
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a80f8e1aef60a4e6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-22 11:15:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Kenwood 930 question
Message-ID: <11689@mgweed.UUCP>
Date: Wed, 22-Aug-84 14:15:52 EDT
Article-I.D.: mgweed.11689
Posted: Wed Aug 22 14:15:52 1984
Date-Received: Thu, 23-Aug-84 02:20:11 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

Does anyone know any of the following about the transverter output
in the Kenwood 930?:

     Frequency. (looks like it is off a broadband driver and
               would be any freq selected).

     Impedance.

     Level.

Tnx Bob K9EUI

From 3698615639120541564
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,64ecfca5a94fb82,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-22 15:40:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!hplabs!sri-unix!
jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: 220 MHz and other issues
Message-ID: <12714@sri-arpa.UUCP>
Date: Wed, 22-Aug-84 18:40:00 EDT
Article-I.D.: sri-arpa.12714
Posted: Wed Aug 22 18:40:00 1984
Date-Received: Sat, 25-Aug-84 06:09:20 EDT
Lines: 21

To facilitate official-looking comments to the FCC, could somebody put a
"blank form" for the purpose on the net? Or an example comment?
I once had such a form in electronic form which I used for the no-code
filing, but it has been zapped in the meantime.

You know,

```
           (
           (
           (                      or whatever
In the matter of  (
           (
           (
           (
```

Any help in reconstructing the proper format will be appreciated.

```
                       73,
                       W3IKG
```

From -8921129295610813438
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,96a5fdbd23d0d153,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-22 17:52:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!uok!mpackard
From: mpackard@uok.UUCP

Newsgroups: net.ham-radio
Subject: 220 Whimps - (nf)
Message-ID: <2800016@uok.UUCP>
Date: Wed, 22-Aug-84 20:52:00 EDT
Article-I.D.: uok.2800016
Posted: Wed Aug 22 20:52:00 1984
Date-Received: Sat, 25-Aug-84 05:48:50 EDT
Lines: 11
Nf-ID: #N:uok:2800016:000:411
Nf-From: uok!mpackard   Aug 22 19:52:00 1984

#N:uok:2800016:000:411
uok!mpackard   Aug 22 19:52:00 1984

:-)
I bet you all thought I left. Anyway, there apears to be some
comotion about loosing 220? What do you expect! Use it or loose
it! Just because you have a repeater that emits morse code and
collects static doesn't mean you are a spectrum user. I still think
amatuers should stay below 30 MHZ where Morse code is supreme and
leave the VHF and up to the people who can use it more effectively.
uok!mpackard

From 5776988708309912921
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de3daa6621c00208
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-22 22:51:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 SMI; site sun.uucp
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!zinfandel!dual!amd!
decwrl!sun!gnu
From: gnu@sun.uucp (John Gilmore)
Newsgroups: net.ham-radio
Subject: Re: reposting of amrad vadcg doc
Message-ID: <1630@sun.uucp>
Date: Thu, 23-Aug-84 01:51:57 EDT
Article-I.D.: sun.1630
Posted: Thu Aug 23 01:51:57 1984
Date-Received: Sun, 19-Aug-84 03:54:09 EDT
References: <756@cp1.UUCP>
Organization: Sun Microsystems, Inc.
Lines: 23

     Path: sun!decwrl!decvax!mcnc!philabs!cmcl2!seismo!rlgvax!cvl!umcp-cs!aplvax!
cp1!hart
     From: hart@cp1.UUCP
     Newsgroups: net.ham-radio
     Date: Thu, 9-Aug-84 18:31:47 PDT
     Article-I.D.: cp1.756
     Organization: C & P Tel. Co., Balto., Md.

Lines: 1432

JEEZUS H CHRIST!!!!

This is the second time you've posted a 1400 line document full
of total garbage!

Of course you work for a phone company, so our phone bills don't bother
you. Just for an exercise, figure out what it cost the 11 sites in the
path to send this piece of sh*t, then multiply that by 99 for the 1000
sites on the net.

Kindly find some dark hole somewhere and seal it behind you.

At first I thought the original complainer from xeroX was overreacting.
I now see that his reaction was overly mild.

From -8113856814656983156
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cc7bb0f50383965c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-23 18:32:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: CBS reporters' headsets on 462.65 MHz
Message-ID: <2364@ihuxf.UUCP>
Date: Thu, 23-Aug-84 21:32:08 EDT
Article-I.D.: ihuxf.2364
Posted: Thu Aug 23 21:32:08 1984
Date-Received: Sat, 25-Aug-84 05:41:53 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 16

x
  In a recent telephone conversation, Bob Grove passed on this
  note of interest:

        The two-way radio headsets that CBS announcers and
        reporters use transmit on 462.650 MHz.

  These headsets are quite noticeable in the coverage of the
  current political conventions as well as sporting events.

--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -4108605676892168539
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,61b4924aaf693c76,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-23 22:21:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!ecn-ee!wn9nbt
From: wn9nbt@ecn-ee.UUCP
Newsgroups: net.ham-radio
Subject: White House Radio replies - (nf)
Message-ID: <2083@pur-ee.UUCP>
Date: Fri, 24-Aug-84 01:21:45 EDT
Article-I.D.: pur-ee.2083
Posted: Fri Aug 24 01:21:45 1984
Date-Received: Sat, 25-Aug-84 06:10:14 EDT
Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University
Lines: 18

#N:ecn-ee:14900008:000:729
ecn-ee!wn9nbt   Aug 23 23:54:00 1984

Thanks to all of the replies from my question about the White
House Security Radios that are not "receivable" with a conventional
scanner.   Most replies suggest that they are using a Motorola
system that employs the DES algorythm or a similar method developed
by Motorola.   I built a simple circuit years ago to listen to
a local Police department that used a speech inversion scheme. That
turned out to be quite simple to defeat. This appears to be quite
secure and for all practical purposes, extremely difficult to
impossible to decode, without the key /etc.   Sorry I didn't thank
everyone personally, but I don't have access to arpanet, where several
of the replies came from.   Thanks !!......Dave Chasey -- wn9nbt

From 6108149193470995700
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd46e9d130e4affc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-24 06:02:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!dual!hplabs!piety
From: piety@hplabs.UUCP (Bob Piety)
Newsgroups: net.ham-radio
Subject: Re: White House radios prevent eavesdrop - (nf)
Message-ID: <774@hplabs.UUCP>
Date: Fri, 24-Aug-84 09:02:53 EDT

Article-I.D.: hplabs.774
Posted: Fri Aug 24 09:02:53 1984
Date-Received: Wed, 29-Aug-84 01:09:12 EDT
References: <12736@sri-arpa.UUCP>
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 8

Spread Spectrum communications could be used. Even if one were close enough to the transmitter to detect RF, it would just sound like static on an ordinary receiver. Most of the time, the signal would be substantially below the noise-- again, static received.

--Spread Spectrum on 2M--

Bob (KG6HV)

From 7477575406840090507
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,10b51601cd4fb290,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-24 10:33:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Comment format for dockets, petitions, etc.
Message-ID: <11755@mgweed.UUCP>
Date: Fri, 24-Aug-84 13:33:01 EDT
Article-I.D.: mgweed.11755
Posted: Fri Aug 24 13:33:01 1984
Date-Received: Sat, 25-Aug-84 07:43:11 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 61

HOW TO PREPARE COMMENTS FOR THE F.C.C.
_____

Comments to the FCC should be on 8 1/2 by 11 inch paper with the left-hand and top margins being at least 1 1/2 inches and at least one inch on the right side and bottom of the page. Use one side of the paper only and double-space your comments, except for long quotations, which may be single spaced. All papers shall be typewritten. Number your paragraphs and in your comments, refer to the docket paragraph number or rules Part number that you are commenting on.

Be polite and don't insult the Commission. Don't say "don't do" something unless you have an alternative to offer, or can list reasons why it should not be done.

Mail the original and 5 copies to:

Federal Communications Commission
Mr. William Tricarico, Secretary
1919 M. Street, NW.
Washington, D.C. 20554

The top of the first page should be headed as in the following example:

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Notice of Proposed Rulemaking)
regarding the establishment of)
a Class of Amateur Operator) PR Docket No. 83-28
License not requiring a demon-)
stration of proficiency in the)
International Morse Code)

COMMENTS

(Start your comments about 5 lines down)

Sign and date the comments at the end of the last page:

Respectfully submitted
2-23-83

(Your signature)

Robert J. Roehrig, K9EUI
314 S. Harrison Street
Batavia, Illinois 60510

From 691160662780454201
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,66e690227ae66244,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-24 18:33:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin 89
Message-ID: <141@mouton.UUCP>
Date: Fri, 24-Aug-84 21:33:12 EDT
Article-I.D.: mouton.141
Posted: Fri Aug 24 21:33:12 1984
Date-Received: Sun, 26-Aug-84 01:16:23 EDT
Organization: Bell Communications Research, Inc
Lines: 217

**** UoSAT Bulletin-89 24th August 1984 ****

** General News **

* Future UoSAT Missions are being proposed and studied, varying in scope from UO-9 & UO-11 orbits to Phase 111 and involvement in Geosynchronous orbits. We would be very interested to hear of any (reasonable!) suggestions or areas of interest that you may have - please direct to G3YJO.

One such future mission possibility being considered is the use of an ARIANE-4 launch to place a constellation of six (or maybe cut down to three) small amateur satellites into geosynchronous orbit. The spacecraft would be transferred into geosynchronous orbit by a common 'carrier' module, ferrying the spacecraft through the drift phase of the orbit and then depositing them, two at a time, at positions around the equator. It is proposed that each spacecraft carry at least a MODE-L transponder. A project of this scale would clearly have to be undertaken by a international AMSAT team , probably US/DL/UK and each group would also furnish additional experiments in keeping with their interests. This is an ambitious idea (and costly) but could advance amateur radio communications by a further quantum leap, however it is early days yet and this scale of mission may not prove practicable or even desirable. What are YOUR thoughts?

* A Masters Degree in 'Satellite Communications Engineering', based heavily around the experience gained through the UoSAT Projects, will commence at the University of Surrey this October - although welcome, this adds, however, to the already overloaded UoSAT Team! Details again avaliable from G3YJO.

* Three Active Magnetospheric Particle Tracer Expt. (AMPTE) spacecraft were launched successfully by NASA DELTA from Cape Canaveral on Thursday 16th August - after three aborted launch attempts following ground station computer malfunctions and the discovery of debris in the vehicle. A small UK spacecraft, contributed by the UK SERC, was mounted between the two large US & DL spacecraft - UoSAT contributed to the Particle Wave Experiment on this s/c. The spacecraft have been in orbit over a week now and are reported to be functioning very well.

** UoSAT-Oscar-9 Schedule **

The Bulletin/Digitalker/Telemetry on UoSAT-1 will run through to Wednesday 29 August due to a UK national holiday on Monday and a UoS holiday on Tuesday! It is hoped that a more normal service will resume soon on UoSAT-1. The preparation of the Bulletin is being re-organised to spread the workload and items of relevant interest for the Bulletin are always welcome - the weekly deadline is 10.30 local time each Friday - and should be sent to the UoSAT Team in writing.

We have received a suggestion that it might be useful to include line numbers in the Bulletin. This would be useful for those using comuters to gather the Bulletin as it would allow them to assemble a complete Bulletin from noisy data on multiple orbit passes without manual editing. This feature would, however, reduce the space available for text - what are YOUR thoughts please!

Special 'Notice Board' items for demonstrations/displays using UoSAT are also welcome as they can add 'interest' to such activities.

The H.F.Beacons Expt. will be in use this week.

** UoSAT-Oscar-11 Operations **

Harold Price, NK6K, is continuing his efforts to commission the Digital Communications Experiment (DCE).

Several whole-orbit data formats have been gathered last week - interspersed with telemetry - to support analysis of the GG lock and libration. A daily account follows:

```
 Saturday - #2479, channels 1,2,3,52 reset at 11:49:30
            #2484, channels 1,2,3,52 reset at 19:46:45

 Sunday   - #2498, channels 1,2,3,52 reset at 18:49:30

 Monday   - #2507, channels 1,2,3,52 reset at 09:48:25

 Tuesday -  #2521, channels 1,2,3,52 reset at 08:47:40
            #2522, channels 0,10,20,30,50,51 reset at 10:32:00
            #2528, ODATA ran incorrectly - no data
            #2529, channels 1,2,3,52 reset at 21:40:50

 Wedneday - #2536, 1,2,3,52 reset at 09:29:48
            #2537, channels 17,18,19,27,28,29 reset at 11:07:55
            #2542, channels 40,50,51,52,53,57 reset at 18:59:31

 Thursday - #2551, channels 40,50,51,52,53,57 reset at 10:11:25
            #2552, channels 1,2,3,52 reset at 11:47:00
            #2556, channels 1,2,3,11,38,49 reset at 18:04:55
```

Friday - #2565, channels 1,2,3,52 reset at 09:10:50

The frequent dumps of data from the ODATA whole-orbit telemetry recording program indicate that the gravity-gradient lock is stable, and analysis now indicates that the libration (oscillation about the ideal downward-pointing direction) is currently contained within a 20 degree cone and with a very long period - of the order of hours. The simulations carried out at UoS before GG boom deployment indicated that we might expect about 38 to 42 degrees of libration, so this result is particularly pleasing.

UO-11 is now spinning about once every 4 minutes around the z-axis in order to minimise the temperature gradients across the spacecraft. The spin has not affected the GG lock but has introduced some more complex motions which are currently being analysed. The spacecraft spin rate will be increased slowly to evaluate the interaction with GG lock and to study thermal effects. The effect of the z-spin can be seen clearly in the whole-orbit navigation magnetometer data ('wrinkles' on the z-data & modulated oscillations on the x,y-data) and also quite easily by observing the solar array currents on real-time telemetry.

The CCD Imager tests carried out (Thurs & Fri last week) are still being analysed - the results will take some time to process, but will be announced a.s.a.p.!

** UOSAT-OSCAR-11 Gravity Gradient Boom Deployment **

Following several days final preparation and rehearsals, the UO-11 gravity gradient boom was deployed under on-board 1802 computer control at 10:35 gmt during orbit 2113 on 24th July.

The automatic magnetorquing manoeuvres, continuously executed by the 1802 OBC over the previous few weeks, had aligned the spacecraft closely to the geomagnetic field vector and reduced residual motions (wobble) to a very low value. Following final confirmation of auspicious deployment conditions at AOS at Surrey on orbit 2113, the OBC was given instructions to terminate the magnetorquing routines and deploy the boom for 15 minutes taking the spacecraft out of range of UoS. The OBC simultaneously recorded X,Y,Z, +5V current and boom & computer status channels automatically throughout the operation whilst the boom was being deployed and during the following orbit, to monitor gravity gradient capture and spacecraft operations.

The stored data was dumped at UoS on the next orbit (2114) and examination confirmed the correct operation of the deployment routine and preliminary analysis of the stored Navigation Magnetometer data indicated successful gravity gradient

capture.

Data gathered regularly since then has confirmed that the spacecraft has maintained successful gravity gradient stabilisation and showed no evidence of severe libration. Residual energy before boom deployment translated itself into libration following GG-lock - which has been monitored and will be minimised using magnetorquing routines similar to those used during initial attitude control manoeuvres. The spacecraft has now been spun slowly around the Z-axis in order to improve the internal temperatures - previously running somewhat cool. Introducing a slow Z-spin does, of course, interact with the GG stabilising forces but should only impart a small forward or backward 'tilt' of a few degrees dependent on spin rate.

Gravity gradient stabilisation of UO-11 is the culmination of many months of preparation and many weeks of spacecraft activities - most of which has not been visible to the outside world! It has been very demanding and has necessitated the use of considerable facilities and required a particular, dedicated effort from the UOSAT Team - particularly Stephen (Attitude, Stabilisation & Navigation Analysis), Roger G8NEF (Spacecraft Software) and Neville G8NOB (Ground Station Software).

** UO-11 Mission Plan **

Gravity gradient stabilisation marks the end of the major spacecraft commissioning phase of UO-11 and now allows us to progress with the commissioning of the experiments. This will commence with evaluation of the DCE and CCD Camera, however a more detailed Plan is being prepared.

** NOAA Spacecraft Update **

* NOAA-8, the first in a series of Advanced TIROS-N spacecraft, began exhibiting problems on June 12 when it experienced a 'clock interrupt' that caused the spacecraft's gyros to loose synchronism. Continued clock perturbations interfered with the meteorological instruments on June 13th. Over the weekend of June 30/July 1, the situation deteriorated to the extent that the spacecraft's attitude control systems were affected and NOAA-8 began tumbling. The spacecraft has no nitrogen attitude control fuel left after remedial manoeuvres following launch on March 28, 1983 aboard an ATLAS-E launcher. NOAA-8 weighes 3,775 lbs and carries six environmental monitoring instruments and a search-and-rescue experiment. Although the search-and-rescue facility will be lost if NOAA-8 cannot be recovered, much of the environmental monitoring is being conducted by NOAA-6, still operational since launch on 27 June 1979.

Engineers are working to resolve the problem before the launch of NOAA-F, currently scheduled for 23 October 1984.

* NOAA-7 will complete its planned operational lifetime this summer, but is continuing to perform well.

** Thanks for Reports & Questionnaire Returns **

PE1HLB, VK2ZYE, I2KBD, VK2RX, VK2XPW, VK2AVH, ON4HW.

W2RS, M.D.Oslender, G8DGR, WB9ANQ, G8KTM, G4PSO, G6TRR, G8JUB. ON4AWV, OZ1IWS, G4ILN, G4SAQ, ON5EX, GM4CUX, G4MAB, G8AVH, I2KBD, G6FPX G3MBN, VK5HI, ON6RL, G1BUY, G5TU, G3SLI, Steve Hodson.

This week: G2DBT, K1KSY, N4NY, OZ2LW, JA1WO

** Keplerian Orbital Elements - from KA9Q **
etc....

From -1821751900197577526
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b83f63edf5eb0e1d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-24 23:58:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!tektronix!hplabs!zehntel!zps!digger
From: digger@zps.UUCP (Scott A. Miles)
Newsgroups: net.ham-radio
Subject: 220 wimps reply flame
Message-ID: <169@zps.UUCP>
Date: Sat, 25-Aug-84 02:58:52 EDT
Article-I.D.: zps.169
Posted: Sat Aug 25 02:58:52 1984
Date-Received: Thu, 30-Aug-84 19:02:58 EDT
Lines: 23

> In California the 220 mhz spectrum is used quite extensively. There hundreds of repeaters in use that occupy all of the allocated repeater spectrum, and 90% of these repeaters are used often. Not just sounding their id'er (which happens to be illegal). There are emergency services and nets on this band just as there are on the bands below 30MHZ. Vhf serves it purposes for local communications and works well when integrated with hf for emergency communications. I would like to see you carry a 520S with a key on your hip while you are hiking up a mountain searching for a lost hiker. And I'm sure those people half way across the the world would also like to hear about the walkathon your working on. I think that covers it for now. I know I will hear from you soon.
>
> 73's

Scott Miles WB6PQM
Northern Amateur Relay Council of California (NARC)
(Repeater Coordinating Council)
220 MHZ Coordinator
zehntel!zps!digger

From -6184626466453133859
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de3daa6621c00208
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-25 09:03:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cp1.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!hplabs!hao!seismo!umcp-cs!aplvax!cp1!hart
From: hart@cp1.UUCP
Newsgroups: net.ham-radio
Subject: Re: reposting of amrad vadcg doc
Message-ID: <764@cp1.UUCP>
Date: Sat, 25-Aug-84 12:03:29 EDT
Article-I.D.: cp1.764
Posted: Sat Aug 25 12:03:29 1984
Date-Received: Thu, 30-Aug-84 02:31:55 EDT
References: <756@cp1.UUCP>, <52800029@trsvax.UUCP>
Organization: C & P Tel. Co., Balto., Md.
Lines: 15

Sorry to p--- you off. Some twit with a thrash-80 sent it to me to put on
the net. I have gotten quite afew request, but I have refused. Instead I
am sending a copy of your message along with Keith's instructions on how to
obtain in via Arpa. That's enough of this STUPID dialog!

--

==========
signed: Rod Hart (wa3mez)
        Chesapeake & Potomac Tel. Co.
        Bell Atlantic Inc.
        Silver Spring, Md.
        gamma!cp1!hart - umcp-cs!cp1!hart - aplvax!cp1!hart
==========

From -7246712359319280063
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,258097ac55f23bf0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-26 10:00:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sdccsu3.UUCP

Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!hplabs!sdcrdcf!sdcsvax!
sdccsu3!brian
From: brian@sdccsu3.UUCP (Brian Kantor)
Newsgroups: net.ham-radio
Subject: Packet Radio Networking Proposal (long paper)
Message-ID: <2220@sdccsu3.UUCP>
Date: Sun, 26-Aug-84 13:00:52 EDT
Article-I.D.: sdccsu3.2220
Posted: Sun Aug 26 13:00:52 1984
Date-Received: Fri, 31-Aug-84 02:34:33 EDT
Distribution: na
Organization: UCSD beer & pizza society
Lines: 474

The following paper was presented at the Los Angeles Amatuer Packet
Radio Group meeting on Saturday, Aug 25 1984.

ihnp4 \ Brian Kantor, UC San Diego
decvax \
akgua >---- sdcsvax ----- brian
dcdwest/
ucbvax/ Kantor@Nosc

"not at all a well cat..."

-------- cut here ----------

_A _P_r_o_p_o_s_e_d _N_e_t_w_o_r_k _f_o_r _t_h_e _i_n_t_e_r_c_o_n_n_e_c_t_i_o_n _o_f _A_m_a_t_e_u_r _D_i_g_i_t_a_l _P_a_c_k_e_t _R_a_d_i_o _S_t_a_t_i_o_n_s

_B_r_i_a_n _K_a_n_t_o_r, _W_B_6_C_Y_T
_U_n_i_v_e_r_s_i_t_y _o_f _C_a_l_i_f_o_r_n_i_a, _S_a_n _D_i_e_g_o

_I_n_t_r_o_d_u_c_t_i_o_n

The growth of digital communications in the amateur radio service during the past few years has been nothing short of incredible. More than anything else, the ready availability of digital packet communications using sophisticated packet controllers such as the Vancouver [VADCG], Tucson [TAPR], and GLB devices has introduced packet communications to many hams who would not otherwise have become involved in digital communications. Beyond these packet controller's function as sophisticated replacements for mechanical teleprinters, they provide a means for the estab-

lishment of message systems and bulletin boards by permitting direct connection to personal computers.

While some use of packet radio has been made on the HF bands below 30 MHz at lower data transmission rates, the greatest activity is currently on VHF-FM (particularly 2 meters). Since dependable VHF communication is limited to (at most) a hundred miles or so from one home station to another, the number of stations that can be contacted by packet radio is somewhat limited.

_R_e_p_e_a_t_e_r_s _a_n_d _D_i_g_i_p_e_a_t_e_r_s

Since the digital transmissions are converted to and from audio signals using standard modem technology, it is possible to send packet transmissions through ordinary voice repeaters. There are both technical and social problems with this practice, however, which make it unwise to do so.

Technically, many voice repeaters have audio response characteristics that, while not really noticeable with voice transmissions, introduce significant distortions that reduce the reliability of digital retransmission. Additionally, Morse code or voice identifiers, frequency or signal

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Much of the work in this paper is the direct outgrowth of continuing discussions with Mike Brock, WB6HHV and others in the Southern California packet radio community.
Author's current address:
Brian Kantor, Computer Center C-010, UCSD, La Jolla, CA 92093 [sdcsvax!brian -or- kantor@nosc]

strength telemetry tones, and `over' beeps all may be confused as packet signals by the less sophisticated packet controllers.

Socially, the harsh sounding modem tones generated by the packet equipment are annoying in the extreme for voice users, leading to jamming, interference, and general unhappiness. Also, many packet controllers recognize only packet

modem tones, so they do not acknowledge that a frequency is busy when it is occupied with voice transmissions, and may transmit on top of an existing voice conversation.

Digital repeaters, known as _d_i_g_i_p_e_a_t_e_r_s, provide a means for automatically retransmitting packet signals, but because packet acknowledgments must be returned from the far end of the connection over the possibly multi-hop link path, the effective rate of transmission is greatly decreased. Also, there is currently no collision checking when signals are digipeated. Thus, in case of a packet collision, current digipeaters cannot detect the collision and retransmit the packet that was destroyed by the collision. The originating station must therefore await the lack of acknowledgement from the far end of the connection and resend the packet. Repetition of sent packets from the originating station may very well occupy large amounts of a network's available transmission capacity.

_T_h_e _N_e_t_w_o_r_k _S_o_l_u_t_i_o_n

We feel that the solution to these problems lies in a dedicated network for packet communications, much like the packet switching networks that regularly move millions of characters of data across the country and around the world every day.

The network is simple. Each community (or geographic area) has at least one Packet Network Controller [PNC] to serve as a network _g_a_t_e_w_a_y which would be the access to the packet network for that area. These stations would function automatically, without a human operator, and would serve to provide connections for local and network users. Each PNC would have at least one neighbor PNC, and could make logical connections to and through the adjoining PNCs.

_T_h_e _S_t_r_u_c_t_u_r_e _o_f _t_h_e _N_e_t_w_o_r_k

AMPRNET[1] is structured as a mesh of PNCs, each having one or more neighbor PNCs to which it can connect via radio links. Each of these PNCs has connections to other PNCs, and so on, until all PNCs in the network are reachable

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[1] Thanks to Hank Magnuski, KA6M for the network name.

through one or more hops. Connections between nonadjacent PNCs are made by having adjacent PNCs relay the packets between the two endpoints of the logical connection.

Every PNC has a routing table which describes at least one path to every other accessable PNC. By using this table, it is possible for any PNC to contact any other PNC, possibly through a number of intervening relay hops. The routing table is dynamically built and updated as the network topology changes with nodes coming in and out of service.

_T_h_e _U_s_e_r _V_i_e_w _o_f _t_h_e _N_e_t_w_o_r_k

A connection is established via the network in two distinct steps. First, a user connects to the local PNC. We have chosen the use of the ssid (station sub identification field) value 14 (fourteen decimal) as the reserved designator for PNC stations, so a connection initiated from (for example) a TAPR TNC might appear as

CONNECT WB6CYT-14

which would instruct your station to connect to the PNC run by WB6CYT. A `connected' message, followed by a `network ready' message would appear on your screen.

Next, you would instruct the PNC to attempt to connect to the station you wanted to call. In order to do this, you must know the identification of the PNC serving his area. So, for example, to contact Harold Price in Los Angeles, you might instruct the PNC to connect you to his packet station via one of the Los Angeles PNCs:

CONNECT NK6K@WB6YMH
(the -14 is implied here)

assuming that WB6YMH was operating that PNC. The network will take care of establishing the connection and all routing of packets necessary. When the conversation is finished, disconnecting from either end will cause the virtual connection over the network to be closed as well. Note that connections may be entirely local with only the local PNC involved; this provides a more reliable local-area repeated connection than current digipeater technology can.

We plan to have the PNC supply other services as well. Among those planned for are

o+ Who's On Listing
o+ Network Status
o+ Time and Date Server
o+ Site Security Monitor

_N_e_t_w_o_r_k _P_r_o_t_o_c_o_l_s

While there are many proposals to establish a standard protocol for linking of amateur packet stations, there currently are no experimental results showing a clear advantage for one choice over another.

The protocol chosen must take into account two different aspects of the network. First, there is the question of transport between nodes of the network, and second, the format of the data carried by the network. These are not necessarily solved by the same answer.

The _t_r_a_n_s_p_o_r_t protocol describes the method chosen to carry messages between nodes of the network. While for a hardwire line a simple serial ASCII link would be sufficient, for the more common radio links, a reliable means should be chosen. In our research, we found that the present implementation of the _A_X._2_5 protocol (used by TAPR, VADCG, GLB, and others) would serve well. It has error detection and correction, is efficient, and both software and hardware for its use are readily available. For these reasons, we have chosen to use the AX.25 protocol for most node-to-node radio links on the network.

The _A_M_T_O_R communications protocol also has some distinct advantages for links that are on the HF amateur bands. In cases where the links between network nodes are to span large distances, the AMTOR protocol could be used and we think it would serve well.

The format of messages carried by the network is independent of the transport protocol used. Because it is expected that links will fade and suffer interference, and that nodes will fail, it is wise to use a protocol that is

robust enough to recover from many such problems. After extensive searches of the literature and considering the base of already installed software and systems, we have chosen the _I_n_t_e_r_n_e_t _T_C_P/_I_P mechanism for the message protocol.[2]

TCP/IP is designed to operate with an unreliable transport system, and its performance improves when the underlying transport system is more reliable. It incorporates packet reassembly and reordering mechanisms that can cope with lost packets, packets received out of order, and duplicated packets. Since the network routing scheme described below will accomodate a failed node by routing around it as

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[2] A special note here to thank Phil Karn, KA9Q for his suggestion that TCP/IP could run on top of AX.25 - Phil, it was a brilliant idea and solves a problem we'd been discussing for some time.

long as a path exists between the endpoint network nodes of a connection, it was a great advantage to chose the TCP/IP protocol which would correctly utilize such a facility.

TCP/IP also has other advantages which we think places it as the top contender for the internal message protocol. It has been proven by over 10 years of use on the DOD Arpanet/Milnet/Internet; implementations are available for computer systems ranging from VAX mainframes to the IBM PC; it is completely defined and documented; other facilities which use the TCP/IP protocol for file transfer and remote computer use already exist; and much of the software needed to implement TCP/IP is available at no charge.[3]

Therefore, it is planned to implement the network such that all inter-PNC communication is performed using Internet Protocol [IP] datagrams to allow for maximum flexibility in the routing and transport of data, regardless of the kind of link used between nodes. This allows direct interconnection to the Internet or any other IP compatable network should such be desired.

Hank Magnuski, KA6M, has obtained a Class-A internet network number assignment for amateur packet radio.[4] It is anticipated that each PNC will have its own unique block of host numbers assigned. In the case of manufactured PNCs, the PNC host addresses will be assigned when the unit is shipped. For homebrew units, a central registry will assign the number. Since these numbers are 24 bits long, several million numbers are available. The number merely identifies the PNC address and is much like a hardware serial number. It does not have to be changed when a PNC is sold or moved or assigned a new callsign. (For those of you familiar with the internet, an address resolution protocol is used to map the PNC internet address numbers to the PNC callsign dynamically.)

_R_o_u_t_i_n_g _o_n _t_h_e _N_e_t_w_o_r_k

Routing tables are automatically built and maintained by network nodes. When first activated or after a system reset, the PNC has no connections to neighboring stations. Whenever a PNC has no connections it sends a broadcast beacon message periodically (probably every 10 minutes) until

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[3] Among other sources, Professor Jerome Saltzer of MIT has implemented TCP/IP for the IBM PC. His implementation is available and can be reproduced at no charge, although MIT retains the copyright.

[4] This is registered with the Defense Communication Agency's Network Information Center as network number 044.xxx.xxx.xxx AMPRNET as documented in Internet RFC 870 dated October 1983.

it has established at least one connection to a neighboring PNC. When a neighboring PNC receives such a beacon, it attempts to open a connection to the PNC sending the beacon message. Whenever any node-to-node network activity is detected, routing tables are updated by all PNCs that received the messages so that each will understand the most recent network connectivity. Routing tables may also be exchanged to provide updates.

If a PNC already in the routing table has not been active for a length of time, a message is sent to that PNC to check that it is still active. This is called _p_i_n_g_i_n_g, and will probably be performed after 30 minutes of idle time has elapsed.

If an attempt to communicate with a neighboring PNC fails for any reason, whether during normal packet relaying or as a result of a failed ping, that PNC is deleted from the open connections list and routing table, and will no longer be used for packet relay by the PNC detecting the failure. Thus, the network will recover from and route around any failure that does not isolate a node. When the failed PNC recovers, its beacon or other activities will alert its neighbors that it has returned to service.

Connections between PNCs need not be radio links. Modems, hardwire lines, optical fibres, or other means will serve as well. In these cases, the messages sent by the PNC over these links are identical to those that would have travelled over the AX.25 virtual radio circuit, so there will be no difference in operation with these other types of links.

_A_c_k_n_o_w_l_e_d_g_e_m_e_n_t_s

My deepest thanks to Mike Brock WB6HHV, for his invaluable suggestions on the design of the network, as well as his help in preparing this document.

My thanks also to the many people of the Vancouver Amateur Digital Computer Group and of Tucson Amateur Packet Radio Inc, and to Phil Karn KA9Q, Rod Hart WA3MEZ, Harold Price NK6K, and Skip Hansen WB6YMH for their contributions and suggestions.

_R_e_f_e_r_e_n_c_e_s

Beattie, J. Gordon N2DSY. _N_e_t_w_o_r_k_i_n_g _C_o_n_s_i_d_e_r_a_t_i_o_n_s _f_o_r _t_h_e _A_m_a_t_e_u_r _P_a_c_k_e_t _N_e_t_w_o_r_k

Borden, David W. K8MMO. _T_h_e _E_a_s_t_n_e_t _N_e_t_w_o_r_k _C_o_n_t_r_o_l_l_e_r

Bruninga, CDR Robert E. WB4APR. _E_a_s_t_n_e_t: _A_n _E_a_s_t _C_o_a_s_t _P_a_c_k_e_t _R_a_d_i_o _N_e_t_w_o_r_k

Bruninga, CDR Robert E. WB4APR. _H_F _P_a_c_k_e_t_s: _M_o_d_e_m_s _a_n_d _G_a_t_e_w_a_y_s

Fox, Terry WB4JFI. _I_S_O _R_e_f_e_r_e_n_c_e _M_o_d_e_l _R_e_v_i_e_w

Saltzer, Jerome A. _P_C/_I_P _U_s_e_r_s _M_a_n_u_a_l.

Tannenbaum, Andrew. _C_o_m_p_u_t_e_r _N_e_t_w_o_r_k_s.

TAPR, Inc. _T_N_C _U_s_e_r_s _M_a_n_u_a_l.

DARPA Internet RFCs are available from the Defense Communications Agency Network Information Center at SRI International, Menlo Park, CA. Many technical libraries also have copies. Of special interest are numbers 765, 768, 791, 792, 793, 813-817, 826, and 870.

From 1057627399849609537
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,da590432e710c30d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-26 10:05:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site sdcrdcf.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!barryg
From: barryg@sdcrdcf.UUCP
Newsgroups: net.ham-radio
Subject: Re: "hams" vs. "hackers" -- vote request
Message-ID: <1267@sdcrdcf.UUCP>
Date: Sun, 26-Aug-84 13:05:07 EDT
Article-I.D.: sdcrdcf.1267
Posted: Sun Aug 26 13:05:07 1984
Date-Received: Thu, 30-Aug-84 19:28:27 EDT
References: <sri-arpa.12741>
Reply-To: barryg@sdcrdcf.UUCP (Barry Gold)
Organization: System Development Corporation, Santa Monica
Lines: 12
Summary:

In England we can send computer data by hooking an accoustic coupler to a rig and transmitting F3E or J3E (ie simple audio). You have to establish the QSO using speech and would need to repeat calls every 15 minutes thereafter. My hope is to work our university Multics system /M (obviously you need a license at each end).

Ian G. Batten, G1FVC.

--
     Barry Gold/Lee Gold
     usenet: {decvax!allegra|ihnp4}!sdcrdcf!ucla-s!lcc!barry
     Arpanet: barry@BNL

From 2275265327021431832
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,96a5fdbd23d0d153
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-26 10:09:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site sdcrdcf.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!barryg
From: barryg@sdcrdcf.UUCP
Newsgroups: net.ham-radio
Subject: Re: 220 Whimps - (nf)
Message-ID: <1268@sdcrdcf.UUCP>
Date: Sun, 26-Aug-84 13:09:25 EDT
Article-I.D.: sdcrdcf.1268
Posted: Sun Aug 26 13:09:25 1984
Date-Received: Thu, 30-Aug-84 19:28:48 EDT
References: <uok.2800016>
Reply-To: barryg@sdcrdcf.UUCP (Barry Gold)
Organization: System Development Corporation, Santa Monica
Lines: 11
Summary:

Yeah, and you can use morse on a handheld top-band rig with a trap dipole.

(Top-Band = 160 metre)

              Ian G. Batten, G1FVC.
I'll stick with an FT708!
--
     Barry Gold/Lee Gold
     usenet: {decvax!allegra|ihnp4}!sdcrdcf!ucla-s!lcc!barry
     Arpanet: barry@BNL

From 998334839596617282
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,360a7610eeeb07bc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-26 11:10:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!uok!mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: RE: White house radios - (nf)
Message-ID: <2800017@uok.UUCP>

Date: Sun, 26-Aug-84 14:10:00 EDT
Article-I.D.: uok.2800017
Posted: Sun Aug 26 14:10:00 1984
Date-Received: Wed, 29-Aug-84 05:33:16 EDT
Lines: 12
Nf-ID: #N:uok:2800017:000:423
Nf-From: uok!mpackard   Aug 26 13:10:00 1984

#N:uok:2800017:000:423
uok!mpackard   Aug 26 13:10:00 1984

[]

I'm just guessing but the radios probably use the same technology as
the military which send a sync tone and then convert the audio to
digital, scramble it, and convert it back to audio. When you listen
you should hear a tone followed by static. This is called wide band
secure. This method was attempted by motorola several years back
but the users were not impressed with it, due to the sync problem.
uok!mpackard

From 7891117745915412729
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c58cd50b08ef7a09,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-27 09:31:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site druxm.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!drutx!druxm!n2ic
From: n2ic@druxm.UUCP (LondonSM)
Newsgroups: net.ham-radio
Subject: RSGB MINIMUF - FORTRAN Version
Message-ID: <912@druxm.UUCP>
Date: Mon, 27-Aug-84 12:31:13 EDT
Article-I.D.: druxm.912
Posted: Mon Aug 27 12:31:13 1984
Date-Received: Tue, 28-Aug-84 00:19:29 EDT
Organization: AT&T Information Systems Laboratories, Denver
Lines: 258

Courtesy of W1GD, here is a version of the RSGB MINIMUF program written
in FORTRAN. It should be compiled with the "f77" compiler.
The results seem to agree with the BASIC version.

                            73,
                            Steve, N2IC


```
C     THIS VERSION WRITTEN FOR FORTRAN 77 USED ON PDP-11
C     BY GERRY KERSUS, W1GD
```

```
C
C     Also works FB on a VAX-11/780  (N2IC)

      REAL A(2), C0(2), G6(2), G7(2), G8(2), Z(2)
      REAL T1(2), T3(2), T4(2), T9(2)

      CHARACTER*3 PA
      PI=3.14159


C     NORTH LATITUDE AND WEST LONGITUDE IS POSITIVE
C     OLAT IS HARD-CODED FOR THE ORIGINATING STATION LATITUDE
      OLAT=40.0
C     OLON IS HARD-CODED FOR THE ORIGINATING STATION LONGITUDE
      OLON=-105.0
C     DLAT & DLON ARE DESTINATION LATITUDE & LONGITUDE
      PRINT *, 'ENTER DESTINATION LATITUDE AND LONGITUDE'
      READ *, DLAT, DLON
      DLON =-DLON

C     INPUT MONTH AS A NUMBER FROM 1 TO 12
      PRINT *, 'ENTER MONTH (1-12)'
      READ *, M0

C     INPUT DAY AS A NUMBER FROM 1 TO 31
      PRINT *, 'ENTER DAY (1-31)'
      READ *, D0

C     S0 IS THE SUNSPOT NUMBER
C     SF IS THE SOLAR FLUX
      PRINT *, 'ENTER SOLAR FLUX'
      READ *, SF
      S0=625.*(SQRT((0.73)**2-0.0032*(65.-SF))-.73)
      IS0=NINT (S0)

C     PA INDICATES LONG PATH ("L") OR SHORT PATH ('S')
      PA='S'

      W1=-(OLON-180.*(1+SGN(OLON-.001)))*PI/180.
      W2=-(DLON-180.*(1+SGN(DLON-.001)))*PI/180.
      A1=OLAT*PI/180.
      A2=DLAT*PI/180.

C     ROTATE LONGITUDES
      W3=W2-W1+.001
      W3=PI*(1-SGN(W3))+W3
      H1=SIN(A1)*SIN(A2)+COS(A1)*COS(A2)*COS(W3)
      G1=ATAN(SQRT(1-H1*H1)/H1)+PI/2.*(1-SGN(H1))
      IF (PA .EQ. 'L') THEN
      G1=PI+PI-G1
      ELSE
      CONTINUE
      END IF
```

```
C     PATH LENGTH IN 4 KM UNITS
      H0=INT(1.59*G1)+1.
C     CALCULATE BEARING
      H9=(SIN(A2)-H1*SIN(A1))/SIN(G1)/COS(A1)
      H9=ATAN(SQRT(1-H9*H9)/H9)+PI/2.*(1-SGN(H9))
      H9=H9*SGN(W3-PI)*SGN(PI-G1)
      H9=H9+PI*(1-SGN(H9))
      IB1=INT(H9*180./PI+.5)
      PRINT 1, ' MONTH:', M0, ' SUNSPOT NO.', IS0
1     FORMAT (A, I2, A, I3)
      PRINT 5, ' LONG/SHORT = ', PA, ' BEARING:', IB1
5     FORMAT (A, A, A, I3)
      PRINT *, ' GMT        HPF        MUF        LUF'

      Y6=ATAN(1./TAN(G1/(H0+1.))-.952/SIN(G1/(H0+1.)))
      IF (Y6 .LT. .314) THEN
      Y6=.314
      ELSE
      END IF

      Y6=1./SQRT(1.-.965*COS(Y6)**2)
      Y1=.0172*(10.+(M0-1.)*30.4+D0)
      Y2=.409*COS(Y1)
      Y1=.13*SIN(Y1)+.156*SIN(Y1+Y1)
C     DIRECTION COSINE
      H9=(SIN(A1)-COS(G1)*SIN(A2))/SIN(G1)/COS(A2)
      Z9=SIN(2.5*G1/H0)
      Z9=1.+2.5*Z9*SQRT(Z9)
      Z0=1.-.5/H0

      DO 20 N = 1, 2
      A9=COS(G1*Z0)*SIN(A2)+SIN(G1*Z0)*COS(A2)*H9
      A0=PI/2.-(ATAN(SQRT(1.-A9*A9)/A9)+PI/2.*(1-SGN(A9)))
      W0=(COS(G1*Z0)-SIN(A2)*A9)/COS(A2)/COS(A0)
      W0=ATAN(SQRT(1.-W0*W0)/W0)+PI/2.*(1.-SGN(W0))
      W0=PI-SGN(PI-G1*Z0)*(PI-W0)
      W0=W3+W0*SGN(W3-PI)*SGN(PI-G1)+W1-.001
      W0=W0-PI*(1.-SGN(PI+PI-W0))
      T0=3.82*W0+12.+Y1
      T0=T0-12.*(1.+SGN(T0-24.))*SGN(ABS(T0-24.))

      IF (COS(A0+Y2) .LE. -.26)THEN
      T1(N)=0.
      GO TO 15
      ELSE
      END IF
      T1(N)=(SIN(Y2)*A9-.26)/(COS(Y2)*COS(A0)+.001)
      T1(N)=12.-ATAN(T1(N)/SQRT(ABS(1.-T1(N)*T1(N))))*24./PI
      T7=T0-T1(N)/2.
      T3(N)=T7+12.*(1.-SGN(T7))*SGN(ABS(T7))
      T7=T0+T1(N)/2.
      T4(N)=T7-12.*(1.+SGN(T7-24.))*SGN(ABS(T7-24.))
      C0(N)=ABS(COS(A0+Y2))
```

```
      T9(N)=9.7*(C0(N)**8)
      IF (T9(N) .LT. .1) THEN
      T9(N)=.1
      ELSE
      END IF

15    Z0=1.-Z0
      U2=INT(12./T1(N))
      U3=INT(T1(N)/12.)
      Z(N)=Z9*.75*((12./T1(N)-1.)*SGN(U2)+1.)
      Z(N)=Z(N)*(1+S0/100.*(1-(T1(N)/12.-1.)*SGN(U3)))
      A9=ABS(A0+.21*SIN(W0+.35))
      G2=.5
      IF (A9 .GE. (PI/4.)) THEN
      Z(N)=Z(N)*(1.-.1*(1.+COS(A9*4.)))
      G2=.2
      ELSE
      END IF

      A(N)=SIN(A9*4.)*G2
      G8(N)=PI*T9(N)/T1(N)
      T7=T1(N)/T9(N)
      IF (T7 .GT. 85.) THEN
      T7=85.
      ELSE
      END IF

      G7(N)=C0(N)*G8(N)*(EXP(-T7)+1.)
      G6(N)=G7(N)*EXP((T1(N)-24.)/2.)
20    CONTINUE
      DO 90 J = 1, 24
      T5=J-1.
      R9=100.
      E9=0.
      DO 80 N = 1, 2
      G0=0.
      G3=PI/2.
      IF (T1(N) .EQ. 0.) THEN
      GO TO 40
      ELSE
      CONTINUE
      END IF
      IF (T4(N) .LT. T3(N)) THEN
      GO TO 25
      ELSE
      CONTINUE
      END IF
C     DAYTIME ?
      IF (((T5-T3(N))*(T4(N)-T5)) .GT. 0.) THEN
      GO TO 30
      ELSE
      GO TO 45
      END IF
```

```
C     NIGHT TIME ?
25    IF (((T5-T4(N))*(T3(N)-T5)) .GT. 0.) THEN
      GO TO 45
      ELSE
      END IF
C     EFFECTIVE COS X (DAY)
30    T6=T5+12.*(1.+SGN(T3(N)-T5))*SGN(ABS(T3(N)-T5))
      G4=PI*(T6-T3(N))/T1(N)
      T8=(T3(N)-T6)/T9(N)

      IF (ABS(T8) .GT. 85.) THEN
      T8=85.*SGN(T8)
      ELSE
      END IF
      G0=C0(N)*(SIN(G4)+G8(N)*(EXP(T8)-COS(G4)))
      G3=PI/2.

      IF ((T6-T3(N)) .GT. (T1(N)/2.+3.)) THEN
      GO TO 35
      ELSE
      G3=(T6-T3(N))/(T1(N)/2.+3.)*G3
      ENDIF
35    G3=G3*(1.+SGN(A(N)))
      IF (G0 .LT. G6(N)) THEN
      G0=G6(N)
      ELSE
      END IF
C     F0F2
40    G2=SQRT(7.+45*SQRT(G0/(1.+G8(N)*G8(N))))

C     HPF
      G2=G2*Z(N)*1.27*(1.+SIN(G3)*A(N))
      GO TO 50
C     EFFECTIVE COS X (NIGHT)
45    T6=T5+12.*(1.+SGN(T4(N)-T5))*SGN(ABS(T4(N)-T5))
      G4=PI*(T6-T4(N))/(24.-T1(N))
      G0=G7(N)*EXP((T4(N)-T6)/2.)
      G3=G4+(PI-G4)/4.*(1.+SGN(A(N)))
      G4=0.
      GO TO 40
50    IF (G2 .LT. R9) THEN
      R9=G2
      ELSE
      END IF
C     E LAYER
      Y8=.2
      IF (T1(N) .EQ. 0.) THEN
      GO TO 55
      ELSE IF ((T1(N)*G4) .EQ. 0.) THEN
      GO TO 55
      ELSE
      END IF
      Y9=C0(N)*SIN(PI*(T6-T3(N))/T1(N))
```

```
      IF (Y9 .LE. .174) THEN
      Y8=(ATAN(SQRT(1.-Y9*Y9)/Y9)*180./PI-76.)**(-.4)
      ELSE
      Y8=Y9**(.3)
      END IF
55    Y9=(3.4+.00544*S0)*Y8*Y6
      IF (Y9 .LE. 7.) THEN
      Y9=.91*Y9-.37
      ELSE
      Y9=(1.33*Y9-3.31)**(2.)/7
      END IF

      IF (E9 .LT. Y9) THEN
      E9=Y9
      ELSE
      END IF
80    CONTINUE

      IT5=INT(T5)
      HPF=(R9+.5)
      RMUF=(R9/1.27+.5)
      RLUF=(E9+.5)
      PRINT 85, IT5, HPF, RMUF, RLUF
85    FORMAT (I6, 3F6.1)

90    CONTINUE

      END

      FUNCTION SGN (X)
C     THIS ROUTINE PROVIDES SIGNUM FUNCTION FOR ARGUMENT X
      SGN=SIGN (0.5, X)-SIGN (0.5, -X)
      RETURN
      END
```

```
From -4425642984075692653
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,680476764b5fbf81,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-27 19:22:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 64 (OKLA sec mgr election)
Message-ID: <11822@mgweed.UUCP>
Date: Mon, 27-Aug-84 22:22:52 EDT
Article-I.D.: mgweed.11822
Posted: Mon Aug 27 22:22:52 1984
Date-Received: Tue, 28-Aug-84 23:43:42 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
```

Lines: 10

qst de k9eui
hr arrl bulletin nr 64 from arrl headquarters
newington ct august 21, 1984
to all radio amateurs bt

ballots for the section manager election for oklahoma have been counted according to the prescribed rules. nb5n has been declared elected. his term begins october 1, 1984 ar

From -8694315925429571454
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8650205bddfe4cfc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-27 19:23:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 35
Message-ID: <11823@mgweed.UUCP>
Date: Mon, 27-Aug-84 22:23:22 EDT
Article-I.D.: mgweed.11823
Posted: Mon Aug 27 22:23:22 1984
Date-Received: Tue, 28-Aug-84 23:43:54 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 36

qst de k9eui
hr propagation forecast bulletin nr 35 from arrl headquarters
newington ct august 27, 1984
to all radio amateurs bt

solar activity has been below predicted levels most of the time since early may. the northern hemisphere summer is never a time of high f layer muf but this summer has brought near minimum dx activity on 21 and 28 mhz.

some improvement will be seen during the ((last)) days of august and things will pick up further during the autumn months. solar flux and sunspot numbers have been below the levels used for the dx chart in qst during the summer. the charts for august 15 to september 15 are based on a flux of 97. the highest thus far in this period was 93 and there were ((garble)) days in the 70s.

the current lull should not be taken to mean that high band dx is doomed for the next 5 years or so. even at present levels

of solar activity the autumn months should bring many good days for users of 21 and 28 mhz. it seems likely that f layer dx on 50 mhz is over for this solar cycle, but other propagation modes will provide 50 mhz dx particularly in ((low)) latitudes and on transequatorial paths.

for the forecast week, higher flux levels are expected, but disturbed conditions are likely august 28 through september 1. generally good propagation is likely september 2 to 4 and after september 6.

american sunspot numbers for august 16 to 22 were between 17 and 9 with a mean of 12.4

((k9eui fills)) ar

From -834838861569840141
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f9f2fd663eaacbe6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-27 21:18:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!linus!decvax!decwrl!amd!fortune!hpda!hplabs!hao!seismo!brl-tgr!jcp
From: jcp@brl-tgr.ARPA (Joe Pistritto <jcp>)
Newsgroups: net.ham-radio
Subject: Packet Radio info wanted
Message-ID: <4268@brl-tgr.ARPA>
Date: Tue, 28-Aug-84 00:18:04 EDT
Article-I.D.: brl-tgr.4268
Posted: Tue Aug 28 00:18:04 1984
Date-Received: Thu, 30-Aug-84 11:15:00 EDT
Organization: Ballistics Research Lab
Lines: 21

[I don't understand this blank line thing, but I'll throw this in anyway]

I'm interested in the packet radio situation on 2meters on the East Coast. In particular, what's possible, what's currently implemented, and how much does it take to get started in this mode.

I've read several articles in QST about people using commonly available packet radio boards to interface terminals to their radios, but these only seem to be for talking to other amateurs directly, (like RTTY but more complex). I'm more interested in computer based applications, such as bulletin boards, networks, repeaters, etc.

Also, what baud rates are commonly used, and what protocols are in the modems used for packet. I have heard about baud rates from 300 to 4800, it would seem at least 2 or 3 protocols would exist...

-JCP-

"Think of it as Evolution in Action"

From 8539279486763636486
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9520052f85407c70,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-28 09:37:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 30
Message-ID: <11834@mgweed.UUCP>
Date: Tue, 28-Aug-84 12:37:05 EDT
Article-I.D.: mgweed.11834
Posted: Tue Aug 28 12:37:05 1984
Date-Received: Wed, 29-Aug-84 01:03:50 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 32

qst de k9eui
hr dx bulletin nr 30 from arrl headquarters newington ct
august 24 1984 to all radio amateurs bt

mellish reef. the down under dxers contest club plans to operate from mellish reef between october 25 and november 6 on all bands 160 through 10 meters. they hope to be assigned the call vk9mr. qsls will go via wk2ku, po box 31, winmalee nsw, 2777, australia.

antigua. wb9ihh and ko1k plan to operate /v2a from august 23 through september 1. operation will be mostly cw, with special attention to the 40 and 15 meter novice bands. qsl to thier home calls.

cambodia. xu1ss is still active on sundays at 1200z on 14245 khz. last week he was heard on the east coast for the first time in several weeks.

cyprus. zc4cz has been quite active on 7007 khz at 2340z.

jordan. jy5ci is active on 14228 khz at 2200z. qsl to box 616 amman.

surinam. pz1dv has been worked around 0100z on 7003 khz.

asia on 40. a group of asiatic russian stations has been

active on 40 meters recently at about 2330z. ug6gdd has been
on 7005 khz, uf6fhm on 7009 khz, um6mkw on 7002 khz and ua0agd
on 7009 khz. ar

From -5448191588151494301
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd46e9d130e4affc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-28 18:40:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: White House radios prevent eavesdrop - (nf)
Message-ID: <2369@ihuxf.UUCP>
Date: Tue, 28-Aug-84 21:40:41 EDT
Article-I.D.: ihuxf.2369
Posted: Tue Aug 28 21:40:41 1984
Date-Received: Wed, 29-Aug-84 05:17:59 EDT
References: <12736@sri-arpa.UUCP>, <774@hplabs.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 9

It's not spread spectrum. It's Motorola's Digital Voice
Privacy (DVP), with the DES option no doubt.

You can read about it in a DVP Mitrek manual, available for a buck or
so at your local hamfest.

--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 7967619712211427 62
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6db321f7f88048d6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-30 08:19:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!drutx!houxe!hogpc!houti!ariel!vax135!
cornell!uw-beaver!tektronix!hplabs!hao!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.UUCP
Newsgroups: net.ham-radio
Subject: FM Optional Add-Ons for HF Receivers
Message-ID: <4343@brl-tgr.ARPA>
Date: Thu, 30-Aug-84 11:19:07 EDT
Article-I.D.: brl-tgr.4343
Posted: Thu Aug 30 11:19:07 1984
Date-Received: Sat, 1-Sep-84 13:07:28 EDT

Organization: Ballistics Research Lab
Lines: 22

Many HF receivers, such as the Icom R-70 and R-71, have an extra-cost option of an FM detector mode. This is intended, I believe, for use in receiving narrow-band FM used in certain ham bands. I am under the impression that those bands are all above 20 MHz. Does anyone know if these FM options are so contructed so as to only operate in this higher portion of the HF spectrum? Or will they function no matter what frequency the receiver is tuned to?

I ask this because older tube receivers, such as my old Hallicrafters SX-42, which cover from medium wave up to 108 MHz, have FM modes which only function in the higher bandswitch position(s), not at all frequencies. I discovered this when trying to use this receiver toto tune cordless phones using FM in the 1600-1800 kHz range. (I know I can tune in AM using slope detection; I just wanted to use the for-real FM mode if I could.) Since these new-style receivers have no "bandswitch" as such (but maybe a MHz-selection mechanism), it would seem that the FM option could be turned on independent of the tuned frequency. I would appreciate confirmation of this supposition.

Regards, Will Martin

seismo!brl-bmd!wmartin or wmartin@almsa-1

From 8227505998418871837
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d69f82d43c5b79d7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-30 10:57:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site dsd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!vax135!cornell!uw-beaver!
tektronix!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP (David Altekruse)
Newsgroups: net.ham-radio
Subject: Pacific Packet Radio Meetings
Message-ID: <326@dsd.UUCP>
Date: Thu, 30-Aug-84 13:57:37 EDT
Article-I.D.: dsd.326
Posted: Thu Aug 30 13:57:37 1984
Date-Received: Sat, 1-Sep-84 13:49:34 EDT
Organization: AMPEX DSD, Redwood City, CA.
Lines: 64

From dna Thu Aug 30 01:04:18 1984
To: dna
Subject: DG mail =W6RAW_FM_QST.84.08.29.0.KA6M on 30-AUG-84 at 01:10:48

Note: The following is being reposted to correct ARRL Convention times.

****

To: All Persons Interested in Packet Radio
From: Hank Magnuski, KA6M
Date: August 27th, 1984

Subject: PPRS September Meeting - Revised Notice

The next meeting of the Pacific Packet Radio Society will be held on:

Tuesday, September 4th, 8:00 pm

AMPEX Cafeteria
401 Broadway
Redwood City, California

On Route 84 at 101 or 280, proceed south on Broadway in Redwood City about 2 to 3 blocks. The cafeteria is glass enclosed and is adjacent to a small fountain area. It will be on your right as you travel south.

Dave Engle, KE6ZE, is sponsoring this meeting, and is lining up hardware for a comprehensive review of Terminal Node Controllers (TNC's).

A terminal node controller has proven to be the easiest and most reliable way to get into packet radio. More and more manufacturers are getting on the packet radio bandwagon, and are coming out with offerings that support the AX.25 protocol. This meeting will acquaint you with the TNC offerings available, and will help you buy a TNC that can walk and chew gum at the same time. Come and learn about the comparative advantages of each model, and listen to the war stories of their owners.

In addition, there will be an opportunity to sign up for PPRS working committees. These committees were described in our August meeting, and in September we hope to sign up members who will help formulate the role that PPRS will play in the future of packet radio.

Plus reports on other topics of interest to our members.

Hope you can make the meeting. 73, Hank

P.S. Mark your calendar for these future meetings of the PPRS:

October 2nd, 1984 - Protocol Introduction, AX.25 - John Gilmore
November 13th, 1984 - Technical Topics - Bob Reiling
December 4th, 1984 - Emergency Communications via packet - Curtis Spangler

****
ARRL Pacific Division Convention - 8/31, 9/1, 9/2 - Marriott - Santa Clara

Packet Radio Session - Paul Rinaldo - 1:00 pm to 2:30 pm
Packet Radio Session - Hank Magnuski - 2:30 pm to 3:30 pm
****

From 5593392719817377097
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9f9f9beafb3ea0ae,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-08-30 19:33:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: TAPR Software Updates
Message-ID: <145@mouton.UUCP>
Date: Thu, 30-Aug-84 22:33:02 EDT
Article-I.D.: mouton.145
Posted: Thu Aug 30 22:33:02 1984
Date-Received: Fri, 31-Aug-84 03:20:07 EDT
Organization: Bell Communications Research, Inc
Lines: 221

To: TAPR TNC owners:
Fm: NK6K
Re: Software updates.

Since a TAPR software maintanence release will be out soon, I'd like to
make sure we have all bug reports and requests for changes in.

I'll list the ones I know about here, along with a disposition, if known.
Please feel free to make comments on any part of the TNC, hardware or
software. Please keep in mind the following though:

There are now at least 1300 TAPR TNCs (Beta + kit) in the world today.
Many people have written code to match the current user interface,
mailboxes, bulletin boards, host systems, gateways, etc. Ask yourself
if your proposed change will require a change in user software. If your
sugestion would cause recoding of other ham's software, unless it has a major
benefit, we would probably have to turn it down. This is called the
real world, which is something you get into when 1300 hams are involved.

A few of the discussions below will seem long and involved. That is because
some of the bugs are in more advanced features. The majority of the bugs
in the more common features were wrung out in the beta test.

On with the bugs:

1) If RETRY is not 0, the TNC will sometimes disconnect before the
retry count has expired. This problem took a long time to find,

because we couldn't reproduce it. Someone in the field came up with a reliable way to make it happen. The symptom was affected by both the number of frames in flight, and the number of frames in the buffer waiting to be sent.

KD4NL has made a patch, we are testing it in the LA area now and will release it next week. This should make some people very happy.

2) TNC "locks up". This is a difficult symptom to trace. Most of them are caused by a fault in the hardware. We have found a bug in the software that causes this, to my knowledge only one person has fallen in to this particular hole. This is also patched along with the retry bug.

3) TNC prints garbage on the screen, 64k worth, then comes back. I have heard rumors that the GLB board can send a frame which causes this to occur when it is received by a TAPR TNC. If anyone has firm information on this, please send it in. Sometimes the rumor comes in as "The GLB sends an illegal protocol frame", possibly an I or UI frame with no PID byte. Based on that, and the symptom, we have fixed a problem that would occur if that type of frame was received. If you have any info on this, send it in. This will be fixed in the next software update, i.e. it is not patched.

4) The beacon is not started even if a non zero value for beacon time is stored in novram. True enuff. You must give a BEACON command after every reset. This bug will be fixed in the next software update.

5) The 400 and 800 baud rates for HBAUD that were there in 2.1 disappeared in 3.1. A patch is available for this, and has been sent to the AMSAT guys who needed it. They use 400 baud PSK thru Oscar 10. Fixed in next software update.

6) *** connect request comes out in transparent mode. I can't make this happen. It will happen if CONMODE is CONV, you are currently unconnected, and you manually go into transparent mode by saying TRANS. When a connect occurs, you will go into convers mode and will see all messages. If you want to do this, and remain in transparent mode on connect, say CONMODE TRANS. If anyone has another way of making this happen, please let me know.

7) If your terminal overruns the TNC's input buffer by ignoring an <xoff> character, the TNC will never try to <xoff> you again. Serves you right, too! This bug should be fixed in the next software update. See also improvement #11 below.

8) TRACE 2xxx bit doesn't work. Non-header data is always dumped.

9) Autobaud is a bit flakey. Since the hardware has no specific baud rate measuring capability, an easy fix is simply to limit the autobaud choices to 300 and 1200 baud. If this would have caused a great deal of difficulty in getting your board up the first time, please let us know.

This is the end of the known bugs, i.e. those things which work counter to the way we intended, or counter to the way things were documented. Following are change requests.

1) Store a line to be transmitted when your TNC is connected to by another TNC. E.g. CTEXT I'M IN THE SHOWER, PLEASE RING BELL. That message would be sent automatically when a connect occured. This one stands a good chance of getting in.

2) Store a line to be transmitted when your TNC refuses a connect from another TNC. You'd like the other guy to see
*** WB6UUT busy: MAILBOX IS DOWN.

This is a little more iffy. Since the frame used for a connect nak, DM, has no I field, we have to put the text in a UI frame. The connecting TNC would have to have MON ON, and the UI frame would have to follow the same digipeater path back, which may be a different path than UNPROTO packets usually take. Thus, even if you used this facility, you stand a finite chance of it not working. Is this worth the effort to implement? Comments please.

3) Link status check. You'd like the TNC to automatically send a frame to see if the other TNC is still there. If not, your TNC would timeout based on RETRY. The command would be CHECK EVERY/AFTER n, where n is some convenient interval. It would not apply if RETRY was 0. This will require a protocol change or update. Right now, with the poll/final controversy, there is no way to prod the other end into giving a response, short of sending a zero length (PID byte only) Iframe. This seems a bit tacky. This is on the list of things to get resolved at the next protocol review in September.

4) Discard unacknowledged I frames when a disconnect occurs. Currently, if there are outstanding frame, i.e. frames waiting to be acked or resent, or frames that are in the terminal input queue but as yet unsent, we dump them as UI frames to the UNPROTO address list. This is listed under improvements because this is as we intended it to be, i.e. this is a feature, not a bug. We feel this is a useful diagnostic aid. WE in this paper, by the way, is various combinations of KV7D, KD4NL, and NK6K, depending on which of us is responsible for that part of the code. Comments on this one, please.

5) Implement a TNC resident file transfer protocol. When it comes to file transfers, the TNC was designed to be transparent, just like a modem. In fact, if you go into transparent mode, you can run any program that assumes it's talking to a modem and get the desired results. (And no, it doesn't dial the phone on ATDT commands, wise guy). Note that if you want to transfer 8 bit data you must set the AWLEN and PARITY options correctly, otherwise we'll trash the high order bit. Most data transfer programs will run correctly thru the TNC, as long as their internal timers can handle the inherent delays in packet transmission and digipeating. Implementing a TNC based file transfer protocol would please a small number of users,

who would still have to write code on their computer to interface with the TNC's file transfer mechanism. I think the current scheme is the right choice, and is more in line with the division of tasks set out in the ISO seven layered OSI model. Comments?

6) Confirm entry into CONVERS mode. You want a warm fuzzy feeling that the TNC has done your bidding in response to the CONV command. This would require a change that would bother the mailbox/host/gateway crowd. They do a lot of popping in and out of command mode to check status, paths, and other things. An extra message might put the warm fuzzy message into a file, unless they modified their code. Comments?

7) Go back into command mode after a disconnect initiated by the other TNC. Currently, you are left in CONVERS or TRANS mode. This should not both mailbox/host types since ctl-C in command mode is ignored. Comments?

8) Implement a watchdog timer. Have the software pulse a bit on the parallel port at some inner point only reached if the software is running correctly. This is so mountain top digipeaters can reset themselves if something bad happens. Note that this is different than the hardware transmit timer. Good idea, and it will probably be in the next release.

9) Print the digipeat list when

    a) Someone connects to you
    b) When you get a connect request
    c) When monitoring the frequency.

I think a) and b) should be done all the time. c) would add to an already cluttered monitor mode. Anybody see a better way of doing it. Adding another command to enable this would add to an already lengthy command list. MPATH has been suggested.

10) Print connect and disconnect packets in monitor mode. How about

```
NK6K>WB6YMH <C>
WB6YMH>NK6K <D>
```

There are connect ack and disconnect ack frames, but that might be getting carried away.

11) Increase the number of bytes that the TNC will handle from the terminal after the TNC signals <xoff>. Currently, you must stop within five bytes. After that, the TNC sends another <xoff> after each of the following five bytes. After that, any characters received before the TNC sends an <xon> are discarded. While this has not been a problem for users writing file dumpers in assembler or some high level languages, it has been a problem for programs which dump a line, then look in their input buffer for <xoff>. We will probably increase the guard space to at least 80 characters. Anyone need more?

12) Output <CR> after the callsigns on monitor lines. This would
give more room for digipeat paths and not break up data lines
as much.

13) Echoing xoff and xon. Currently, if the terminal sends a flow
control character out of sequence (xon before xoff, 2 xoffs in
a row, etc.), the TNC treats such characters as data and echos
them. This has the interesting effect of locking some terminals.
It has been suggested that we eliminate this feature and ignore
those characters.

That's the list as I know it to be. Submit any others to the TAPR PO
box.   Now that we've got a secretary, she's in charge of not loosing them.

Remember, the TRACE command is handy for looking at the protocol and seeing
exactly what the TNC sent/received, including user data. Please include
hardcopy of traces for protocol error reports.

NK6K for KV7D and KD4NL, TAPR Software Group.

From 8401633814291869101
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6103615ac608b24d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-17 15:42:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL bulletin nr 55 (shuttle audio relay on OSCAR 10)
Message-ID: <10879@mgweed.UUCP>
Date: Tue, 17-Jul-84 18:42:15 EDT
Article-I.D.: mgweed.10879
Posted: Tue Jul 17 18:42:15 1984
Date-Received: Wed, 18-Jul-84 03:30:53 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

qst de k9eui
hr arrl bulletin nr 55 from arrl headquarters
newington ct july 13, 1984
to all radio amateurs bt

the spaceport amateur radio club, sparc, has been authorized by
amsat to transmit space shuttle mission commentary for all

missions on special services channel h2, 145.963 mhz, of amsat oscar 10. special services channel coordinator w6kag has authorized use of ssc h2, 145.963 mhz, in addition to amsat bulletins from england and australia. sparc, through the facilities of k4gcc and wb4zxs, amsat area coordinator, will provide space shuttle mission audio for several hours each day as time permits. all amateurs are invited to submit reception reports to sparc, box 672, merritt island, fl 32952 ar

From 2486266555441896417
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2b59d8b3eedf0254,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-17 15:43:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL bulletin nr 56 (3rd party - non olympics)
Message-ID: <10880@mgweed.UUCP>
Date: Tue, 17-Jul-84 18:43:09 EDT
Article-I.D.: mgweed.10880
Posted: Tue Jul 17 18:43:09 1984
Date-Received: Wed, 18-Jul-84 03:31:07 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 10

qst de k9eui
hr arrl bulletin nr 56 from arrl headquarters
newington ct july 16, 1984
to all radio amateurs bt

the u.s. and st. christopher and nevis, st. kitts, vp2k, have signed a third party traffic agreement, effective august 8, 1984 ar

From -74809077440596814
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e3aa2a247ce4f460,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-17 15:43:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL propagation forecast bulletin nr 29
Message-ID: <10881@mgweed.UUCP>
Date: Tue, 17-Jul-84 18:43:28 EDT

Article-I.D.: mgweed.10881
Posted: Tue Jul 17 18:43:28 1984
Date-Received: Wed, 18-Jul-84 03:31:21 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 28

qst de k9eui
hr propagation forecast bulletin nr 29 from arrl headquarters
newington ct july 16, 1984
to all radio amateurs bt

the solar flux resumed its usual downward trend during the past week, moving from 101 on july 9 to 89 on the 15th. this range is slightly below the base value used for the propagation charts in qst for july 9, but not enough to make a significant difference in midsummer dx conditions.

the state of the earths magnetic field is more important than the solar flux in determining the usefulness of our dx frequencies in midsummer. high geomagnetic activity narrows the useful rf spectrum and causes erratic fading and increased distortion on voice signals, especially on high latitude circuits. these adverse effects were very marked july 13 to 15. they will be in evidence often through july, though less than in the days just prior to the issuance of this bulletin.

with the sun moving southward again, dx conditions will improve gradually over the next six weeks. the change will become most obvious in early september.

american sunspot numbers for july 5 through 11 were between 52 and 82 with a mean of 65.7 ar

From 4392384014072288853
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ccdf678e3171acb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-18 09:19:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabsc.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!hplabsc!labelle
From: labelle@hplabsc.UUCP (WB6YZZ La Belle)
Newsgroups: net.ham-radio
Subject: Re: CODE IS NECESSARY
Message-ID: <2021@hplabsc.UUCP>
Date: Wed, 18-Jul-84 12:19:55 EDT
Article-I.D.: hplabsc.2021
Posted: Wed Jul 18 12:19:55 1984
Date-Received: Fri, 20-Jul-84 03:21:55 EDT
References: <7000002@hp-pcd.UUCP> <579@inuxd.UUCP>

Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 10

I totally disagree with the "Ham radio is a hobby second and a service first" ethic. It is a hobby first! It is in someway paid for with public service; but that is not its primary function.

GEORGE

From -694020689413088121
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a953ab15f36e7b92,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-18 09:46:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: IDing valuables
Message-ID: <10890@mgweed.UUCP>
Date: Wed, 18-Jul-84 12:46:45 EDT
Article-I.D.: mgweed.10890
Posted: Wed Jul 18 12:46:45 1984
Date-Received: Thu, 19-Jul-84 03:18:08 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 10

I thought that it was not a good idea to use one's social security number for marjing valuables since it was so difficult for anyone to get the information on who the number belonged to. I was always told the best number to use was your driver's license. I would think second best would be your ham call.

Bob K9EUI

From 8816867177669680988
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2fb51f1faf3effec,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-18 09:57:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site iddic.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!hplabs!tektronix!orca!iddic!brucec

From: brucec@iddic.UUCP
Newsgroups: net.ham-radio
Subject: CW and Nuclear War
Message-ID: <1761@iddic.UUCP>
Date: Wed, 18-Jul-84 12:57:26 EDT
Article-I.D.: iddic.1761
Posted: Wed Jul 18 12:57:26 1984
Date-Received: Sun, 22-Jul-84 02:52:29 EDT
Organization: Tektronix, Beaverton OR
Lines: 30

Richard Loken hit one of my 'hot' (no pun intended) buttons in his
posting on CW.

"We will all die in the year long winter anyway."

I've spent some time researching the effects of nuclear war, both for
my own interest and professionally (I designed radiation hard VLSI
computer chips at TI). After surveying all the TECHNICAL literature that
I could find, I have come the conclusion that even all-out nuclear is
SURVIVABLE. That doesn't mean its morally right and I reserve the right
to dispute any other 'conclusions' drawn from this FACT. But civil
defense measures in this direction are not a waste of effort (if done
correctly).

This nuclear winter business is interesting and deserves more study.
My SPECULATION is that it, too, is survivable. My rational for this
opinion is that the human race has already survived a similar phenomena:
The year without a summer - 1816. This was caused by the eruption of
a volcano, Tambora (sp?). Folks survived then (obviously), and with todays
technology and knowledge , I should think we could do as well or better.

Now about CW. My only objection is requiring escalating CW proficiency
for VOICE privileges. Everyone should learn 5 (maybe even 10) wpm, but its
hard to explain why you have to learn more CW to get away from it! The
rewards of greater band privleges should depend on a demonstration of skills
required for those bands and modes!!

NI7M Bruce Cheney Tektronix, Wilsonville OR. UUCP ...!tektronix!iddic!brucec

From 4550660847924692545
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f4ed2b4f76872c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-18 09:57:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: repeater ID's
Message-ID: <10891@mgweed.UUCP>
Date: Wed, 18-Jul-84 12:57:53 EDT
Article-I.D.: mgweed.10891
Posted: Wed Jul 18 12:57:53 1984
Date-Received: Thu, 19-Jul-84 03:18:22 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

We had a voice id on our repeater about 10 years ago (along with the cw id) and I agree with what someone else said on the net, it does not work too well. The level is too high and it wipes out a user. One good thing can be said for it however, and that is that it can be faster than a 20wpm cw id. The thing is to make it go off between transmissions.

We found that a high frequency tone is best for a cw id. Something between 2000 and 2500 Hz. It need not be as loud as a lower tone and it is better heard on the small speakers in hand-held units.

Bob K9EUI

From -7485067346731454372
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ada1defc6cbfb177,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-18 10:00:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Subcarrier on repeater question
Message-ID: <10892@mgweed.UUCP>
Date: Wed, 18-Jul-84 13:00:31 EDT
Article-I.D.: mgweed.10892
Posted: Wed Jul 18 13:00:31 1984
Date-Received: Thu, 19-Jul-84 03:18:36 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 7

Has anyone used a subcarrier on a repeater for telemetering purposes? Since the sudio is normally cut off above 3000 Hz, it would seem that one could insert a low level 4 khz subcarrier and fsk it with data.

Bob K9EUI

From -8451385403034998658
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,f9761be269de60b2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-18 13:24:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!inuxg!wjl
From: wjl@inuxg.UUCP (Wm Lumpkin)
Newsgroups: net.ham-radio
Subject: marine band
Message-ID: <315@inuxg.UUCP>
Date: Wed, 18-Jul-84 16:24:38 EDT
Article-I.D.: inuxg.315
Posted: Wed Jul 18 16:24:38 1984
Date-Received: Thu, 19-Jul-84 03:31:32 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 10

I have got a GE vhf model PE walkie-talkie. I am interested in
trading it for a marine band radio.
Anyone interested please respond.

317-845-6316
Jeff Lumpkin
KA9RKD

From -6370139919688782403
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd72a88fcebc7068,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-18 14:35:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: VADCG Board Upgrade Kit
Message-ID: <99@mouton.UUCP>
Date: Wed, 18-Jul-84 17:35:31 EDT
Article-I.D.: mouton.99
Posted: Wed Jul 18 17:35:31 1984
Date-Received: Thu, 19-Jul-84 03:32:17 EDT
Organization: Bell Communications Research, Inc
Lines: 52

TO ALL VANCOUVER BOARD USERS

JULY 2, 1984

Recently, The Amateur Radio Research and Development Corporation (AMRAD), originators of the now popular AX.25 packet radio protocol, developed a retrofit board for the Vancouver

Terminal Node Controller board, originally developed by Douglas Lockhart, VE7APU. Using the daughter board (part number VDS-1), systems designers are now freed from the memory constraints of the original board. This translates into better operation for the packet radio enthusiast.

Some of the advantages of the AMRAD Vancouver Daughter board system are:

* No modifications (jumpers or traces cut) required on the Vancouver board for normal operation

* No jumper wires to hook between the two boards. All connections necessary are done via wire-wrap sockets.

* From 8k (using 2716's) to 32k (using 2764's) of EPROM

* From 8k (using 6116's) to 32k (using Intel xxxx's) of RAM

* Software programmable baud rate generator (using Intel 8253)

* Optional use of timed interrupts for better software control

* Position for up to six 16-pin sockets for user kludging

* Position for one 24-pin socket for user kludging

* General kludge area of 1.1 by 1.7 tenth-inch spaced holes

* Uses only two additional IC's (other than RAM and EPROM)

* requires no additional power supplies (in fact the minus five volt supply needed for the 2708's can be eliminated)

* Full documentation available.

* Priced inexpensively at only $25.00 for the bare board.

To order a VDS-1 board, send $25.00 plus $2.25 for shipping (US funds) to:

Technetronics Systems Inc.
ATTN: Charles O. Phillips
6134 Columbia Pike
Falls Church, VA 22041

From -3827465091507753274
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4ec10004ed1d1d5a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-18 15:30:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!ecn-ee!wn9nbt
From: wn9nbt@ecn-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: More on no-code (as if there hadn't - (nf)
Message-ID: <1973@pur-ee.UUCP>
Date: Wed, 18-Jul-84 18:30:21 EDT
Article-I.D.: pur-ee.1973
Posted: Wed Jul 18 18:30:21 1984
Date-Received: Thu, 19-Jul-84 04:46:57 EDT
Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University
Lines: 9

#R:sri-arpa:-182400:ecn-ee:14900003:000:89
ecn-ee!wn9nbt   Jul 18 13:03:00 1984

They did that allready. They call it channels 24 thru 40.

.....Dave -- pur-ee!wn9nbt

From 6143904813342249296
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6ef401195877c5e5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-19 00:05:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!hao!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Funny interference on CHU (Canadian time-signal station)
Message-ID: <3400@brl-tgr.ARPA>
Date: Thu, 19-Jul-84 03:05:53 EDT
Article-I.D.: brl-tgr.3400
Posted: Thu Jul 19 03:05:53 1984
Date-Received: Fri, 20-Jul-84 07:19:37 EDT
References: <2116@sri-arpa.UUCP>
Organization: Ballistics Research Lab
Lines: 3

Funny, I've always gotten CHU reception better than WWV.

-Ron

From 2470899975662354598
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8aaceb2adad40093,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-07-19 07:54:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)
Newsgroups: net.ham-radio
Subject: Re: Technical Competence, Code, Emergencies,etc
Message-ID: <52@whuxl.UUCP>
Date: Thu, 19-Jul-84 10:54:05 EDT
Article-I.D.: whuxl.52
Posted: Thu Jul 19 10:54:05 1984
Date-Received: Fri, 20-Jul-84 04:13:27 EDT
Organization: Bell Communications Research, Inc.
Lines: 19

<gulp>
I found Andy (N6JLJ)'s article quite interesting. I would agree that the
single most important thing for the FCC to require of potential Hams is
TECHNICAL COMPETENCE, and I like some of the articles suggesting that a
practical theory exam is the way to do this. Can this be tied in with the
FCC proposal that volunteer examiners design their own exams? (cf. ARRL
bulletin #54).
I'm all for packet radio and other state of the art means of communication
(perhaps also moving to higher EHF/SHF frequencies - I believe that the FCC
has allocated substantial blocks of 20+ GHz for amateur use, and you only
need a Tech license (5 wpm code) to go up there), but I'm concerned about the
viability of a packet or other high tech station in an emergency. Give me
something simple when the things get rough (like massive power outages - perhaps
I'm biased since I'm from NYC and its happened here twice already) that I
can get through to as many stations as possible with compatible equipment
2m HT's are good IF the repeater has emergency power, otherwise I'd think
a CW rig is the way to go.
73's
Bill Mitchell (whuxl!wjm) WB2IAU

From -2486374224189070171
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,61447a255f1b9e13,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,61447a255f1b9e13,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 14023a,61447a255f1b9e13,start
X-Google-Attributes: gid14023a,public
X-Google-ArrivalTime: 1984-07-19 08:03:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)
Newsgroups: net.ham-radio,net.consumers,net.audio
Subject: Re another form of ID
Message-ID: <53@whuxl.UUCP>
Date: Thu, 19-Jul-84 11:03:23 EDT

Article-I.D.: whuxl.53
Posted: Thu Jul 19 11:03:23 1984
Date-Received: Fri, 20-Jul-84 04:15:29 EDT
Organization: Bell Communications Research, Inc.
Lines: 14

<gulp>
Re the NCIC being keyed by SSN:
I doubt it (although I may be wrong), since the Social Security Administration
is fairly adamant about not disclosing SSN's.
All the police Operation ID flyer's I've seen around here (Northern NJ and NYC)
and in the Boston area when I was a grad student at MIT explicitly say NOT to
use your SSN for this purpose, since the police cannot get the number.
They recommend use of driver's license numbers instead, and I think driver's
licenses are the key to the NCIC data base.
My original article was directed to those of us who can't or don't drive, and
I suggested several alternatives that could be obtained relatively easily, like
ham radio calls and equipment serial numbers (which can be given to the local
police for entry into NCIC).
Bill Mitchell (whuxl!wjm) WB2IAU

From 3567108696600746211
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,427d2e5828898c0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-19 08:35:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site abnjh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!sdcrdcf!sdcsvax!akgua!whuxle!spuxll!abnjh!cbspt002
From: cbspt002@abnjh.UUCP (Marc E. Kenig)
Newsgroups: net.ham-radio
Subject: a few Gander Air Traffic Control SW freqs
Message-ID: <751@abnjh.UUCP>
Date: Thu, 19-Jul-84 11:35:51 EDT
Article-I.D.: abnjh.751
Posted: Thu Jul 19 11:35:51 1984
Date-Received: Tue, 24-Jul-84 03:46:43 EDT
Organization: ATTIS, NJ
Lines: 17

<>

Here are 3 Gander, Newfoundland Air Traffic Control Center freqs for Shortwave.
They control cross-North Atlantic air traffic. These are mostly used at
night (except 8825). I'm listening to pick-up the day freqs, but since I'm
leaving the net tomorrow, just have time to post these.

All are SSB:

freq	comments
5598	busiest. swear I also heard Shannon IRL ATC on this freq, too.

5616   alternate to above
8825   clearest

Marc "ham ticket someday" Kenig
....!swl!sony2001

From 4005554339174100142
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 14023a,1ef00cf3b7794538
X-Google-Attributes: gid14023a,public
X-Google-Thread: 151e61,1ef00cf3b7794538
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,1ef00cf3b7794538
X-Google-Attributes: gid15c702,public
X-Google-ArrivalTime: 1984-07-19 10:52:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site idi.UUCP
Path: utzoo!watmath!clyde!burl!idi!kiessig
From: kiessig@idi.UUCP (Rick Kiessig)
Newsgroups: net.ham-radio,net.consumers,net.audio
Subject: Re: Another Form of ID
Message-ID: <219@idi.UUCP>
Date: Thu, 19-Jul-84 13:52:11 EDT
Article-I.D.: idi.219
Posted: Thu Jul 19 13:52:11 1984
Date-Received: Fri, 20-Jul-84 04:23:22 EDT
References: <847@pucc-h>
Organization: Intelligent Decisions, Saratoga, CA
Lines: 17

    NO! Do not put your social security number on any
property that you wish to have recovered by the police! I
worked for the police department when I was in school, and
they had an entire room full of stuff that they couldn't
get back to their original owners because it was incorrectly
marked with social security numbers instead of drivers license
numbers. DLs are easily looked up over computer terminals
that are present in most police departments. SSNs are just
about IMPOSSIBLE to look up. The stuff that was recovered
with SSNs on it was eventually sold at auction.

--
Rick Kiessig
{decvax, ucbvax}!sun!idi!kiessig
{akgua, allegra, amd70, burl, cbosgd, dual, ihnp4}!idi!kiessig
Phone: 408-996-2399

From -7775694423863492561
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,987f6c01d4960d3b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-19 18:05:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sdchema.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!cbosgd!ihnp4!drutx!houxe!hogpc!houti!
ariel!vax135!cornell!uw-beaver!tektronix!hplabs!sdcrdcf!sdcsvax!sdchema!lbv
From: lbv@sdchema.UUCP
Newsgroups: net.ham-radio
Subject: Morse Code stinks/doesn't stink....etc....(enough!)
Message-ID: <203@sdchema.UUCP>
Date: Thu, 19-Jul-84 21:05:16 EDT
Article-I.D.: sdchema.203
Posted: Thu Jul 19 21:05:16 1984
Date-Received: Sun, 22-Jul-84 02:30:48 EDT
Organization: U.C. San Diego Chemistry Dept
Lines: 11

Morse code should be treated exactly the same way as Latin
(both are languages in a general sense):
everybody should know them, and *nobody* should
(routinely) use them.

This debate continues

._   _..   _. ._ .._ ... . .._ __ !!

                      WA6LBV
                      ...!sdcsvax!sdchema!lbv

From -6297212146614364102
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c39e7e03a53de9e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-19 18:59:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Monitor Law Guide available (warning: SCANNERS!)
Message-ID: <2322@ihuxf.UUCP>
Date: Thu, 19-Jul-84 21:59:03 EDT
Article-I.D.: ihuxf.2322
Posted: Thu Jul 19 21:59:03 1984
Date-Received: Fri, 20-Jul-84 05:03:14 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 21

x
     Monitor Law Guide Available (not an endorsement)

The August 1984 issue of the Radio Communications Monitoring Association (RCMA) Newsletter contains an advertisement for a "highly detailed presentation of every known state scanner law," with the "full text including court decisions", and "attorney general opinions."

This compilation was written by Bob McGovern, and is available for $5.00 postpaid from:

CP Communications
Box 997
Las Vegas, Nevada 89125

--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -7424358033994373496
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba5a04199762cb15,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-19 19:59:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site stolaf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!ihnp4!stolaf!hornberg
From: hornberg@stolaf.UUCP (Steven R. Hornberger)
Newsgroups: net.ham-radio
Subject: Heath computer
Message-ID: <1807@stolaf.UUCP>
Date: Thu, 19-Jul-84 22:59:16 EDT
Article-I.D.: stolaf.1807
Posted: Thu Jul 19 22:59:16 1984
Date-Received: Fri, 20-Jul-84 05:09:30 EDT
Organization: St. Olaf College, Northfield MN
Lines: 15

CQ CQ CQ DE WD0ABC

I just assembled a Heath H-100 computer.
Are there any other amateurs out there using Heath/Zenith
H/Z-100's. Anyone using an RTTY interface?

Any other ideas? (software/hardware)
Anyone else anoyed by the fan?

Steven R. Hornberger WD0ABC
ihnp4!stolaf!hornberg

From -932445650446039313
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,92c790642214f655,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-19 20:25:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 (MC830713); site glasgow.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!cbosgd!ihnp4!houxm!houxz!vax135!ukc!
edcaad!edee!glasgow!m.gibb
From: m.gibb@glasgow.UUCP (m.gibb)
Newsgroups: net.ham-radio
Subject: Packet Radio (AX-25) - Request for info
Message-ID: <783@glasgow.UUCP>
Date: Thu, 19-Jul-84 23:25:05 EDT
Article-I.D.: glasgow.783
Posted: Thu Jul 19 23:25:05 1984
Date-Received: Wed, 18-Jul-84 02:16:34 EDT
Organization: Comp. Sci., Univ. of Glasgow, Scotland
Lines: 22

Dear network,

I wonder if anyone out there has any information on the AX-25 'standard'
for packet radio. Work on that is just in its early stages over here, and
I had heard that this packet format was in use in the USA.

Being unable to talk to the states on the radio (I'm only a "B" license here,
which means above 144MHz only), I thought that I might use other means to
get in touch with anyone who might be able to tell me something about it.

Any and all information or references would be gratefully received.

P.S. -- Why is there hardly any traffic on net.ham-radio ?

Martin Gibb (GM1FGO)
(...!glasgow!m.gibb)
OR
12 Woodlands Drive,
Woodlands,
GLASGOW,
G4 9EH,
United Kingdom

From -4437766996047897292
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6ef401195877c5e5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-20 05:42:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: Funny interference on CHU (Canadian time-signal station)
Message-ID: <100@mouton.UUCP>
Date: Fri, 20-Jul-84 08:42:04 EDT
Article-I.D.: mouton.100
Posted: Fri Jul 20 08:42:04 1984
Date-Received: Sat, 21-Jul-84 04:19:10 EDT
References: <2116@sri-arpa.UUCP> <3400@brl-tgr.ARPA>
Organization: Bell Communications Research, Inc
Lines: 6

For me (on the East coast) I've always gotten CHU on 7.335 very well during
the day. In the evenings, some high speed RTTY service comes up just
below frequency, but using USB (CHU suppresses its lower sideband anyway)
seems to fix that problem.

Phil

From 8392129854461340172
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6ef401195877c5e5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-20 06:13:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Funny interference on CHU (Canadian time-signal station)
Message-ID: <2323@ihuxf.UUCP>
Date: Fri, 20-Jul-84 09:13:01 EDT
Article-I.D.: ihuxf.2323
Posted: Fri Jul 20 09:13:01 1984
Date-Received: Sat, 21-Jul-84 03:27:29 EDT
References: <2116@sri-arpa.UUCP>, <3400@brl-tgr.ARPA>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 6

The interference may be due to radiation from neighborhood television
receivers or VCRs. Try a CHU listening test at 4 am.

--
==
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -3645563965247708265
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fbb90bfe1787c344,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-07-20 08:54:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site noao.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!noao!jacoby
From: jacoby@noao.UUCP
Newsgroups: net.ham-radio
Subject: Monitor 52 Simplexvi simplex
Message-ID: <370@noao.UUCP>
Date: Fri, 20-Jul-84 11:54:42 EDT
Article-I.D.: noao.370
Posted: Fri Jul 20 11:54:42 1984
Date-Received: Sat, 21-Jul-84 04:02:38 EDT
Organization: Natl. Optical Astronomy Obs. Tucson AZ USA
Lines: 26

Regarding emergency communications -- Let's not forget that there
was a time before repeaters.

I would like to encourage more hams to monitor the 2m simplex
frequency 146.52 when possible. There are areas where repeater
coverage is poor, or during genuine emergencies (floods, earthquakes),
most repeaters are not operating.

I have had one emergency experience where 52 simplex saved the day.
And this was from the bottom of the Grand Canyon! Not an optimal
site for simplex coverage! By good fortune a commercial airline
pilot (also a ham) was calling another station. I had given up
on repeaters of course, and settled down to monitor 52.
After about 30 minutes, there was a call, and I promptly broke
in with an emergency request.

He was at 30,000+ ft, and 80 miles north. I had an IC-2AT with a
Vocom 5/8ths whip.

Certainly this is not an adequate solution to all emergencies,
but with more people listening, the better it is.

George
WD6BBQ
ihnp4!noao!jacoby

From 8777178022984970049
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,61447a255f1b9e13
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,61447a255f1b9e13
X-Google-Attributes: gid151e61,public
X-Google-Thread: 14023a,61447a255f1b9e13
X-Google-Attributes: gid14023a,public
X-Google-ArrivalTime: 1984-07-20 10:12:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1   9/27/83; site saturn.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!drutx!houxe!hogpc!houti!ariel!
vax135!cornell!uw-beaver!tektronix!hplabs!saturn!fauntsu
From: fauntsu@saturn.UUCP
Newsgroups: net.ham-radio,net.consumers,net.audio
Subject: Re: Re another form of ID
Message-ID: <2231@saturn.UUCP>
Date: Fri, 20-Jul-84 13:12:22 EDT
Article-I.D.: saturn.2231
Posted: Fri Jul 20 13:12:22 1984
Date-Received: Sun, 22-Jul-84 03:22:46 EDT
References: <53@whuxl.UUCP>
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 2

I would suspect that for ham equipment, call letters are adequate,
but not for other kinds of stuff.

From 3876284713524438216
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c1493ad806ea5e9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-20 10:25:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site smu.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!uiucdcs!smu!
neihart
From: neihart@smu.UUCP
Newsgroups: net.ham-radio
Subject: Simplex patches - (nf)
Message-ID: <13200006@smu.UUCP>
Date: Fri, 20-Jul-84 13:25:00 EDT
Article-I.D.: smu.13200006
Posted: Fri Jul 20 13:25:00 1984
Date-Received: Sun, 22-Jul-84 03:45:37 EDT
Lines: 22
Nf-ID: #N:smu:13200006:000:968
Nf-From: smu!neihart   Jul 20 12:25:00 1984

#N:smu:13200006:000:968
smu!neihart   Jul 20 12:25:00 1984

Why do so many hams consider simplex patches to be illegal? Why, I even
saw a spot in QST which indicated they were considering not printing any more
ads for the devices because of their questionability. Since Dallas ham
radio stores have been barred from selling the patches, if QST quits
advertising them, I would most likely have to fly to the middle of Kansas or
somewhere to buy one!

What is the difference between a simplex patch and a repeater patch,
besides the duplexity? The nature of the conversation dictates the patch's
legality. The argument that simplex patches would compete against Bell's

mobile phone service is absurd, since hams don't get licenses merely to get them revoked for calling businesses on patches, and businessmen don't purchase mobile phones merely for pleasure. Will someone please enlighten me to the reason why these patches are considered illegal.

Carl Neihart, KE5BX
Southern Methodist University
Dallas, Texas

From 1306538751291307764
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ccf6f7a4d1e809d1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-20 11:12:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Satellite Orbital Elements
Message-ID: <101@mouton.UUCP>
Date: Fri, 20-Jul-84 14:12:57 EDT
Article-I.D.: mouton.101
Posted: Fri Jul 20 14:12:57 1984
Date-Received: Sat, 21-Jul-84 04:01:44 EDT
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84194.37189055
   Thu Jul 12 08:55:31.343 1984 UTC
Element set: 661
Inclination: 97.5937 deg
RA of node: 169.3389 deg
Eccentricity: 0.0004237
Arg of perigee: 48.0909 deg
Mean anomaly: 312.0688 deg
Mean motion: 15.26078689 rev/day
Decay rate: 2.981e-05 rev/day^2
Epoch rev: 15338
Semi major axis: 6862.650 km
Anom period: 94.359486 min
Apogee: 499.050 km
Perigee: 493.234 km
Ref perigee: 2384.38061502
   Thu Jul 12 09:08:05.137 1984 UTC
Beacon: 145.8250 mhz

Satellite: oscar-10
Catalog number: 14129

```
Epoch time:      84177.96936827
   Mon Jun 25 23:15:53.418 1984 UTC
Element set:     107
Inclination:       25.5969 deg
RA of node:       192.2384 deg
Eccentricity:    0.6084343
Arg of perigee:   283.3262 deg
Mean anomaly:      18.9696 deg
Mean motion:    2.05846041 rev/day
Decay rate:          2e-07 rev/day^2
Epoch rev:             779
Semi major axis: 26106.433 km
Anom period:    699.551953 min
Apogee:          35616.117 km
Perigee:          3848.018 km
Ref perigee:      2367.94376985
   Mon Jun 25 22:39:01.715 1984 UTC
Beacon:           145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84193.14093882
   Wed Jul 11 03:22:57.114 1984 UTC
Element set:     34
Inclination:       98.2400 deg
RA of node:       255.2638 deg
Eccentricity:    0.0012128
Arg of perigee:   211.0279 deg
Mean anomaly:     149.0207 deg
Mean motion:   14.61882376 rev/day
Decay rate:       1.08e-06 rev/day^2
Epoch rev:            1920
Semi major axis:  7062.319 km
Anom period:     98.503137 min
Apogee:            698.304 km
Perigee:           681.174 km
Ref perigee:      2383.11262284
   Wed Jul 11 02:42:10.612 1984 UTC
Beacon:           145.8260 mhz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84198.33595451
   Mon Jul 16 08:03:46.469 1984 UTC
Element set:     99
Inclination:       82.9582 deg
RA of node:       116.9244 deg
Eccentricity:    0.0058083
Arg of perigee:   288.3767 deg
Mean anomaly:      71.0990 deg
Mean motion:   12.15587401 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11447
```

```
Semi major axis:  7987.329 km
Anom period:    118.461248 min
Apogee:           1674.547 km
Perigee:          1581.761 km
Ref perigee:      2388.31970745
   Mon Jul 16 07:40:22.723 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84195.42650640
   Fri Jul 13 10:14:10.152 1984 UTC
Element set:     208
Inclination:       82.9622 deg
RA of node:       127.5453 deg
Eccentricity:    0.0018299
Arg of perigee:    21.9262 deg
Mean anomaly:     338.2582 deg
Mean motion:   12.06669354 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11325
Semi major axis:  8026.661 km
Anom period:    119.336751 min
Apogee:           1666.141 km
Perigee:          1636.765 km
Ref perigee:      2385.43151141
   Fri Jul 13 10:21:22.585 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      84196.02284550
   Sat Jul 14 00:32:53.851 1984 UTC
Element set:     176
Inclination:       82.9588 deg
RA of node:       128.7020 deg
Eccentricity:    0.0011590
Arg of perigee:    50.2308 deg
Mean anomaly:     309.9824 deg
Mean motion:   12.05050349 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11317
Semi major axis:  8033.853 km
Anom period:    119.497082 min
Apogee:           1677.464 km
Perigee:          1658.841 km
Ref perigee:      2386.03437512
   Sat Jul 14 00:49:30.10  1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84198.75313849
   Mon Jul 16 18:04:31.165 1984 UTC
Element set:     85
Inclination:       82.9588 deg
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```
RA of node:       118.7414 deg
Eccentricity:    0.0049938
Arg of perigee:   306.6685 deg
Mean anomaly:      52.9793 deg
Mean motion:   12.13562679 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11430
Semi major axis:  7996.217 km
Anom period:    118.658890 min
Apogee:           1671.555 km
Perigee:          1591.692 km
Ref perigee:      2388.74101182
   Mon Jul 16 17:47:03.421 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      84198.33426213
   Mon Jul 16 08:01:20.248 1984 UTC
Element set:     162
Inclination:       82.9584 deg
RA of node:       123.7837 deg
Eccentricity:    0.0022824
Arg of perigee:   334.8428 deg
Mean anomaly:      25.1527 deg
Mean motion:   12.08681917 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11379
Semi major axis:  8017.743 km
Anom period:    119.138044 min
Apogee:           1661.704 km
Perigee:          1625.105 km
Ref perigee:      2388.32848157
   Mon Jul 16 07:53:00.807 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      84198.75028625
   Mon Jul 16 18:00:24.732 1984 UTC
Element set:     283
Inclination:       82.9592 deg
RA of node:       129.2218 deg
Eccentricity:    0.0020590
Arg of perigee:    87.6001 deg
Mean anomaly:     272.7408 deg
Mean motion:   12.02945662 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11330
Semi major axis:  8043.228 km
Anom period:    119.706155 min
Apogee:           1702.671 km
Perigee:          1669.549 km
Ref perigee:      2388.77043568
   Mon Jul 16 18:29:25.642 1984 UTC
```

```
Satellite: noaa-7
Catalog number: 12553
Epoch time:      84196.35294411
   Sat Jul 14 08:28:14.371 1984 UTC
Element set:     268
Inclination:       99.0509 deg
RA of node:       168.0299 deg
Eccentricity:    0.0014288
Arg of perigee:    22.3125 deg
Mean anomaly:     337.8666 deg
Mean motion:   14.13060045 rev/day
Decay rate:       1.65e-06 rev/day^2
Epoch rev:           15769
Semi major axis:  7224.240 km
Anom period:    101.906498 min
Apogee:            859.423 km
Perigee:           838.779 km
Ref perigee:      2386.35729507
   Sat Jul 14 08:34:30.293 1984 UTC
Beacon:           137.6200 mhz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84198.66534440
   Mon Jul 16 15:58:05.756 1984 UTC
Element set:     88
Inclination:       98.7052 deg
RA of node:       229.3170 deg
Eccentricity:    0.0016845
Arg of perigee:   333.2005 deg
Mean anomaly:      26.8298 deg
Mean motion:   14.22423613 rev/day
Decay rate:        8.4e-07 rev/day^2
Epoch rev:            6766
Semi major axis:  7192.460 km
Anom period:    101.235665 min
Apogee:            830.678 km
Perigee:           806.447 km
Ref perigee:      2388.66010495
   Mon Jul 16 15:50:33.67  1984 UTC
Beacon:           137.5000 mhz


From -4938348387152840704
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8f6ef82d913545de,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-20 11:15:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
```

Newsgroups: net.ham-radio
Subject: Element set format
Message-ID: <102@mouton.UUCP>
Date: Fri, 20-Jul-84 14:15:08 EDT
Article-I.D.: mouton.102
Posted: Fri Jul 20 14:15:08 1984
Date-Received: Sat, 21-Jul-84 04:03:02 EDT
Organization: Bell Communications Research, Inc
Lines: 25

A new set of Keplerian elements has been posted to net.ham-radio.

In response to a request by DJ4ZC at the England technical meeting,
I have added a new entry to each set, the "Ref perigee" time.
This is the time of the perigee nearest to the reference epoch of
the element set. It is expressed in the "AMSAT-DL standard" time format,
i.e., decimal days since 00:00:00 UTC 1 Jan 1978. For added convenience,
a human-readable time format follows on the next line. The perigee chosen
may be either before or after the reference epoch, depending on which is
closer.

This is a derived element in that it is not part of the NASA/NORAD sets, but
is calculated from the epoch time, mean motion and mean anomaly at epoch.
Apparently there are many users of a Sharp hand calculator tracking program
which requires perigee times and these calculators cannot be easily
reprogrammed. Users of the many W3IWI program variants do not require this
information and may safely ignore this new entry.

Those using the Ref perigee time should note that the other orbital
elements remain valid at the Epoch time, NOT at the Ref perigee time.
For most applications the rates of change of the elements over this
time difference (e.g., the secular perturbations in RAAN and Argument
of perigee) are small enough to preclude any significant error.

73, Phil

From -6974151405188508483
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c21d44b4a72244d2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-20 14:26:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles - hp 1.2 08/01/83; site hp-pcd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!hp-pcd!stan
From: stan@hp-pcd.UUCP (stan)
Newsgroups: net.ham-radio
Subject: Simplex auto patch ?
Message-ID: <5700003@hp-pcd.UUCP>
Date: Fri, 20-Jul-84 17:26:00 EDT
Article-I.D.: hp-pcd.5700003
Posted: Fri Jul 20 17:26:00 1984

Date-Received: Sun, 22-Jul-84 06:15:21 EDT
Organization: Hewlett-Packard - Corvallis, OR
Lines: 15
Nf-ID: #N:hpcvra:5700003:000:284
Nf-From: hpcvra!stan   Jul 20 13:26:00 1984

[]

I am posting this for a friend. Can any of the readers of ham-radio advise him on simplex auto patches?

He is looking for general info such as good brands/models and also the ones to stay away from. Features to look for etc.

Thanks in advance

Stan Gibbs KR7C
hpcvra!stan

From -3213819573255495139
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e57a5687b6b06681,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-20 15:31:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mhuxt.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!mhuxt!evans
From: evans@mhuxt.UUCP (crandall)
Newsgroups: net.ham-radio
Subject: SW receivers?
Message-ID: <216@mhuxt.UUCP>
Date: Fri, 20-Jul-84 18:31:02 EDT
Article-I.D.: mhuxt.216
Posted: Fri Jul 20 18:31:02 1984
Date-Received: Sat, 21-Jul-84 04:40:30 EDT
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 10

<>
This has been around some time ago, but can someone give me recommendations for a quality communications receiver? I have had the ICOM R-71 recommended, and have had people tell me that the Kenwood 1000 and 2000 aren't worth the money.

thanks in advance
Steve Crandall
ihnp4!mhuxt!evans

From 7109478006086511786
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fbb90bfe1787c344
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-20 16:28:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site alice.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!alice!danny
From: danny@alice.UUCP ( )
Newsgroups: net.ham-radio
Subject: Re: Monitor 52 Simplexvi simplex
Message-ID: <2931@alice.UUCP>
Date: Fri, 20-Jul-84 19:28:35 EDT
Article-I.D.: alice.2931
Posted: Fri Jul 20 19:28:35 1984
Date-Received: Sat, 21-Jul-84 04:19:24 EDT
References: <370@noao.UUCP>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 31

WD6BBQ suggests that people monitor 146.52 when not otherwise using
their 2m xcvrs. I think this is a good idea. A problem exists,
however. Since so many people use 52 as their first choice of simplex
freq, the channel is often occupied; very few people are willing to
monitor for possible emergency calls if there is constant chatter on
a channel.

Other services have solved this problem by designating an emergency-only
freq (e.g., aviation band) or a calling-only freq (e.g., marine band).
(A calling-only channel is used for emergency calls, but also for general
calls; once communication is established, you move to a different freq to
free up the calling channel.)

I'd like to see 52 used as a calling freq. Now that the great majority
of hams are using synthesized equipment on 2m, there's no reason why
people can't move off 52 once contact has been established.
There are fairly-well-respected calling freqs in the ssb segments
of the v/uhf bands (e.g. 144.200) - why not for FM? Think how
much easier it would be to make random simplex QSO's, try to work
FM DX, etc. if everyone interested in making a QSO listened on a
single channel; it would work if people would agree not to ragchew
on that channel. And think of the implications for getting help
in an emergency, as WB6BBQ suggested, if there were one channel
that everyone listened to, but nobody ragchewed on.

Comments invited.

Dan Kahn, K1DK
Bell Communications Research
Murray Hill, NJ

From 5762170268084509385
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,987f6c01d4960d3b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-20 20:35:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!hao!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Morse Code stinks/doesn't stink....etc....(enough!)
Message-ID: <3459@brl-tgr.ARPA>
Date: Fri, 20-Jul-84 23:35:06 EDT
Article-I.D.: brl-tgr.3459
Posted: Fri Jul 20 23:35:06 1984
Date-Received: Mon, 23-Jul-84 01:44:15 EDT
References: <203@sdchema.UUCP>
Organization: Ballistics Research Lab
Lines: 13

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From 1274717501656092415
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6ef401195877c5e5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-21 17:57:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Funny interference on CHU (perhaps from US military stations)
Message-ID: <2329@ihuxf.UUCP>
Date: Sat, 21-Jul-84 20:57:48 EDT
Article-I.D.: ihuxf.2329
Posted: Sat Jul 21 20:57:48 1984

Date-Received: Sun, 22-Jul-84 03:46:05 EDT
References: <2116@sri-arpa.UUCP> <3400@brl-tgr.ARPA>, <100@mouton.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 12

According to my records:

-The US Navy is allocated 7.336 MHz for 10,000 watt coastal stations
using emissions of 0.1A1, 1.24F1, 3A7J, and 2.8A3J along the Atlantic
Seaboard, especially in Virginia.

-The US Air Force is allocated 7333.5 MHz for fixed and mobile use
USA-wide, but only for 3A3J emission at the 500 watt level.

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==========
Bob Parnass, Bell Telephone Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 3763325320853129649
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c1493ad806ea5e9
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-21 20:50:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: Simplex patches - (nf)
Message-ID: <103@mouton.UUCP>
Date: Sat, 21-Jul-84 23:50:19 EDT
Article-I.D.: mouton.103
Posted: Sat Jul 21 23:50:19 1984
Date-Received: Sun, 22-Jul-84 03:38:04 EDT
References: <13200006@smu.UUCP>
Organization: Bell Communications Research, Inc
Lines: 18

This topic was brought up just this afternoon at the ARRL National
Convention in New York. Ray Kowalski's (of the FCC) first answer was
"don't ask". He then went into a very strong series of comments that
if we're not careful, "simplex autopatches will end amateur radio
as we know it". Read into this what you will. I think there are
several issues involved:

1. Technical legality under existing rules (need for separate control
link via wire or 220 mhz radio or above, control operator monitoring)

2. The potential for abuse (business calls, etc).

In my (KA9Q) opinion, there really isn't any difference between simplex
and duplex autopatches, but the latter have raised a number of grey-area

issues over the past ten years, and simplex autopatches are likely
to force the issues because "everybody will have one".

Phil

From 6009731073157341920
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5b641b4ef8b64c8a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-21 21:01:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: More news from the ARRL Convention
Message-ID: <104@mouton.UUCP>
Date: Sun, 22-Jul-84 00:01:53 EDT
Article-I.D.: mouton.104
Posted: Sun Jul 22 00:01:53 1984
Date-Received: Sun, 22-Jul-84 03:38:26 EDT
Organization: Bell Communications Research, Inc
Lines: 23

There were several other items of note from the National ARRL Convention
FCC forum:

1. The ARRL's request for HF phone band expansion has just been adopted.
2. The ARRL formally signed an agreement with the FCC to become a
Volunteer Exam Coordinator (VEC).
3. Bob Foosaner (Private Radio Bureau chief) commented that the pressure
for spectrum from Land Mobile users is extremely high. He went on to
say that while the no code license proposal was being considered, there
was some thought being given to accomodating them on 220 mhz. However,
he said, the amateurs have made it abundantly clear that there is no
room ANYWHERE in amateur radio for a no-code license. Therefore, it will
be much harder to defend the relatively lightly used lower part of 220
mhz against being reallocated to Land Mobile. He did go on to emphasize
that this is only one of the many options they are considering, which
also include reallocating some broadcast spectrum. However, the demands
are extremely high; they estimate over 100 mhz would be needed to
satisfy demand even INCLUDING the conversion from FM to compandored
SSB!

I (KA9Q) think there's a moral in here somewhere.

Phil

From -4273998106978516219
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6cbce192354291a0,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-22 11:49:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mit-athena.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!dual!amd!decwrl!decvax!
mit-athena!yba
From: yba@mit-athena.ARPA (Mark H Levine)
Newsgroups: net.ham-radio
Subject: Computers, Hams, and Code
Message-ID: <214@mit-athena.ARPA>
Date: Sun, 22-Jul-84 14:49:00 EDT
Article-I.D.: mit-athe.214
Posted: Sun Jul 22 14:49:00 1984
Date-Received: Sat, 28-Jul-84 19:31:30 EDT
Organization: MIT, Project Athena, Cambridge, Ma.
Lines: 56

In regard to the no-code discussion, which I feel somewhat responsible
for restimulating, I would like to indulge in patting you guys on the back
a wee bit:

In other news groups on this net, any discussion with this kind of emotional
loading would have propagated to net.flame, net.general, and net.followup
by now. I have also seen only one "personal attack" in the whole of the
discussion. The quality of knowing how to communicate without abusing the
medium seems to be the prime requisite for being a ham. All else is really
just an attempt to express that in rules and requirements. And we never
explicitly test for courtesy!

I see we're still about evenly split on this network; I think it is because
the combination of ham radio and computers selects some good minds
(and naturally I feel this is demonstrated by coming out on my side of
the argument :-)).

The outcome for Morse code requirements will probably be the "test of time".

I was listening to Hal Abelson a few nights ago in an after dinner talk;
he mentioned seeing some quotes on an office door about education--he
realted these to computers and education. The quotes were the collected
ramblings of educators of the past discussing what was really NEEDED in
the school curriculum.

The progression included: "I think it is criminal to give these students
slates--what will they do when they find they have to write in the middle
of the woods and do not know how to prepare tree-bark?", "We cannot
allow students to use pencils, as they will then lose the necessary
skill for filling their pens with ink" and similar sayings. Like educators,
I think we lose sight of just how technology driven our license requirements
are.

Morse is no more nor less important than the papyrus reed, the cuneiform
tablet, or parchment. We do not require writers to study these because
we can get by easier without them. We don't require engineering students

to use a slide rule because calculators are faster and economically
cheaper. We still have people who can and do use all of these.

Radio has been with us for such a short time that we haven't really had
time to see many technical revolutions.

This disagreement by people, even loudly and irrationally, is the process
by which we decide WHEN the time has come for a change. I guess it isn't
time yet. I still cannot picture ham radio in the year 2025 as being
involved with Morse code--more likely Huffman codes!)

I guess we`ve done okay so far, and I'm willing to talk while I wait
for the twelve year cycle. Meantime it's on to the satellite computer
net. Whatever technology we use, let's just make sure to keep the
spirit alive!

WA2YBA

--
yba%mit-heracles@mit-mc.ARPA   UUCP: decvax!mit-athena!yba

From 9172137226098206359
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9807e871b7e3b56
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-22 12:11:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!tektronix!uw-beaver!cornell!
vax135!houxz!houxm!mhuxl!ihnp4!inuxc!pur-ee!uiucdcs!uok!mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: Morse Code?
Message-ID: <2800011@uok.UUCP>
Date: Sun, 22-Jul-84 15:11:00 EDT
Article-I.D.: uok.2800011
Posted: Sun Jul 22 15:11:00 1984
Date-Received: Sat, 28-Jul-84 00:22:48 EDT
References: <1454@sri-arpa.UUCP>
Lines: 8
Nf-ID: #R:sri-arpa:-145400:uok:2800011:000:290
Nf-From: uok!mpackard   Jul 22 14:11:00 1984
Nf-ID: #R:sri-arpa:-145400:uok:2800011:000:290
Nf-From: uok!mpackard   Jul 22 14:11:00 1984

Tim (KE5EP) [By the way this is a computer and you don't have to give
your call sign! ha. Most amatuers use thier call signs like Dr. etc]

  Thankyou for your support of morse code, like always it makes sense
only to a lawyer or thief, I don't know which one you are.
88's
uok!mpackard

w

From 8681339787636539750
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ed55244557e1c6d6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-22 12:26:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!tektronix!uw-beaver!cornell!
vax135!houxz!houxm!ihnp4!inuxc!pur-ee!uiucdcs!uok!mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: RE: W3IKG HAMS vs PIGS
Message-ID: <2800012@uok.UUCP>
Date: Sun, 22-Jul-84 15:26:00 EDT
Article-I.D.: uok.2800012
Posted: Sun Jul 22 15:26:00 1984
Date-Received: Sat, 28-Jul-84 00:23:02 EDT
Lines: 16
Nf-ID: #N:uok:2800012:000:872
Nf-From: uok!mpackard   Jul 22 14:26:00 1984
Nf-ID: #N:uok:2800012:000:872
Nf-From: uok!mpackard   Jul 22 14:26:00 1984

[] <-- Eat Me

John, I must say that the government has got you indoctrinated very
well! Not only are you being pulled by the ring in your nose, you
even read the back of government paperwork. I've written several
government documents and I must tell you that what the people want
is what the people get. If Hams [Those that favor no-code] want the
code requirement lifted on VHF and up and can get a majority, guess
what? They get their way. And if Pigs[Those that favor code] want
to stay on 1GHZ and tap code across the block (They never heard of
cans and string) and have the majority then guess what? They will
get their way! So john if you still are sending morse code on VHF
and up and reading whats on the back of government paperwork (try
reading a book sometime, its much more educational) then I believe
that you need to take an inventory.
uok!mpackard

From -5484622626221864468
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d4f0aaa1447fff87,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-23 05:51:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)

Newsgroups: net.ham-radio
Subject: RE: 146.52 simplex
Message-ID: <59@whuxl.UUCP>
Date: Mon, 23-Jul-84 08:51:10 EDT
Article-I.D.: whuxl.59
Posted: Mon Jul 23 08:51:10 1984
Date-Received: Tue, 24-Jul-84 03:51:42 EDT
Organization: Bell Communications Research, Inc.
Lines: 6

<gulp>
I like the idea. It seems like a good way to provide emergency communications
when the machines are down. The best idea would be to use 52 as a calling
frequency and then get off it -> another simplex frequency once a QSO is set up.
73's
Bill Mitchell (whuxl!wjm) WB2IAU

From -5348665237661685137
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7bd99f5ba646cc2d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-23 07:35:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: simplex autopatch comment
Message-ID: <10987@mgweed.UUCP>
Date: Mon, 23-Jul-84 10:35:42 EDT
Article-I.D.: mgweed.10987
Posted: Mon Jul 23 10:35:42 1984
Date-Received: Tue, 24-Jul-84 03:57:02 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

It does not matter if the patch is simplex or whatever. The legality
of its use lies in the fact that the system must have a separate
control frequency, just like a repeater. The control link must be
220 MHz or above, or a landline that is not used for the patching
itself. Since simplex patches are more likely to be used by individuals,
where duplex patches are usually on a already properly controlled
repeater, it is more likely that the simplex patch will not be used
legally.

Bob K9EUI

From -1968412992368147386
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c1493ad806ea5e9

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-23 12:49:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!hplabs!hao!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Re: Simplex patches - (nf)
Message-ID: <3512@brl-tgr.ARPA>
Date: Mon, 23-Jul-84 15:49:48 EDT
Article-I.D.: brl-tgr.3512
Posted: Mon Jul 23 15:49:48 1984
Date-Received: Fri, 27-Jul-84 07:11:03 EDT
References: <13200006@smu.UUCP>, <103@mouton.UUCP>
Organization: Ballistics Research Lab
Lines: 17

For those of us who are bewildered...

Would someone post an explanation of what a "simplex autopatch" is and
why it is different from the autopatch tie-ins to telco lines commonly
found on repeaters (is this latter what you mean by "duplex autopatch")?

I thought that "simplex" meant "using only one frequency", and that
"duplex" meant "using two frequencies -- one for transmitting and
one for receiving". I fail to see how this distinction could make
the basis for a "religious war" about the propriety of autopatching.
What difference does the technical detail of the implementation method
make? If autopatching is good, use whatever it takes to do it. If it
is bad, it doesn't matter how it is done, does it?

Confused,

Will

From 576947057990713588
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f05b7dc8af296989,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-23 17:24:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!tektronix!uw-beaver!cornell!vax135!houxz!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 60 (ARRL is now a VEC)
Message-ID: <11019@mgweed.UUCP>
Date: Mon, 23-Jul-84 20:24:24 EDT
Article-I.D.: mgweed.11019
Posted: Mon Jul 23 20:24:24 1984

Date-Received: Sat, 28-Jul-84 00:19:13 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 37

qst de k9eui
hr arrl bulletin nr 60 from arrl headquarters
newington ct july 21, 1984
to all radio amateurs bt

the american radio relay league is now a volunteer examiner coordinator. on july 12 the commission ruled on docket 84 265 permitting recoupment of expenses by vecs. in anticipation of this, arrl had filed its petition to become a vec on june 27. on july 21, culminating more than two years of intensive planning and preparation, representatives of the arrl and the fcc signed a memorandum of agreement at the arrl national convention in new york city.

the agreement authorizes the arrl to accredit volunteer examiners and coordinate giving upgrade exams in each of the 13 fcc defined regions. the arrl will now proceed on its announced course of action, coordinating technicnan, general, advanced and extra class exams at hamfests and conventions in september and october. beginning in november of this year, arrl will coordinate exams at any location. sponsors must register their intent with the arrl vec office, 225 main street, newington, ct, 06111, at least 75 days in advance.

the thousands of advanced and extra class licnsees who have applied to serve as volunteer examiners with the arrl should complete and return their application materials to hq as soon as possible. they will be accredited and sent credentials in time for the first arrl coordinated exam sessions in september.

to determine when exams will next be given in your local area, check hamfest and convention brochures for september and october. your fcc field office has exam schedule information for all vecs. an article on taking exams under the volunteer examiner program will appearin an upcoming issue of qst. ar

From -3575513212077437960
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c4ee2b41f010740,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-23 17:25:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!tektronix!uw-beaver!cornell!
vax135!houxz!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: arrl bulletin nr 59A (FCC order clarifying exam $$)
Message-ID: <11020@mgweed.UUCP>
Date: Mon, 23-Jul-84 20:25:44 EDT
Article-I.D.: mgweed.11020
Posted: Mon Jul 23 20:25:44 1984
Date-Received: Sat, 28-Jul-84 00:19:30 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

qst de k9eui
hr arrl bulletin nr 59a from arrl headquarters
newington ct july 20, 1984
to all radio amateurs bt

the fcc released a memorandum opinion and order on july 20
clarifying some volunteer examiner details, pr docket 83 27.

the fcc says that (it) is inadvisable to attempt to specify
items as a reimbursable cost. if the expense relates to
amateur examinations, then it is a reimbursable cost.

in short, fcc expects vecs and ves to use good business
judgement, reminds the examiners that all expenses must be
necessary and prudent. details will be in an upcoming issue of
qst ar

From -463018472496730736
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,415b0e908313e91a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-23 17:26:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!tektronix!uw-beaver!cornell!
vax135!houxz!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 58 (NEW U.S. FONE BAND EXPANSION!!)
Message-ID: <11021@mgweed.UUCP>
Date: Mon, 23-Jul-84 20:26:31 EDT
Article-I.D.: mgweed.11021
Posted: Mon Jul 23 20:26:31 1984
Date-Received: Sat, 28-Jul-84 00:19:43 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 40

qst de k9eui
hr arrl bulletin nr 58 from arrl headquarters
newington ct july 20, 1984
to all radio amateurs bt

the fcc released on july 20 a second report and order on the hf phone band expansion docket, pr docket number 82 23, and also granted the petition, rm 4228, filed by randall f. soball, kh6xx, allowing phone operation on 7075 to 7100 khz in the state of hawaii.

effective 0001 utc, september 1, 1984, these will be the new hf radiotelephone subbands.

3750 to 3775 khz extra class
3775 to 3850 khz advanced and extra class
3850 to 4000 khz general, advanced and extra class

21200 to 21225 khz extra class
21225 to 21300 khz advanced and extra class
21300 to 21450 khz general, advanced and extra class

28300 to 29700 khz general, advanced and extra class

with regard to the 40 meter band, fcc concurs with arrl that phone band expansion here would be detrimental to cw operations. however, the commission will allow phone operation on 7075 to 7100 khz in hawaii and other areas near region 3, and alaska.

remember that these new phone privileges are not available until 0001 utc, september 1, 1984.

in summary, the commission adopted the plan as submitted in the arrls comments with the addiion of expanded phone operation at 7075 to 7100 khz in certain geographic areas near region 3. details will be in the next issue of the arrl letter and september qst ar

From 4601674480891981403
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c9373bfe77b953d5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-23 17:27:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!tektronix!uw-beaver!cornell!
vax135!houxz!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 30
Message-ID: <11022@mgweed.UUCP>
Date: Mon, 23-Jul-84 20:27:04 EDT
Article-I.D.: mgweed.11022
Posted: Mon Jul 23 20:27:04 1984
Date-Received: Sat, 28-Jul-84 00:20:04 EDT

Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 32

qst de k9eui
hr propagation forecast bulletin nr 30 from arrl headquarters newington ct july 13, 1984
to all radio amateurs bt

the solar flux fell to a seven year low of 74 on july 20. the most recent 74 had come july 19, 1977, when cycle 21 was only one year old. the occasional reappearance of such low solar flux numbers should not be taken to mean the end of f layer dx on our bands above 14 mhz for the next four years, however. the flux was back up to 84 on the 21st, and considerably higher values can be expected occasionally through at least 1985, and possibly longer.

the very poor conditions during july were mostly the result of severe geomagnetic disturbances. the earths magnetic field is expected to be less active through the rest of july, and into early august, so there should be a general improvement in signal strength and quality on all dx frequencies. watch wwv for k indices of 2 or lower indicating improved propagation in the higher latitudes of the northern hemisphere. the k index was 3 or higher almost continuously july 11 through 21.

this summer has been a disappointment for users of 28, 50 and 144 mhz. scattered e layer openings will continue through early august, but less frequently and over smaller areas than is normal for the summer season.

american sunspot numbers for july 12 through 18 were between 13 and 48 with a mean of 29.0 ar

From -7864148851156116524
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fbb90bfe1787c344
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-24 10:42:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pitt.UUCP
Path: utzoo!linus!decvax!mcnc!idis!pitt!hoffman
From: hoffman@pitt.UUCP
Newsgroups: net.ham-radio
Subject: Re: Monitor 52 Simplex
Message-ID: <593@pitt.UUCP>
Date: Tue, 24-Jul-84 13:42:08 EDT
Article-I.D.: pitt.593
Posted: Tue Jul 24 13:42:08 1984
Date-Received: Sat, 28-Jul-84 05:55:02 EDT
References: <2931@alice.UUCP>

Organization: Univ. of Pittsburgh, C. S. Dept.
Lines: 15

K1DK writes--

  >I'd like to see 52 used as a calling freq. Now that the great majority
  >of hams are using synthesized equipment on 2m, there's no reason why
  >people can't move off 52 once contact has been established.

Isn't .52 supposed to be the "National Calling Frequency" anyway?
I always thought that it was supposed to be the way K1DK describes.
'Seems to me that I read that in the ARRL repeater directory or some
such place. In this area, .52 is regularly used for extended QSOs.
For that reason, I avoid it.

---N3CVL
--
Bob Hoffman
Pitt Computer Science

From 4916746877552984063
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6dc697bc306b0733,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-24 12:11:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!houxz!houxm!mhuxl!
ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <109@mouton.UUCP>
Date: Tue, 24-Jul-84 15:11:54 EDT
Article-I.D.: mouton.109
Posted: Tue Jul 24 15:11:54 1984
Date-Received: Fri, 27-Jul-84 02:18:29 EDT
Organization: Bell Communications Research, Inc
Lines: 225

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84194.37189055
   Thu Jul 12 08:55:31.343 1984 UTC
Element set: 661
Inclination: 97.5937 deg
RA of node: 169.3389 deg
Eccentricity: 0.0004237
Arg of perigee: 48.0909 deg
Mean anomaly: 312.0688 deg
Mean motion: 15.26078689 rev/day
Decay rate: 2.981e-05 rev/day^2

```
Epoch rev:           15338
Semi major axis:  6862.650 km
Anom period:     94.359486 min
Apogee:            499.050 km
Perigee:           493.234 km
Ref perigee:      2384.38061502
   Thu Jul 12 09:08:05.137 1984 UTC
Beacon:           145.8250 mhz

Satellite: oscar-10
Catalog number: 14129
Epoch time:      84195.94119483
   Fri Jul 13 22:35:19.233 1984 UTC
Element set:     108
Inclination:       25.6129 deg
RA of node:       189.0754 deg
Eccentricity:    0.6080442
Arg of perigee:   288.4692 deg
Mean anomaly:      17.0329 deg
Mean motion:    2.05846092 rev/day
Decay rate:       -2.5e-07 rev/day^2
Epoch rev:             816
Semi major axis: 26106.425 km
Anom period:    699.551780 min
Apogee:          35605.736 km
Perigee:          3858.015 km
Ref perigee:      2385.91820989
   Fri Jul 13 22:02:13.334 1984 UTC
Beacon:           145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84201.62818827
   Thu Jul 19 15:04:35.466 1984 UTC
Element set:     36
Inclination:       98.2408 deg
RA of node:       263.7260 deg
Eccentricity:    0.0012447
Arg of perigee:   181.4702 deg
Mean anomaly:     178.6481 deg
Mean motion:   14.61886525 rev/day
Decay rate:       1.68e-06 rev/day^2
Epoch rev:            2044
Semi major axis:  7062.306 km
Anom period:     98.502857 min
Apogee:            692.965 km
Perigee:           675.384 km
Ref perigee:      2391.59424277
   Thu Jul 19 14:15:42.575 1984 UTC
Beacon:           145.8260 mhz

Satellite: rs-3
Catalog number: 12997
```

```
Epoch time:      84198.33595451
   Mon Jul 16 08:03:46.469 1984 UTC
Element set:     99
Inclination:       82.9582 deg
RA of node:       116.9244 deg
Eccentricity:    0.0058083
Arg of perigee:   288.3767 deg
Mean anomaly:      71.0990 deg
Mean motion:   12.15587401 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11447
Semi major axis:  7987.329 km
Anom period:    118.461248 min
Apogee:           1674.547 km
Perigee:          1581.761 km
Ref perigee:      2388.31970745
   Mon Jul 16 07:40:22.723 1984 UTC

Satellite: rs-4
Catalog number: 13000
Epoch time:      84195.42650640
   Fri Jul 13 10:14:10.152 1984 UTC
Element set:     208
Inclination:       82.9622 deg
RA of node:       127.5453 deg
Eccentricity:    0.0018299
Arg of perigee:    21.9262 deg
Mean anomaly:     338.2582 deg
Mean motion:   12.06669354 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11325
Semi major axis:  8026.661 km
Anom period:    119.336751 min
Apogee:           1666.141 km
Perigee:          1636.765 km
Ref perigee:      2385.43151141
   Fri Jul 13 10:21:22.585 1984 UTC

Satellite: rs-5
Catalog number: 12999
Epoch time:      84196.02284550
   Sat Jul 14 00:32:53.851 1984 UTC
Element set:     176
Inclination:       82.9588 deg
RA of node:       128.7020 deg
Eccentricity:    0.0011590
Arg of perigee:    50.2308 deg
Mean anomaly:     309.9824 deg
Mean motion:   12.05050349 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11317
Semi major axis:  8033.853 km
Anom period:    119.497082 min
```

```
Apogee:           1677.464 km
Perigee:          1658.841 km
Ref perigee:      2386.03437512
   Sat Jul 14 00:49:30.10  1984 UTC

Satellite: rs-6
Catalog number: 13002
Epoch time:      84198.75313849
   Mon Jul 16 18:04:31.165 1984 UTC
Element set:     85
Inclination:       82.9588 deg
RA of node:       118.7414 deg
Eccentricity:    0.0049938
Arg of perigee:   306.6685 deg
Mean anomaly:      52.9793 deg
Mean motion:   12.13562679 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11430
Semi major axis:  7996.217 km
Anom period:    118.658890 min
Apogee:           1671.555 km
Perigee:          1591.692 km
Ref perigee:      2388.74101182
   Mon Jul 16 17:47:03.421 1984 UTC

Satellite: rs-7
Catalog number: 13001
Epoch time:      84198.33426213
   Mon Jul 16 08:01:20.248 1984 UTC
Element set:     162
Inclination:       82.9584 deg
RA of node:       123.7837 deg
Eccentricity:    0.0022824
Arg of perigee:   334.8428 deg
Mean anomaly:      25.1527 deg
Mean motion:   12.08681917 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11379
Semi major axis:  8017.743 km
Anom period:    119.138044 min
Apogee:           1661.704 km
Perigee:          1625.105 km
Ref perigee:      2388.32848157
   Mon Jul 16 07:53:00.807 1984 UTC

Satellite: rs-8
Catalog number: 12998
Epoch time:      84198.75028625
   Mon Jul 16 18:00:24.732 1984 UTC
Element set:     283
Inclination:       82.9592 deg
RA of node:       129.2218 deg
Eccentricity:    0.0020590
```

```
Arg of perigee:    87.6001 deg
Mean anomaly:     272.7408 deg
Mean motion:   12.02945662 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           11330
Semi major axis:  8043.228 km
Anom period:    119.706155 min
Apogee:           1702.671 km
Perigee:          1669.549 km
Ref perigee:      2388.77043568
   Mon Jul 16 18:29:25.642 1984 UTC

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84196.35294411
   Sat Jul 14 08:28:14.371 1984 UTC
Element set:     268
Inclination:       99.0509 deg
RA of node:       168.0299 deg
Eccentricity:    0.0014288
Arg of perigee:    22.3125 deg
Mean anomaly:     337.8666 deg
Mean motion:   14.13060045 rev/day
Decay rate:       1.65e-06 rev/day^2
Epoch rev:           15769
Semi major axis:  7224.240 km
Anom period:    101.906498 min
Apogee:            859.423 km
Perigee:           838.779 km
Ref perigee:      2386.35729507
   Sat Jul 14 08:34:30.293 1984 UTC
Beacon:           137.6200 mhz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84198.66534440
   Mon Jul 16 15:58:05.756 1984 UTC
Element set:     88
Inclination:       98.7052 deg
RA of node:       229.3170 deg
Eccentricity:    0.0016845
Arg of perigee:   333.2005 deg
Mean anomaly:      26.8298 deg
Mean motion:   14.22423613 rev/day
Decay rate:        8.4e-07 rev/day^2
Epoch rev:            6766
Semi major axis:  7192.460 km
Anom period:    101.235665 min
Apogee:            830.678 km
Perigee:           806.447 km
Ref perigee:      2388.66010495
   Mon Jul 16 15:50:33.67  1984 UTC
Beacon:           137.5000 mhz
```

From 8992794922101135372
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7bd99f5ba646cc2d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-24 16:45:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sdccsu3.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!sdcrdcf!sdcsvax!sdccsu3!brian
From: brian@sdccsu3.UUCP (Brian Kantor)
Newsgroups: net.ham-radio
Subject: Simplex Autopatches explained
Message-ID: <2099@sdccsu3.UUCP>
Date: Tue, 24-Jul-84 19:45:03 EDT
Article-I.D.: sdccsu3.2099
Posted: Tue Jul 24 19:45:03 1984
Date-Received: Fri, 27-Jul-84 08:02:55 EDT
References: <10987@mgweed.UUCP>
Organization: U.C. San Diego, Computer Center
Lines: 35

A simplex autopatch (called a 'simplex phone machine' out here in
California) is a telephone intertie that works in the following manner:

A receiver listens to a simplex channel (preferably a lesser used one,
but some people aren't that courteous), and waits for a specific tone
sequence to appear - usually a combination of a touchtone sequence and a
subaudible (PL) tone.

When that is detected, the control equipment takes the phone line
off-hook, and transmits on the same frequency as the receiver was
listening. Every so often (typically, once a second) the transmitter is
dropped to allow the receiver to sample the channel. If a carrier is
detected during this receiver sampling slot, the transmitter is
inhibited and the receiver feeds the phone line. As soon as the
receiver detects the carrier has dropped, the transmitter is enabled
again and the sampling begins.

Because of the simplex operation, it is a trivial matter to adapt your
home transceiver to operate in this manner, and because of the tone
access, the device is assumed to operate under the 'automatic control'
provisions of the Rules.

Except for the annoying bursts of noise (the 'squelch tails') caused by
the transmitter cycling during receiver polling, they seem to work
pretty well. All you have to do is remember to wait about a second
after you key your transmitter to talk, to allow the receiver sampler
time to notice that you are transmitting.

     ihnp4 \   Brian Kantor WB6CYT, UC San Diego

```
     decvax \
     akgua   >----  sdcsvax  ----- brian
     dcdwest/
     ucbvax/       Kantor@Nosc
```

```
From 4580236759371850025
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c62b967eeefc96a3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-25 06:00:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!inuxg!wheatley
From: wheatley@inuxg.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Desecheo Island
Message-ID: <316@inuxg.UUCP>
Date: Wed, 25-Jul-84 09:00:36 EDT
Article-I.D.: inuxg.316
Posted: Wed Jul 25 09:00:36 1984
Date-Received: Fri, 27-Jul-84 04:31:48 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 7

anyone heard the kp4 expedition to desecheo .... it was supposed to
be on from July 23 to 30 (i think).........

actively looking,
ku9c
steve wheatley
inuxg!wheatley


From -1738094277692278101
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,191a3ca3c5c08817,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-25 06:14:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cbdkc1.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!cbosgd!cbdkc1!cly
From: cly@cbdkc1.UUCP (Carl Yaffey)
Newsgroups: net.ham-radio
Subject: recommendations for hf gear
Message-ID: <628@cbdkc1.UUCP>
Date: Wed, 25-Jul-84 09:14:11 EDT
Article-I.D.: cbdkc1.628
Posted: Wed Jul 25 09:14:11 1984
Date-Received: Fri, 27-Jul-84 05:45:51 EDT
Organization: AT&T Bell Laboratories, Columbus
Lines: 8
```

I'm interested in opinions on some of the newer hf tranceivers on
the market - in particular, the Kenwood and Yaesu rigs
that cost around $800.
Carl K8NU

--
Carl Yaffey at AT&T Bell Laboratories Columbus, Ohio
614-860-3399 cbosgd!cbdkc1!cly

From -2997903009920527821
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,85cc5c9f43b7b15d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-25 10:38:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site auvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!ihnp4!alberta!auvax!tech
From: tech@auvax.UUCP (Richard Loken)
Newsgroups: net.ham-radio
Subject: Re: other countries & no-code - (nf)
Message-ID: <427@auvax.UUCP>
Date: Wed, 25-Jul-84 13:38:01 EDT
Article-I.D.: auvax.427
Posted: Wed Jul 25 13:38:01 1984
Date-Received: Sat, 28-Jul-84 19:34:20 EDT
References: <1968@pur-ee.UUCP>
Organization: Athabasca U, Alberta
Lines: 9

urp

The Canadian packet licence is an extremely difficult exam I am told. It
appears to me (somebody has disagreed at least once before) that the licence
is aimed at Electrical Engineers and other highly skilled people who are
looking for a corner to experiment in.

Richard Loken

From 6063028108502777912
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1a2b9db54a1ba0c2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-29 10:25:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!jhs@Mitre-
Bedford
From: jhs%Mitre-Bedford@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: concur with N2XS comments.
Message-ID: <1444@sri-arpa.UUCP>
Date: Fri, 29-Jun-84 13:25:00 EDT

Article-I.D.: sri-arpa.1444
Posted: Fri Jun 29 13:25:00 1984
Date-Received: Sun, 8-Jul-84 08:55:39 EDT
Lines: 4

Tubes are VERY classy especially after an EMP or nearby lightning strike!

John Sangster, W3IKG
jhs at MITRE-bedford.arpa

From -4717405860865379638
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9807e871b7e3b56,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-29 11:01:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!
NOURSE@DEC-MARLBORO
From: NOURSE%DEC-MARLBORO@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: Morse Code?
Message-ID: <1454@sri-arpa.UUCP>
Date: Fri, 29-Jun-84 14:01:00 EDT
Article-I.D.: sri-arpa.1454
Posted: Fri Jun 29 14:01:00 1984
Date-Received: Sat, 14-Jul-84 13:25:18 EDT
Lines: 18

The main effect of the morse code is to keep most of the new blood out of Amateur Radio. This is most evident when I demonstrate packet radio to my non-ham friends. Most of them have the technical expertise to be a credit to our hobby, but will NEVER be a part of it, as long as they have to spend a lot of time that they do not have on this antique requirement.

The fact that it is possible for a 12-year-old to learn morse code is irrelevant. That's when most of us learned it. IT IS FAR EASIER FOR A TWELVE-YEAR-OLD TO LEARN MORSE CODE THAN FOR AN ADULT TO DO SO. The result is that most people who did not learn it when they were growing up are locked out of ham radio.

The Japanese have a code-free license, and this has greatly increased the interest in Amateur Radio there. To the extent that we shut off such interest here with the code requirement, we put our entire electronics industry at a disadvantage.

From -4135092310733444133
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-06-29 18:14:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cvl.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!dual!amd!decwrl!decvax!genrad!
wjh12!harvard!seismo!rlgvax!cvl!louie
From: louie@cvl.UUCP (Louis A. Mamakos)
Newsgroups: net.ham-radio
Subject: Re: Stop the Bulletins!
Message-ID: <1132@cvl.UUCP>
Date: Fri, 29-Jun-84 21:14:49 EDT
Article-I.D.: cvl.1132
Posted: Fri Jun 29 21:14:49 1984
Date-Received: Fri, 27-Jul-84 05:35:32 EDT
References: <2800004@uok.UUCP>
Organization: U. of Md. Computer Vision Lab
Lines: 6

.
Yes, I read the bulletins.
- -
Louis A. Mamakos WA3YMH - Computer Science Center - Univ. of Maryland
Internet: louie@cvl.ARPA   uucp: ...!{seismo,ihnp4,allegra}!rlgvax!cvl!louie

From 5639308573187428025
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a8b2d87321401d9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-29 19:15:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!
AG0B@CMCCTE
From: AG0B%CMCCTE@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: list add
Message-ID: <1464@sri-arpa.UUCP>
Date: Fri, 29-Jun-84 22:15:33 EDT
Article-I.D.: sri-arpa.1464
Posted: Fri Jun 29 22:15:33 1984
Date-Received: Sat, 14-Jul-84 13:26:39 EDT
Lines: 8

From: Bdale Garbee <AG0B@CMCCTE>

Please add me to you mailing list.   AG0B@CMU-CC-TE
Perhaps via CMU-CS-C or Columbia-20.

Bdale Garbee
CMU Software Staff

From 5482632946608816058

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9807e871b7e3b56
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-30 03:37:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!
leetr.dlos@XEROX.ARPA
From: leetr.dlos@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Morse Code?
Message-ID: <1469@sri-arpa.UUCP>
Date: Sat, 30-Jun-84 06:37:58 EDT
Article-I.D.: sri-arpa.1469
Posted: Sat Jun 30 06:37:58 1984
Date-Received: Sat, 14-Jul-84 13:16:58 EDT
Lines: 12

Sir--

ONE point to keep in mind, having a ham ticket and using as large a spectrum
of frequencies available to hams is a PRIVILEGE, NOT a RIGHT such as freedom
of speech!
Privileges ARE normally earned. Rights are normally given.
Privileges are not normally abused. Rights generally are.

73's,
     --Tim KE5EP

From -4735423831134478269
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6892c4317fa792f6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-30 15:28:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some Columbus Ohio scanner freqs
Message-ID: <2289@ihuxf.UUCP>
Date: Sat, 30-Jun-84 18:28:28 EDT
Article-I.D.: ihuxf.2289
Posted: Sat Jun 30 18:28:28 1984
Date-Received: Sun, 1-Jul-84 07:27:49 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 51

Here are a small portion of the frequencies for Columbus, OH
(from the February 1984 FCC records):

f 152.300 WXC251   All Ohio Ambulance (Columbus)
f 153.185 KJS306   Anheuser-Busch Inc (Columbus)
f 153.395 KJS306   Anheuser-Busch Inc (Columbus)
f 151.775 KNGH519 Arlington Arms (Columbus)
f 153.200 KFP958   AT&T Technologies aka/Western Electric (Columbus)
f   27.245 KLN595   Battelle Memorial In (Columbus)
f 151.865 KLT400   Battelle Memorial In (Columbus)
f   44.440 KYI923   Brinks Inc (Columbus)
f 157.740 KVM948   Carrousel Inn (Columbus)
f 123.500 WJE3   Central Skyport Inc (Columbus)
f 157.740 WZJ263   Childrens Hospital (Columbus)
f 111.700 WRLL2048 City of Columbus (Columbus)
f 119.000 WLI2   City of Columbus (Columbus)
f 121.800 WLI2   City of Columbus (Columbus)
f 151.775 KNHP930 Columbia Dental Labs (Columbus)
f   31.000 KSJ331   Doctors Hospital (Columbus)
f   35.900 KRV740   Dunbar Geotechnical (Columbus)
f 122.800 KSV7   E C Aviation Service (Columbus)
f 151.865 KNDC984 Franklin University (Columbus)
f 153.080 KFQ858   General Motors Research (Columbus)
f 153.155 KNFQ207 General Motors Research (Columbus)
f 153.215 KNDG468 General Motors Research (Columbus)
f 154.540 KNFZ885 Grant Hospital (Columbus)
f 157.740 KYW380   Holiday Inn (Columbus)
f 123.300 KEP6   JFK Flight Services (Columbus)
f 151.805 KYZ487   National Detective Bureau (Columbus)
f 151.895 KIS231   Northland Mall (Columbus)
f 154.540 KYP880   Ohio Dominican College (Columbus)
f 122.950 KWM7   Ohio State University (Columbus)
f 123.000 KWM7   Ohio State University (Columbus)
f 151.715 KNDU560 Ohio State University (Columbus)
f 157.740 WXW795   Ohio State University (Columbus)
f   35.700 KEY372   Pepsi Cola Bottling (Columbus)
f 151.655 KNGJ508 Public Library of Columbus (Columbus)
f 151.685 KXU903   Respiratory Therapy Inc (Columbus)
f 153.260 KQB415   Rockwell International (Columbus)
f 153.140 WXD456   Ross Laboratories (Columbus)
f 151.685 KNHF867 Sheet Metal Workers (Columbus)
f   48.640 KCT450   Shell Communications (Columbus)
f 157.740 KTW880   Sheraton-Columbus Hotel (Columbus)
f   35.180 KGT899   Syntonic Technology (Columbus)
f 153.050 WQM546   White-Westinghouse Consumer... (Columbus)
f 153.350 KNAP814 Xerox Education Publ... (Columbus)
f 154.515 KHAN891 Xerox Education Publ... (Columbus)
--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 8756911593763789528
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e311793bdde98aff,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-30 15:50:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site noao.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!noao!jacoby
From: jacoby@noao.UUCP
Newsgroups: net.ham-radio
Subject: Re: bulletin postings
Message-ID: <363@noao.UUCP>
Date: Sat, 30-Jun-84 18:50:15 EDT
Article-I.D.: noao.363
Posted: Sat Jun 30 18:50:15 1984
Date-Received: Sun, 1-Jul-84 07:31:13 EDT
Organization: Natl. Optical Astronomy Obs. Tucson AZ USA
Lines: 16

> I also enjoy reading the bulletins and would like to
> encourage mgweed!rjr to continue his postings. By the
> way, the lower case modification is a definite improvement.
>
> Keep up the good work!
>
> Just one question: What's a "mgweed"? I've been
> wondering about that for a while, pronouncing it as
> "mag-weed". We've got lots of "tumble-weed" around here -
> any similarity?

George (WD6BBQ)
Tucson, AZ
ihnp4!noao!jacoby

From -8468297475532249780
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9807e871b7e3b56
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-30 17:37:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Morse Code?
Message-ID: <1473@sri-arpa.UUCP>
Date: Sat, 30-Jun-84 20:37:00 EDT
Article-I.D.: sri-arpa.1473
Posted: Sat Jun 30 20:37:00 1984
Date-Received: Sat, 14-Jul-84 13:18:34 EDT
Lines: 25

See my earlier message on the REAL reason they want us to learn Morse, and

quite properly so, to make us a more valuable emergency communications resource. Sorry if you don't feel like being a resource, but read the back of your license.

I agree that youngsters probably have the easiest time of it, but there are numerous cases of people of all ages learning the code. The MOTHER of one of our local hams learned the code and got her ticket (Advanced, I believe, by now) at the age of 74. This is by no means an isolated instance, either. Many people take up ham radio after retiring at 65.

Regarding Japan's experience, they are currently experiencing massive band crowding and a surprising lack of radio discipline, considering the cultural traditions of Japan. I don't think Japan is a good recommendation for a code-free license class.

Now that the argument is over as far as the FCC is concerned for (I am told) at least twelve years, we should all pitch in and try to help and encourage aspiring hams to get past the very minor obstacle that the code represents. If anybody out there needs help or encouragement or tapes or on-the-air practice, let me know and I for one will be glad to try to help you.

73,
John H. Sangster, W3IKG
jhs at mitre-bedford

From -8823343624211090808
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7b196bd335f7cc52
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-30 17:47:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: In support of Morse code requirements.
Message-ID: <1474@sri-arpa.UUCP>
Date: Sat, 30-Jun-84 20:47:00 EDT
Article-I.D.: sri-arpa.1474
Posted: Sat Jun 30 20:47:00 1984
Date-Received: Sat, 14-Jul-84 13:18:55 EDT
Lines: 69

*** I GOT A SERVICE MSG THAT THIS DIDNT MAKE IT TO SIMTEL20. PLEASE
    DISREGARD IF A DUPLICATION; ELSE DELETE THESE 2 LINES ***

Ref. - recent ARRL bulletin # 50 (below):

    qst de k9eui
    hr bulletin nr 50   from arrl headquarters   newington ct
    june 22 1984   to all radio amateurs bt

> the efforts of radio amateurs in meeting the challenge of emergency communications readiness through participation in the 1984 american radio relay league field day and in the exercises sponsored by the national communications system are greatly appreciated. your communications skills are a vital resource to our country.
>
> signed, casper w. weinberger, secretary of defense. ar

The amateur radio service is NOT handed all that spectrum just for our amusement. The PRIMARY justification, in the face of a LOT of competition, for all those Megahertzes we call home is that we are a major emergency communications resource. Both us as operators and our equipment.

Read the back of your license, last sentence, for further clarification.

Morse code, with the most sophisticated signal processor known to Man (the human brain) as receiver, is well known to be able to "get through" under many kinds of highly adverse conditions in which most other modes fail miserably.

Morse transmitters can be "jury rigged" in the field out of junk parts in an emergency. Like a battery and a roll of wire. (Try to build a computerized ASCII terminal starting with those resources!)

I know of one recent case (circa 1980) in which two people were rescued from virtually certain death after an auto accident because one of them happened to be a ham and happened to be able to send Morse code using the touch-tone pad on his 2 Meter FM rig. I never learned just why he couldn't use voice; probably either his injury or that of the microphone prevented it. But if he had NOT known Morse, two people would now be dead unnecessarily. (Details available on request -- it was a pretty dramatic incident.)

Morse IS a bit of effort to learn, and can't effectively be taught quickly in an emergency situation.

For all these reasons, it is in the public interest that ALL of us be coerced, wheedled, conned, tricked, and/or otherwise forced into learning the code whether we are interested in doing so or not. The only exception I would support is for people who REALLY are medically impaired in a way that makes this impossible or an undue burden. And I think when one looks into this, that's a VERY small fraction of those who seek relief from the code requirement.

It is also in our PERSONAL interest, because knowing the code could (as in the case mentioned above) save you own personal life someday.

Besides, Morse code is actually FUN, like skiing or ice skating, once you stop grumbling and get some proficiency in it. And the way to do that is to USE it, just for fun, once in awhile, even if your main interest in ham radio lies

somewhere else. Get into a CW "ragchew" from time to time. This takes away the drudgery of practice and makes it actually interesting. HINT: As with tennis or chess, you progress the fastest when you work with an "opponent" more skilled than yourself.

-John H. Sangster (617) 271-7426
jhs at mitre-bedford

From -5495069832189783197
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,676e7d9c8a9a3392,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-01 08:04:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site e21.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!e21!mahler
From: mahler@e21.UUCP (mahler)
Newsgroups: net.ham-radio
Subject: TAPR history
Message-ID: <120@e21.UUCP>
Date: Sun, 1-Jul-84 11:04:27 EDT
Article-I.D.: e21.120
Posted: Sun Jul 1 11:04:27 1984
Date-Received: Tue, 3-Jul-84 02:17:35 EDT
Organization: UNKNOWN
Lines: 6

I didn't save all the articles over the past year or so about the TAPR TNC ... why should I ... I didn't have packet and couldn't afford it ... Now that my TNC order has gone out, I am interested in reading the old articles. If you have saved the discussion and informational articles on the TAPR TNC or Packet mode in general please mail me a copy .. tnxs and 73s .. Steve N9DRR

From -751759504785855484
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,92f22c226e9e3c3a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-01 08:42:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: more Columbus OH scanner freqs
Message-ID: <2292@ihuxf.UUCP>
Date: Sun, 1-Jul-84 11:42:49 EDT
Article-I.D.: ihuxf.2292
Posted: Sun Jul 1 11:42:49 1984
Date-Received: Mon, 2-Jul-84 00:25:31 EDT
Organization: AT&T Bell Labs, Naperville, IL

Lines: 57

f 158.460 KNDX889 Riverside Methodist (Columbus)
f 161.640 KF4704 Great Trails Broadcasting (Columbus)
f 161.640 KJN624 Buckeye Media Inc (Columbus)
f 161.700 KJN624 Buckeye Media Inc (Columbus)
f 170.150 KQK756 North American Broadcasting (Columbus)
f 173.225 KQG254 Dispatch Printing Co (Columbus)
f 173.375 KET594 E W Scripps Co (Columbus)
f 275.600 KRL2 Rockwell International (Columbus)
f 305.800 KRL2 Rockwell International (Columbus)
f 314.600 KRL2 Rockwell International (Columbus)
f 333.500 WRLG2011 City of Columbus Ohio (Columbus)
f 334.700 WRLT4821 Ohio State University (Columbus)
f 450.050 KPE636 North American Broadcasting (Columbus)
f 450.0875 KLG684 Outlet Co (Columbus)
f 450.2125 KXZ925 WBNS TV Inc (Columbus)
f 450.250 KUQ300 Taft Broadcasting Co (Columbus)
f 450.2875 KPE919 Outlet Co (Columbus)
f 450.350 KRN298 Taft Broadcasting Co (Columbus)
f 450.4125 KXZ925 WBNS TV Inc (Columbus)
f 450.5125 KQB637 Nationwide Communication (Columbus)
f 450.700 KK4926 Taft Broadcasting Co (Columbus)
f 450.700 KS2140 Ohio State University (Columbus)
f 450.750 KAI303 Radiohio Inc (Columbus)
f 450.850 KLU704 Skyway Broadcasting (Columbus)
f 450.850 KS2253 Taft Broadcasting Co (Columbus)
f 450.990 WZZ704 Taft Broadcasting Co (Columbus)
f 461.175 KWH205 J C Penney Co Inc (Columbus)
f 461.275 KNAW951 Police Motorcycle Es... (Columbus)
f 461.275 KNFE248 Franklin Local School (Columbus)
f 461.325 KSV245 Warner Cable Corp (Columbus)
f 461.375 KXD937 Warner Cable Corp (Columbus)
f 461.425 WRL363 California Plant Protection, security agency (Columbus)
f 461.425 WXV684 Adams Security, security agency (Columbus)
f 461.500 WSS906 Windsor Protection S..., security agency? (Columbus)
f 461.675 KJM213 Capital Area Humane (Columbus)
f 461.675 KNCE580 Leveque Tower (Columbus)
f 461.675 KNDP630 Amguard Corp, security agency? (Columbus)
f 461.800 KNAW351 Holiday Inn Inc Hotel (Columbus)
f 461.925 KKO834 Warner Amex Cable Corp (Columbus)
f 461.925 KNGS268 Oki Inc (Columbus)
f 462.000 WZJ799 Hilton Inn East (Columbus)
f 462.075 KRY356 Warner Amex Cable Corp (Columbus)
f 462.300 KTB712 AT&T Technologies aka/Western Electric (Columbus)
f 462.650 KAD4847 Lane Avenue Shopping (Columbus)
f 462.675 KAA9482 J C Penney Co Inc (Columbus)
f 462.700 KAD0108 Doctors Hospital No... (Columbus)
f 463.200 KNCK832 National Repossession (Columbus)
f 463.475 KNDU524 Producers Video (Columbus)
f 463.475 KNFJ752 Metropolitan Armored, armored cars? (Columbus)
f 463.800 KNEV558 CPP Security Svc/aka California Plant Protection (Columbus)

f 464.275 KSU930   Pinkerton Inc, security agency (Columbus)
f 464.725 WQH779   Smiths Detective & Security (Columbus)

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==
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -2462124755085248117
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ccdf678e3171acb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-01 10:41:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site akgua.UUCP
Path: utzoo!linus!decvax!mcnc!akgua!glc
From: glc@akgua.UUCP (G.L. Cleveland [Lindsay])
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks
Message-ID: <858@akgua.UUCP>
Date: Sun, 1-Jul-84 13:41:37 EDT
Article-I.D.: akgua.858
Posted: Sun Jul 1 13:41:37 1984
Date-Received: Tue, 3-Jul-84 00:29:21 EDT
References: <2812@ecsvax.UUCP>
Organization: AT&T Technologies/Bell Labs, Atlanta
Lines: 32

  I thought this topic was well chewed over during the days when
the FCC was considering a no-code license. Anyway, I'll drop in
some observations.

  Just because a hand-held doesn't have a Key jack doesn't mean
that the Morse Code isn't used on VHF. I have an HF transmitter
that doesn't have a SSB mode. By using that sort of logic, should
one assume that SSB is not used on 40 meters? The point is: Morse
Code *is* used on VHF! Just because you only have an FM rig and
don't listen to the DX'ers and satellite buffs doesn't mean that
a particular mode is not in use.

  Do some reading in some of those sections of Worldradio or QST
that you usually skip over. You'll find lots of instances where
knowledge of the Code saved life or property. Without our large
pool of world-wide "Code Readers", many of those instances would
not have turned out so well.

  And a final note...not all the world is affluent! Remember the
project the ARRL advocated some years back of encouraging clubs and
individuals to sponsor a $50.00 rcvr/xmtr kit to be sent to various
third-world locales? If the U.S. went no-code we would be
effectively saying to the less-affluent hams of the world "We don't
want to talk to you unless you can do SSB or ASCII!"

Ham Radio has many facets. Your license allows you to enjoy any
and all. Getting it means you are *qualified* to use any mode.
Just because you aren't interested in a particular mode today
doesn't mean you won't be next month.

From the laid-back (lassiez-faire) ham shack of W4IZI.
Lindsay

From -5980005379272220402
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e311793bdde98aff
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-01 13:16:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!prg
From: prg@mgweed.UUCP (Phil Gunsul)
Newsgroups: net.ham-radio
Subject: Re: bulletin postings
Message-ID: <10397@mgweed.UUCP>
Date: Sun, 1-Jul-84 16:16:59 EDT
Article-I.D.: mgweed.10397
Posted: Sun Jul 1 16:16:59 1984
Date-Received: Mon, 2-Jul-84 00:38:18 EDT
References: <363@noao.UUCP>
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 10

Mgweed (pronounced mig-weed) stood for Montgomery Western Electric
Engineering Development. (Named before we became AT&T Consumer
Products!) All six UN*X machines on our site have similar names
all beginning with 'Mg' and four more letters. Orders from corporate
headquarters dictate this naming scheme..

Thanks for support on the bulletins...

Phil Gunsul -- WB9AAX

From -5695288676371196124
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc9e4cb5d4ed865,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-02 04:39:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!
WMartin@SIMTEL20.ARPA
From: WMartin@SIMTEL20.ARPA
Newsgroups: net.ham-radio
Subject: New Regency scanner source; also bulletins & code
Message-ID: <1497@sri-arpa.UUCP>
Date: Mon, 2-Jul-84 07:39:37 EDT

Article-I.D.: sri-arpa.1497
Posted: Mon Jul 2 07:39:37 1984
Date-Received: Sat, 14-Jul-84 13:35:59 EDT
Lines: 43

From: William G. Martin <WMartin@SIMTEL20.ARPA>

Gentlefolk:

I finally did what I promised I would do and looked up the Monitoring Times discussion of the source of the new-style wide-coverage Regency scanners. Refer to the March, '84, issue. The Regency MX-5000 is really the Japanese AOR Corp AR-2001 scanner with a Regency nameplate. This AOR scanner had been marketed in Europe since Fall '83. In the April, '84, issue, there is a report on this model which states that the plastic cabinet allows excessive synthesizer noise to feedback and swamp the scan/search function when the attached indoor whip antenna is used. Works much better with an outdoor antenna. Some rather poor user-interface design comments, too -- you have to ride the squelch control to stop it on-frequency in search mode, and restarting searches start over again from the start point, not where it last stopped. Yech...

Regarding the discussion of the worth of the bulletins and the value of Morse -- over on the ARPA/MILNET side, here on Info-Hams, the START of those discussions never appeared, as far as I can recall. We suddenly started seeing follow-ups, but never the base or original postings which started all this flamage. Somebody want to find and re-post those items so the other half of the world can see what we should be flaming at or about? (Add a subject line indicating that this is the original re-posted, please.)

For what it's worth, I like the bulletins and I'm not even a ham. I can ignore what doesn't interest me. (I am not qualified to comment on the code business; even if there was no code requirement, I doubt that I would have gotten a ham ticket. I am more interested in reception than transmission. The only thing ever tempting me to become a ham was the whole idea of having a 2m handheld with touchtone pad, which I could use over a local repeater for a much-less-expensive mobile telephone service. The reports of malicious interference and the need to be careful about "non-business" usage put me off that idea. I understand that most repeaters allowing telephone patch-thru require users to join a support group and pay a fee, which seems reasonable. How much is this, normally? Is the service usable and available enough to make this worthwhile for an ordinary person [as opposed to one who lives on the phone -- you know the kind]?)

Will

From -6465085055397714700
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,997f76f8b7d9dd1e,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-02 06:07:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!
ERWINVL.DLOS@XEROX.ARPA
From: ERWINVL.DLOS@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: MORSE CODE FOREVER!!
Message-ID: <1506@sri-arpa.UUCP>
Date: Mon, 2-Jul-84 09:07:02 EDT
Article-I.D.: sri-arpa.1506
Posted: Mon Jul 2 09:07:02 1984
Date-Received: Sat, 14-Jul-84 13:34:33 EDT
Lines: 7

I SUPPORT THE MORSE CODE REQUIREMENT FOR A SINGLE REASON- I DON'T WANT
THE HAM
BANDS TO BECOME ANOTHER CHANNEL 19 AS ON THE 27 MHZ CB BAND. ANYTHING
THAT WE REALLY DESIRE IN LIFE IS WORTH A LITTLE EFFORT ISN'T IT??

                        VAL ERWIN
                        W5PUT

From 3830931727943821871
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,41ef47d416909a82,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-02 08:27:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!decvax!decwrl!dec-rhea!dec-3106!dm_johnson
From: dm_johnson@3106.DEC (the BIG d)
Newsgroups: net.ham-radio
Subject: aluminum
Message-ID: <2215@decwrl.UUCP>
Date: Mon, 2-Jul-84 11:27:26 EDT
Article-I.D.: decwrl.2215
Posted: Mon Jul 2 11:27:26 1984
Date-Received: Tue, 3-Jul-84 04:44:32 EDT
Sender: daemon@decwrl.UUCP
Organization: DEC Engineering Network
Lines: 5

I recently got a good deal on some aluminum wire. Anybody have
suggestions on how to make good mechanical and electrical connections
for wire antennas?

Denny/ka1bqz

From -3885734619826324985
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,2ccdf678e3171acb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-02 08:41:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mit-athena.ARPA
Path: utzoo!linus!decvax!mit-athena!yba
From: yba@mit-athena.ARPA (Mark H Levine)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks
Message-ID: <187@mit-athena.ARPA>
Date: Mon, 2-Jul-84 11:41:21 EDT
Article-I.D.: mit-athe.187
Posted: Mon Jul 2 11:41:21 1984
Date-Received: Tue, 3-Jul-84 04:43:53 EDT
References: <2812@ecsvax.UUCP>, <858@akgua.UUCP>
Organization: MIT, Project Athena, Cambridge, Ma.
Lines: 40

I was not a net reader when you (plural) were chewing over the codeless
license. I have read parts of the rehash and would like to know how
people with my particular view were answered by the majority.

I know several people, most of whom are EEs, especially in microwave
engineering, who would apply for a code-less VHF-UHF license and bring
some of their expertise into amateur radio. They cite the stumbling block
of the code as the reason they will not apply.

Now personally I agree that once in the ham fraternity such folks would
find incentives to learn the code. I didn't really like it myself for
quite awhile, and then some friends at W2SZ took me on a moonbounce expedition.
There is nothing like trying a VHF/UHF contest for proving your new 1.2 GHz
amplifier either--not a whole lot of phone in that last I checked.

I don't think whether code is useful or not is at issue--I think it is,
and if I'm wrong we will all just plain stop using it and it will go
away. The open question is whether to get people who will not learn
the code a novice type ham license so that we can benefit from the new
blood.

Not all of us took up this hobby to be operators. Some are mainly
equipment builders, or interested in public service, or even chess.
I feel that it takes all kinds, and that we want the kind that will
contribute, even without the code. We seem to have enough appliance
operators to go around. I believe that making the codeless license
require a tough technical test and limiting privileges will make sure we get
good technicians, and not CBers.

Aside from the "No one gets into this club unless he passes the same initiation
I had to pass" arguments, what were the objections to the codeless
experimenter license? Please feel free to use direct mail for
responses, and flame at me if you wish. I'd really like to know what
drives League policy here, as the FCC seemed ready to go for this idea
before ARRL started lobbying--does anyone think that impression wrong?

WA2YBA/1

--
yba%mit-heracles@mit-mc.ARPA UUCP: decvax!mit-athena!yba

From 5302918298457780224
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-02 10:09:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site noao.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!noao!allan
From: allan@noao.UUCP
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks
Message-ID: <366@noao.UUCP>
Date: Mon, 2-Jul-84 13:09:39 EDT
Article-I.D.: noao.366
Posted: Mon Jul 2 13:09:39 1984
Date-Received: Tue, 3-Jul-84 02:53:45 EDT
References: uok.2800004 <570@uofm-cv.UUCP>
Organization: Natl. Optical Astronomy Obs. Tucson AZ USA
Lines: 12

I really don't see what the problem is with learning morse code. The argument
was that it is not used much on vhf and uhf frequencies. Well if you are
only interested in these frequencies then a technician license will give
you all the privileges that you need. You are not telling me that 5 wpm
is too much to cope with are you?

Peter Allan (KA7RFO)
Kitt Peak National Observatory
Tucson, Az
UUCP: {akgua,allegra,arizona,decvax,hao,ihnp4,lbl-csam,seismo}!noao!allan
ARPA: noao!allan@lbl-csam.arpa

From 284626276484440621
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,66e371c2ad8f0f1a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-02 11:04:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!
wmartin@BRL-TGR.ARPA
From: wmartin@BRL-TGR.ARPA
Newsgroups: net.ham-radio
Subject: Reposting for ARPA/MILNET: Original code & bulletin flames
Message-ID: <1519@sri-arpa.UUCP>

Date: Mon, 2-Jul-84 14:04:44 EDT
Article-I.D.: sri-arpa.1519
Posted: Mon Jul 2 14:04:44 1984
Date-Received: Sat, 14-Jul-84 13:32:18 EDT
Lines: 52

From: Will Martin <wmartin@BRL-TGR.ARPA>

I took my own advice and found the originals of the "no code" and "anti-bulletin" messages over on USENET's net.ham-radio. Here they are, for the Info-Hams people who never saw them. Maybe they'll show up eventually, but I'd like to point out that BOTH have the ":-)" symbol on them. Obviously mpackard is pulling the legs of those who reacted so strongly. (I've edited out some header garbage but left the text untouched.)

Here they are:

From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Morse code stinks
Message-ID: <2800003@uok.UUCP>
Date: Sun, 24-Jun-84 20:40:00 EDT

:-)

I would like to start an argument on net.ham-radio as it seems there is no food for thought on this note.
  The subject is no-code on 50 Mhz and up. I believe the requirement for an amatuer to learn morse code for these frequencys is pure hogwash. The number of radios available on these frequencys is more than enough to eliminate the need. When was the last time you saw a jack on a two-meter handheld that said 'key' on it? The poor users couldn't do morse if they wanted too. The above statement refers to the fact that in this day and age the only concievable purpose of morse would be for emergencys when your microphone broke and for practice to maintain currency. Wayne Green says if hams want morse than by god they better be current and able to operate with it. A person should retest every year and even be required to show a speed improvement also. I believe this would be fair. My interest is in microwaves and I just don't see where the ham community would benifit from my knowing morse code. Hell you guys don't use morse actively up on these frequencys anyway.
   Don't send me any mail on this subject but go ahead and start arguing (sp?).
uok!mpackard

From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Stop the Bulletins!

:-)

Does anybody read the garbage from mgweed!rjr about bulletins?
I don't listen to the stuff on the radio, much less read it!
Am I missing the importance of that garbage?

From -6202599432169071351
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,76d1d330af0cb1f7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-03 02:08:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!
CarpenterCR.dlos@XEROX.ARPA
From: CarpenterCR.dlos@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: CBer's of the ham bands
Message-ID: <1541@sri-arpa.UUCP>
Date: Tue, 3-Jul-84 05:08:04 EDT
Article-I.D.: sri-arpa.1541
Posted: Tue Jul 3 05:08:04 1984
Date-Received: Sat, 14-Jul-84 13:28:52 EDT
Lines: 25

Interesting comments Andy, and I agree. Here are some other thoughts.

- There is a no-code band. It's around 11 Meters.

- Code is good for those who want to use it, and I do.

- Very few Amateurs use their equipment for emergencies.

- Not all the jammers are in California. - They are in Dallas too - and they are usually locals.

- Some are the good ole boys who don't want the lids, kids and space cadets using "their" frequencies.

- It appears that the original message was inteded to start a controversy. WOW!

- Amateur radio provides a foundation for many and varied interests.

- That's what we aught to be concentrating on!

73
Chuck, W5USJ

From 2334866687420532910

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-03 08:56:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 Fluke 1/4/84; site fluke.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
ssc-vax!fluke!chuckb
From: chuckb@fluke.UUCP (Chuck Bowden)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks - (nf)
Message-ID: <305@tpvax.fluke.UUCP>
Date: Tue, 3-Jul-84 11:56:44 EDT
Article-I.D.: tpvax.305
Posted: Tue Jul 3 11:56:44 1984
Date-Received: Thu, 5-Jul-84 06:31:09 EDT
References: <2800003@uok.UUCP> <1977@hplabsc.UUCP>
Organization: John Fluke Mfg. Co., Everett, WA
Lines: 37

urs have a great deal of
    responsibility with their generous HF spectrum space. And that includes
    taking the time to learn Morse Code, the most reliable and efficient
    mode in radio communication.

    /Chuck Bowden, kd7lz

    {uw-beaver,microsof,sun,allegra,ssc-vax} !fluke!chuckb

From 9211821625613694174
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c7d0b0a72d43643f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-03 10:14:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 23 (18 MHz antenna contest)
Message-ID: <10429@mgweed.UUCP>
Date: Tue, 3-Jul-84 13:14:06 EDT
Article-I.D.: mgweed.10429
Posted: Tue Jul 3 13:14:06 1984
Date-Received: Wed, 4-Jul-84 04:13:12 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

qst de k9eui
hr crrl bulletin nr 23   from crrl headquarters   london ont
july 2 1984   to all radio amateurs bt

in response to a crrl request, doc is allowing amateurs who wish to take part in the arrl antenna design competition to transmit on the following four frequencies, 18.073 18.163 24.895 and 24.985 mhz. transmissions must be a0 or a1, maximum power 250 watts. two way communications are not permitted. transmissions must be for testing of antennas only. canadian amateurs wishing to use these frequencies must first make application to a doc district office, and use of the frequencies will expire on november 1 1984. ar

From 1347687782224250577
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,156e01619bcc4444,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-03 10:15:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 53 (another olympic 3rd party agreement)
Message-ID: <10430@mgweed.UUCP>
Date: Tue, 3-Jul-84 13:15:11 EDT
Article-I.D.: mgweed.10430
Posted: Tue Jul 3 13:15:11 1984
Date-Received: Wed, 4-Jul-84 04:13:50 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

qst de k9eui
hr bulletin nr 53 from arrl headquarters newington ct
june 26 1984 to all radio amateurs bt

romania, yo, has established a temporary third party traffic agreement with the u.s. for use during the 1984 summer olympics. other countries with such agreements are indonesia, yb, yc and yd, hong kong, vs6, and zimbabwe, z2. the agreements take effect at 0100 utc july 1 to 2359 utc august 31, 1984, and will allow messages to be exchanged between the olympic village and the athletes home countries. ar

From -8874612066262964456
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b56ddfba0bad69d2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-03 10:15:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr

From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 27
Message-ID: <10431@mgweed.UUCP>
Date: Tue, 3-Jul-84 13:15:37 EDT
Article-I.D.: mgweed.10431
Posted: Tue Jul 3 13:15:37 1984
Date-Received: Wed, 4-Jul-84 04:14:35 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 31

qst de k9eui
hr propagation bulletin nr 27 from arrl headquarters newington ct july 2 1984 to all radio amateurs bt

the solar flux average for june was 100.4, the lowest this year, though there were two months below 100 in 1983. perhaps more significant is that there was only a 19 point spread during june. these facts emphasize the difference in the character of the sun in the low years of the solar cycle.

there will be less day to day variation in the solar numbers in the next few years. this will improve f layer propagation on the lower amateur frequencies, at the expense of the higher bands. though this summer has been poor for sporadic e activity on 28, 50 and 144 mhz, this is not necessarily the result of declining sun spot numbers and lower solar flux. the w6jkv 50 mhz expedition to greenland this past week produced a surprising number of qsos over a greater expanse of territory than had been expected. then at the weeks end, there was a surprise transatlantic opening to the channel islands from northeastern u.s. and adjacent canada. reception of the gibraltar 6 meter beacon zb2vhf, and the british beacon gb3six, was reported over a wide area in this country.

for the forecast week, generally poor hf conditions are expected through july 5, improving july 6 and july 9 to 12.

american sunspot numbers for june 21 to 27 were between 39 and 54 with a mean of 47.9. ar

From 7502761378188178449
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,75bb76907ad1eda4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-03 10:16:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: arrl dx bulletin nr 23
Message-ID: <10432@mgweed.UUCP>
Date: Tue, 3-Jul-84 13:16:01 EDT
Article-I.D.: mgweed.10432
Posted: Tue Jul 3 13:16:01 1984
Date-Received: Wed, 4-Jul-84 04:15:21 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 57

qst de k9eui
hr dx bulletin nr 23 from arrl headquarters newington ct
june 29 1984 to all radio amateurs bt

egypt. bob, ka4sbe, expects to be operating portable su for about four more weeks. check 14200 khz at around 2230z. qsls for ka4sbe/su go to wb1ggq.

dx net. net control station for the rare dx net is jy3zh. this net meets daily on 14220 khz at 2200z. recent checkins have included hk0ekr, ta1as, xt2br and 5u7ld. 5u7ld can also be found on 14235 khz at around 2230z. there is also a possibility later this month of tz7bky apprearing on the net. qsls for 5u7ld are via in3rzy and qsls for ta1as go to dj0oc.

norfolk island. vk9ns, jim, has had a good signal on 7005 khz at about 1045z. he also appears sometimes on or near 14215 khz at around 1100z.

tahiti. tahitian stations, fo, are expected to produce much activity during the first week of july during their national holiday, tiurai.

lebanon. od5ns has been worked on 14335 khz at about 1130z. od5nt has been appearing on 14197 khz at around 2340z.

kermadec. zl8afh has been recently active on 21295 khz at around 0100z.

india. vu2bk has been appearing on 7003 khz at around 0015z.

paraguay. zp5jcy has been active on 3792 khz at around 0015z. qsl zp5jcy via lu8dpm.

bahrain. a92nh has been active on 14195 khz at around 0145z. qsls for a92nh go to w8lu.

zl7amo operation qsls. qsl cards for the zl7amo operation have been received from ron, zl1amo. it is expected that he will visit the arrl national convention at new york city july 21.

central kiribati. t31at was last heard active on 21286 khz at

around 0000z.

solomon iylands. look for h44ia on 14235 khz at around 1120z.

heard and worked,

callsign	frequency	time	remarks
fm7wd	14195 khz	1125z	qsl via w3hnk
um8ml	14229 khz	0120z	

ar

From 8356280057184934327
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-03 11:23:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!hao!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks
Message-ID: <3093@brl-tgr.ARPA>
Date: Tue, 3-Jul-84 14:23:49 EDT
Article-I.D.: brl-tgr.3093
Posted: Tue Jul 3 14:23:49 1984
Date-Received: Fri, 13-Jul-84 03:52:28 EDT
References: uok.2800004 <570@uofm-cv.UUCP> <366@noao.UUCP>
Organization: Ballistics Research Lab
Lines: 8

What separates Amateur Radio from Children's Band is not the increased
technical knowledge. C'mon, the written exam for the so-called general
license doesn't assure any great level of technical competance. The difference
between ham and CB is effort. You have to spend some type of effort to get
your license, unlike just mailing back the form when you buy your radio (if
the average CBer even bothers to do that).

-Ron

From 7042159695809083995
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2cace3a975a2a11b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-03 12:45:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!kk9w

From: kk9w@pur-ee.UUCP (Andersen)
Newsgroups: net.ham-radio
Subject: Bulletins, Morse Code, and other stuff
Message-ID: <1953@pur-ee.UUCP>
Date: Tue, 3-Jul-84 15:45:11 EDT
Article-I.D.: pur-ee.1953
Posted: Tue Jul 3 15:45:11 1984
Date-Received: Wed, 4-Jul-84 03:42:36 EDT
Organization: Electrical Engineering Department , Purdue University
Lines: 20

UB 40

Re: all of the complaints about the stuff on net.ham-radio

First, yes, I read the bulletins. Not all are of interest to me,
but I appreciate the service that rjr and the others provide.
Keep them coming, at least they pertain to ham-radio.

Second, won't idiots ever get tired of complaining about the morse
code? The fcc decided that it will be a fact of life for a while
anyway, so learn to live with that. And, yes, I do have a key jack
on my 2m radio, and I do use it.

Thirdly, if you want to complain, I vote we get rid of all of the
scanner crap that is on the net. That's not ham radio.

Sincerely, Dave

From 1760432109048684301
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c745e24244b7bf1e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-03 14:04:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!uok!mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: mpackard rides again - (nf)
Message-ID: <2800005@uok.UUCP>
Date: Tue, 3-Jul-84 17:04:00 EDT
Article-I.D.: uok.2800005
Posted: Tue Jul 3 17:04:00 1984
Date-Received: Fri, 6-Jul-84 00:14:31 EDT
Lines: 15
Nf-ID: #N:uok:2800005:000:601
Nf-From: uok!mpackard   Jul 3 16:04:00 1984

#N:uok:2800005:000:601
uok!mpackard   Jul 3 16:04:00 1984

:-)

I didn't attack anyone personally and I hope no one felt that way.
I only asked a question (sarcasticaly, sorry) and voiced an opinion.
Several people responded with good arguments for getting rid of
code in the upper freq's but I haven't seen any good arguments for
keeping the requirement, maybe there isn't one. The idea of my
learning code isn't the subject, as I've already learned it and then
stopped using it. I don't recall the writers name but (s)he used the
comparison of learning the bit patterns of ASCII or BAUDOT in order to
operate on ham radio. This was well put.
uok!mpackard

From 830320204297093668
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-03 20:50:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cp1.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!sdcrdcf!sdcsvax!akgua!mcnc!philabs!cmcl2!seismo!rlgvax!cvl!umcp-
cs!aplvax!cp1!hart
From: hart@cp1.UUCP
Newsgroups: net.ham-radio
Subject: Re: Stop the Bulletins! - (nf)
Message-ID: <718@cp1.UUCP>
Date: Tue, 3-Jul-84 23:50:16 EDT
Article-I.D.: cp1.718
Posted: Tue Jul 3 23:50:16 1984
Date-Received: Mon, 9-Jul-84 00:38:16 EDT
References: <308@houxb.UUCP>, <344@hou5h.UUCP>
Organization: C & P Tel. Co., Balto., Md.
Lines: 14

Don't stop the bulletins! With some work, anyone
can master cw. If you can't dedicate the time and
effort, try cb. KEEP THE HAM BANDS CLEAN!!!!

--

==========
signed: Rod Hart (wa3mez)
        Chesapeake & Potomac Tel. Co.
        Bell Atlantic Inc.
        Silver Spring, Md.
        gamma!cp1!hart - umcp-cs!cp1!hart - aplvax!cp1!hart
==========

From 3821613446933910692
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7d69ed6fdee715f6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-04 10:14:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some 2.0 - 3.0 MHz freqs
Message-ID: <2305@ihuxf.UUCP>
Date: Wed, 4-Jul-84 13:14:50 EDT
Article-I.D.: ihuxf.2305
Posted: Wed Jul 4 13:14:50 1984
Date-Received: Thu, 5-Jul-84 00:36:05 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 66

from FCC records dated February 1984:

f	2.0000	KNEV670	W5UNY Co (USA-wide)
f	2.0664	KYH210	Exxon Communications (USA-wide)
f	2.0664	WDJ331	Ocean Technology Ltd (USA-wide)
f	2.0664	WDS	Exxon Communications (USA-wide)
f	2.0804	KA2XTH	Harris Corp, experimental (USA-wide)
f	2.0874	KA2XTH	Harris Corp, experimental (USA-wide)
f	2.0979	KA2XTH	Harris Corp, experimental (USA-wide)
f	2.0979	WXF700	Houston Oil & Mineral (USA-wide)
f	2.1594	KA2XTH	Harris Corp, experimental (USA-wide)
f	2.1674	KA2XTH	Harris Corp, experimental (USA-wide)
f	2.1834	KYH210	Exxon Communications (USA-wide)
f	2.1834	WDJ331	Ocean Technology Ltd (USA-wide)
f	2.1834	WDS	Exxon Communications (USA-wide)
f	2.1834	WXF700	Houston Oil & Mineral (USA-wide)
f	2.1994	KA2XTH	Harris Corp, experimental (USA-wide)
f	2.2764	KB24174	Eastern Sierra Natio...., public safety (USA-wide)
f	2.2764	KB24178	Bay Area Region Nati...., public safety (USA-wide)
f	2.2904	KA42364	Georex Inc (USA-wide)
f	2.2904	KH4434	Marlin Drilling Company (USA-wide)
f	2.2920	KA2899	Western Geophysical (USA-wide)
f	2.2920	KA2976	Mobil Oil Telcom Ltd (USA-wide)
f	2.2920	KKJ750	Mobil Oil Telcom Ltd (USA-wide)
f	2.2920	KN2907	Penrod Drilling Company (USA-wide)
f	2.2934	KA2120	Geophysical Service (USA-wide)
f	2.2934	KA2307	Offshore Navigation (USA-wide)
f	2.2934	KA3485	Rogers Explorations (USA-wide)
f	2.2934	KA7257	King Fisher Marine S... (USA-wide)
f	2.2934	KA7758	Brown & Root Inc (USA-wide)
f	2.2934	KA87200	Goldston Company Inc (USA-wide)

```
f     2.2934 KKQ217   Offshore Navigation (USA-wide)
f     2.2934 KNCK293  Geophysical Service (USA-wide)
f     2.2934 KTG973   McDermott Inc (USA-wide)
f     2.3964 KA42364  Georex Inc (USA-wide)
f     2.3964 KH4434   Marlin Drilling Company (USA-wide)
f     2.3980 KA2899   Western Geophysical (USA-wide)
f     2.3980 KA2976   Mobil Oil Telcom Ltd (USA-wide)
f     2.3980 KKJ750   Mobil Oil Telcom Ltd (USA-wide)
f     2.3980 KN2907   Penrod Drilling Company (USA-wide)
f     2.3990 KA2120   Geophysical Service (USA-wide)
f     2.3994 KA2307   Offshore Navigation (USA-wide)
f     2.3994 KA3485   Rogers Explorations (USA-wide)
f     2.3994 KA7257   King Fisher Marine S... (USA-wide)
f     2.3994 KA80947  Wilderness Tree Service (USA-wide)
f     2.3994 KA87200  Goldston Company Inc (USA-wide)
f     2.3994 KKQ217   Offshore Navigation (USA-wide)
f     2.3994 KNCK293  Geophysical Service (USA-wide)
f     2.3994 KTG973   McDermott Inc (USA-wide)
f     2.3995 KM2XLF   Rockwell International, experimental (USA-wide)
f     2.4220 KM2XET   SRI International, experimental (USA-wide)
f     2.7260 KF2364   North East Surf Patrol, public safety (USA-wide)
f     2.7274 KQ2XKM   National Ski Patrol, experimental (USA-wide)
f     2.7274 KQ2XYZ   National Ski Patrol, experimental (USA-wide)
f     2.7394 KA2XTH   Harris Corp, experimental (USA-wide)
f     2.7420 KC2XGD   Woods Hole Oceanographic, experimental (USA-wide)
f     2.7705 KB2XXP   Federal Electric Corp, experimental (USA-wide)
f     2.7720 KB2XXP   Federal Electric Corp, experimental (USA-wide)
f     2.7834 KA2XTH   Harris Corp, experimental (USA-wide)
f     2.8315 KK2XHJ   Lamont Doherty Geo O..., experimental (USA-wide)
f     2.9790 KA5280   Georgia Kraft Company, forestry (USA-wide)

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================================================================================
Bob Parnass,  AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414


From -226550662340787228
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-05 07:20:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2g.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hou2g!stekas
From: stekas@hou2g.UUCP (J.STEKAS)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks - (nf)
Message-ID: <285@hou2g.UUCP>
Date: Thu, 5-Jul-84 10:20:03 EDT
Article-I.D.: hou2g.285
Posted: Thu Jul  5 10:20:03 1984
Date-Received: Fri, 6-Jul-84 00:32:46 EDT
References: <2800003@uok.UUCP> <1977@hplabsc.UUCP>, <305@tpvax.fluke.UUCP>
```

Organization: AT&T Bell Labs, Holmdel NJ
Lines: 23

As an ex-ham who worked CW exclusively (~30wpm) I vouch that it can't be beat for inexpensive, reliable communications. But as far as the code requirement goes - it serves little purpose.

Certainly, it keeps out the CBers. But wouldn't a more difficult technical exam be just as effective? And as for emergency communications, how much proficiency is needed to copy QRRR or SOS at 5WPM and call the authorities? Even the most die-hard, 60WPM, CW op would slow down to make sure his distress signal was copied.

The fact is, one no longer needs to know the code to use it. For $100 a box can be had which will turn a home computer into a RTTY/Morse terminal. It's true that the box needs a higher S/N than a good operator, but you can't beat it for armchair copy.

So I move that code requirements be dropped to 5WPM and the technical requirements raised. Then maybe every ham will know enough to keep his modulation <100% and all those 5WPM distress now obscured by splatter could be copied! :-)

Jim

ex- WA2IAA

From -1652576735326797127
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,412a2311e59b309c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-05 09:29:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mhuxv.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!mhuxv!wmb
From: wmb@mhuxv.UUCP (W. M. Brelsford)
Newsgroups: net.ham-radio
Subject: DXCC Country List
Message-ID: <130@mhuxv.UUCP>
Date: Thu, 5-Jul-84 12:29:49 EDT
Article-I.D.: mhuxv.130
Posted: Thu Jul 5 12:29:49 1984
Date-Received: Fri, 6-Jul-84 01:12:47 EDT
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 339

The current ARRL DXCC country list follows. A number of corrections, changes and additions (of secondary prefixes) have been made since the earlier posting. Thanks to Ron, W2IOL, for many of the changes.

The colon-separated fields are:

1. primary prefix
2. country
3. continent
4. ITU zone(s)
5. CQ zone(s)
6. other prefixes, if any

For my own use, I added a first field containing a symbol
for status (- for worked, # for QSL received, etc.).
With programs such as sort, awk and grep, one can use the file
for printing lists by prefix, country name, continent, etc.
Please send corrections and suggestions to me.

Bill Brelsford K2DI
AT&T Communications
..!mhuxv!wmb or ..!mhuxv!atux02!wmb

A2:Botswana:Af:57:38
A3:Tonga:Oc:62:32
A4:Oman:As:39:21
A5:Bhutan:As:41:22
A6:United Arab Emirates:As:39:21
A7:Qatar:As:39:21
A9:Bahrain:As:39:21
AP:Pakistan:As:41:21
BV:Taiwan:As:44:24
BY:China:As:33,42,43,44:23,24
C2:Nauru:Oc:65:31
C3:Andorra:Eu:27:14
C5:The Gambia:Af:46:35
C6:Bahamas:NA:11:08
C9:Mozambique:Af:53:37
CE:Chile:SA:14,16:12:XQ
CE9:Antarctica:An:67,69,70,71,72,73,74:12,13,29,30,32,38,39:DP,FB8Y,KC4,LA,LU-Z,OR4,VK0,VP8,Y8,ZL5,ZS1,3Y,4K,8J
CE0A:Easter Is:SA:63:12
CE0X:San Felix:SA:14:12
CE0Z:Juan Fernandez:SA:14:12
CM:Cuba:NA:11:08:CO
CN:Morocco:Af:37:33
CP:Bolivia:SA:12,14:10
CR9:Macao:As:44:24
CT:Portugal:Eu:37:14:CQ-CS,CU
CT2:Azores:Eu:36:14
CT3:Madeira Is:Af:36:33
CX:Uruguay:SA:14:13
D2:Angola:Af:52:36:D3
D4:Cape Verde:Af:46:35
D6:Comoros:Af:53:39
DL:Germany W:Eu:28:14:DA-DK
DU:Philippines:Oc:50:27
EA:Spain:Eu:37:14:AM,EB-EH

EA6:Balearic Is:Eu:37:14
EA8:Canary Is:Af:36:33
EA9:Ceuta & Melilla:Af:37:33
EI:Ireland:Eu:27:14:EJ
EL:Liberia:Af:46:35
EP:Iran:As:40:21
ET:Ethiopia:Af:48:37
F:France:Eu:27:14:HW,TK,TO
FB8W:Crozet:Af:68:39
FB8X:Kerguelen Is:Af:68:39
FB8Z:Amsterdam & St Paul Is:Af:68:39
FC:Corsica:Eu:28:15
FG:Guadeloupe:NA:11:08
FH:Mayotte:Af:53:39
FK:New Caledonia:Oc:56:32
FM:Martinique:NA:11:08
FO:Clipperton Is:NA:10:07
FO:French Polynesia:Oc:63:32
FP:St Pierre & Miquelon:NA:09:05
FR:Glorioso Is:Af:53:39
FR:Juan de Nova, Europa:Af:53:39
FR:Reunion:Af:53:39
FR:Tromelin:Af:53:39
FS:St Martin:NA:11:08:FG
FW:Wallis & Futuna Is:Oc:62:32
FY:French Guiana:SA:12:09
G:England:Eu:27:14
GD:Isle of Man:Eu:27:14
GI:No Ireland:Eu:27:14
GJ:Jersey:Eu:27:14:GC
GM:Scotland:Eu:27:14
GU:Guernsey:Eu:27:14:GC
GW:Wales:Eu:27:14
H4:Solomon Is:Oc:51:28
HA:Hungary:Eu:28:15:HG
HB:Switzerland:Eu:28:14
HB0:Liechtenstein:Eu:28:14
HC:Ecuador:SA:12:10:HD
HC8:Galapagos Is:SA:12:10
HH:Haiti:NA:11:08
HI:Dominican Rep:NA:11:08
HK:Colombia:SA:12:09
HK0:Malpelo Is:SA:12:09
HK0:San Andres & Providencia:NA:11:07
HL:Korea:As:44:25:HM
HP:Panama:NA:11:07
HR:Honduras:NA:11:07
HS:Thailand:As:49:26
HV:Vatican:Eu:28:15
HZ:Saudi Arabia:As:39:21:7Z
I:Italy:Eu:28:15
IS:Sardinia:Eu:28:15
J2:Djibouti:Af:48:37

J3:Grenada:NA:11:08
J5:Guinea-Bissau:Af:46:35
J6:St Lucia:NA:11:08
J7:Dominica:NA:11:08
J8:St Vincent:NA:11:08
JA:Japan:As:45:25:JB-JS,KA
JD:Minami Torishima:Oc:45:27:KA1
JD:Ogasawara:As:45:27:KA1
JT:Mongolia:As:32,33:23
JW:Svalbard:Eu:18:40
JX:Jan Mayen:Eu:18:40
JY:Jordan:As:39:20
K:United States:NA:06,07,08:03,04,05:W,N,AA-AL
KC6:Belau:Oc:64:27
KC6:Micronesia:Oc:65:27
KG4:Guantanamo Bay:NA:11:08
KH1:Baker,Howland,Am Phoenix:Oc:61,62:31:KB6
KH2:Guam:Oc:64:27:KG6
KH3:Johnston Is:Oc:61:31:KJ6
KH4:Midway Is:Oc:61:31:KM6
KH5:Palmyra, Jarvis Is:Oc:61:31:KP6
KH5K:Kingman Reef:Oc:61:31:KP6K
KH6:Hawaii:Oc:61:31
KH7:Kure Is:Oc:61:31
KH8:Am Samoa:Oc:62:32:KS6
KH9:Wake Is:Oc:65:31:KW6
KH0:Mariana Is:Oc:64:27:KG6RST
KL7:Alaska:NA:01,02:01
KP1:Navassa Is:NA:11:08
KP2:Virgin Is:NA:11:08:KV4
KP4:Puerto Rico:NA:11:08
KP5:Desecheo Is:NA:11:08
KX6:Marshall Is:Oc:65:31
LA:Norway:Eu:18:14:LB-LN
LU:Argentina:SA:14,16:13:L8
LX:Luxembourg:Eu:27:14
LZ:Bulgaria:Eu:28:20
OA:Peru:SA:12:10:4T
OD:Lebanon:As:39:20
OE:Austria:Eu:28:15
OH:Finland:Eu:18:15
OH0:Aland Is:Eu:18:15
OJ0:Market Reef:Eu:18:15
OK:Czechoslovakia:Eu:28:15
ON:Belgium:Eu:27:14
OX:Greenland:NA:05,75:40:XP
OY:Faeroe Is:Eu:18:14
OZ:Denmark:Eu:18:14
P2:Papua New Guinea:Oc:51:28
PA:Netherlands:Eu:27:14:PB-PI
PJ2:Neth Antilles:SA:11:09:PJ3-4,P42-4
PJ5:St Maarten, Saba, St Eus:NA:11:08:PJ6-8,P45-8
PY:Brazil:SA:12,13,15:11:PP-PX,ZY

PY0:Fernando de Noronha:SA:13:11
PY0:St Peter & St Paul Rocks:SA:13:11
PY0:Trindade & Martin Vaz Is:SA:15:11
PZ:Surinam:SA:12:09
S2:Bangladesh:As:41:22
S7:Seychelles:Af:53:39
S9:Sao Tome & Principe:Af:47:36
SM:Sweden:Eu:18:14:SK,SL
SP:Poland:Eu:28:15
ST:Sudan:Af:48:34:6T
ST0:Southern Sudan:Af:48:34
SU:Egypt:Af:38:34
SV:Greece:Eu:28:20
SV:Mt Athos:Eu:28:20
SV5:Dodecanese:Eu:28:20
SV9:Crete:Eu:28:20
T2:Tuvalu:Oc:65:31
T31:Central Kiribati:Oc:62:31
T32:East Kiribati:Oc:61:31
T30:West Kiribati:Oc:65:31
T5:Somali:Af:48:37
T7:San Marino:Eu:28:15
TA:Turkey:As:39:20
TF:Iceland:Eu:17:40
TG:Guatemala:NA:11:07
TI:Costa Rica:NA:11:07:TE
TI9:Cocos Is:NA:11:07
TJ:Cameroon:Af:47:36
TL:Central African Rep:Af:47:36
TN:Congo:Af:52:36
TR:Gabon:Af:52:36
TT:Chad:Af:47:36
TU:Ivory Coast:Af:46:35
TY:Benin:Af:46:35
TZ:Mali:Af:46:35
UA1:European RSFSR:Eu:19,20,29,30:16:UA346,UN,UV,UW,UZ,RA,RN,RV,RW,RZ
UA1:Franz Josef Land:Eu:75:40:UZ1,RA1,RZ1
UA2:Kaliningradsk:Eu:29:15:UZ2,RA2,RZ2
UA9:Asiatic
RSFSR:As:20,21,22,23,24,25,26,30,35,75:17,18,19,23:UA0,UN,UV,UW,UZ,RA,RN,RV,RW,RZ
UB:Ukraine:Eu:29:16:UT,UY,RB,RT,RY
UC:White RSFSR:Eu:29:16:RC
UD:Azerbaijan:As:29:21:RD
UF:Georgia:As:29:21:RF
UG:Armenia:As:29:21:RG
UH:Turkoman:As:30:17:RH
UI:Uzbek:As:30:17:RI
UJ:Tadzhik:As:30:17:RJ
UL:Kazakh:As:30:17:RL
UM:Kirghiz:As:31:17:RM
UO:Moldavia:Eu:29:16:RO
UP:Lithuania:Eu:29:15:RP
UQ:Latvia:Eu:29:15:RQ

UR:Estonia:Eu:29:15:RR
V2:Antigua, Barbuda:NA:11:08
V3:Belize:NA:11:07
VE:Canada:NA:02,03,04,09,75:01,02,03,04,05:VO,VY1
VE1:Sable Is:NA:09:05:CY9
VE1:St Paul Is:NA:09:05:CY0
VK:Australia:Oc:55,58,59:29,30
VK:Lord Howe Is:Oc:60:30
VK9N:Norfolk Is:Oc:60:32
VK9X:Christmas Is:Oc:54:29
VK9Y:Cocos-Keeling Is:Oc:54:29
VK9Z:Mellish Reef:Oc:55:30
VK9Z:Willis Is:Oc:55:30
VK0:Heard Is:Af:68:39
VK0:Macquarie Is:Oc:60:30
VP2E:Anguilla:NA:11:08
VP2K:St Kitts, Nevis:NA:11:08
VP2M:Montserrat:NA:11:08
VP2V:Br Virgin Is:NA:11:08
VP5:Turks & Caicos Is:NA:11:08
VP8:Falkland Is:SA:16:13
VP8:So Georgia Is:SA:73:13:LU-Z
VP8:So Orkney Is:SA:73:13:LU-Z
VP8:So Sandwich Is:SA:73:13:LU-Z
VP8:So Shetland Is:SA:73:13:LU-Z,CE9,HF0,4K
VP9:Bermuda:NA:11:05
VQ9:Chagos:Af:41:39
VR6:Pitcairn Is:Oc:63:32
VS5:Brunei:Oc:54:28
VS6:Hong Kong:As:44:24
VU:India:As:41:22
VU7:Andaman & Nicobar Is:As:49:26
VU7:Laccadive Is:As:41:22
XE:Mexico:NA:10:06:XF
XF4:Revilla Gigedo:NA:10:06
XT:Upper Volta:Af:46:35
XU:Kampuchea:As:49:26
XV:Vietnam:As:49:26
XW:Laos:As:49:26
XZ:Burma:As:49:26
Y2:Germany E:Eu:28:14:Y3-Y9
YA:Afghanistan:As:40:21
YB:Indonesia:Oc:54:28:YC,YD
YI:Iraq:As:39:21
YJ:New Hebrides:Oc:56:32
YK:Syria:As:39:20
YN:Nicaragua:NA:11:07:HT
YO:Romania:Eu:28:20
YS:El Salvador:NA:11:07
YU:Yugoslavia:Eu:28:15:YT,4N,4O
YV:Venezuela:SA:12:09:4M
YV0:Aves Is:NA:11:08
Z2:Zimbabwe:Af:53:38

ZA:Albania:Eu:28:15
ZB:Gibraltar:Eu:37:14
ZD7:St Helena:Af:66:36
ZD8:Ascension Is:Af:66:36
ZD9:Tristan da Cunha & Gough Is:Af:66:38
ZF:Cayman Is:NA:11:08
ZK1:No Cook Is:Oc:62:32
ZK1:So Cook Is:Oc:63:32
ZK2:Niue:Oc:62:32
ZK3:Tokelau Is:Oc:62:31
ZL:New Zealand:Oc:60:32
ZL7:Chatham Is:Oc:60:32
ZL8:Kermadec Is:Oc:60:32
ZL9:Auckland Is, Campbell Is:Oc:60:32
ZP:Paraguay:SA:14:11
ZS1:So Africa:Af:57:38:ZS2456,H5,S4,S8,T4,V9
ZS2:Pr Edward & Marion Is:Af:57:38
ZS3:Namibia:Af:57:38
1A0:S M O M:Eu:28:15
1S:Spratly Is:As:50:26
3A:Monaco:Eu:27:14
3B6:Agalega & St Brandon:Af:53:39:3B7
3B8:Mauritius:Af:53:39
3B9:Rodriguez Is:Af:53:39
3C:Equatorial Guinea:Af:47:36
3C0:Annobon:Af:52:36
3D2:Fiji Is:Oc:56:32
3D6:Swaziland:Af:57:38
3V:Tunisia:Af:37:33
3X:Guinea:Af:46:35
3Y:Bouvet:Af:67:38
4S:Sri Lanka:As:41:22
4U:ITU Geneva:Eu:28:14
4U:UN HQ:NA:08:05
4W:Yemen:As:39:21
4X:Israel:As:39:20:4Z
5A:Libya:Af:38:34
5B:Cyprus:As:39:20
5H:Tanzania:Af:53:37
5N:Nigeria:Af:46:35
5R:Malagasy Rep:Af:53:39
5T:Mauritania:Af:46:35
5U:Niger:Af:46:35
5V:Togo:Af:46:35
5W:Western Samoa:Oc:62:32
5X:Uganda:Af:48:37
5Z:Kenya:Af:48:37
6W:Senegal:Af:46:35:6V
6Y:Jamaica:NA:11:08
7O:PDR Yemen:As:39:21
7P:Lesotho:Af:57:38
7Q:Malawi:Af:53:37
7X:Algeria:Af:37:33

8P:Barbados:NA:11:08
8Q:Maldive Is:As:41:22
8R:Guyana:SA:12:09
9G:Ghana:Af:46:35
9H:Malta:Eu:28:15
9J:Zambia:Af:53:36
9K:Kuwait:As:39:21
9L:Sierra Leone:Af:46:35
9M2:W Malaysia:As:54:28
9M6:E Malaysia:As:54:28:9M8
9N:Nepal:As:42:22
9Q:Zaire:Af:52:36
9U:Burundi:Af:52:36
9V:Singapore:As:54:28
9X:Rwanda:Af:52:36
9Y:Trinidad & Tobago:SA:11:09
~~:Abu Ail, Jabal at Tair:As:39:21

From 2944134737688906581
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ccdf678e3171acb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-05 10:39:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site tektronix.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!stephenc
From: stephenc@tektronix.UUCP (Stephen Coan)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks
Message-ID: <2955@tektronix.UUCP>
Date: Thu, 5-Jul-84 13:39:24 EDT
Article-I.D.: tektronix.2955
Posted: Thu Jul 5 13:39:24 1984
Date-Received: Sat, 7-Jul-84 01:13:56 EDT
References: <2812@ecsvax.UUCP>, <858@akgua.UUCP> <187@mit-athena.ARPA>
Organization: Tektronix, Beaverton OR
Lines: 24

NO-CODE will turn the 2 meter and possibly 40 cm bands into a junkpile.
Those that think a tough technical test should remember how many books
are out there to help people pass the present technical tests, all the
way to extra.
   I knew of a woman, totally non-techninical, who went and got a First
Class ticket by reading a book. She did this back in the late 60's
because she was working a night shift at a radio station, and this would
help keep the costs down. Do you think she would have been able to
perform any First Class ticket functions if required? They told her
what to do, and to have her call the engineer if anything happened.
   I was one of those who complained about the code requirement for
years until I sat down and did it. When you realize that 5 wpm is only
one character in about two seconds, all you have to do is learn to

recognize the characters and numbers of the code. Two seconds is a fairly long time to recognize a character.
   At least it shows that a person is genuinely interested in the service. Also, for those that think that code doesn't get used on VHF, there are many places where the code is used. For one, it identifies most of the repeaters that are in use. When in an unfamiliar area, this may be the only way to know which call sign for the repeater is current. Also, those repeaters that have autopatch capabilities usually send the number information back in code as a check prior to dialing the number.
   Code exists most everywhere in Amateur radio, and you only have to listen to find some.

From -306086786472887848
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b8158e0123c8090d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-05 13:12:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!tektronix!hplabs!sri-unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: Another good fight...
Message-ID: <1609@sri-arpa.UUCP>
Date: Thu, 5-Jul-84 16:12:00 EDT
Article-I.D.: sri-arpa.1609
Posted: Thu Jul 5 16:12:00 1984
Date-Received: Sat, 7-Jul-84 01:40:07 EDT
Lines: 9

Hey, why doesn't somebody else start a riot by tossing out another controversial topic (like the code / nocode argument) to see what happens.

Lessee, what's a good topic ? I know, how about this: are DX nets a good thing or are they really rotten? That ought to get some comments!

-de W3IKG
Heh, heh, this ought to be fun to watch...

From 208361888662660438
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ccdf678e3171acb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-05 14:13:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!tektronix!hplabs!hao!seismo!brl-tgr!ron
From: ron@brl-tgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio

Subject: Re: Morse code stinks
Message-ID: <3098@brl-tgr.ARPA>
Date: Thu, 5-Jul-84 17:13:36 EDT
Article-I.D.: brl-tgr.3098
Posted: Thu Jul 5 17:13:36 1984
Date-Received: Sat, 7-Jul-84 07:10:30 EDT
References: <2812@ecsvax.UUCP> <858@akgua.UUCP>
Organization: Ballistics Research Lab
Lines: 6

I really suprised the control stations on our repeater system here in
Baltimore that I noticed they changed the Call Sign on the repeater.
Not many people notice the morse code identifier changed. I don't think
many can copy it.

-Ron

From 5548951876355415958
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-05 17:58:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!uiucdcs!uok!
mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks - (nf)
Message-ID: <2800006@uok.UUCP>
Date: Thu, 5-Jul-84 20:58:00 EDT
Article-I.D.: uok.2800006
Posted: Thu Jul 5 20:58:00 1984
Date-Received: Sat, 7-Jul-84 07:29:28 EDT
References: <2800003@uok.UUCP>
Lines: 9
Nf-ID: #R:uok:2800003:uok:2800006:000:287
Nf-From: uok!mpackard   Jul 5 19:58:00 1984

#R:uok:2800003:uok:2800006:000:287
uok!mpackard   Jul 5 19:58:00 1984

Peter allan,
   1 WPM would be too much to ask for! Even 1 word per week gets my
anger when you require it. I think the requirements to get a licsense
should be to build your own station or be able to fix your radio instead
of sending it back to japan. But this is just as rediculas.

From -9217935726253901231
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,1219d82b16785dae,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-06 05:57:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some 3.0 - 4.0 MHz freqs
Message-ID: <2306@ihuxf.UUCP>
Date: Fri, 6-Jul-84 08:57:47 EDT
Article-I.D.: ihuxf.2306
Posted: Fri Jul 6 08:57:47 1984
Date-Received: Sat, 7-Jul-84 01:28:01 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 37

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f     3.1900 KK2XHJ   Lamont Doherty Geo O, experimental (USA-wide)
f     3.2024 KQ2XKM   National Ski Patrol, experimental (USA-wide)
f     3.2024 KQ2XYZ   National Ski Patrol, experimental (USA-wide)
f     3.2825 KM2XLF   Rockwell International, experimental (USA-wide)
f     3.2844 KJS459   Teledyne, Inc (USA-wide)
f     3.2934 KFR241   Teledyne, Inc (USA-wide)
f     3.2935 KFR241   Teledyne, Inc (USA-wide)
f     3.3012 KTU370   Offshore Navigation (USA-wide)
f     3.3016 KTU370   Offshore Navigation (USA-wide)
f     3.3024 KFR241   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3024 KJS459   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3025 KFR241   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3044 KJS459   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3054 KFR241   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3055 KFR241   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3064 KRJ260   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3074 KJS459   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3074 KRJ260   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3084 KRJ260   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3094 KRJ260   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3104 KJS459   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3134 KJS459   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3154 KFR241   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3155 KFR241   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3164 KJS459   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3164 KRJ260   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3184 KFR241   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3184 KRJ260   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3185 KFR241   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3194 KJS459   Teledyne, Inc, radiobeacon (USA-wide)
f     3.3224 KJS459   Teledyne, Inc, radiobeacon (USA-wide)

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Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -6148317507727022434
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f4ebdf49c242933f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-06 10:59:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site tekig.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!tekig!petel
From: petel@tekig.UUCP (Pete Lancashire)
Newsgroups: net.ham-radio
Subject: scanner freqs: KEEP THOSE LISTS COMMING !!!!
Message-ID: <2162@tekig.UUCP>
Date: Fri, 6-Jul-84 13:59:23 EDT
Article-I.D.: tekig.2162
Posted: Fri Jul 6 13:59:23 1984
Date-Received: Sat, 7-Jul-84 07:30:42 EDT
Organization: Tektronix, Beaverton OR
Lines: 15

[line 1]
I for one find the scanner freqs in the VHF-UHF area useless but keep them
comming, I save them all and pass them on to those that are interested,
I feel that for every one who complains, there are ten who have a different
opinion.

I once had my HAM license, but gave it up after deliberate jamming on 40
meters, it kind of took the fun out of it.

I have ordered my own set of FCC microfiche and being an avid HF listener I
find such data of much interest. Maybe I could help contribute when my
fiche arrives (here at TEK all net.flame is trashed).

Pete Lancashire   ...tektronix!tekig!petel (503) 627-2566

From 7674258858316027948
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2cace3a975a2a11b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-06 11:34:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabsc.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!hplabsc!labelle
From: labelle@hplabsc.UUCP
Newsgroups: net.ham-radio
Subject: Re: Bulletins, Morse Code, and other stuff
Message-ID: <1996@hplabsc.UUCP>
Date: Fri, 6-Jul-84 14:34:10 EDT
Article-I.D.: hplabsc.1996

Posted: Fri Jul 6 14:34:10 1984
Date-Received: Sun, 8-Jul-84 00:08:27 EDT
References: <1953@pur-ee.UUCP> <2301@ihuxf.UUCP>
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 8

Hey Bob, don't listen to the idiots on this net! I don't have a scanner so I don't read those bulletins; but keep 'em comi'n! I do read the ARRL bulletins. GREAT!

GEORGE WB6YZZ

From 5546478928038658781
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ccdf678e3171acb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-06 11:47:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: notesfiles - hp internal release 1.2; site hp-pcd.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!hp-pcd!nathanm
From: nathanm@hp-pcd.UUCP
Newsgroups: net.ham-radio
Subject: re: Morse code stinks
Message-ID: <7000002@hp-pcd.UUCP>
Date: Fri, 6-Jul-84 14:47:00 EDT
Article-I.D.: hp-pcd.7000002
Posted: Fri Jul 6 14:47:00 1984
Date-Received: Tue, 10-Jul-84 03:47:22 EDT
Organization: Hewlett-Packard Portable Computer Division - Corvallis, OR
Lines: 49
Nf-ID: #N:hpcvre:7000002:000:2299
Nf-From: hpcvre!nathanm   Jul 6 13:47:00 1984

> I'd be happy with a more thorough technical test to separate those who
> REALLY know radio & electronics theory from those who Bash their way into
> ham radio.
>
> The basic idea of the code is to keep the hobby clean-- unlike CB. While
> the code test has served that purpose in the past, a comprehensive technical
> test could be used today, when knowing ASCII is more useful than morse code.
>
>
> Bob KG6HV

Alright, I confess, I've never learned code. Perhaps that's one of the few reasons I am not a ham at this moment. But while I don't want to take on the establishment and all that implies, I am a little bothered by the "keep the hobby clean" attitude.

Yes, I agree, let's keep the idiots off the air. As a pilot, I am similarly interested in keeping idiots out of the sky. But I don't believe in the "I had to do it, so you have to do it also" attitude. It's too damn self-serving. If anything, I notice aviation magazines increasingly alarmed at the growing difficulty of getting an airmans certificate, worried that too many people are being scared away from aviation. How exclusive do you want amateur radio to be?

I found the comment about CB quite telling. No, I'm not one, but I read a most interesting comment in net.auto. In an article entitled something like "an inexpensive radar detector", the author touted the advantages of CB as a radar detector (channel 19 or thereabouts) and in emergencies. The author also pointed out that the crap that congested the airwaves during the height of CB's popularity has, by and large, disappeared. In other words, the problem pretty much corrected itself once people got over the novelty of being radio operators.

Times have changed. Amateur radio operators are no longer blazing the trails they once did. DX'ing halfway around the world, while still not trivial, is about as innovative as, well, crossing the Atlantic. I've done the latter in a 747 and it's *really* dull. I hope I'm not being too critical in suggesting that amateur radio has passed its pioneering days in every way except in attitude. Maybe it's time to rethink the code requirement and ask whether it still belongs.

Come to think of it, are they still asking questions about triodes on the tests?

Nathan Meyers
hplabs!hp-pcd!nathanm

From -2446794661462511337
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,41ef47d416909a82
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-06 16:54:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!sri-unix!CarpenterCR.dlos@XEROX.ARPA
From: CarpenterCR.dlos@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: aluminum
Message-ID: <1680@sri-arpa.UUCP>
Date: Fri, 6-Jul-84 19:54:39 EDT
Article-I.D.: sri-arpa.1680
Posted: Fri Jul 6 19:54:39 1984
Date-Received: Mon, 9-Jul-84 00:49:41 EDT
Lines: 7

Pound the ends flat and bolt them together.

Chuck...
W5USJ

Oops! Forgot to say - drill a hole - between flat and bolt.

From 7302095858051784527
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4b69ead8ab84d27c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-07 14:39:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: new Kenwood VHF/UHF ham gear to be announced
Message-ID: <2307@ihuxf.UUCP>
Date: Sat, 7-Jul-84 17:39:43 EDT
Article-I.D.: ihuxf.2307
Posted: Sat Jul 7 17:39:43 1984
Date-Received: Sun, 8-Jul-84 00:30:47 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 38

x
New Kenwood Amateur VHF/UHF Gear to be Announced

Kenwood will soon announce a series of new VHF/UHF radios for the amateur. Among these will be the TR-2600, a 2 meter walkie-talkie with continuous receive coverage of 140 - 160 MHz, allowing monitoring of some military, public service, and business frequencies. This radio resembles the TR-2500 physically, but has a more colorful front panel. Traditional programmable CTCSS will be optional.

The TR-2500 will contain a new Kenwood designed digital squelch system. From what little information I've seen, it looks like one's call letters, among other information, will be sent in ASCII during each transmission. An optional, outboard accessory 1 line LCD display will permit display of these call letters. This appears to be a new form of selec- tive calling scheme for amateurs.

Other new Kenwood offerings will include:

o+ A new 2 and 3/4 meter combination FM transceiver, smal-

ler than the present TW-4000

o+ a new low cost series of 2 and 3/4 meter walkie talkies with thumbwheel switches (a la the ICOM 2AT and Yaesu FT203R), with much hype about robot manufacturing technology and chip components

o+ a multi-mode 2 meter transceiver that looks like the TS400.

Watch QST and other publications for details and pictures.

--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 2622298318385800916
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6d8180063d01603,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-08 05:19:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sbcs.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!hao!seismo!cmcl2!philabs!sbcs!root
From: root@sbcs.UUCP
Newsgroups: net.ham-radio
Subject: TAPR TNC board wanted
Message-ID: <656@sbcs.UUCP>
Date: Sun, 8-Jul-84 08:19:16 EDT
Article-I.D.: sbcs.656
Posted: Sun Jul 8 08:19:16 1984
Date-Received: Thu, 12-Jul-84 00:31:52 EDT
Organization: SUNY at Stony Brook
Lines: 10

Are there any Amateur suppliers (e.g. Ham Radio Outlet, etc) which stock the TAPR TNC Boards? I would prefer a dealer that will accept plastic money & telephone orders.

Thanks,

Rick, WB2CFV

PS. I know about the AEA PKT-1 board - it is too expensive ($589), and is not yet available.

From -64068502583607031
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2cace3a975a2a11b

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-08 11:26:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!uiucdcs!uok!
mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Re: Bulletins, Morse Code, and other stu - (nf)
Message-ID: <2800007@uok.UUCP>
Date: Sun, 8-Jul-84 14:26:00 EDT
Article-I.D.: uok.2800007
Posted: Sun Jul 8 14:26:00 1984
Date-Received: Wed, 11-Jul-84 00:21:26 EDT
References: <1953@pur-ee.UUCP>
Lines: 8
Nf-ID: #R:pur-ee:-195300:uok:2800007:000:134
Nf-From: uok!mpackard   Jul 8 13:26:00 1984

#R:pur-ee:-195300:uok:2800007:000:134
uok!mpackard   Jul 8 13:26:00 1984

Please Bob,
  Just ignore him and accidentaly keep the stuff coming!
My scanner log won't know what to do without you.
uok!mpackard

From -5214673800257656848
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b8b88a0e87b5e2f2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-08 21:30:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: assorted USA-wide licensed scanner freqs
Message-ID: <2296@ihuxf.UUCP>
Date: Mon, 9-Jul-84 00:30:55 EDT
Article-I.D.: ihuxf.2296
Posted: Mon Jul 9 00:30:55 1984
Date-Received: Wed, 4-Jul-84 03:14:49 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 111

f 152.870 KET404   ABC aka/American Broadcasting, motion pic ind freq, press
(USA-wide)
f 469.875 KA68288 Adler Planetarium, museum (USA-wide)
f   35.04   KA95928 Advance Security Inc (USA-wide)

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f  464.500  KA83888  American Aerolights, entertainment (USA-wide)
f  151.625  KV8250   American Bar Assn (USA-wide)
f  151.625  KA81571  American Fireworks, entertainment (USA-wide)
f  469.500  KA78774  American Numismatic, coin collecting, entertainment (USA-
wide)
p   47.42   several  American Red Cross (USA-wide) medical
f  151.625  KP4308   Amusements of America, entertainment (USA-wide)
f  464.500  KA53020  Atlanta Rhythm Section, entertainment (USA-wide)
f  466.500  KZ8788   Atlas Guard Svc, security, Chicago (USA-wide)
f  464.550  KNHB984  Auction Way Co, entertainment (USA-wide)
h  151.625  WSE579   Avionics Associates Inc, id="AAI base", Joliet (USA-wide)
f  464.825  KE3082   Ayr-Way Stores, Gurnee (USA-wide)
f   33.14   KG3221   Bingo King Co Inc, entertainment (USA-wide)
o  151.625  KA81615  Blomsess Allstars Inc, carnival, entertainment (USA-wide)
o  151.625  KA86612  Blomsess Allstars Inc, carnival, entertainment (USA-wide)
f  154.600  KA47051  Bloomingdales Inc, stores (USA-wide)
f  154.600  KZ9967   Brookfield Zoo aka/Chicago Zoological Society (USA-wide)
f  154.570  KM9190   Bruehl, Alan, Naperville (USA-wide)
f  464.500  KA43296  Chicago Lyric Opera, entertainment (USA-wide)
f  464.550  KB35490  Chicago Lyric Opera, entertainment (USA-wide)
f  464.550  KNAA310  Conference & Meeting... (USA-wide) conventions
f  464.550  KB21108  Convention Exhibits (USA-wide) conventions
f  462.575  KAB8747  CPP Security Svc (USA-wide)
f  469.500  KAB8747  CPP Security Svc (USA-wide)
f  461.050  KNFP862  Creative Car Craft (USA-wide)
f  464.500  KA90210  Cross Country Concerts, entertainment (USA-wide)
p  460.825  KVT401   Delta Airlines, portables (USA-wide)
f  462.200  KAD6260  Disabled American Veterans (USA-wide)
f  462.625  KAD6260  Disabled American Veterans (USA-wide)
f  464.600  KLL957   Disney, Walt Distribu..., entertainment (USA-wide)
f  464.500  KA44933  Exhibitgroup Chicago (USA-wide) conventions
f  464.500  KJ3264   Festival Productions, entertainment (USA-wide)
f  464.500  WYZ899   Festival Productions, entertainment (USA-wide)
f   35.04   KAU918   Gallione Detective Agency (USA-wide)
f  469.550  KA3362   Gibb, Andy, entertainment (USA-wide)
f   33.14   KD4131   Godfrey, Arthur Productions, entertainment (USA-wide)
f   35.02   KD4131   Godfrey, Arthur Productions, entertainment (USA-wide)
f  464.550  KB29087  Good Displays Inc, entertainment (USA-wide) conventions
f  469.500  KB22339  Grateful Dead Productions, entertainment (USA-wide)
f  469.550  KB22339  Grateful Dead Productions, entertainment (USA-wide)
f  457.525  KX9443   Great America, Marriott's (USA-wide) entertainment
f  457.550  KX9443   Great America, Marriott's (USA-wide) entertainment
f  457.575  KX9443   Great America, Marriott's (USA-wide) entertainment
f  457.600  KX9443   Great America, Marriott's (USA-wide) entertainment
f  465.900  KX9443   Great America, Marriott's (USA-wide) entertainment
f  465.975  KX9443   Great America, Marriott's (USA-wide) entertainment
f  466.050  KX9443   Great America, Marriott's (USA-wide) entertainment
f  466.125  KX9443   Great America, Marriott's (USA-wide) entertainment
f  466.200  KX9443   Great America, Marriott's (USA-wide) entertainment
f  466.275  KX9443   Great America, Marriott's (USA-wide) entertainment
f  466.350  KX9443   Great America, Marriott's (USA-wide) entertainment
f  466.425  KX9443   Great America, Marriott's (USA-wide) entertainment
f  467.750  KX9443   Great America, Marriott's (USA-wide) entertainment
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f 467.775 KX9443   Great America, Marriott's (USA-wide) entertainment
f 467.800 KX9443   Great America, Marriott's (USA-wide) entertainment
f 467.825 KX9443   Great America, Marriott's (USA-wide) entertainment
f 467.850 KX9443   Great America, Marriott's (USA-wide) entertainment
f 467.875 KX9443   Great America, Marriott's (USA-wide) entertainment
f 467.900 KX9443   Great America, Marriott's (USA-wide) entertainment
f 467.925 KX9443   Great America, Marriott's (USA-wide) entertainment
f   35.04   KVB209   Group W Cable Inc, CATV (USA-wide)
f 151.955 KVB209   Group W Cable Inc, CATV (USA-wide)
f   35.04   KVB365   Heart of Dixie Shows, entertainment (USA-wide)
f 462.675 KAC1128 Hot Line REACT Team (USA-wide)
f 462.600 KAD6587 Humane Society (USA-wide)
f 464.550 KB40100 Jam Productions Inc, entertainment (USA-wide)
f 464.500 KXR313   JC Penney, stores (USA-wide)
f 154.600 KB8770   K-Mart Apparel Corp, stores (USA-wide)
f 464.550 KB28328 Kiwanis International, entertainment (USA-wide)
f 122.90   KN4973   Kneitel, Thomas S (USA-wide)
f 123.10   KN4973   Kneitel, Thomas S (USA-wide)
f 151.625 KB24989 Kneitel, Thomas S (USA-wide)
f 154.600 KZ9061   Liberty Trucking Co, Naperville (USA-wide)
f 464.550 KB38960 Logan Productions Inc, entertainment (USA-wide)
f 464.550 KB29084 Lyric Opera House Inc, entertainment (USA-wide)
f 151.865 KEU875   Macy, R H & Co, stores (USA-wide)
f 151.865 KJT278   Macy, R H & Co, stores (USA-wide)
f 151.865 KTS858   Macy, R H & Co, stores (USA-wide)
f 154.600 KR5188   Macy, R H & Co, stores (USA-wide)
h 153.110 KA4932   Mobil Oil Telcom, Joliet refinery (Elwood, USA-wide)
h 151.625 KH5418   Motorola Inc (USA-wide)
h 151.625 KAZ418   Motorola Inc, call assigned to someone else in '84 fiche
(USA-wide)
h 151.625 KAZ972   Motorola Inc, call assigned to someone else in '84 fiche
(USA-wide)
f 469.550 KNHD836 Museum of Science & ... (USA-wide)
f 464.500 KA53384 Naperville Excavating (USA-wide)
f 464.500 KA63922 Oak Ridge Boys Leasing, entertainment? (USA-wide)
f 154.570 KU4354   Olive Trees, Yorkville (USA-wide)
f 469.400 KA20017 Pioneer Music Corp, entertainment (USA-wide)
f 462.700 KAC6072 Rehabilitation Institute, Chicago (USA-wide)
p 151.625 ?   Ringling Brothers, Barnum & Bailey Circus, entertainment
(USA-wide)
f 151.955 KA90412 Rosedale Amusements, entertainment (USA-wide)
f 154.570 KN9103   RSVP Productions, entertainment? (USA-wide)
f 154.600 KL8196   Saks Fifth Avenue, stores (USA-wide)
f 154.570 KO4297   Skokie Country Club, Plainfield (USA-wide)
f 464.550 KB22719 Smith Concessions, entertainment (USA-wide) conventions
f 464.550 KNEP724 Stage Sound Inc, entertainment (USA-wide)
f 464.550 KA33573 Summer Nights Inc, entertainment (USA-wide)
f 467.850 KA2372   Swaggart, Jimmy Evangelical, entertainment? (USA-wide)
f 464.550 KA52180 Teddy Bear Productions, entertainment (USA-wide)
f 464.550 KNHA417 Trade Show Specialists (USA-wide) conventions
f 464.550 KB37502 Vilsmeier Auction Co, entertainment (USA-wide)
f 464.500 WQF888   Wackenhut Corp, security agency (USA-wide)
f 467.900 KV2689   Wackenhut Corp, security agency (USA-wide)

f 466.9375 KF8909   WGN Continental Broadcasting, Streator (USA-wide)
f 154.515 KF8858   Windham Security Svc, Chicago-based (USA-wide)
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==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -4555748825894590622
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e8042a4ac525234d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-09 05:18:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: No-code: the search for reason (longish flame)
Message-ID: <1768@sri-arpa.UUCP>
Date: Mon, 9-Jul-84 08:18:00 EDT
Article-I.D.: sri-arpa.1768
Posted: Mon Jul 9 08:18:00 1984
Date-Received: Fri, 13-Jul-84 01:25:37 EDT
Lines: 45

Right on, Pete. Andy, I enjoyed your pitch also. Also the suggested new exam questions from Mike, K3MC, which however I thought were not sufficiently demanding if they were intended as a substitute for Morse code proficiency.

I also lament the dearth of "real" hams these days who can wire up fully synthesized full-duplex quadraphase multiplex SSB transceivers out of parts from an old discarded telephone handset. Or even fix their own equipment when it breaks.

My own reply comments to the FCC, though stressing the emergency communications value of the code, also allowed as how a code-free license might not be too bad if it substituted a tough technical examination and if it restricted operations to the less crowded bands above 220 MHz.

Since the issue is dead at the FCC for now, I submit that it would be constructive for us all to shift our energies to the task of encouraging and helping newcomers to the hobby to get past the code requirement.

For example, does anybody out there have a code practice program that will run on reasonable hardware? I have one which is in Fortran and runs on a lot of terminals, using the beeper to generate the sound. Unfortunately this VT-100 won't sustain the beep so I can't make it work on this one. Does anybody know how to modify the VT-100 so the beep timer will "retrigger" without a glitch? Is there a simple timer chip substitution that will do this? I haven't looked into it. The Lear-Siegler ADM-3 worked fine at about 7WPM and the Tektronix graphics terminals would go up to about 20 WPM with very nice keying quality. If anybody would like a copy of the program I would be glad to forward it over the net. (Please allow a week or two for delivery

as I have to locate the tape and get it read in and maybe fool around with format problems.)

If there is any interest, I for one could run some code practice on the air for anybody in the East or Midwest. Also, for Novices or Techs trying to upgrade, I would be happy to make skeds for code practice. I could also be persuaded to record code practice on tape for anybody who wants to send me a blank tape (if demand is not too great).

Is anybody else out there willing to help in these ways? If so, perhaps you could identify yourself to those who could use your help. Let's not make everybody wait 12 years for the FCC to look at the issue again! Let's encourage them to go ahead and learn the code!

73 de W3IKG
jhs at mitre-bedford

From -9066596320138209575
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7fca96ed8b776f17,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-09 07:27:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some 25 - 450 kHz freq listings
Message-ID: <2308@ihuxf.UUCP>
Date: Mon, 9-Jul-84 10:27:36 EDT
Article-I.D.: ihuxf.2308
Posted: Mon Jul 9 10:27:36 1984
Date-Received: Tue, 10-Jul-84 01:38:43 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 28

f   .02502 KA4043   Seiscom Delta United, petroleum industry (USA-wide)
f   .02506 KA4043   Seiscom Delta United, petroleum industry (USA-wide)
f   .02510 KA4043   Seiscom Delta United, petroleum industry (USA-wide)
f   .02514 KA4043   Seiscom Delta United, petroleum industry (USA-wide)
f   .02518 KA4043   Seiscom Delta United, petroleum industry (USA-wide)
f   .02522 KA4043   Seiscom Delta United, petroleum industry (USA-wide)
f   .02526 KA4043   Seiscom Delta United, petroleum industry (USA-wide)
f   .02530 KA4043   Seiscom Delta United, petroleum industry (USA-wide)
f   .08482 KTS332   Decca Survey Systems, radiobeacon (USA-wide)
f   .11310 KTS332   Decca Survey Systems, radiobeacon (USA-wide)
f   .12724 KTS332   Decca Survey Systems, radiobeacon (USA-wide)
f   .21551 WRLB2889 Mobil Oil Telcom Ltd, aerobeacon (USA-wide)
f   .21551 several Mobil Oil Telcom Ltd, aerobeacon (USA-wide)
f   .22551 WRLB2095 Exxon Communications, aerobeacon (USA-wide)

```
f      .23851 WRLB2486 Marathon Oil Company, aerobeacon (USA-wide)
f      .28151 WRLB2858 Shell Communications, aerobeacon (USA-wide)
f      .28151 WRLB3129 Shell Communications, aerobeacon (USA-wide)
f      .35951 WRLB3154 Shell Communications, aerobeacon (USA-wide)
f      .35951 WRLB3155 Shell Communications, aerobeacon (USA-wide)
f      .36650 WRLB2628 Penrod Drilling Company, aerobeacon (USA-wide)
f      .36650 WRLB3047 Penrod Drilling Company, aerobeacon (USA-wide)
f      .38800 WRLB2940 Union Oil Company of..., aerobeacon (USA-wide)
f      .38951 WRLB2937 Shell Communications, aerobeacon (USA-wide)

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==============================================================================
Bob Parnass,  AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414


From -4858371981362146247
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f1cc977f02e38024,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-09 09:04:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)
Newsgroups: net.ham-radio
Subject: RE: CODE
Message-ID: <28@whuxl.UUCP>
Date: Mon, 9-Jul-84 12:04:03 EDT
Article-I.D.: whuxl.28
Posted: Mon Jul  9 12:04:03 1984
Date-Received: Tue, 10-Jul-84 01:44:52 EDT
Organization: Bell Communications Research, Inc.
Lines: 13

<chomp>
I thoroughly agree with W3IKG and others who have noted that CW is the most
effective way to get through in an emergency when one has limited equipment,
minimum power, and perhaps a fair amount of QRN, QSB, QRN and what have you
to go with it.
Lets face it, the reason the FCC (and appropriate organizations in other
countries) have given us the spectrum space they have is because hams are a
national resource and can provide emergency communications.  In addition,
when the conditions are against you in an emergency, you need all the help
you can get, which includes a mode of transmission that can get through best
and that usually is CW.
Regards,
Bill Mitchell, WB2IAU


From 4852579388426078877
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,3229d9e6ac0ce5da,start
X-Google-Attributes: gid15c702,public
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X-Google-Thread: 140f6b,3229d9e6ac0ce5da,start
X-Google-Attributes: gid140f6b,public
X-Google-Thread: 151e61,3229d9e6ac0ce5da,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-09 09:07:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxl.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!whuxl!wjm
From: wjm@whuxl.UUCP (MITCHELL)
Newsgroups: net.ham-radio,net.audio,net.music.classical
Subject: Its good to be back
Message-ID: <29@whuxl.UUCP>
Date: Mon, 9-Jul-84 12:07:41 EDT
Article-I.D.: whuxl.29
Posted: Mon Jul 9 12:07:41 1984
Date-Received: Tue, 10-Jul-84 01:45:19 EDT
Organization: Bell Communications Research, Inc.
Lines: 6

For those of you who were wondering where I've been, I'm alive and well thank
you and back on the net, since the netnews problem on whuxl that prevented one
from sending news has been fixed (thanks to the WH systems people, especially
Ed Lipinsky). Please note my new electronic address.
Regards,
Bill Mitchell (whuxl!wjm)

From -2918157420657613022
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b8158e0123c8090d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-07-09 09:48:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!hao!seismo!brl-tgr!ron
From: ron@brl-tgr.UUCP
Newsgroups: net.ham-radio
Subject: Re: Another good fight...
Message-ID: <3128@brl-tgr.ARPA>
Date: Mon, 9-Jul-84 12:48:33 EDT
Article-I.D.: brl-tgr.3128
Posted: Mon Jul 9 12:48:33 1984
Date-Received: Thu, 12-Jul-84 04:47:49 EDT
References: <1609@sri-arpa.UUCP>
Organization: Ballistics Research Lab
Lines: 4

No, no. Let's really heat things up by discussing the merits of tying up
the bands with large scale contests.

-Ron

From 1152420723675593330
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba45170fd8f6b30c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-19 11:59:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!floyd!cmcl2!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Re: Scanner Info Wanted
Message-ID: <3054@brl-tgr.ARPA>
Date: Tue, 19-Jun-84 14:59:17 EDT
Article-I.D.: brl-tgr.3054
Posted: Tue Jun 19 14:59:17 1984
Date-Received: Thu, 21-Jun-84 05:43:47 EDT
References: <369@hou2a.UUCP>
Organization: Ballistics Research Lab
Lines: 75

I own a couple different Regency scanners, and have bought and tried another model Regency before giving it to a relative. A co-worker has a Regency which he has discussed with me. I have had a Bearcat crystal scanner and have read some discussions of Bearcat programmables. The other brands to keep in mind are JIL and Radio Shack. Regency, Bearcat, and JIL are all available from discounters and mailorder houses, both true wholesalers and quasi-wholesalers (ones who act like wholesalers but happily sell to anyone, even without a business name), so list prices on all these are meaningless and you should either buy strictly by price comparisons (and be prepared to handle any warranty repairs or problems yourself), or resign yourself to paying more at a local dealer to have someone to handle problems or complaints.

Because of the easy availability of lower-priced models in these three brands, I have never paid attention to Radio Shack, as you have to pay either a fixed price or catch these on sale, and even on sale they are more than the others.

OK, enough intro. My Regency models have all worked fine. All were bought from wholesalers by mail-order, and worked OK out-of-the-box. The models were the K500, K100, and ACT-W-10 with Digital Frequency Selector. All of these are now discontinued. THe K500 has a bunch of pre-programmed frequencies, 40 user-programmable channels, and various features. The K100 is similar with fewer goodies. The other is an unusual model which uses metal combs plugged into sockets on the rear panel which short out a diode matrix for frequency programming, and also an external box with switches to select the frequency for one memory. The K500 & K100 are plagued with a number of birdies, spurious oscillator frequencies which behave like an unmodulated carrier and interrupt searches and prevent reception on those frequencies. Those birdies are my main gripe with

these programmable Regency models. I believe newer models have improved this condition, but I know no details.

The co-worker's Regency (I believe an M400) has been back and forth to the factory for repeated repair of a bad membrane keypad. My K500 has a similar keypad but worked fine. I don't know if it is a "lemon" situation or a difference in subassembly design.

I have read comments regarding the programmable Bearcats in the newsletter of the International DXers Club of San Diego, written by the late Larry Brookwell. (This club is now in limbo following Larry's death in December 83.) Larry had a couple Bearcat models and talked with dealers, and reported a seeming tendency to unreliability. His were back for repair repeatedly, and he reported that dealers said this was common. The crystal Bearcat I had I gave to my mother after getting my first programmable; the audio on it was never clear enough to suit me. I believe that the crystals might have aged or been cut slightly off-frequency.

The JIL models have wide frequency coverage, but I believe they all use external plug-transformer power supplies, which I dislike. I have no info on their performance or reliability.

Based on the above, I continue to recommend Regency. I may buy a Bearcat if I could get a big enough bargain, though, just to try the different design and approach. None of my scanners have the aircraft band, and I would like to have this. However, I do not think that it is as popular as the other ranges, for several reasons. 1) It is AM, not FM, which adds circuitry and cost to the scanners that have it; 2) Unless you are an aviator or aviation buff or live near an airport, there is little to be heard except aircraft in flight, which transmit briefly on many different frequencies and who seldom say anything interesting, unless you luck out in hearing a skyjack or disaster. However, having that band is necessary to using scanner accessories, such as the "Globe-Scan" shortwave converter, which lets you use your scanner as a digital-readout shortwave receiver, or the "Scanverter" which converts the military UHF 200-400 MHz range to the aircraft band. (Both of these are from Grove Enterprises.)

Whew! Hope the above was of interest!

Will

From 1070364912868450432
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,83f5f072b9fbebe5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-19 13:04:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!vax135!houxz!houxm!ihnp4!zehntel!hplabs!sri-unix!
PADDEN@SRI-KL.ARPA

From: PADDEN@SRI-KL.ARPA
Newsgroups: net.ham-radio
Subject: REQUEST TO RECEIVE MAIL
Message-ID: <1036@sri-arpa.UUCP>
Date: Tue, 19-Jun-84 16:04:26 EDT
Article-I.D.: sri-arpa.1036
Posted: Tue Jun 19 16:04:26 1984
Date-Received: Fri, 22-Jun-84 06:52:37 EDT
Lines: 6

I am interested in receiving mail relevant to amateur radio. My call is
WA6YFS, of Newark, CA.
Thank You,
Rob Padden

From -6000496156432973729
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1a98a278eada72c9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-20 07:31:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!floyd!vax135!houxz!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: scanner vs scanner & Bearcat -> Uniden
Message-ID: <2265@ihuxf.UUCP>
Date: Wed, 20-Jun-84 10:31:10 EDT
Article-I.D.: ihuxf.2265
Posted: Wed Jun 20 10:31:10 1984
Date-Received: Thu, 21-Jun-84 07:21:50 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 39

x
       At last count, there were about 21 scanners here (got
       another   one yesterday) of various brands, not all on at
     one
       time! I   have serviced Regency, Bearcat, Plectron, Sonar,
       Radio Shack, Craig, SBE, Motorola, and Heathkit monitor
       receivers to name a few, and still have 2 Tennelecs waiting
       for attention which they will probably never get.

       Scanner features often differ not only by model but
      by
       manufacturer.   For instance, Bearcat programmables allow
       enable/disable of the delay function on a per-channel basis.
       Regency   only permits the delay to be enabled/disabled glo-
       bally, that is, for all the channels at one time.

Both Bearcat and Regency, as well as Radio Shack offer some good models. Stay away from the Bearcat 100, and scanners made by JIL, Fox, Tennelec, and Robyn.

In the name of cost cutting, some newer models have done away with the concept of a "channel bank", i.e. the ability to select/deselect a group of channels at a time. The bank concept was a good one. It may be inconvenient to operate a 30 channel scanner without banks (e.g. Regency MX3000, HX1000A) if you operate the way many scanner hobbyists do.

Heath's new scanner is really a Bearcat 20/20 in semi-kit form, and should appeal to those who want to monitor the commercial aircraft band.

Bearcat was just purchased by Uniden, maker of radios and cordless telephones.

My favorites are the Bearcat 300, the Regency M400 (just discontinued), and the Regency K500 (predates the M400).

--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -8737999094043162522
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 105955,f4516ff5f735d816,start
X-Google-Attributes: gid105955,public
X-Google-Thread: 151e61,f4516ff5f735d816,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 132415,f4516ff5f735d816,start
X-Google-Attributes: gid132415,public
X-Google-ArrivalTime: 1984-06-20 09:18:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxv.UUCP
Path: utzoo!watmath!clyde!floyd!vax135!houxz!houxm!houxv!ads
From: ads@houxv.UUCP (A.SCHAPIRA)
Newsgroups: att.ham-radio,net.ham-radio,bell.ham-radio
Subject: Wanted: '73' Magazine (Sept. '77) for RTTY Articles
Message-ID: <276@houxv.UUCP>
Date: Wed, 20-Jun-84 12:18:56 EDT
Article-I.D.: houxv.276
Posted: Wed Jun 20 12:18:56 1984
Date-Received: Thu, 21-Jun-84 07:26:49 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 4

If anyone out there has '73' (Sept. '77) I would like to borrow it
for the RTTY articles.

     - Al Schapira (AT&T Bell Laboratories, houxv!ads MH 7C-306 x3669)

From -6123774165582846535
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,18a2a07958a85fec,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-21 09:01:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site noao.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!noao!allan
From: allan@noao.UUCP
Newsgroups: net.ham-radio
Subject: hamfests
Message-ID: <355@noao.UUCP>
Date: Thu, 21-Jun-84 12:01:23 EDT
Article-I.D.: noao.355
Posted: Thu Jun 21 12:01:23 1984
Date-Received: Fri, 22-Jun-84 07:58:20 EDT
Organization: Natl. Optical Astronomy Obs. Tucson AZ USA
Lines: 7

Does anyone know if there will be any hamfests in California during July?

Peter Allan   (KA7RFO)
Kitt Peak National Observatory
Tucson, Az
UUCP: {akgua,allegra,arizona,decvax,hao,ihnp4,lbl-csam,seismo}!noao!allan
ARPA: noao!allan@lbl-csam.arpa

From 1643568605370081641
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d72aed6fdfffdf50,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-21 17:09:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UO-11 Telemetry Decoding
Message-ID: <88@mouton.UUCP>
Date: Thu, 21-Jun-84 20:09:54 EDT
Article-I.D.: mouton.88
Posted: Thu Jun 21 20:09:54 1984
Date-Received: Fri, 22-Jun-84 20:59:11 EDT
Organization: Bell Communications Research, Inc
Lines: 257

From the University of Surrey.

The following text is reproduced from one of our datasheet handouts, in response to a couple of requests for the latest revision of Oscar-11 telemetry equations.

UoSAT-2 Telemetry Data Format

The telemetry system collects 60 analogue values from around the spacecraft, digitises them and sends the results, together with 96 status points, a 'UOSAT-2' identifier and the time, to the beacon multiplexers as a serial ASCII stream. The data is transmitted at 300, 600, 1200 or 2400 baud, using a standard character format of 1 start bit, 7 data bits, 1 even parity bit and 2 stop bits. There is no Morse code or RTTY available from the telemetry system directly, but these formats could be generated by the 1802 computer. The 2400 baud rate is experimental and can only be modulated using a different format - a separate datasheet will explain this.

A typical 'frame' of data contains 7 rows of 10 'channels' of information. This is illustrated below:

```
UOSAT-2           8405174112923
00380 01370 02661 03481 04059 05046 06027 07056 08040 09033
10512 11357 12000 13089 14000 15000 16000 17487 18467 19572
20523 21061 22659 23000 24000 25000 26104 27483 28600 29544
30435 31040 32283 33000 34000 35378 36434 37460 38529 39539
40855 41000 42674 43000 44171 45001 46000 47528 48541 49509
50569 51073 52702 53295 54990 55000 56000 57535 58532 59535
60800 615BC 62800 63024 64000 65000 66C00 67000 68000 69000
```

The first two digits in each channel are the channel identifier, a decimal number between 0 and 69. Channels 0 to 59 are the 60 analogue values, and the 3-digit decimal number following the identifier is the value 'N' which may be substituted into the calibration equations below. Channels 60 to 67 contain the 96 status points, held as 3 hexadecimal digits, e.g. channel 61 contains bits 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24, with 13 as the MSB and 24 as the LSB. (i.e. 61400 means that bit 14 is set and bits 13 and 15-24 are zero). Channels 68 and 69 are always zero. A 1Eh cursor home character preceeds 'UOSAT-2' in each frame, and the identifier is followed by the date/time in the format YYMMDDWHHMMSS, where W is the day of the week, 0 to 6.

Following experience on UoSAT-1, a checksum character has been included in the telemetry system hardware (rather than using the computer as before). The above frame, with checksums, is as follows:

```
UOSAT-2           8405174112923
00380B0137050266130348 1E040598050467060273070564080 40C090339
10512711357112000313089314000515000416000717487D18467C195728
20523621061422659A230001240006250007261041274 83A28600C29544E
30435131040632283833000034000735378A364346374606385295395395
40855C41000542674343000744171745001046000247528C48541C495091
```

50569F5107305270225329585499015500005600035753515853295953 5F
60800E615BC562800C6302436400026500036 6C00C67000168000E69000F

The checksum characters have been substituted in the place of the spaces following each channel. By exclusive-or'ing the binary (0-15) values of all 6 characters in each channel, (2 identifiers, 3 data & 1 checksum), a non-zero result indicates that the channel has been corrupted in transmission. A zero result, of course, does not guarantee a correct channel!

A dwell format is also available, in which an unlimited number of channels may be selected and displayed in virtually any format, checksummed or non-checksummed. The identifier and time-stamp are optional in this mode.

UoSAT-2 Telemetry Calibration Equations

Chan no.	Name	Equation
00	Solar array current -Y	I=1.9(516-N) ma
01	Nav mag X axis	H=(0.1485N-68) uT
02	Nav Mag Z axis	H=(0.1523N-69.3) uT
03	Nav mag Y axis	H=(0.1507N-69) uT
04	Sun sensor no. 1	
05	Sun sensor no. 2	
06	Sun sensor no. 3	
07	Sun sensor no. 4	
08	Sun sensor no. 5	
09	Sun sensor no. 6	
10	Solar array current +Y	I=1.9(516-N) mA
11	Nav mag (Wing) temp	T=(330-N)/3.45 C
12	Horizon sensor	
13	Spare (tbd)	
14	DCE RAMUNIT current	I=(N-70.4)/6.7 mA
15	DCE CPU current	I=(N-187.1)/2.0 mA
16	DCE GMEM current	I=(N-121.3)/2.1 mA
17	Facet temp +X	T=(480-N)/5 C
18	Facet temp +Y	T=(480-N)/5 C
19	Facet temp +Z	T=(480-N)/5 C
20	Solar array current -X	I=1.9(516-N) mA
21	+10V line current	I=0.97N mA
22	PCM voltage +10V	V=0.015N V
23	P/W logic current (+5V)	I=0.14 (N<=500)
24	P/W Geiger current (+14V)	I=0.21N mA
25	P/W Elec sp.curr (+10V)	I=0.096N mA
26	P/W Elec sp.curr (-10V)	I=0.093 mA
27	Facet temp -X	T=(480-N)/5 C
28	Facet temp -Y	T=(480-N)/5 C
29	Facet temp -Z	T=(480-N)/5 C
30	Solar array current +X	I=1.9(516-N) mA
31	-10V line current	I=0.48N mA
32	PCM voltage -10V	V=0.036N V

33	1802 comp curr (+10V)	I=0.21N mA
34	Digitalker current (+5V)	I=0.13N mA (N<=500)
35	145MHz beacon power O/P	P=(2.5N - 275) mW (N>200)
36	145MHz beacon current	I=0.22N mA
37	145MHz beacon temp	T=(480-N)/5 C
38	Command decoder temp (+Y)	T=(480-N)/5 C
39	Telemetry temp (+X)	T=(480-N)/5 C
40	Solar array voltage (+30V)	V=(0.1N-51.6) V
41	+5V line current	I=0.97N mA
42	PCM voltage +5V	V=0.0084N V
43	DSR current (+5V)	I=0.21N mA (n<=500)
44	Command RX current	I=0.92N mA
45	435MHz beacon power O/P	P=(2.5N-200) mW N>175
46	435MHz beacon current	I=0.44N mA
47	435MHz beacon temp	T=(480-N)/5 C
48	P/W temp (-X)	T=(480-N)/5 C
49	BCR temp (-Y)	T=(480-N)/5 C
50	Battery charge/dischg curr	I=8.8(N-513) mA
51	+14V line current	I-5N mA
52	Battery voltage (+14V)	V=0.021N V
53	Battery cell volts (MUX)	See below
54	Telemetry current (+10V)	I=0.02N mA
55	2.4GHz beacon power O/P	P=((N+50)**2)/480 mW
56	2.4GHz beacon current	I=0.45N mA
57	Battery temp	T=(480-N)/5 C
58	2.4GHz beacon temp	T=(480-N)/5 C
59	CCD imager temp	T=(480-N)/5 C
60-67	Status points 1-96	

Multiplexed Battery Scheme (channel 53)

Six consecutive TLM frames will carry the total volts, the following ten frames will be individual cells, starting with cell no. 10. Each cell has its own equation. The calibrations will be supplied later.

UOSAT-2 Status Points

Telemetry Frame No.	No.	Item	State
60 (MSB)	1	145 MHz General Beacon power	Off/On
60	2	435 MHz Engineering Beacon power	Off/On
60	3	2401 MHz Engineering Beacon power	Off/On
60	4	Telemetry channel mode select	Run/Dwell
60	5	Telemetry channel dwell address load	Off/On
60	6	Telemetry channel dwell address source	Gnd/Computer
60	7	Primary Spacecraft Computer power	Off/On
60	8	Primary Spacecraft Computer error count	Bit 1
60	9	Primary Spacecraft Computer error count	Bit 2

60		10	Primary Spacecraft Computer bootstrap	PROM/UART
60		11	Primary Spacecraft Computer error count	Bit 3
60	(LSB)	12	Primary Spacecraft Computer bootstrap	A/B
61	(MSB)	13	Gravity gradient boom deployment pyros	Safe/Arm
61		14	Gravity gradient boom deployment pyros	Hold/Fire
61		15	Gravity gradient boom deployment	Safe/Arm
61		16	Gravity gradient boom deployment	Hold/Deploy
61		17	Gravity gradient boom deployment	Extend/Retract
61		18	Attitude Control Magnetorquers	Safe/Arm
61		19	Attitude Control Magnetorquer -X	On/Off
61		20	Attitude Control Magnetorquer -Y	On/Off
61		21	Attitude Control Magnetorquer -Z	On/Off
61		22	Attitude Control Magnetorquer	Reverse/Forward
61		23	435 MHz PSK mode	NRZI/NRZIC
61	(LSB)	24	2401 MHz PSK mode	NRZI/NRZIC
62	(MSB)	25	Attitude Control Magnetorquers	High/Low power
62		26	Digitalker expt. power	Off/On
62		27	CCD Camera expt. power	Off/On
62		28	CCD Camera expt. integration period	Bit 0
62		29	CCD Camera expt. integration period	Bit 1
62		30	CCD Camera expt. video amp gain	Bit 0
62		31	CCD Camera expt. video amp gain	Bit 1
62		32	DSR power	Off/On
62		33	DSR mode	Read/Write
62		34	DSR mode	Run/Reset
62		35	Radiation Detectors Geiger-A EHT power	Off/On
62	(LSB)	36	Radiation Detectors Geiger-B EHT power	Off/On
63	(MSB)	37	Radiation Detectors Geiger-C EHT power	Off/On
63		38	Electron Spectrometer sensor EHT power	Off/On
63		39	DCE expt. power	Off/On
63		40	DCE expt.	Reset/Run
63		41	DCE expt. PROM select	A/B
63		42	DCE expt. CPU clock rate select	0.9/1.8 MHz
63		43	Navigation Magnetometer power	Off/On
63		44	Space Dust experiment power	Off/On
63		45	Status calibrate	
63		46	BCR status	0/1
63		47	435 MHz beacon modulation select	AFSK/PSK
63	(LSB)	48	2401 MHz beacon modulation select	AFSK/PSK
64	(MSB)	49	Engineering data	Bit 1
64		50	Engineering data	Bit 2
64		51	Engineering data	Bit 3
64		52	Engineering data	Bit 4
64		53	Engineering data	Bit 5
64		54	Command Watchdog	Disable/Enable
64		55	Command Watchdog reset	0/1
64		56	145 MHz beacon data select	A
64		57	145 MHz beacon data select	B
64		58	145 MHz beacon data select	C

64	59	145 MHz beacon data select	D
64 (LSB)	60	145 MHz beacon data select	E
65 (MSB)	61	145 MHz beacon data select	F
65	62	145 MHz beacon data rate	A
65	63	145 MHz beacon data rate	B
65	64	435 MHz beacon data rate	A
65	65	435 MHz beacon data rate	B
65	66	435 MHz beacon data rate	C
65	67	Particle / Wavecounter control	Count/Reset
65	68	Beacon lockout latch	Enable/Disable
65	69	Engineering data	Bit 6
65	70	Engineering data	Bit 7
65	71	Engineering data	Bit 8
65 (LSB)	72	Engineering data	Bit 9
66 (MSB)	73	P/W channel plate control	Bit 0
66	74	P/W channel plate control	Bit 1
66	75	P/W channel plate control	Bit 2
66	76	Space Dust (MSB)	
66	77	Space Dust	
66	78	Space Dust	
66	79	Space Dust	
66	80	Space Dust	
66	81	Space Dust	
66	82	Space Dust	
66	83	Space Dust (LSB)	
66 (LSB)	84	DSR write cycle complete	
67 (MSB)	85	1802 CWO output	
67	86	1802 Telemetry port (MSB)	
67	87	1802 Telemetry port	
67	88	1802 Telemetry port	
67	89	1802 Telemetry port	
67	90	1802 Telemetry port	
67	91	1802 Telemetry port	
67	92	1802 Telemetry port	
67	93	1802 Telemetry port	
67	94	1802 Telemetry port	
67	95	1802 Telemetry port	
67 (LSB)	96	1802 Telemetry port (LSB)	

The 'engineering data' bits contain the internal status of certain modules and are unlikely to be of general interest.

From 5829707292268112653
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8abfacc32a5308b2,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12745e,db42e6f938df28c4
X-Google-Attributes: gid12745e,public

X-Google-ArrivalTime: 1984-06-22 06:56:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!hplabs!hao!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.railroad,net.ham-radio
Subject: Re: IL Railway Museum scanner freqs - (nf)
Message-ID: <3056@brl-tgr.ARPA>
Date: Fri, 22-Jun-84 09:56:15 EDT
Article-I.D.: brl-tgr.3056
Posted: Fri Jun 22 09:56:15 1984
Date-Received: Wed, 27-Jun-84 08:53:43 EDT
References: <3647@fortune.UUCP>, <2266@ihuxf.UUCP>
Organization: Ballistics Research Lab
Lines: 21

There is a commercial source for railroad frequency listings; a book
by Tom Kneitel called RAIL-SCAN. The blurb on it claims that it is
"the absolute largest compilation of railroad scanner frequencies
ever published -- 4000 railroad-related listings". It is listed in the
catalog of CRB Research (PO Box 56, Commack, NY 11725), at $7.95 (Item # RS).

This catalog also has many other scanner and communications books,
and some of the standard survivalist and "covert operations" books
sold by many mail-order dealers. (Anybody ever notice that these
books are always sold mail-order, and not in bookstores where you
could look at them first? I believe it's because the sellers
realize that if a customer gets a chance to scan through the book
first, he'll realize it is not worth the $8.95 or whatever the
book costs... Anyway, that refers to the "build your own
submachinegun" books, not the scanner frequency lists, though
they are probably overpriced, too.)

Probably worth dropping them a postcard for the catalog, in
any case.

Will

From -3529148213747758886
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba45170fd8f6b30c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-22 07:49:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Scanner Info Wanted - (nf)
Message-ID: <52800021@trsvax.UUCP>
Date: Fri, 22-Jun-84 10:49:00 EDT

Article-I.D.: trsvax.52800021
Posted: Fri Jun 22 10:49:00 1984
Date-Received: Wed, 27-Jun-84 09:16:32 EDT
References: <369@hou2a.UUCP>
Lines: 35
Nf-ID: #R:hou2a:-36900:trsvax:52800021:000:1776
Nf-From: trsvax!mikey   Jun 22 09:49:00 1984

#R:hou2a:-36900:trsvax:52800021:000:1776
trsvax!mikey   Jun 22 09:49:00 1984

If your Bearcat crystal scanner was unclear, were you using standard crystals? If you were, that was the problem. I used to be in retail and sold scanners as part of my line. Bearcats at that time used a different IF (10.8 as opposed 10.7 MHz) I don't know if that is still true, but it would be a good idea to check. I know of a few people that just calculated the crystal frequency and then ordered a standard crystal at an offset, like 154.570 when you really want 154.470, or something like that, but it still was off. I think that the Bearcat used different capacitance on the crystal or something. I'll admit I'm not a fan of Bearcat. The only scanner that I like of theirs is there new RS-232 scanner that is computer programmed, but I've heard that the program only comes on the C64 and it is VERY SLOOOOWWWWWWWW! If you wrote your own on another computer, it MIGHT be faster.

Before you buy any scanner, you should look into the features that are not really stressed, but you will have to dig in the manuals for. Things like in search mode, will the scanner track to the center frequency, or will it lock and sit on the edge, giving only a lot of noise.

Personally, I own a Radio Shack PRO-2001, but that was as much a matter of company loyalty as it was the scanner quality back in 1978. However, all loyalties aside, my next scanner will be either the Radio Shack portable programmable or the new Regency that offers CONTINUOUS coverage of VHF and UHF. I haven't really investigated the Regency yet, but I'm interested in the 220 MHz ham band, and it will cover it. When I get enough money saved, I'll have to decide if I want portability or coverage, assuming the Regency is up to snuff, quality and feature wise.

mikey at trsvax (KA5MJQ)

From 3777297373608592163
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e554922c845d7c27,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-22 16:06:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site fortune.UUCP
Path: utzoo!linus!decvax!decwrl!amd70!fortune!burton

From: burton@fortune.UUCP
Newsgroups: net.ham-radio
Subject: Scanners for train spotting - (nf)
Message-ID: <3669@fortune.UUCP>
Date: Fri, 22-Jun-84 19:06:07 EDT
Article-I.D.: fortune.3669
Posted: Fri Jun 22 19:06:07 1984
Date-Received: Sat, 23-Jun-84 23:49:09 EDT
Sender: notes@fortune.UUCP
Organization: Fortune Systems, Redwood City, CA
Lines: 27

#N:fortune:5000002:000:984
fortune!burton   Jun 22 12:55:00 1984

<for the one-eyed, one-eared, flying purple people-eater>

I'm a guest to this group, since my interest in scanner radios is to
add to my railroad hobby activity - train spotting and the like.

For my use, the ideal unit would be portable, programmable, *rugged*,
and also useable in a car or home, using external speakers if necessary.
Mega-band reception isn't necessary, since the RRs operate on only a
few bands, such as 160 MHz. Other concerns are signal clarity and range,
and rechargeable battery option.

Are there any situations in which use of scanners is illegal, either handheld
or in a car or home?

Please advise by mail to me below. Sorry if this sounds a bit naive.
I will post the results to net.railroad, and to this group, if requested.

Thanks in advance.

  Philip Burton   101 Twin Dolphin Drive-MS 133
  Fortune Systems   Redwood City, CA 94065   (415) 595-8444 x 526
                    - - -
{ihnp4 [ucbvax | decvax!decwrl]!amd70 harpo hpda }!fortune!burton

From 6322173166849515796
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e554922c845d7c27
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-23 07:45:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Scanners for train spotting - (nf)
Message-ID: <2273@ihuxf.UUCP>
Date: Sat, 23-Jun-84 10:45:29 EDT

Article-I.D.: ihuxf.2273
Posted: Sat Jun 23 10:45:29 1984
Date-Received: Wed, 27-Jun-84 08:51:05 EDT
References: <3669@fortune.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 62

x

As your questions have been asked by several readers, I shall take the liberty of posting a reply in a followup article.

Since you want a programmable, rather than crystal controlled, portable scanner, you currently have 3 choices:

1. Radio Shack PRO30: 16 channels, list price about $300, batteries and AC adapter/charger optional. Watch for a sale. Widest frequency coverage, also includes commercial aircraft band. Plastic case. Internal speaker is rather weak, but the audio stage has sufficient power to drive an external speaker to high volume levels. (I own this unit and am very satisfied with it.)

2. Bearcat 100: Early models had extremely high failure rate. Keyboard design allowed key to recess too far, and be "lost" underneath the front panel. Problems in physical design caused intermittant battery contact, thus resetting microprocessor controller. This problem was corrected in later models, which may be recognized by the BNC antenna connector, and appear to be more reliable. Usually discounted to $289, but may be found as low as $239. Includes leather case, batteries, charger/adapter. No priority channel. Several Bearcat 100 owners in this area are trying to selling their units and replacing them with PRO30s.

3. Regency HX1000A: 30 channels, with built-in digital clock. Discounts at $180 - $220, including leather case, battery, charger/adapter. Very new, too early for any evaluation. Could be the most rugged of the three programmable, portable scanners.

Carrying the scanner in a decent leather case goes a long way towards protecting the radio. Since Radio Shack offers no case for the PRO30, I use a husky case made for a Motorola walkie talkie, purchased from a 2-way radio shop.

If you are content to listen to 6 - 8 channels or less,

you could buy a crystal controlled portable scanner, which may be a bit more rugged, and a good deal smaller than a programmable one.

Some states have enacted restrictions on the mobile use of scanners. It is against the law in New Jersey for John/Jane Doe to have a radio in the car capable of intercepting police signals, without written permission of the chief of police in the town in which the vehicle is being driven. This law also precludes one from using a portable scanner while in a vehicle, and is enforced religiously in some New Jersey towns. A friend was stopped by the Police in Norwood because he had a 19" whip antenna on his Chevy.

Indiana has a similar law, but exempts licensed amateur radio operators (hams).

--
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -439956426755945663
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 105955,9c92641dcad096a5,start
X-Google-Attributes: gid105955,public
X-Google-Thread: 151e61,9c92641dcad096a5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-23 18:24:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxu.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!houxu!jhv
From: jhv@houxu.UUCP (James Van Ornum)
Newsgroups: net.ham-radio,att.ham-radio
Subject: FCC Service Codes
Message-ID: <408@houxu.UUCP>
Date: Sat, 23-Jun-84 21:24:04 EDT
Article-I.D.: houxu.408
Posted: Sat Jun 23 21:24:04 1984
Date-Received: Wed, 27-Jun-84 09:07:35 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 57

()

I bought the FCC microfiche listings of the licensees on file as of January/February 1984. It is a tremendous source of information for those of who listen to scanners; however, it uses a two letter FCC service code and I do not have the key to the code. The Radio Shack "Police Call Radio Directory" lists some of these codes, as shown

below:

```
      Code - Meaning
     AA
     AF
     BA - Remote Broadcast Pickup (radio & TV stations)
     BF
     BS
     CA - General Mobile Radio Service
     CB - Citizens Band (class D)
     CC - Citizens BAnd (class C)
     CD
     IB - Business
     IF - Forest Products
     IM - Motion Picture Industry
     IP - Petroleum Industry
     IS - Special Industrial (construction, farming, etc.)
     IT - Telephone Maintenance
     IW - Power and Water Utilities
     IX - Manufacturers
     IY - Relay Press (newspaper reporters)
     LA - Automotive Emergency (tow trucks)
     LJ - Motor Carrier, Trucks
     LR - Railroad
     LU - Motor Carrier, Buses
     LV
     LX - Taxi
     MC - Maritime Limited Coast (private stations)
     MG - Maritime Government (Coast Guard)
     MP - Maritime Public Coast (marine telephone)
     MS - Maritime Shipboard
     PF - Fire
     PH
     PL - Local Government
     PM - Medical Services
     PO - Forestry Conservation
     PP - Police
     PS - Special Emergency
     RA - Mobile Telephone, Aircraft
     RC - Mobile Telephone, Radio Common Carrier
     RT - Mobile Telephone, Landline Companies
     SV
     XR
     ZA
```

If anyone on the net knows the meaning of any of the above codes with blank meanings, or how to get a complete listing of codes and meanings, please mail me what ever information you have.

Thanks.

James Van Ornum, AT&T Bell Laboratories, inhp4!houxu!jhv

From 9013762306812489729

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c92641dcad096a5
X-Google-Attributes: gid151e61,public
X-Google-Thread: 105955,9c92641dcad096a5
X-Google-Attributes: gid105955,public
X-Google-ArrivalTime: 1984-06-23 22:36:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,att.ham-radio
Subject: Re: FCC Service Codes
Message-ID: <2274@ihuxf.UUCP>
Date: Sun, 24-Jun-84 01:36:12 EDT
Article-I.D.: ihuxf.2274
Posted: Sun Jun 24 01:36:12 1984
Date-Received: Wed, 27-Jun-84 09:09:23 EDT
References: <408@houxu.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 71

> I bought the FCC microfiche listings of the licensees on file as of
> January/February 1984. It is a tremendous source of information
> for those of who listen to scanners; however, it uses a two letter
> FCC service code and I do not have the key to the code. The Radio Shack
> "Police Call Radio Directory" lists some of these codes....
>
> ...If anyone on the net knows the meaning of any of the above codes with
> blank meanings....

I filled in those codes marked with a *

Code - Meaning

* AA - Airlines - airport ground operations
* AF - Commercial & Private Aircraft (in-flight use?)
* AR - Airlines
    BA - Remote Broadcast Pickup (radio & TV stations)
* BF - FM Commerical Broadcasting
* BS - AM Commercial Broadcasting
* BT - Television Broadcasting
    CA - General Mobile Radio Service
    CB - Citizens Band (class D)
    CC - Citizens Band (class C)
* CD - Common Carrier Paging (?)
* CF - (microwave link?)
* CX - (Cable TV microwave link?)
* GB - (800 MHz business?)
* GO -
* GP -
* GX -
* GS - (800 MHz trunked systems?)
    IB - Business
    IF - Forest Products

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     IM - Motion Picture Industry
     IP - Petroleum Industry
     IS - Special Industrial (construction, farming, etc.)
     IT - Telephone Maintenance
     IW - Power and Water Utilities
     IX - Manufacturers
     IY - Relay Press (newspaper reporters)
     LA - Automotive Emergency (tow trucks)
     LJ - Motor Carrier, Trucks
     LR - Railroad
     LU - Motor Carrier, Buses
*    LV - (Motor Carrier inter-urban?)
     LX - Taxi
     MC - Maritime Limited Coast (private stations)
     MG - Maritime Government (Coast Guard)
     MP - Maritime Public Coast (marine telephone)
     MS - Maritime Shipboard
     PF - Fire
*    PH - Highway Maintenance
     PL - Local Government
     PM - Medical Services
     PO - Forestry Conservation
     PP - Police
     PS - Special Emergency
     RA - Mobile Telephone, Aircraft
     RC - Mobile Telephone, Radio Common Carrier
     RT - Mobile Telephone, Landline Companies
*    SV - Service (column heading on the microfiche?)
*    XD - Experimental
*    XR - Experimental
*    YB - (800 MHz trunked systems?)
*    YO -
*    YP -
*    YX -
*    ZA - General Mobile Radio Service (GMRS = Class A CB)

--
==========================================================================
Bob Parnass,  AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414


From 6517570075180859014
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba45170fd8f6b30c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-24 07:45:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!hao!hplabs!tektronix!uw-beaver!cornell!
vax135!houxz!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Scanner Info Wanted
```

Message-ID: <2276@ihuxf.UUCP>
Date: Sun, 24-Jun-84 10:45:59 EDT
Article-I.D.: ihuxf.2276
Posted: Sun Jun 24 10:45:59 1984
Date-Received: Wed, 27-Jun-84 02:38:39 EDT
References: <369@hou2a.UUCP>, <52800021@trsvax.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 26
Nf-ID: #R:hou2a:-36900:trsvax:52800021:000:1776
Nf-From: trsvax!mikey   Jun 22 09:49:00 1984

> Bearcats at that time used a different
> IF (10.8 as opposed 10.7 MHz) I don't know if that is still true...

     Yes, it's still true. The first IF frequency in crystal
     controlled Bearcat scanners is 10.8 MHz. The synthesized
     bearcats have first IF's of 10.8 and 10.85 MHz (e.g. early
     and late BC-250).

> The only scanner that I like of theirs is there new RS-232
> scanner that is computer programmed, but I've heard that the program only
> comes on the C64 and it is VERY SLOOOOWWWWWWWW! If you wrote your own
> on another computer, it MIGHT be faster.

     The Compuscan (TM) demonstrated to our club was driven by
     an IBM PC. This setup operated about as fast as a BC-250,
     a reasonable speed.
     A review of the Compuscan in Monitoring Times complained
     of slow performance when a C64 was used as the controller.
     The receiver board in the Compuscan is the same as used
     in the BC-300 and BC-350. The feature board differs in
     these scanners.

--
==
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 8855589573486869665
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-24 17:40:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!uok!mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Morse code stinks - (nf)
Message-ID: <2800003@uok.UUCP>
Date: Sun, 24-Jun-84 20:40:00 EDT
Article-I.D.: uok.2800003

Posted: Sun Jun 24 20:40:00 1984
Date-Received: Thu, 28-Jun-84 02:30:58 EDT
Lines: 27
Nf-ID: #N:uok:2800003:000:1187
Nf-From: uok!mpackard   Jun 24 19:40:00 1984

#N:uok:2800003:000:1187
uok!mpackard   Jun 24 19:40:00 1984

:-)

I would like to start an argument on net.ham-radio as it
seems there is no food for thought on this note.
  The subject is no-code on 50 Mhz and up. I believe the
requirement for an amatuer to learn morse code for these
frequencys is pure hogwash. The number of radios available
on these frequencys is more than enough to eliminate the
need. When was the last time you saw a jack on a two-meter
handheld that said 'key' on it? The poor users couldn't do
morse if they wanted too. The above statement refers to the
fact that in this day and age the only concievable purpose
of morse would be for emergencys when your microphone broke
and for practice to maintain currency. Wayne Green says if
hams want morse than by god they better be current and able
to operate with it. A person should retest every year and
even be required to show a speed improvement also. I believe
this would be fair. My interest is in microwaves and I just
don't see where the ham community would benifit from my
knowing morse code. Hell you guys don't use morse actively
up on these frequencys anyway.
   Don't send me any mail on this subject but go ahead and
start arguing (sp?).
uok!mpackard

From -3979120141879271462
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-24 17:45:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site uok.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!uok!mpackard
From: mpackard@uok.UUCP
Newsgroups: net.ham-radio
Subject: Stop the Bulletins! - (nf)
Message-ID: <2800004@uok.UUCP>
Date: Sun, 24-Jun-84 20:45:00 EDT
Article-I.D.: uok.2800004
Posted: Sun Jun 24 20:45:00 1984
Date-Received: Thu, 28-Jun-84 02:31:11 EDT
Lines: 8
Nf-ID: #N:uok:2800004:000:174

Nf-From: uok!mpackard   Jun 24 19:45:00 1984

#N:uok:2800004:000:174
uok!mpackard   Jun 24 19:45:00 1984

:-)

Does anybody read the garbage from mgweed!rjr about bulletins?
I don't listen to the stuff on the radio, much less read it!
Am I missing the importance of that garbage?

From 4212706062839163186
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,da49e8d01c4e3314,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-24 20:59:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!mhuxl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: AMSAT Member Chosen As Astronaut
Message-ID: <89@mouton.UUCP>
Date: Sun, 24-Jun-84 23:59:34 EDT
Article-I.D.: mouton.89
Posted: Sun Jun 24 23:59:34 1984
Date-Received: Thu, 28-Jun-84 01:08:58 EDT
Organization: Bell Communications Research, Inc
Lines: 67

Posted: Mon Jun 25, 1984 12:19 AM GMT   Msg: RGIE-1827-1019
From: VRIP
To: RMYERS
CC: AMSAT
Subj: ASR#81-2 (Lead Story)

NASA Chooses AMSAT's WA4SIR For Shuttle Science Mission

Apparently the Hams-In-Space theme will have periodic reprise throughout
the second third of the decade as NASA has selected Dr. Ron Parise, WA4SIR,
to fly as Payload Specialist on at least 2 future shuttle missions!

Ron was notified on 11 Jun 84 of his selection. In an exclusive interview
with ASR last week, Ron indicated he had applied for the position in Sep 83
and was delighted at his success. He is anxious to include Amateur Radio
activities in the mission although he cautions, "This will be a crew-intensive
mission" referring to the projected March 1986 planned launch of Mission 61F.
The 61F mission will be a further flight of the Spacelab series.

Dr. Parise is an astronomer with a PhD from the University of Florida (1979)

and is 33 years old. He has been a licensed amateur since he was 11 having held prior calls WN8JBR and WA8MHD. Ron is a native of Warren, Ohio, is married and has a young son. He and his wife, Cecelia, are expecting another child.

The newest astronaut-selectee is employed by Computer Sciences Corporation in their Systems Sciences Division and currently lives in Silver Spring, Maryland not far from AMSAT Headquarters. Ron is an active AMSAT member and frequently gives talks and presentations on science aspects of OSCAR. He has been AMSAT's Science Coordinator for the UO-9 mission. Computer Sciences is under contract to NASA and in fact Ron works at the Goddard Space Flight Center at Greenbelt, Maryland.

The 61F mission will carry the ASTRO 1 experiment in its Spacelab section. This experiment is sponsored by NASA's Office of Space Science Applications and involves an ultraviolet imaging telescope. Ron helped design the instrument and will be aboard to operate it and collect data. He also is involved in two later follow-on experiments known as the "Hopkins Ultraviolet Prime Focus Spectrometer" developed in conjunction with Johns Hopkins University and the "Wisconsin Ultraviolet Photo Polarimeter" developed in conjunction with the University of Wisconsin. ASTRO 2 (Hopkins Spectrometer) is due for launch in Nov 86 while ASTRO 3 (Wisconsin Photo Polarimeter) is slated for Jul 87. Ron indicates his contract with NASA calls for him flying two missions and being a backup for the third.

Regarding his operating Amateur Radio from the shuttle Ron says he is "enthusiastic" and looks forward "to bringing some radios aboard". Ron says he will support proposals to NASA for Amateur Radio activity on the missions he will be flying but because of intense preparations for the science aspects of the mission, will be unable to spearhead the proposal effort. He indicates full support for the premise without hesitation, however.

The Amateur Space program has its roots firmly planted in space science. AMSAT is a remarkable alloy of scientists, engineers, educators and layman reflecting the very best in Amateur Radio. We are justly proud that "one of our own" has been selected to carry space science further along new paths and will be carrying Amateur Radio along just to keep in touch! Congratulations to Ron, WA4SIR! (And to us, too).

Dr. Tony England, W0ORE, is due to fly the shuttle in March 85 and an ambitious proposal was jointly submitted by ARRL/AMSAT recently to permit Tony to follow the lead of Owen Garriott, W5LFL, and Owen's historic 1983 premiere Ham-In-Space effort.

From 896547045712407903
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba45170fd8f6b30c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-25 07:16:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA

Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!dual!amd70!decwrl!decvax!
ucbvax!ucbcad!tektronix!hplabs!hao!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA
Newsgroups: net.ham-radio
Subject: Re: Scanner Info Wanted
Message-ID: <3061@brl-tgr.ARPA>
Date: Mon, 25-Jun-84 10:16:32 EDT
Article-I.D.: brl-tgr.3061
Posted: Mon Jun 25 10:16:32 1984
Date-Received: Thu, 28-Jun-84 06:26:46 EDT
References: <369@hou2a.UUCP>, <52800021@trsvax.UUCP>
Organization: Ballistics Research Lab
Lines: 11

In case anyone cares, those new wide-coverage Regency scanners are
actually another Japanese-brand line with Regency nameplates applied.
There was some discussion in Monitoring Times a few issues back; I'll
try to remember to look up what the real manufacturer's name is.

Will

PS Re the "unclear" Bearcat crystal scanner -- that was the first
scanner I bought, when I was young and naive, and the
crystals were those procured and installed by the dealer before
I received it. Have no idea from whence they came... WM

From -673374781626671660
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f4ebd169f8f95895,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-25 11:38:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site smu.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!smu!neihart
From: neihart@smu.UUCP
Newsgroups: net.ham-radio
Subject: Simplex patchees: what's the proble - (nf)
Message-ID: <13200001@smu.UUCP>
Date: Mon, 25-Jun-84 14:38:00 EDT
Article-I.D.: smu.13200001
Posted: Mon Jun 25 14:38:00 1984
Date-Received: Thu, 28-Jun-84 02:31:23 EDT
Lines: 7
Nf-ID: #N:smu:13200001:000:32
Nf-From: smu!neihart   Jun 25 13:38:00 1984

#N:smu:13200001:000:32
smu!neihart   Jun 25 13:38:00 1984

smu ignored 966 excess bytes

From 5572145959986464840
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-25 16:27:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!
mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Stop the Bulletins! - (nf)
Message-ID: <52800022@trsvax.UUCP>
Date: Mon, 25-Jun-84 19:27:00 EDT
Article-I.D.: trsvax.52800022
Posted: Mon Jun 25 19:27:00 1984
Date-Received: Thu, 28-Jun-84 04:54:10 EDT
References: <2800004@uok.UUCP>
Lines: 19
Nf-ID: #R:uok:2800004:trsvax:52800022:000:564
Nf-From: trsvax!mikey   Jun 25 18:27:00 1984

#R:uok:2800004:trsvax:52800022:000:564
trsvax!mikey   Jun 25 18:27:00 1984

You may not get anything out of them but some people do, I'm sure.
Even if they don't want all the propagation forecast, they still might
want to be informed as to what foolishness Wayne Green is up to with
the FCC now. Is ignorance your best excuse???

My God, two notes is a row, the first one trying to start an argument and
he even used Wayne Green as a reference, then he wants us to bury our head
in the sand.

All I can say is, if you wanted to start an arguement, you certainly
did good picking Wayne Green to back you up.

mikey at trsvax KA5MJQ

From -2039725676779848078
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f4199998165dae4e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-25 17:47:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP

Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Bearcat discontinues CompuScan and other scanners
Message-ID: <2279@ihuxf.UUCP>
Date: Mon, 25-Jun-84 20:47:53 EDT
Article-I.D.: ihuxf.2279
Posted: Mon Jun 25 20:47:53 1984
Date-Received: Thu, 28-Jun-84 01:57:35 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 23

x
Uniden Corporation acquired the Bearcat division of Electra Company on May 28, 1984. According to an article in Monitoring Times (July 1984, pg. 2):

"It is safe to assume that several new products, including a BC-100XL with aircraft band, a BC-450 wide coverage scanner, and a BC-210XLT with 800 MHz, will never see the light of day."

"Presently manufactured products which have been canceled include BC-250, BC-300, CompuScan 2100 and the new TV satellite terminal."

"Sources close to the company revealed that approximately 120 employees were laid off Friday, June 1, 1984....."

--
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 2422795345080572341
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,24bbaeb8a365e94c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-25 18:01:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: New Regency 200 ch Regency computer-controlled scanner
Message-ID: <2280@ihuxf.UUCP>
Date: Mon, 25-Jun-84 21:01:54 EDT
Article-I.D.: ihuxf.2280
Posted: Mon Jun 25 21:01:54 1984

Date-Received: Thu, 28-Jun-84 01:58:04 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 24

x
New 200 Channel Computer-Controlled Regency Scanner

According to an article in Monitoring Times (July 1984, pg. 9):

"With the MX-7000 25-1200 MHz scanner barely ready for shipping, Regency announced the impending release of the MX-8000, a 200-channel scanning system with excellent graphic menu using the NEC PC8801 MK-II microcomputer."

"While no price or availability was announced, the preliminary specifications are very impressive. A visual spectrum display is shown on the screen indicating the frequency, channel, bandwidth, mode and other characteristics programmed into the computer-controlled channel selection...."

--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -8375993397615697745
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a63768f21d05aeff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-26 06:03:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 48
Message-ID: <10254@mgweed.UUCP>
Date: Tue, 26-Jun-84 09:03:17 EDT
Article-I.D.: mgweed.10254
Posted: Tue Jun 26 09:03:17 1984
Date-Received: Thu, 28-Jun-84 02:06:23 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 13

qst de k9eui
hr bulletin nr 48 from arrl headquarters newington ct
june 20 1984 to all radio amateurs bt

indonesia, yb, yc, yd, has been added to the list of countries with temporary third party traffic agreements with the u.s. for use during the 1984 summer olympics. the agreements will be in effect between july 1 and august 31 1984, and will allow messages to be exchanged between the olympic cillage and the athletes home countries. other countries with such agreements are hong kong, vs6, and zimbabwe, z2. ar

From 2244537861506724418
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2eb1af410ad9d4b0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-26 06:03:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 50
Message-ID: <10255@mgweed.UUCP>
Date: Tue, 26-Jun-84 09:03:39 EDT
Article-I.D.: mgweed.10255
Posted: Tue Jun 26 09:03:39 1984
Date-Received: Thu, 28-Jun-84 02:06:55 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr bulletin nr 50 from arrl headquarters newington ct
june 22 1984 to all radio amateurs bt

the efforts of radio amateurs in meeting the challenge of emergency communications readiness through participation in the 1984 american radio relay league field day and in the exercises sponsored by the national communications system are greatly appreciated. your communications skills are a vital resource to our country.

signed, casper w. weinberger, secretary of defense. ar

From 7986909600161921253
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f106f9e1c3be1726,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-26 06:03:57 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 51
Message-ID: <10256@mgweed.UUCP>
Date: Tue, 26-Jun-84 09:03:57 EDT
Article-I.D.: mgweed.10256
Posted: Tue Jun 26 09:03:57 1984
Date-Received: Thu, 28-Jun-84 02:07:21 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

qst de k9eui
hr bulletin nr 51 from arrl headquarters newington ct
june 22 1984 to all radio amateurs bt

dick goodman, wb1hih, section emergency coordinator for western massachusetts, reports that senate bill 2112 of the commonwealth of massachusetts authorizes the northern berkshire amateur radio club to lease the bascom lodge repeater and antenna site for twenty years. the lease becomes effective august 23. the bill was signed by governor dukakis on june 21.

at the same time, the governor proclaimed amateur radio week in massachusetts to coincide with field day operations this weekend. details will appear in the arrl letter and in september qst. ar

From 7979957257170547829
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a795e14afc03d80
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-26 06:04:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 25
Message-ID: <10257@mgweed.UUCP>
Date: Tue, 26-Jun-84 09:04:22 EDT
Article-I.D.: mgweed.10257
Posted: Tue Jun 26 09:04:22 1984
Date-Received: Thu, 28-Jun-84 02:07:50 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 31

qst de k9eui

hr propagation bulletin nr 25 from arrl headquarters newington ct june 18 1984 to all radio amateurs bt

after several days of solar flux levels in the low 90s, solar activity began to rise on june 13. by the 15th, the flux was up to 114. present indications are for gradually lower readings during the forecast week and through the end of june.

the level of geomagnetic activity is the main propagation factor at this season, especially in our northern states and adjacent areas. on this basis, fair to poor propagation is predicted through june 20, improving to fair to good through the 28th.

the early part of the arrl fd weekend should have good summer conditions on our lower frequencies in areas not plagued by thunderstorms. the usefulness of 21, 28 and 50 mhz will depend to a large extent on sporadic e layer ionization which peaks in late june. short skip, often with high signal levels, can break out suddenly, so field day teams keep continuous watches on these bands, especially 28 and 50 mhz. e skip is most common in late morning and early evening hours local time, but it can show up at any hour. stable, calm weather makes for above average signal levels and extended range on 50 mhz and higher frequencies.

american sunspot numbers for june 7 through 13 were between 22 and 45 with a mean of 30.9. ar

From 4422924347157282063
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a974e5ef47e6796c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-26 06:04:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 22
Message-ID: <10258@mgweed.UUCP>
Date: Tue, 26-Jun-84 09:04:52 EDT
Article-I.D.: mgweed.10258
Posted: Tue Jun 26 09:04:52 1984
Date-Received: Thu, 28-Jun-84 02:08:18 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 38

qst de k9eui
hr dx bulletin nr 22 from arrl headquarters newington ct june 21 1984 to all radio amateurs bt

tristan da cunha. according to his qsl manager, w4fru, andy, zd9bv, lost all of his antennas in a windstorm. andy now has an inverted vee up for 40 and 15 meters. he should be active on 7080 khz listening around 7160 khz at 0730z. he will probably not be back on 75 meters until sometime in july.

marshall islands. kx6ds is very active on 40 meters, usually around 7002 khz at 0900z.

solomon islands. h44ia has been active on 3795 khz at 0900z, with good signals in the eastern u.s.

cambodia. xu1ss is still active around 14335 khz at 1200z on sundays in a list operation.

crete. ka0cyr/sv9 occasionally shows up on 7005 khz at 0245z for a u.s. schedule.

qatar. a71bk, mohamed, has been worked on 14185 khz at 2300z.

liechtenstein. df4gv/hb0 has beenhactive on 7003 khz at 0300z and will be on from liechtenstein until sunday morning.

egypt. herb, ka4sbe, continues to be active on 20 meter ssb on 14245 khz at 0230z.

turkey. ta1as can sometimes be found on 14220 khz at 2300z.

east kiribati. t32af has a new beam on 40 meters and is frequently on 7075 khz at 0815z testing it, and plans to be doing this frequently for the next two or three weeks, listening in the u.s. phone band. qsl via kh6ur. ar

From 2079969953220672643
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-26 06:10:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!hogpc!houxb!3435ras
From: 3435ras@houxb.UUCP (R.SCHREIBMAIER)
Newsgroups: net.ham-radio
Subject: Re: Stop the Bulletins! - (nf)
Message-ID: <308@houxb.UUCP>
Date: Tue, 26-Jun-84 09:10:27 EDT
Article-I.D.: houxb.308
Posted: Tue Jun 26 09:10:27 1984
Date-Received: Thu, 28-Jun-84 02:44:57 EDT
References: uok.2800004
Lines: 7

I, for one, read the ARRL bulletins, propagation forecasts,
and DX bulletins regularly. Keep them coming, Bob.

Bob Schreibmaier K2PH
AT&T Information Systems
Lincroft, N.J.
...!houxb!3435ras

From -1313716482488413310
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fda4177f925b0241,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-26 08:56:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!hogpc!houxp!4421gjk
From: 4421gjk@houxp.UUCP (Gerry Kersus)
Newsgroups: net.ham-radio
Subject: Re:Stop the Bulletins!
Message-ID: <350@houxp.UUCP>
Date: Tue, 26-Jun-84 11:56:04 EDT
Article-I.D.: houxp.350
Posted: Tue Jun 26 11:56:04 1984
Date-Received: Thu, 28-Jun-84 03:17:42 EDT
Lines: 4

I also read the ARRL bulletins that
are posted to the net. I'm not always
able to copy the propagation and dx
bulletins. Keep them coming.

From 8166338935533852000
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93801ac1b53945d0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-26 12:07:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!wd9get
From: wd9get@pur-ee.UUCP (Brandt)
Newsgroups: net.ham-radio
Subject: Bulletins
Message-ID: <1937@pur-ee.UUCP>
Date: Tue, 26-Jun-84 15:07:39 EDT
Article-I.D.: pur-ee.1937
Posted: Tue Jun 26 15:07:39 1984
Date-Received: Thu, 28-Jun-84 03:29:34 EDT
Organization: Electrical Engineering Department , Purdue University
Lines: 11

....

Don`t stop the bulletins!!!!  I`m an Official Bulletin Station
for the Lafayette (IN) area and use these bulletins weekly, not
to mention I appreciate the information!!

========

Keith E. Brandt pur-ee!wd9get

From -1011558969966497593
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,53223f6f0e19eab1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-26 18:01:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site umn-cs.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!stolaf!umn-cs!mincher
From: mincher@umn-cs.UUCP (Richard Mincher)
Newsgroups: net.ham-radio
Subject: Re: FCC Service Codes - (nf)
Message-ID: <487@umn-cs.UUCP>
Date: Tue, 26-Jun-84 21:01:15 EDT
Article-I.D.: umn-cs.487
Posted: Tue Jun 26 21:01:15 1984
Date-Received: Thu, 28-Jun-84 04:13:32 EDT
Sender: notes@umn-cs.UUCP
Organization: Computer Science Dept., U of Minn, Mpls, MN
Lines: 5

#R:houxu:-40800:umn-cs:5600001:000:34
umn-cs!mincher   Jun 26 14:03:00 1984

How much does such a list cost?

From -5032140772020593083
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-26 19:19:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!inuxg!wheatley
From: wheatley@inuxg.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Re: Stop the Bulletins! - (nf)
Message-ID: <307@inuxg.UUCP>
Date: Tue, 26-Jun-84 22:19:37 EDT
Article-I.D.: inuxg.307
Posted: Tue Jun 26 22:19:37 1984
Date-Received: Thu, 28-Jun-84 04:51:19 EDT
References: <2800004@uok.UUCP>
Organization: AT&T Consumer Products Div., Indianapolis

Lines: 6

Stop the bulletins and bring up no-code discussions from the depths
of net.ham-radio (or, at least dialogue from a few months back)???!!!
Whats up??? KEEP THE BULLETINS COMING, some of us dont have the
time (or the ability) to catch them all via other means

Steve Wheatley, KU9C

From 5319029770548213997
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-27 05:17:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site alice.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!alice!danny
From: danny@alice.UUCP ()
Newsgroups: net.ham-radio
Subject: Re: Stop the Bulletins! - (nf)
Message-ID: <2879@alice.UUCP>
Date: Wed, 27-Jun-84 08:17:44 EDT
Article-I.D.: alice.2879
Posted: Wed Jun 27 08:17:44 1984
Date-Received: Thu, 28-Jun-84 05:05:48 EDT
References: <2800004@uok.UUCP>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 12

I appreciate rjr's posting of the arrl bulletins, and would like to
see it continue. I find the majority of the bulletins uninteresting,
but a few important ones make up for that. Perhaps rjr could add
a word or two to the title line that would suggest the content of
the bulletin. I would skip anything marked '3rd-party traffic', for ex.

mpackard, don't forget the power of the 'n' key.

Dan Kahn, K1DK
Bell Communications Research
Murray Hill, NJ

From 6821850777763242280
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e76ee79e72cd5443,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1363ce,e76ee79e72cd5443,start
X-Google-Attributes: gid1363ce,public
X-Google-ArrivalTime: 1984-06-27 08:02:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass

From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.auto,net.ham-radio
Subject: Radar Jammers BEWARE
Message-ID: <2281@ihuxf.UUCP>
Date: Wed, 27-Jun-84 11:02:13 EDT
Article-I.D.: ihuxf.2281
Posted: Wed Jun 27 11:02:13 1984
Date-Received: Thu, 28-Jun-84 05:28:12 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 67

x
From an article in net.auto:

> Nf-ID: #N:trsvax:55200084:000:5280

> --->>> Hitchhikers guide to radar jamming <<<---
.
.
[explanation of how Doppler radar works]
.
.
> How about jamming. OK, lets assume that you don't care about the legality
> and you just want to try to jam for funs sake.
.
.
[how to construct a radar jamming transmitter]
.
.
> Be forwarned that police are getting more adept at detecting jammers, and
> the penalty is not light. If you have a HAM ticket, you could lose it.
> There could even be criminal penalties in some states.
.
.
> ....If you do jam........
.
.
[more jamming hints]
.
.

Is this "radical chic", or just poor judgement?
Congratulations, you have just used the net to advocate
the breaking of federal and international regulations:

+ FCC Rules & Regulations:
- R&R 89.51 - Station Authorization Required.
- R&R 89.117 - Acceptability of Transmitters for Licensing

+ Communications Act of 1934:
    - Sec 324 - Use of Minimum Power

+ International Telecommunications Commission Convention 1947:
    - Article 44 - Harmful Interference

+ International Radio Regulations Annexed to the International Telecommunications Convention 1947:
    - Article 13 - Unnecessary transmissions and superfluous signals
    - Article 22 - Station license

+ Geneva Treaty 1959:
    - Article 1 Sec 3 - Harmful interference

I hope you don't hold amateur or commercial licenses.

...Bob
(FCC Radiotelephone Operator's License P2-18-37775/Radar Endorsement)

--
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -7442706927507199898
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-27 09:19:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!mb2c!uofm-cv!tom
From: tom@uofm-cv.UUCP (Tom Libert)
Newsgroups: net.ham-radio
Subject: Re: Stop the Bulletins! - (nf)
Message-ID: <570@uofm-cv.UUCP>
Date: Wed, 27-Jun-84 12:19:08 EDT
Article-I.D.: uofm-cv.570
Posted: Wed Jun 27 12:19:08 1984
Date-Received: Thu, 28-Jun-84 05:45:26 EDT
References: uok.2800004
Lines: 4

I enjoy reading arrl bulletins, and appreciate the service provided by mgweed!rjr. The 'n' key is still available for those of you who aren't interested, since they are clearly identified in the "Subject:" line. Keep them coming!

From -2955399747155051845
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-27 09:21:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hogpc!houti!ariel!hou5f!hou5g!
hou5h!jak
From: jak@hou5h.UUCP
Newsgroups: net.ham-radio
Subject: Re: Stop the Bulletins! - (nf)
Message-ID: <344@hou5h.UUCP>
Date: Wed, 27-Jun-84 12:21:29 EDT
Article-I.D.: hou5h.344
Posted: Wed Jun 27 12:21:29 1984
Date-Received: Thu, 28-Jun-84 05:39:07 EDT
References: <308@houxb.UUCP>
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 7

I find the ARRL bulletins, DX bulletins, and propagation reports very
useful. I appreciate the time and effort spent to post them to the net.
For many of us with busy schedules, etc. net.ham-radio is the only source
of this info.
Please keep it up.
73, Jim Kutsch KY2D
...!houxn!jak

From -5361256719317944793
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2f11149d725b0eb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-27 09:21:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site druxm.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hogpc!houxe!drutx!druxm!n2ic
From: n2ic@druxm.UUCP
Newsgroups: net.ham-radio
Subject: Field Day Scores
Message-ID: <877@druxm.UUCP>
Date: Wed, 27-Jun-84 12:21:30 EDT
Article-I.D.: druxm.877
Posted: Wed Jun 27 12:21:30 1984
Date-Received: Thu, 28-Jun-84 05:31:41 EDT
Organization: AT&T Information Systems Laboratories, Denver
Lines: 16

Anybody have any Field Day scores to report ??????

N0RR (3A)

	80	40	20	15	10	2	Total
Phone	162	433	784	399	17	4	1799
CW	233	601	722	206	0	0	1762

							3561

Steve, N2IC

From 2352498883378370501
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3e9538fe921a0973,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-27 10:36:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: mgweed!rjr's response to mpackard & other comments
Message-ID: <10314@mgweed.UUCP>
Date: Wed, 27-Jun-84 13:36:44 EDT
Article-I.D.: mgweed.10314
Posted: Wed Jun 27 13:36:44 1984
Date-Received: Thu, 28-Jun-84 06:03:57 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 58

I really didn't want to start something here in this news group when I think that "mpackard" should really be ignored, but since I was the object of the "Stop the Bulletins" flame, I will most certainly respond to it here!

BURNER ON

I could say "Hey, April 1st was a couple months ago" or "Why are you criticizing amateur traffic from ARRL when you don't appear to be a ham (at least I didn't see any call sign - let alone your name)" or "Are you related to Wayne Green?".....

After reading your comments on no-code I will say that ham radio might not benefit from having you on the air at all , regardless of whether you use Morse code or not!

As someone else suggested, and I have seen it in other news groups as well, what's wrong with using your "n" key to skip over the stuff you don't like to read? I sure as hell don't read everything either but I don't flame everyone just because

I am not interested in their items!

BURNER OFF

I think Wayne Green's proposal was the most horse-crap idea I have ever seen, especially to be sent to the FCC as a petition. On the other hand I will say I like Wayne. I don't agree with him a lot of times but you have to admit, he does get you thinking.

I don't always agree with the ARRL either. Previous to Wayne's petition, I think the most idiotic idea was the League's incentive licensing plan, which we have today. It would have made much more sense to allocate priveledges according to what modes one qualifies for by taking a test for each mode. Naturally, then, the more modes you are qualified in, the more spectrum you can use.

I agree with the basic idea of why have code a requirement on VHF. However I don't think the same spectrum/priveledges should be available for those that have not passed the entire amateur exam. The FCC stated that one way or another, there will be some kind of hobby radio service available that will require an exam but not require a code test. We shall see what happens.....

Hey there Bob (AJ9S), keep those interesting frequency lists coming.

Thanks to all of you for your encouragement on the bulletins. I wouldn't send them if I didn't think there was interest. I will look into a way to possibly give a brief description in the title line concerning the content. Tnx for that suggestion.

Bob K9EUI (mgweed!rjr)

From -831633479625277805
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-27 11:00:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!inuxd!gls
From: gls@inuxd.UUCP (Gary Spahn)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks - (nf)
Message-ID: <564@inuxd.UUCP>
Date: Wed, 27-Jun-84 14:00:51 EDT
Article-I.D.: inuxd.564
Posted: Wed Jun 27 14:00:51 1984
Date-Received: Thu, 28-Jun-84 05:58:14 EDT

References: <2800003@uok.UUCP>
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 16

The reason you don't see alot of arguing on this net is that this is not CB. The majority are interested in exchanging information on various aspects of the hobby or help newcomers as yourself get started. I didn't get into the hobby until recently because I "didn't have time" to learn the code. Two years ago, my 13 year-old daughter enrolled in an electronics class in school which would lead to a novice license. I got on the stick and got my ticket, then upgraded. She got her license and worked her first Field Day contest. My older daughter and wife also now have their tickets. Are you going to let THEM show YOU up????? Come-on!!!! Find a ham at work or in your neighborhood. Join the crowd. You are very welcome.

'73s de KA9MQI
Gary

From -8910000300513354574
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1363ce,e76ee79e72cd5443
X-Google-Attributes: gid1363ce,public
X-Google-Thread: 151e61,e76ee79e72cd5443
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-27 12:34:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site drusd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!drutx!drusd!lrd
From: lrd@drusd.UUCP (DuBroffLR)
Newsgroups: net.auto,net.ham-radio
Subject: Re: Radar Jammers BEWARE
Message-ID: <1065@drusd.UUCP>
Date: Wed, 27-Jun-84 15:34:12 EDT
Article-I.D.: drusd.1065
Posted: Wed Jun 27 15:34:12 1984
Date-Received: Thu, 28-Jun-84 06:03:22 EDT
References: <2281@ihuxf.UUCP>
Lines: 30

[Just in case...]

> "Is this 'radical chic', or just poor judgement?
> Congratulations, you have just used the net to advocate
> the breaking of federal and international regulations:

> Bob Parnass, AT&T Bell Laboratories
> - ihnp4!ihuxf!parnass - (312)979-5414
> (FCC Radiotelephone Operator's License
> P2-18-37775/Radar Endorsement)"

From the quoted exerpts, it SEEMS as if Mr. Parnass and I have read the
same article, but our reactions are totally different.

I did not see any details that would enable anyone to build a RADAR
jammer if the builder did not already have the knowledge to do so;
all I saw was a general description of the principles involved.

Further, I don't agree that the original poster has "just used the net
to advocate the breaking of federal and international regulations."
I saw neither advocacy nor encouragement; indeed, I saw cautions and
warnings of the penalties for using a jammer.

Maybe we weren't reading the same article.

L. R. DuBroff ...[ihnp4!]drusd!lrd

FCC Ratio Telephone Operator License
(First Class) #P1-18-52382
Ship Radar Endorsement

From 1227441123625304844
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eb2a449dc0b7ab3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-27 15:17:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: Re: Stop the Bulletins! - (nf)
Message-ID: <70@sask.UUCP>
Date: Wed, 27-Jun-84 18:17:17 EDT
Article-I.D.: sask.70
Posted: Wed Jun 27 18:17:17 1984
Date-Received: Thu, 28-Jun-84 06:31:40 EDT
References: <2800004@uok.UUCP>, <52800022@trsvax.UUCP>
Organization: U of Saskatchewan, Canada
Lines: 4

KEEP the bulletins. DON'T even start the no-code discussion again.
And if the perpetrator of the original two messages is so short sighted
as to assume that what he is doing is the only thing of interest in
ham radio then it sure ain't any wonder that he quoted Wayne Green.

From -5285017801124979800
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba45170fd8f6b30c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-28 05:55:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Scanner Info Wanted
Message-ID: <2284@ihuxf.UUCP>
Date: Thu, 28-Jun-84 08:55:06 EDT
Article-I.D.: ihuxf.2284
Posted: Thu Jun 28 08:55:06 1984
Date-Received: Sat, 30-Jun-84 02:45:13 EDT
References: <369@hou2a.UUCP>, <52800021@trsvax.UUCP>, <3061@brl-tgr.ARPA>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 7

The new Regency continuous coverage scanners are made by the Japanese
firm AOR, the same folks who make the Tempo S1 and S5 2 meter handie-
talkies.

--
==
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -2246614112537785567
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2efebb4f7b303b6a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-28 07:07:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou2e.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hou2e!w2iy
From: w2iy@hou2e.UUCP (M.TORTORELLA)
Newsgroups: net.ham-radio
Subject: Stop The Bulletins
Message-ID: <190@hou2e.UUCP>
Date: Thu, 28-Jun-84 10:07:59 EDT
Article-I.D.: hou2e.190
Posted: Thu Jun 28 10:07:59 1984
Date-Received: Sat, 30-Jun-84 02:47:27 EDT
Organization: Bell Labs, Holmdel NJ
Lines: 10

I want to add a word of thanks and encouragement to all those
that have already been sent to ..!mgweed!rjr.
For some of us busy folks, netnews is the only way we can
keep up with the bulletins in a cost-effective way.
Bob, I appreciate all the work you do to post the bulletins
on the net.
Please keep 'em coming.
And for you all out there who don't need to read them,
use the !@#$%^&! 'n' key.
So, 73 for now from w2iy.

From -1957825234915259911
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-28 10:21:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!dual!hplabs!piety
From: piety@hplabs.UUCP (Bob Piety)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks - (nf)
Message-ID: <490@hplabs.UUCP>
Date: Thu, 28-Jun-84 13:21:20 EDT
Article-I.D.: hplabs.490
Posted: Thu Jun 28 13:21:20 1984
Date-Received: Sun, 1-Jul-84 05:39:57 EDT
References: <2800003@uok.UUCP>
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 11

I'd be happy with a more thorough technical test to separate those who
REALLY know radio & electronics theory from those who Bash their way into
ham radio.

The basic idea of the code is to keep the hobby clean-- unlike CB. While
the code test has served that purpose in the past, a comprehensive technical
test could be used today, when knowing ASCII is more useful than morse code.

Bob KG6HV

From 1458124620739417227
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-28 13:39:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1   9/27/83; site hplabsc.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!hplabs!hplabsc!labelle
From: labelle@hplabsc.UUCP (WB6YZZ La Belle)
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks - (nf)
Message-ID: <1977@hplabsc.UUCP>
Date: Thu, 28-Jun-84 16:39:11 EDT
Article-I.D.: hplabsc.1977
Posted: Thu Jun 28 16:39:11 1984
Date-Received: Sun, 1-Jul-84 04:22:41 EDT
References: <2800003@uok.UUCP>
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 8

Agreed. Morse code should be just another available mode. I don't have to learn ascii to operate a tty station!

Technical expertise should be the only mandantory requirement for a liscence to operate!

From 7052033521554128157
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f775c9a7dfa6d454,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-29 05:21:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!agordon@Nosc
From: agordon%Nosc@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: Re: Stop the Bulletins!
Message-ID: <1426@sri-arpa.UUCP>
Date: Fri, 29-Jun-84 08:21:56 EDT
Article-I.D.: sri-arpa.1426
Posted: Fri Jun 29 08:21:56 1984
Date-Received: Sun, 8-Jul-84 08:51:22 EDT
Lines: 15

From: Alan Gordon <agordon@Nosc>

Receiving arrl bulletins via net mail is, for me, a simple and efficient way of keeping plugged into ham radio developments. Also, when there are some timely bulletins in my mailbox I print them out and bring them to our club meetings. Keep 'em coming!

Al Gordon, N6ZI (agordon@NOSC)
Naval Ocean Systems Center
San Diego, Ca.
President
Point Loma Amateur Radio Club (W6RDF)

From -1947535115652853539
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fd2b9848cc225a5e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-29 06:03:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!sde@Mitre-Bedford
From: sde%Mitre-Bedford@sri-unix.UUCP

Newsgroups: net.ham-radio
Subject: code req. rationale
Message-ID: <1429@sri-arpa.UUCP>
Date: Fri, 29-Jun-84 09:03:48 EDT
Article-I.D.: sri-arpa.1429
Posted: Fri Jun 29 09:03:48 1984
Date-Received: Sun, 8-Jul-84 08:47:55 EDT
Lines: 11

When the more sophisticated systems fail, almost anything can be used to generate Morse code. The point of the req. to know it is to ensure that those granted privs to use the bands will be able to deal with the kind of real emergencies that occasionally necessitate such a mode. The ASCII analogy does not apply. If you want substantiation that such events have actually occurred, just read QST, for example. By the way, although I got my commercial license (radar endorsed) without difficulty many years ago, it was years after that until I got sufficiently code-proficient for an amateur license,, so try not to class my comments as merely trying to exclude those for whom it is a chore to learn the code.
   David

From -5093269494670986390
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-29 06:21:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!
stephany.WBST@XEROX.ARPA
From: stephany.WBST@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks - (nf)
Message-ID: <1430@sri-arpa.UUCP>
Date: Fri, 29-Jun-84 09:21:00 EDT
Article-I.D.: sri-arpa.1430
Posted: Fri Jun 29 09:21:00 1984
Date-Received: Sun, 8-Jul-84 08:52:10 EDT
Lines: 12

To have Morse or not to have Morse that is no longer the question.
Morse is here to stay. I do not think 4 Hrs of work and $4.98 for a
cassette is too much to ask for to qualify for a Ham Licese. The Boy
Scout Merit badge award requires 5 WPM, so you guys out there want a Ham
License that has less of a requirement than a Boy Scout Merit Badge ??

Oh, Oh, there I go again. Sorry Guys.

                  Joe N2XS "Spark Forever"

PS I still think tubes are classy

From -1172992325170742671
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eeeea322dc2ae24,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-29 08:02:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!
LEETR.DLOS@XEROX.ARPA
From: LEETR.DLOS@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: Stop the Bulletins! - (nf)
Message-ID: <1447@sri-arpa.UUCP>
Date: Fri, 29-Jun-84 11:02:21 EDT
Article-I.D.: sri-arpa.1447
Posted: Fri Jun 29 11:02:21 1984
Date-Received: Sat, 14-Jul-84 13:25:06 EDT
Lines: 11

I too, must say I like the bulletins being posted, particularly the dx and
propogation forecast bulletins.

I redistribute these locally to some of the Ham BBS's, and the response has
been totally positive!! Folks love 'em, particularly since most folks
don't get to copy them directly.

Keep em' coming!

     --Tim KE5EP

From -4217419180234599976
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bab2ac8b78f174e4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-29 09:30:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!
Rturner@darcom-hq.arpa
From: Rturner@darcom-hq.arpa
Newsgroups: net.ham-radio
Subject: Re: Morse code stinks - (nf)
Message-ID: <1441@sri-arpa.UUCP>
Date: Fri, 29-Jun-84 12:30:47 EDT
Article-I.D.: sri-arpa.1441
Posted: Fri Jun 29 12:30:47 1984
Date-Received: Sun, 8-Jul-84 08:53:16 EDT
Lines: 3

Nope...Boy Scout Radio Merit Badge is tougher. 7WPM!

rick/nf4t

From 3869872583644059973
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7b196bd335f7cc52,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-29 10:12:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!sri-unix!jhs@Mitre-Bedford
From: jhs%Mitre-Bedford@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: In support of Morse code requirements.
Message-ID: <1443@sri-arpa.UUCP>
Date: Fri, 29-Jun-84 13:12:00 EDT
Article-I.D.: sri-arpa.1443
Posted: Fri Jun 29 13:12:00 1984
Date-Received: Sun, 8-Jul-84 08:55:11 EDT
Lines: 67

Ref. - recent ARRL bulletin # 50 (below):
---

    qst de k9eui
    hr bulletin nr 50   from arrl headquarters   newington ct
    june 22 1984   to all radio amateurs bt

    the efforts of radio amateurs in meeting the challenge of
    emergency communications readiness through participation in the
    1984 american radio relay league field day and in the exercises
    sponsored by the national communications system are greatly
    appreciated. your communications skills are a vital resource
    to our country.

    signed, casper w. weinberger, secretary of defense. ar

The amateur radio service is NOT handed all that spectrum just for our amusement. The PRIMARY justification, in the face of a LOT of competition, for all those Megahertzes we call home is that we are a major emergency communications resource. Both us as operators and our equipment.

Read the back of your license, last sentence, for further clarification.

Morse code, with the most sophisticated signal processor known to Man (the human brain) as receiver, is well known to be able to "get through" under many kinds of highly adverse conditions in which most other modes fail miserably.

Morse transmitters can be "jury rigged" in the field out of junk parts in an emergency. Like a battery and a roll of wire. (Try to build a

computerized ASCII terminal starting with those resources!)

I know of one recent case (circa 1980) in which two people were rescued from virtually certain death after an auto accident because one of them happened to be a ham and happened to be able to send Morse code using the touch-tone pad on his 2 Meter FM rig. I never learned just why he couldn't use voice; probably either his injury or that of the microphone prevented it. But if he had NOT known Morse, two people would now be dead unnecessarily. (Details available on request -- it was a pretty dramatic incident.)

Morse IS a bit of effort to learn, and can't effectively be taught quickly in an emergency situation.

For all these reasons, it is in the public interest that ALL of us be coerced, wheedled, conned, tricked, and/or otherwise forced into learning the code whether we are interested in doing so or not. The only exception I would support is for people who REALLY are medically impaired in a way that makes this impossible or an undue burden. And I think when one looks into this, that's a VERY small fraction of those who seek relief from the code requirement.

It is also in our PERSONAL interest, because knowing the code could (as in the case mentioned above) save you own personal life someday.

Besides, Morse code is actually FUN, like skiing or ice skating, once you stop grumbling and get some proficiency in it. And the way to do that is to USE it, just for fun, once in awhile, even if your main interest in ham radio lies somewhere else. Get into a CW "ragchew" from time to time. This takes away the drudgery of practice and makes it actually interesting. HINT: As with tennis or chess, you progress the fastest when you work with an "opponent" more skilled than yourself.

-John H. Sangster (617) 271-7426
jhs at mitre-bedford

From -3796221915262648748
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c988a1735e3b72d1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-05 05:58:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 43
Message-ID: <9661@mgweed.UUCP>
Date: Tue, 5-Jun-84 08:58:54 EDT
Article-I.D.: mgweed.9661
Posted: Tue Jun 5 08:58:54 1984
Date-Received: Wed, 6-Jun-84 06:06:31 EDT
Organization: AT&T Consumer Products - Montgomery Illinois

Lines: 11

qst de k9eui
hr bulletin nr 43 from arrl headquarters newington ct
may 31 1984 to all radio amateurs bt

the results on the question of the admittance of two new member societies to membership in the iaru are now known. the union welcomes the chinese radio sports association and the vanuatu amateur radio society as the 120th and 121st members respectively. ar

From -6689605754284747381
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8ca87c55bbb24f2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-05 05:59:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 20
Message-ID: <9662@mgweed.UUCP>
Date: Tue, 5-Jun-84 08:59:16 EDT
Article-I.D.: mgweed.9662
Posted: Tue Jun 5 08:59:16 1984
Date-Received: Wed, 6-Jun-84 06:06:54 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 62

qst de k9eui
hr dx bulletin nr 20 from arrl headquarters newington ct
june 1 1984 to all radio amateurs bt

thanks to w1trc, k1xm, k1mm and the southern new england dx association for the following dx information.

tonga. nick, a35mo, has been worked on 7178 khz at 0900z. he plans to be active the next 4 wees, especially on 40 and 80 meters. qsl to his home call, zl1axu.

chatham island. ron, zl7amo, will be winding up his operation on chatham within a week. look for him on 21310 khz at 0200z, 20 meters between 0330 and 0500z, 40 meters at 0530z and at 0900z for 80 and 160 meters. qsl to his home call, zl1amo.

rwanda. look for 9x5wp, wes, on sundays from 1900 to 1930z around 21275 to 21280 khz. qsl to wb6vkd.

niger. look for a dxpedition signing 5u7ld this weekend or possibly next weekend. check the usual dxpedition frequencies and 14175 khz at 1930z. qsl to in3rzy.

south sudan. tl8ge/st0 has been showing up on the international dx association net on 14236 khz at 0300z.

wallace island. fw8af, francis, has also been worked on 14236 khz at 2330z.

liechtenstein. da1wa/hb0 expects to be active until next monday, especially on 40, 80 and 160 meters.

thailand. hs4ams was heard last weekend on 14227 khz at 1300z, working the midwest.

solomon islands. h44ia is quite active on the weekends. look around 14200 to 14230 khz betwezn 1200 and 1300z.

west malaysia. 9m2hb is a periodic visitor to the w7phl net on 14226 khz at 1430z.

bahrain. a92eb, christian, is active on weekends on 21335 khz at 2000z. qsl to k0lst.

nauru. c21bd, det, can be found on 14220 to 14250 khz from 1200 to 1400z.

brunei. v85hg, whose old call is vs5hg, is active on 14200 khz at 1400z. he will make skeds for rtty.

heard and worked,

callsign	frequency	time heard
5z4ed	7010 khz	0250z
5b8wj	21300 khz	1015z
ve7lb/kh8	7196 khz	0930z

ar

From -61979488845751442
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,83f8034433c437ea,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11da26,83f8034433c437ea,start
X-Google-Attributes: gid11da26,public
X-Google-ArrivalTime: 1984-06-05 11:58:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site iddic.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!

tektronix!orca!iddic!brucec
From: brucec@iddic.UUCP
Newsgroups: net.chess,net.ham-radio
Subject: Chess Amateur Radio International
Message-ID: <1694@iddic.UUCP>
Date: Tue, 5-Jun-84 14:58:58 EDT
Article-I.D.: iddic.1694
Posted: Tue Jun 5 14:58:58 1984
Date-Received: Wed, 6-Jun-84 07:39:05 EDT
Organization: Tektronix, Beaverton OR
Lines: 13

Before I moved to the Portland, OR area (I gave my HF transceiver to
my father in WVA), I used to be somewhat active in "CARI." That
stands for Chess Amateur Radio International. It's a great idea
for combining chess and amateur radio, resulting in truly international
playing for both hams and non-hams. For more information, write to

      CARI
      PO Box 682
      Cologne, NJ 08213

Until I get another transceiver, I am limited to 2 meters in the
Portland area. Any ham/chess players interested in 2 meter chess?

From 4259421580435604817
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1865144fba8777b2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-05 15:11:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 23
Message-ID: <9672@mgweed.UUCP>
Date: Tue, 5-Jun-84 18:11:17 EDT
Article-I.D.: mgweed.9672
Posted: Tue Jun 5 18:11:17 1984
Date-Received: Wed, 6-Jun-84 05:14:42 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 31

qst de k9eui
hr propagation forecast bulletin nr 23   from arrl headquarters
newington ct june 4, 1984
to all radio amateurs bt

the solar flux average for may was 129.4, but flux values have

been falling since may 21 and the reading for june 2 was 107. in late april we had readings as high as 183, a high for the past 17 months. such peaks have kept the daily average for 1984 at around 127. this is nearly two points above the early 1983 average, despite the fact that cycle 21 is now nearly eight years old.

solar flux values during the past week, 120 to 107, are more like what is expected this late in the cycle, but flux levels are not a major propagation factor during the northern hemisphere summer.

of more interest at this season is the activity of the earths magnetic field, which will be lower early in the forecast week, making for generally better conditions on all hf bands. it will rise again june 5 to 7, resulting in poorer high latitude propagation until about june 8.

sporadic e layer ionization will continue to provide short skip on 28 and 50 mhz, and the chances for 144 mhz will improve.

american sunspot numbers for may 24 through 30 were between 59 and 83 with a mean of 72.1 ar

From -5036960165752398433
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a2dfbbccda39cecf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-06 05:15:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!mb2c!uofm-cv!tom
From: tom@uofm-cv.UUCP (Tom Libert)
Newsgroups: net.ham-radio
Subject: Re: Prom Erasure
Message-ID: <568@uofm-cv.UUCP>
Date: Wed, 6-Jun-84 08:15:38 EDT
Article-I.D.: uofm-cv.568
Posted: Wed Jun 6 08:15:38 1984
Date-Received: Thu, 7-Jun-84 07:52:39 EDT
References: sri-arpa.438
Lines: 24

Subject: Prom Erasure

There are two different kinds of ultraviolet tubes available--short wave and long wave. The kind used to illuminate posters, etc. are long wave.
The kind used to erase EPROMS are short wave. Short wave UV is the component of sunlight which causes tanning (and sunburn, and skin cancer), so you have to be very careful not to look at a short wave UV lamp. I've been using a General Electric G8T5 8-watt germicidal tube with very good results. If you want to build an eraser from scratch then you'll also need an 8-watt ballast and an FS-5 starter. There are some back issues of BYTE magazine which

describe the construction of an EPROM eraser. However, at least one of these articles INCORRECTLY suggests using a long-wave UV lamp. The easiest way (and probably cheapest way) to build an EPROM eraser is to buy the G8T5 tube and put it in an inexpensive fluorescent desk lamp which already contains the correct ballast, starter, sockets, cord and power switch.

Good luck and have fun. Let me know if you need more information.

Tom Libert
Dept. of EECS
Division of Computer Sci. and Engin.
Univ. of Michigan
Ann Arbor, MI 48109
(313) 763-6474

From 8968476012069107470
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9b56895fdc53da77,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-06 06:32:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: rcvr comments
Message-ID: <9685@mgweed.UUCP>
Date: Wed, 6-Jun-84 09:32:47 EDT
Article-I.D.: mgweed.9685
Posted: Wed Jun 6 09:32:47 1984
Date-Received: Thu, 7-Jun-84 07:41:28 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 70

Since others are posting their opinions on receivers here, I'll throw in my vote.

I had a chance to try out a ICR70 a few weeks ago for about an hour and it is truely a fine rcvr. If bucks were no problem I would go for one without doubt.

My main "auxilliary" receiver is a Kenwood R-1000. For the money it also is a fine rcvr. In this area there are more hams with that rcvr than any other. All I have encountered have excellent stability and minimum drift (about the same as my 820S transceiver).

When using a random wire for an antenna, it is a good idea to use a small antenna tuner for best results, as one really should with any rcvr.

A tuner is a must when using it below the broadcast band to prevent

bdcst stations from creeping in. I am about 20 miles from several
50kw stations.

As I pointed out in my article in "73" magazine a year or so ago,
The AGC time constant is reversed from what it should be (unless
Kenwood has corrected it by now). On SSB/CW it has the fast AGC
and on AM it has slow release AGC, which is backwards.

My R-1000 is used mainly for rtty work and is quite adequate for this.
Rtty probably requires a more stable rcvr than any other mode.

I have transmitted on nearby frequencies (working splits on the same band)
with a separate antenna on the R-1000 and have not blown the front end
out as has happened to other rcvrs and transceivers.

I would stay away from the R-600 and the R-2000.....

The only R-600 I have had access to had a mechanical problem
in the VFO dial mechanism -- backlash!

The R-2000 steps in 50 Hz jumps when tuning. This is especially
bad for RTTY use. Beyond that, I can't comment as I have not
actually used one.

Another fairly decent rcvr is the Yeasu FRG-7. This is an
older rcvr of theirs but is synthesized and very stable.
They can be had for less than $200 used. I use one for a
backup rcvr and for semi-continuous monitoring of a particular
frequency, while tuning around with the other rcvr.

The FRG-7 does not have digital readout, although there are some
available as add-ons. The Analog dial can be read out to within
a couple of kHz with care.

The IF filter is a little wide but can be replaced. The product
detector is quite good. This rcvr is more forgiving on what you
use for an antenna since it has a tunable preselector.
It also can be powered from internal D cells or external 12 volts,
making it ideal to haul around on vacation.

Stay away from the Radio Shack jobs. Bad dial mechanisms and
lotsa drift are their main problems.....

Bob K9EUI

From 8829541840868221977
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a2dfbbccda39cecf
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-06 14:46:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: Prom Erasure
Message-ID: <67@mouton.UUCP>
Date: Wed, 6-Jun-84 17:46:34 EDT
Article-I.D.: mouton.67
Posted: Wed Jun 6 17:46:34 1984
Date-Received: Thu, 7-Jun-84 19:35:02 EDT
References: sri-arpa.438 <568@uofm-cv.UUCP>
Organization: Bell Communications Research, Inc
Lines: 6

A very important thing to remember if you're going to build your own EPROM
eraser is that short wave UV is very harmful to your eyes. Commercial units
are well enclosed and have interlocks to keep you from blinding yourself.
Be careful!

Phil

From -6298790053172553376
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b421b24f00c7cf9b,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,b421b24f00c7cf9b,start
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1984-06-06 20:10:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.aviation
Subject: Balloon & Blimp scanner frequencies
Message-ID: <2241@ihuxf.UUCP>
Date: Wed, 6-Jun-84 23:10:01 EDT
Article-I.D.: ihuxf.2241
Posted: Wed Jun 6 23:10:01 1984
Date-Received: Thu, 7-Jun-84 19:39:27 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 23

 123.30   KN7685   American Balloon Svc, sports (USA-wide)
 123.50   KN7685   American Balloon Svc, sports (USA-wide)
 151.625 KA89677 Balloon Adventure, sports (USA-wide)

```
 123.300  KD9559   Balloon Adventures, sports (USA-wide)
 123.500  KD9559   Balloon Adventures, sports (USA-wide)
 151.625  KB28682  Balloon Depot Inc, sports (USA-wide)
 151.625  KA79512  Balloon Media Ltd, sports (USA-wide)
 123.300  KU6011   Balloon Promotions Ltd, sports (USA-wide)
 151.625  KB20846  Balloonatics Inc, sports (USA-wide)
 123.300  WNQ5     Balloons Aloft, sports (USA-wide)
 123.500  WNQ5     Balloons Aloft, sports (USA-wide)
 132.000  WQP6     Goodyear Blimp, sports, entertainment
 151.625  ?        Goodyear Blimp, sports, entertainment
  46.85   ?        US: Navy, Scott AFB, exp research stn, balloon (Belleville)
  46.95   ?        US: Navy, Scott AFB, exp research stn, balloon (Belleville)
  49.85   ?        US: Navy, Scott AFB, exp research stn, balloon (Belleville)
  49.95   ?        US: Navy, Scott AFB, exp research stn, balloon (Belleville)
 151.655  KB38764  Wicker Basket Balloon, sports (USA-wide)

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================================================================================
Bob Parnass,  AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414


From 2920901982932359867
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,480c969a73836676,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 1363ce,480c969a73836676,start
X-Google-Attributes: gid1363ce,public
X-Google-ArrivalTime: 1984-06-06 20:29:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.auto,net.ham-radio
Subject: auto race freq list - updated
Message-ID: <2242@ihuxf.UUCP>
Date: Wed, 6-Jun-84 23:29:36 EDT
Article-I.D.: ihuxf.2242
Posted: Wed Jun  6 23:29:36 1984
Date-Received: Thu, 7-Jun-84 19:39:41 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 74


f  461.050  KNEU448  AAR Toyota Motor Sports (USA-wide)
f  466.025  KNEU447  All American Racers, racing (USA-wide)
f  154.600  KP3213   Allied Auto Racing (USA-wide)
f  151.955  KA96286  American Honda, motorsports? (USA-wide)
f  469.500  KB38932  American Speed Assn, racing (USA-wide)
f  154.530  KA52803  Auto Race Promotions, sports (USA-wide)
f  469.550  KB40093  Baton Rouge Road Run..., racing? (USA-wide)
f  469.500  KJ3823   Bayside Racing Team (USA-wide)
f  469.550  KK8624   BDR Racing (USA-wide)
f  464.325  KNFW308  Bon Temps Racing Inc (USA-wide)
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f   42.98   KA46958  Brinks Racing Team, sports (USA-wide)
f  466.300  KB28380  Brune, Leslie V Racing (USA-wide)
f  464.750  KA44115  Championship Auto Racing (USA-wide)
f  151.955  KK7097   Clarke Race Cars, sports (USA-wide)
f  469.500  KB24827  Cobra Racing (USA-wide)
f  469.550  KB24827  Cobra Racing (USA-wide)
f   35.04   KA7851   Competition Limited, sports (USA-wide)
f  154.570  KB35171  Daredevil Attractions, sports (USA-wide)
f  469.500  KU4811   Desperado Racing (USA-wide)
f  469.500  KB32647  Electronic Race Patrol, auto racing? (USA-wide)
f  154.600  KS8119   Executive Sports (USA-wide)
f  469.500  KB30672  Falcon Racing (USA-wide)
f  462.575  KAD6220  Fast Trucks Inc, motorsports? (USA-wide)
f  464.725  KA33486  Fletcher Racing (USA-wide)
f  151.775  KA83937  Gilmore Enterprises, auto sports racing (USA-wide)
f  151.955  KB35540  Hallett Motor Racing (USA-wide)
f  463.500  KNHD830  Hawkins, Bobby Racing (USA-wide)
f  464.450  KB31930  Hayes, Johnny Racing (USA-wide)
f  151.925  KNDX844  High Sierra Sports, sports (USA-wide)
f  469.425  KB34600  Hooker Racing Enterprises (USA-wide)
f  460.550  KM7823   I 70 Speedway Inc, sports (USA-wide)
f  460.825  KM7823   I 70 Speedway Inc, sports (USA-wide)
f  461.100  KB25794  Jarrett, Glen Racing (USA-wide)
f  469.500  KB36366  JET Racing (USA-wide)
f  464.750  KA33482  Kent & Bagly Racing (USA-wide)
f  461.025  KNFP607  Kent Racing Inc (USA-wide)
f  466.025  KNFP607  Kent Racing Inc (USA-wide)
f  462.550  KAD3316  Keystone Sports Foundation (USA-wide)
f  464.800  KNCV313  Kyle Racing (USA-wide)
f  467.900  KS9804   Malibu Grand Prix Inc, racing (USA-wide)
f  463.400  KNCP944  Martin, Mark Racing (USA-wide)
f  464.050  KB33210  Mash Racing (USA-wide)
f  154.600  KA90320  Megabucks Racing (USA-wide)
f  469.500  KB28185  Milwaukee Sports Svc (USA-wide)
f   35.04   KNBV535  P & S Racing (USA-wide)
f  464.825  KNEE321  Parrott, Buddy Racing (USA-wide)
f  464.500  KA95649  Patrick Racing Team, auto sports racing (USA-wide)
f  464.550  KA95649  Patrick Racing Team, auto sports racing (USA-wide)
f  464.700  KA95649  Patrick Racing Team, auto sports racing (USA-wide)
f  464.750  KA95649  Patrick Racing Team, auto sports racing (USA-wide)
f  469.725  KQ9180   Peles Racing (USA-wide)
f  154.600  KV8498   Penske Speedway Inc, auto sports racing (USA-wide)
f  464.725  KNAP470  Petty Enterprises Inc, auto racing? (USA-wide)
f  469.550  KB27126  Prime Time Racing (USA-wide)
f  461.7875 KB20325  R & S Racing (USA-wide)
f  468.8125 KG2971   Road Inc, racing? (USA-wide)
f  463.800  KB35895  Rose Racing Inc (USA-wide)
o  151.625  KA72881  Skip Barber Racing, spotter's ht (USA-wide)
f  464.425  KB31929  Skoal Bandit Racing (USA-wide)
f  151.625  KH8971   Sports Car Club of America, Raleigh NC (USA-wide)
f  151.955  KA37393  Stadium Motorsports (USA-wide)
f  469.550  KU4287   Starr Racing (USA-wide)
f  467.850  KA96176  Teleview Racing Patrol (USA-wide)
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f 467.875 KA96176 Teleview Racing Patrol (USA-wide)
f 467.750 KB29026 True Sports Company (USA-wide)
f 468.250 KB29026 True Sports Company (USA-wide)
f 151.625 KNGH755 United Shows Inc, sports, entertainment (USA-wide)
f 151.625 KA26819 Universal Sports Inc (USA-wide)
f 151.625 KJ9237   US Auto Club - Speedway, IN, sports (USA-wide)

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Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -5902533914607057459
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c3a040b3c2cf623c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-07 13:33:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site iddic.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!cornell!uw-beaver!tektronix!orca!
iddic!brucec
From: brucec@iddic.UUCP
Newsgroups: net.ham-radio
Subject: HF Transceivers
Message-ID: <1696@iddic.UUCP>
Date: Thu, 7-Jun-84 16:33:20 EDT
Article-I.D.: iddic.1696
Posted: Thu Jun 7 16:33:20 1984
Date-Received: Sat, 9-Jun-84 08:03:50 EDT
Organization: Tektronix, Beaverton OR
Lines: 11

I am looking for a transceiver that has: 1) general coverage,
2) digital display, 3)multiple VFO capability. My previous
experience was with a TS 520 with narrow CW filters and a VFO.
I used the VOX for "semi-break-in" capability (it dropped out
of XMIT between words). I don't know the precise definition of
full QSK, maybe if I did I'd want that, too.
    Does any one have something NICE or NASTY to say about any
transceivers that would be appropriate? Please post it or UNIX
mail it to iddic!brucec. TNX.

From -512144844271947998
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8562ae27837652fd
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-07 18:21:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site watcgl.UUCP
Path: utzoo!watmath!watcgl!dmmartindale

From: dmmartindale@watcgl.UUCP (Dave Martindale)
Newsgroups: net.ham-radio
Subject: Re: Aircraft Freq's
Message-ID: <2644@watcgl.UUCP>
Date: Thu, 7-Jun-84 21:21:33 EDT
Article-I.D.: watcgl.2644
Posted: Thu Jun 7 21:21:33 1984
Date-Received: Fri, 8-Jun-84 01:46:05 EDT
References: <237@bpa.UUCP>
Organization: U of Waterloo, Ontario
Lines: 6

The easiest way to find the "public" frequencies - towers, IFR control centres, etc., is to use the same publications the pilots use. In Canada, you'd want something called the VFR and IFR supplements - they list all air traffic frequencies needed by pilots. There must be corresponding FAA publications. Find a nearby pilot (or flying club) and ask.

From 4525850972138495831
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8b4bdc94647e3036,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-08 02:10:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!houxz!vax135!cornell!uw-beaver!tektronix!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Ian Ashley is NZ Amateur of the Year
Message-ID: <311@dsd.UUCP>
Date: Fri, 8-Jun-84 05:10:13 EDT
Article-I.D.: dsd.311
Posted: Fri Jun 8 05:10:13 1984
Date-Received: Sun, 10-Jun-84 01:20:18 EDT
Lines: 10

From: Tom Clark, W3IWI

It is with great pleasure that I pass along the news I learned last nite. At the recent annual meeting of NZART, the New Zealand national society, Ian Ashley, ZL1AOX was presented a certificate of merit naming him as Amateur of the Year for 1983 for his work as an AO-10 telecommand station and for his pioneering work in packet radio.

I know I express the congratulations of all the AMSAT membership to Ian for this most deserved award.

From -1875855896163713589
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1ba6d33f5cd7e7c1,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-08 07:18:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Need RTTY info - (nf)
Message-ID: <52800019@trsvax.UUCP>
Date: Fri, 8-Jun-84 10:18:00 EDT
Article-I.D.: trsvax.52800019
Posted: Fri Jun 8 10:18:00 1984
Date-Received: Mon, 11-Jun-84 00:17:43 EDT
Lines: 22
Nf-ID: #N:trsvax:52800019:000:955
Nf-From: trsvax!mikey   Jun 8 09:18:00 1984

#N:trsvax:52800019:000:955
trsvax!mikey   Jun 8 09:18:00 1984

I'm about to design a RTTY card for my Coco. I'm having no trouble
designing it for 170 hz shift. However, I want to make it so that
it will also function on 425 and 850 hz shifts that I've heard are
used commercially in the HF bands. I'm using an Exar 2211 as the
demodulator. Since the 2211 can be tailored for different data
rates and such, I need to know what speeds are used. I'm new to
RTTY and the only thing I know is that hams on VHF generally use 110
baud in the Dallas/Ft. Worth area with 170 hz shift.

I was also going to use overlaping switched capacitor filters to give
me a variable bandwidth filter, but I don't know if the filter is
even necesary on VHF. If it isn't, it will be added later, as my primary
goal is to get up a monitor on VHF first, then get transmitting
ability on VHF, and then start on the other bands. I don't know what is
necessary at this stage of the game. Any suggestions?

mikey at trsvax KA5MJQ

From 6539551579505586577
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,28ceb7377d03d383,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-08 09:08:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mordor.UUCP
Path: utzoo!linus!philabs!cmcl2!seismo!ut-sally!mordor!wct
From: wct@mordor.UUCP
Newsgroups: net.ham-radio
Subject: receiver recommendations
Message-ID: <3745@mordor.UUCP>

Date: Fri, 8-Jun-84 12:08:12 EDT
Article-I.D.: mordor.3745
Posted: Fri Jun 8 12:08:12 1984
Date-Received: Sat, 9-Jun-84 07:58:45 EDT
Organization: S-1 Project, LLNL
Lines: 29

++++++++++++++++++++++++++++++++++++
With respect to the R600 anti-recommendation posted:

I've been using one for over a year and have been quite pleased with it.
The review in the 1983 World Radio TV handbook reinforces this view.
It is sort of the current VW of communications receivers.

Best prices for it seem to consistently be from The Ham Radio Outlet
stores--see their ads in CQ or 73. (about $280.)

Although I have read reports of problems with backlash in the dial
mechanism with some R600's, I have no appreciable backlash on my
receiver--Perhaps it is a good idea to try before you buy--or
at least ask the dealer about it beforehand.

                    Bill Thompson

--
     William C. Thompson III (S-1 Project, Lawrence Livermore National Laboratory)
        U.S. Mail: LLNL, S-1 Project, P.O. Box 5503, L-276, Livermore, Ca., 94550
        Phone: (415) 422-0758
     MILNET: wct@s1-c or s1-a   UUCP: ...!decvax!decwrl!mordor!wct

From 4830950720403095224
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8fb5a9994c3df420,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-08 11:40:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <75@mouton.UUCP>
Date: Fri, 8-Jun-84 14:40:12 EDT
Article-I.D.: mouton.75
Posted: Fri Jun 8 14:40:12 1984

Date-Received: Sat, 9-Jun-84 08:18:22 EDT
Organization: Bell Communications Research, Inc
Lines: 203

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84155.35502310
   Sun Jun 3 08:31:13.995 1984 UTC
Element set: 647
Inclination: 97.5912 deg
RA of node: 129.7084 deg
Eccentricity: 0.0003830
Arg of perigee: 131.7528 deg
Mean anomaly: 228.4027 deg
Mean motion: 15.25824165 rev/day
Decay rate: 4.491e-05 rev/day^2
Epoch rev: 14743
Semi major axis: 6863.414 km
Anom period: 94.375226 min
Apogee: 499.592 km
Perigee: 494.335 km
Beacon: 145.8250 mhz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84155.14064979
   Sun Jun 3 03:22:32.141 1984 UTC
Element set: 105
Inclination: 25.6378 deg
RA of node: 196.2423 deg
Eccentricity: 0.6089574
Arg of perigee: 276.7795 deg
Mean anomaly: 21.6381 deg
Mean motion: 2.05850652 rev/day
Decay rate: -1.36e-06 rev/day^2
Epoch rev: 732
Semi major axis: 26106.044 km
Anom period: 699.536283 min
Apogee: 35629.315 km
Perigee: 3834.378 km
Beacon: 145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time: 84148.10356205
   Sun May 27 02:29:07.761 1984 UTC
Element set: 29
Inclination: 98.2421 deg
RA of node: 210.3619 deg
Eccentricity: 0.0014072
Arg of perigee: 358.1468 deg
Mean anomaly: 1.9676 deg
Mean motion: 14.61867821 rev/day

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Decay rate:       2.58e-06 rev/day^2
Epoch rev:           1262
Semi major axis:  7062.366 km
Anom period:     98.504118 min
Apogee:            694.181 km
Perigee:           674.305 km
Beacon:           145.8260 mhz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84146.15537273
   Fri May 25 03:43:44.203 1984 UTC
Element set:     95
Inclination:       82.9606 deg
RA of node:       145.8645 deg
Eccentricity:    0.0060058
Arg of perigee:    36.9567 deg
Mean anomaly:     323.5616 deg
Mean motion:   12.15586627 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10812
Semi major axis:  7987.332 km
Anom period:    118.461323 min
Apogee:           1664.771 km
Perigee:          1568.830 km

Satellite: rs-4
Catalog number: 13000
Epoch time:      84156.04324497
   Mon Jun  4 01:02:16.365 1984 UTC
Element set:     201
Inclination:       82.9525 deg
RA of node:       148.9951 deg
Eccentricity:    0.0019332
Arg of perigee:    93.9820 deg
Mean anomaly:     266.3429 deg
Mean motion:   12.06665385 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10850
Semi major axis:  8026.679 km
Anom period:    119.337143 min
Apogee:           1685.013 km
Perigee:          1653.979 km

Satellite: rs-5
Catalog number: 12999
Epoch time:      84147.12198177
   Sat May 26 02:55:39.224 1984 UTC
Element set:     169
Inclination:       82.9529 deg
RA of node:       155.2656 deg
Eccentricity:    0.0011108
Arg of perigee:   137.6944 deg
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Mean anomaly:     222.4971 deg
Mean motion:   12.05045307 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10728
Semi major axis:  8033.876 km
Anom period:    119.497582 min
Apogee:           1674.198 km
Perigee:          1656.350 km

Satellite: rs-6
Catalog number: 13002
Epoch time:      84144.42449493
   Wed May 23 10:11:16.361 1984 UTC
Element set:     81
Inclination:       82.9626 deg
RA of node:       148.7570 deg
Eccentricity:    0.0051579
Arg of perigee:    58.5039 deg
Mean anomaly:     302.1055 deg
Mean motion:   12.13561845 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10771
Semi major axis:  7996.220 km
Anom period:    118.658971 min
Apogee:           1674.634 km
Perigee:          1592.146 km

Satellite: rs-7
Catalog number: 13001
Epoch time:      84151.40146634
   Wed May 30 09:38:06.691 1984 UTC
Element set:     158
Inclination:       82.9620 deg
RA of node:       149.4716 deg
Eccentricity:    0.0023888
Arg of perigee:    68.0025 deg
Mean anomaly:     292.3570 deg
Mean motion:   12.08682263 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10812
Semi major axis:  8017.741 km
Anom period:    119.138010 min
Apogee:           1676.858 km
Perigee:          1638.552 km

Satellite: rs-8
Catalog number: 12998
Epoch time:      84145.27286685
   Thu May 24 06:32:55.695 1984 UTC
Element set:     274
Inclination:       82.9621 deg
RA of node:       158.1641 deg
Eccentricity:    0.0018655
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Arg of perigee:   197.1727 deg
Mean anomaly:     162.8721 deg
Mean motion:   12.02946019 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10687
Semi major axis:  8043.226 km
Anom period:    119.706120 min
Apogee:           1681.922 km
Perigee:          1651.913 km

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84147.92021818
   Sat May 26 22:05:06.850 1984 UTC
Element set:     262
Inclination:       99.0473 deg
RA of node:       119.0749 deg
Eccentricity:    0.0013213
Arg of perigee:   151.5200 deg
Mean anomaly:     208.6694 deg
Mean motion:   14.13040614 rev/day
Decay rate:       2.28e-06 rev/day^2
Epoch rev:           15085
Semi major axis:  7224.306 km
Anom period:    101.907899 min
Apogee:            860.449 km
Perigee:           841.358 km
Beacon:           137.6200 mhz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84153.36482752
   Fri Jun  1 08:45:21.97  1984 UTC
Element set:     83
Inclination:       98.7063 deg
RA of node:       184.5742 deg
Eccentricity:    0.0018073
Arg of perigee:    98.3230 deg
Mean anomaly:     261.9997 deg
Mean motion:   14.22413743 rev/day
Decay rate:       1.51e-06 rev/day^2
Epoch rev:            6122
Semi major axis:  7192.493 km
Anom period:    101.236367 min
Apogee:            847.804 km
Perigee:           821.806 km
Beacon:           137.5000 mhz


From 5470375004377079379
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b52189cc07763232,start
X-Google-Attributes: gid151e61,public
```

X-Google-ArrivalTime: 1984-06-08 13:19:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!floyd!cmcl2!
seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Munich packet station heard on AO10
Message-ID: <312@dsd.UUCP>
Date: Fri, 8-Jun-84 16:19:24 EDT
Article-I.D.: dsd.312
Posted: Fri Jun 8 16:19:24 1984
Date-Received: Tue, 12-Jun-84 00:33:41 EDT
Lines: 11

To: All packet stations
From: Hank Magnuski, KA6M
Subject: Packet activity in W. Germany

At approximately 0700 UTC on June 7th, 1984 a new packet station
in Munich, DL3MAO, "Bernie" reported copying packets from Wes, K7PYK,
in Arizona on the Oscar 10 digital channel.

Bernie reports that there are four TAPR boards on the air in the
Munich area, and another four in the Hannover area. He also has learned
that there is now an active group in Switzerland, near Zurich.

From -8279872446842999684
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c3a040b3c2cf623c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-08 15:44:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!houxz!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: HF Transceivers
Message-ID: <2246@ihuxf.UUCP>
Date: Fri, 8-Jun-84 18:44:38 EDT
Article-I.D.: ihuxf.2246
Posted: Fri Jun 8 18:44:38 1984
Date-Received: Sat, 9-Jun-84 08:24:54 EDT
References: <1696@iddic.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 35

In response to the question:

> "...Does any one have something NICE or NASTY to say about any
> transceivers that would be appropriate? Please post it or UNIX
> mail it to iddic!brucec. TNX."

The Indian Hill Amateur Radio Club here at AT&T Bell Laboratories has Kenwood's top of the line TS-930S general coverage transceiver, and an older pair of Drake R4B/T4XB twins.

The general coverage and digital features on the Kenwood are neat, but it lacks:

1. scanning of memory channels

2. provision for FM detector

3. memorizing of mode along with frequency

4. all-mode squelch control

Leaving aside all the nice digital control circuitry, the Kenwood is "left in the dust" by the older R4B when trying to copy a signal in the presence of other strong signals (e.g. Field Day). There is an odd asymmetry in the type of controls available for use in CW and SSB. As an example, the dual variable bandwidth control functions in SSB but not CW mode.

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==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 2612110103071285391
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,626256008d74a742,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-09 06:07:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: nyu notesfiles V1.1 4/1/84; site acf4.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!floyd!cmcl2!acf4!sullivan
From: sullivan@acf4.UUCP
Newsgroups: net.ham-radio
Subject: Re: opinions on receivers
Message-ID: <16400002@acf4.UUCP>
Date: Sat, 9-Jun-84 09:07:00 EDT
Article-I.D.: acf4.16400002
Posted: Sat Jun 9 09:07:00 1984
Date-Received: Wed, 6-Jun-84 04:24:32 EDT
References: <263@BBNA.UUCP>

Organization: New York University
Lines: 32
Nf-ID: #R:BBNA:-26300:acf4:16400002:000:1874
Nf-From: acf4!sullivan   Jun 4 09:07:00 1984

Last Friday (June 1) I bought a ICOM IC-R71A for $700. I have only played with it for a few days (this being Monday), so I haven't really put it through its paces. My previous receiver was a Sony ICF-2001, which is helplessly out-classed by the ICOM. I'll post a follow up review later.

My primary interest is in Medium Wave DXing. I saw wonderful reviews of the R70 which said that it was superb for BCB work. I also saw the reports of poor quality control which caused some R70's to die, as well as hearing that they were extremely succeptable to static build-up which would fry the front end. So, I waited.

When my eyes caught the first R71A add, I fell into immediate, and deep love. I had to have it. Then I read a six or seven page review of the R71A by a Australian DX club in DX News (the publication of the National Radio Club) which was quite detailed and pointed out the good and the bad of the radio. All in all, it fixes most (but not all) of the R70's quirks. More importantly the review stated that in their opinion this was the best performance for the money that could be had in the $500 to $3000 prrice range. I was sold, and I waited until my wallet caught up.

It is a fantastic receiver. I find it very enjoyable to operate, and I have been having so much fun with the shortwave spectrum that I haven't really gotten down into the BCB too often, though when I did I caught a few new stations where I had previously heard static. This receiver works very well in ECSS mode, which then provides full access to the PBT and notch. Also, the noise blanker works extremely well at getting rid of ac line hash, which made low frequency (100-500KHz) work almost impossible before.

If you can stand the wait, save up and buy this radio. More later.

David J. Sullivan, WA1TNS   ...!floyd!cmcl2!sullivan
New York University   SULLIVAN@NYU.ARPA

From -3061836629041860206
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8562ae27837652fd
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-09 09:33:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-vgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!floyd!cmcl2!
seismo!brl-tgr!brl-vgr!ron
From: ron@brl-vgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: Aircraft Freq's
Message-ID: <3151@brl-vgr.ARPA>
Date: Sat, 9-Jun-84 12:33:59 EDT

Article-I.D.: brl-vgr.3151
Posted: Sat Jun 9 12:33:59 1984
Date-Received: Sun, 10-Jun-84 01:56:13 EDT
References: <609@sri-arpa.UUCP>
Organization: Ballistics Research Lab
Lines: 4

I think he wants the commercial frequencies used by the particular
airlines not the ATC and UNICOM frequencies listed in the AOPA books.

-Ron

From -5494221630527810577
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8562ae27837652fd
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-09 18:24:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Aircraft Freq's
Message-ID: <2248@ihuxf.UUCP>
Date: Sat, 9-Jun-84 21:24:25 EDT
Article-I.D.: ihuxf.2248
Posted: Sat Jun 9 21:24:25 1984
Date-Received: Sun, 10-Jun-84 06:52:54 EDT
References: <609@sri-arpa.UUCP>, <3151@brl-vgr.ARPA>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 20

Here are a few of the many O'Hare Airport (Chicago) airlines frequencies:

```
f  460.775  KDM873   American Airlines
f  462.700  KAC8703  American Airlines
o  462.575  KAB7781  Britt Airlines (Chicago)
p  460.825  KSI674   Delta Airlines (Chicago)
p  460.825  KVT401   Delta Airlines, portables (USA-wide)
f  464.875  KTY716   El Al Israel Airlines (Chicago)
p  460.875  ?        Midway Airlines (Chicago)
o  464.525  KZZ826   Ozark Airlines
p  460.675  KTT668   Trans World Airlines (Chicago)
p  461.750  KBR316   Trans World Airlines (Chicago)
```

  o = somebody has confirmed usage of this freq
  f = as listed in FCC records/not yet reported as being used
  p = as listed in press /not yet reported as being used

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==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 1649973188743744835
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,616490741ec49bfa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-10 10:16:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site abnjh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!abnjh!cbspt002
From: cbspt002@abnjh.UUCP (Marc E. Kenig)
Newsgroups: net.ham-radio
Subject: BBC World Svce freq Sked July 1984 (London Calling)
Message-ID: <672@abnjh.UUCP>
Date: Sun, 10-Jun-84 13:16:22 EDT
Article-I.D.: abnjh.672
Posted: Sun Jun 10 13:16:22 1984
Date-Received: Mon, 11-Jun-84 00:30:47 EDT
Organization: ATTIS, NJ
Lines: 103

<this line to be snarfed by a Russian woodpecker?>

BBC World Service Frequencies - July 1984
Target areas: Canada USA Mexico Central America Caribbean Equador
Peru Venezuela

Letter in grid denotes xmittion from that time for the next 15 min.
from that xmitter (see key below). All times GMT.
(Note: No changes from June Sked. Expanded Highlights follow freq/time
charts)

```
MHz    00  01  02  03  04  05  06  07  08  09  10  11 GMT  MHz  Meter
       ..............................................
21.55  +   +   +   +   +   +   +   +   +   +   +   GGGG+  21.55  13.92
15.42  CCCCCCCCCC  +   +   +   +   +   +   +   +   +   +  15.42  19.46
15.26  +   +   +   +   +   +   +   +   +   +   +   +   +  15.26  19.66
15.215 +   +   +   +   +   +   +   +   +   +   +   GGGG+  15.215 19.72
15.07  GG  +   +   +   +   +   +   +   +   +   +   +   +  15.07  19.91
11.91  GG  +   +   +   +   +   +   +   +   +   +   +   +  11.91  25.19
11.835 + GGGGGGGG  +   +   +   +   +   +   +   +   +   +  11.835 25.35
11.775 +   +   +   +   +   +   +   +   +   +   +   WWWW+  11.775 25.48
11.75  AAAAAAAAAA  +   +   +   +   +   +   +   +   +   +  11.75  25.53
 9.915 GGGGGGGGGG  +   +   +   +   +   +   +   +   +   +   9.915 30.26
 9.74  +   +   +   +   +   +   +   +   +   +   +   +   +   9.74  30.80
 9.59  SS  +   +   +   +   +   +   +   +   +   +   +   +   9.59  31.28
 9.515 + KKKKKKKKKKK  +   +   +   +   +   +   +   +   +   9.515 31.53
 9.51  +   +   +   +   + WWWWWWWWWWWWWWWWWWW   +   +   +   9.51  31.55
 7.325 GGGGGGGGGGGGG  +   +   +   +   +   +   +   +   +   7.325 40.96
 6.195 +   +   +   +   +   +   +   +   +   W   +   WWWW+   6.195 48.43
 6.175 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWW  +   +   +   +   +   6.175 48.58
 6.12  SSSSSSSSSSSSS  +   +   +   +   +   +   +   +   +   6.12  49.02
 6.085 AA  +   +   +   +   +   +   +   +   +   +   +   +   6.085 49.30
```

```
 6.02  + AAAAAAAAAAA  +   +   +   +   +   +   +   +   +   6.02  49.83
 6.005 +   +   +   +   +   +   +   +   +   +   +   +   +   6.005 49.96
 5.975 GGGGGGGGGGGGGGGGGGGGGG+   +   +   +   +   +   +   5.975 50.21
 5.965 +   +   +   +   +   +   +   +   +   +   +   +   +   5.965 50.29
       .............................................

MHz    12  13  14  15  16  17  18  19  20  21  22  23 GMT  MHz  Meter
       .............................................
21.55  GGGGGG  +   +   +   +   +   +   +   +   +   +   +  21.55  13.92
15.42  +   +   +   +   +   +   +   +   +   +   CCCCCCCCC  15.42  19.46
15.26  +   +   +   ssssSSSSSss +   +   +   +   +   +   +  15.26  19.66
15.215 GGGGGG  +   +   +   +   +   +   +   +   +   +   +  15.215 19.72
15.07  +   +   +   GGGGGGGGGG +   +   GGGGGGGGGGGGGGGG  15.07  19.91
11.91  +   +   +   +   +   +   +   +   +   +   +   GGGGG  11.91  25.19
11.835 +   +   +   +   +   +   +   +   +   +   +   +   +  11.835 25.35
11.775 WWWWWW  +   ssssSSSSSss +   +   +   +   +   +   +  11.775 25.48
11.75  +   +   +   FFFFF   +   +   +   AAAAAAAAAAAAAAAA  11.75  25.53
 9.915 +   +   +   +   +   +   +   +   +   +   GGGGGGGGG   9.915 30.26
 9.74  +   +   +   FFFFF   +   +   +   +   +   +   +   +   9.74  30.80
 9.59  +   +   +   +   +   +   +   +   +   +   SSSSSSSSS   9.59  31.28
 9.515 +   +   +   +   +   +   +   +   +   +   +   +   +   9.515 31.53
 9.51  +   SS  +   +   +   +   +   +   +   +   +   +   +   9.51  31.55
 7.325 +   +   +   +   +   +   +   +   +   +   +   GGGGG   7.325 40.96
 6.195 WWWWWW  +   +   +   +   +   +   +   +   +   +   +   6.195 48.43
 6.175 +   +   +   +   +   +   +   +   WWWWWWWWWWWWWWWWW   6.175 48.58
 6.12  +   +   +   +   +   +   +   +   +   +   SSSSSSSSS   6.12  49.02
 6.085 +   +   +   +   +   +   +   +   +   +   +   + AAA   6.085 49.30
 6.02  +   +   +   +   +   +   +   +   +   +   +   +   +   6.02  49.83
 6.005 +   +   +   +   +   +   +   +   +   +   +  AAA  +   6.005 49.96
 5.975 +   +   +   +   +   +   +   +   +   +   +  GGGGGG   5.975 50.21
 5.965 SSSSSS  +   +   +   +   +   +   +   +   +   +   +   5.965 50.29
       .............................................

Key to transmitters:
       A - Atlantic Relay (Ascension)   C - East Mediterranean Relay
       F - Far East Relay               G - United Kingdom
       S - North America (Sackville)    W - Caribbean Relay

Lower case indicate transmissoins available as follows:

      s - 1500-1600 Sat/Sun only        1709-1745 Sat/Sun only

Highlights:

WaveGuide - Mons 0915 rep Wed 0430, 1735, Thurs 0030.
Classical record review -
            Sun 1015 Tue 2030 Wed 0815 Thurs 0430.
  Cricket - England v W. Indies Commentary 1115 and 1430 and on Saturday
            Special and Sports Round Up.
Wimbledon - 7th Saturday special begins 1309GMT for Ladies Singles and
            full match coverage of Mens Finals 8th @1309 to end of match.
 Olympics - Background stories Mons 0315 rep 1015 (ex 9th) 1630 (ex 2nd
            1730) Weds 2315.  Daily reports at 2145 for morning events
```

and review of days events at 0645 rep 1115 and 1445 from 29th until August 13th.

Drama - Ghosts (Ibsen) 7th 1830 rep 8th 0030,1130.House at Pooh Corner (Milne) Mon 0430 rep 1115,1445, 2115 Tues 0430(10th). Haunted (stories) Suns (fr 22nd)2330 rep Tue0830 Thur1830. Fosdyke Saga Mons 1615 ex 2nd 1715 Tues 0730.

Music - Prom Concerts. First night, English composers 20th 1830 Dame Janet Baker, (BBC Symph,Pritchard). Berlioz (LSO, Yuri Simonov) and Brahams 27th 1830. Dvorak/Beethoven (BBC, Groves) 28th 1830. Mussorgsky/Prokofiev (PC#3) (BBC, Janowski, solo Donohoe) 29th 1515. Handel/Bach (Brandenburg#3) (Acad St.Martins, Brown) 30th 1830

M. Kenig [Share and Enjoy!]
ATT-IS
...abjnh!cbspt002

From 7023282320184890366
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,985b14796355789c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-10 17:28:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site abnjh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!abnjh!cbspt002
From: cbspt002@abnjh.UUCP (Marc E. Kenig)
Newsgroups: net.ham-radio
Subject: Review - MFJ 304 Auto SW converter
Message-ID: <673@abnjh.UUCP>
Date: Sun, 10-Jun-84 20:28:12 EDT
Article-I.D.: abnjh.673
Posted: Sun Jun 10 20:28:12 1984
Date-Received: Mon, 11-Jun-84 00:55:42 EDT
Organization: ATTIS, NJ
Lines: 25

<>

The converter is only about 4x4x1". It can tune *parts* of the 19, 25, 31 and 49 meter bands. There is a button on the front for each band, and they are ganged to the on/off-bypas switch. There is an LED on/off indicator.

There's good news and bad news, mostly good. It does a very good job converting for my car radio (an AM/FM Ford OEM). It down converts on a 1:1 ratio to the tuning strip. Shortwave comes in between approx 800 and 1200 Khz, giving a 400Khz slice of each band:
19m 15075:15475- 25m 11638:12038- 31m 9438:9838 and 49m 5875:6275.
Reception is about on par with a $100 portable, BUT with a much better bandspread. Heavyweights (RCI, BBC, DW, etc.) come in with hardly noticable interference. If a station is down in the dirt, it's lost. Nighttime reception is great, daytime poor. Suprisingly, there is hardly any fade.

Now for the BAD news...1) It cuts heavily down on regular AM reception (I

know, I know, I should thank heaven...). FM sensitivity is left unchanged. 2) My car electrical system causes so much RFI, that I might have to license it. I can quiet the ignition system, but weaker stns get wiped by, say, the windshield wiper motors. 3) The 'mounting hdwr' supplied was a joke. A trip to Radio Shack was necessary.

All in all the MFJ allows me to fulfill a childhood wish of DXing in the car, and gives me something to twiddle with in traffic. It's worth the $80.

M. Kenig, ATT-IS S. Plainfield

From 3033665962437064202
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,53c94c7247d0b787,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-10 22:24:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: MFJ-1020 Indoor Active Antenna Review
Message-ID: <2249@ihuxf.UUCP>
Date: Mon, 11-Jun-84 01:24:22 EDT
Article-I.D.: ihuxf.2249
Posted: Mon Jun 11 01:24:22 1984
Date-Received: Mon, 11-Jun-84 06:26:32 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 77

x

MFJ 1020 Active (Indoor) Antenna

The MFJ 1020 Active Antenna consists of a telescoping antenna and a preselector-type circuit inside the now familiar beige and wood grain cabinet. The frequency coverage of approximately 200 KHz to 30 MHz is divided into 5 bands.

A small, external power supply is required, but not provided.

The 1020 lists for $80 new, but I purchased it at a hamfest for $20, and performed one minor repair (replaced a fiber washer at the base of the telescoping antenna). I use this unit with an ICOM R-70 general coverage receiver. Overall, the MFJ 1020 works better than expected, although still not as good as an outdoor antenna.

The Bad News

Phono jacks are used rather than the SO-239 type.

The inclusion of an LED indicator lamp in the 1020 really precludes the prolonged use of any internal battery.

One problem with my particular unit is that, despite the dial markings, coverage ends at about 28.5 MHz (rather than 30.0 MHz). There is no simple trimmer capacitor that can be adjusted as a remedy. One of these days (yawn), I'll have to trim an inductor.

Active antennas are more prone to electrical interference. A photoelectric night light in an adjacent room causes a high QRN level, due to the SCR in the dimming circuit, and must be disabled during listening periods. Emissions from the horizontal oscillators of TV sets in the building also cause problems.

Use of a narrow band (tuneable, in this case) antenna makes "instant QSY" impossible. One cannot make full use of the broadband capabilities of the new generation of general coverage receivers. This is a shame, especially if one has a receiver such as the ICOM R-71 or the Kenwood R2000 which contain several memories.

The Good News

The MFJ 1020 works! The bypass switch on the front panel allows quick in/out comparisons.

The 1020 has a jack on the rear for another antenna. (This jack is always connected to the telescoping antenna.) I use a 30 foot piece of wire connected to this jack, and dressed internally around a window frame. In this setup, the 1020 is used essentially as a super preselector, and it permits me to hear many more stations than using the telescoping antenna provided.

Using the 1020 and some wire indoors allows one a fair level of SWL'ing.

Closing Comments

If you are in a condo/apartment situation, I recommend buying an MFJ 1020 at a hamfest or a sale. Like many MFJ products, it looks good on the outside, but you may feel guilty if you've paid the $80 list price after looking at the simplicity inside.

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==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 1101495756957926801
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,72856e3f6454f3b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-11 05:47:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin
Message-ID: <9845@mgweed.UUCP>
Date: Mon, 11-Jun-84 08:47:46 EDT
Article-I.D.: mgweed.9845
Posted: Mon Jun 11 08:47:46 1984
Date-Received: Mon, 11-Jun-84 23:57:25 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 3

The ARRL did not receive the dx bulletin info again last week.

From -8911433894211229706
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c3a040b3c2cf623c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-11 15:52:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site noao.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!noao!allan
From: allan@noao.UUCP
Newsgroups: net.ham-radio
Subject: Re: HF Transceivers
Message-ID: <350@noao.UUCP>
Date: Mon, 11-Jun-84 18:52:35 EDT
Article-I.D.: noao.350
Posted: Mon Jun 11 18:52:35 1984
Date-Received: Tue, 12-Jun-84 01:30:27 EDT
References: <1696@iddic.UUCP>

Organization: Natl. Optical Astronomy Obs. Tucson AZ USA
Lines: 16

I have a Yaesu FT757-GX and I think it is terrific.

It has general coverage receive, dual vfo's, full breakin (QSK), eight memories,
USB, LSB, CW wide, CW narrow, AM, FM; modes all as standard features.
I have noticed that Kenwood and Icom are lowering the prices of the 430S and
the 745, obviously to compete better with the 757, but they still cost more
and do not have the narrow CW filter, FM and AM (430S) built in.

Just in case anyone thinks that I am total biased against Icom and Kenwood,
if you do not want general coverage receive capability, then I think that
the Icom 730 is an execellent transceiver for pure ham band work.

Peter Allan
Kitt Peak National Observatory
Tucson, Az

From -7479748176334039174
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1f50595e7b6ab00b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-12 05:49:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 21/22
Message-ID: <9861@mgweed.UUCP>
Date: Tue, 12-Jun-84 08:49:49 EDT
Article-I.D.: mgweed.9861
Posted: Tue Jun 12 08:49:49 1984
Date-Received: Wed, 13-Jun-84 00:20:46 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 24

qst de k9eui
hr crrl bulletin nr 21/22   from crrl headquarters london ont
june 11 1984   to all radio amateurs bt

a new reciprocal licensing agreement between canada and
grenada, j3, went into effect on april 11.

nominations are now open for crrl amateur of the year. send
nominations and support material to crrl by september 14.

the thursday june 21 north american teleconference radio net
will feature ve2cv speaking on multiband, broadband and

frequency independent antennas. the net begins at 2130 edt and is carried on repeaters all over the u.s. and canada.

the crrl board of directors will hold its 1984 meeting in toronto on august 4. anyone with input for the meeting should contact their nearest crrl director, ve7csd, ve6aw, ve3gro, ve3cdm, ve3fn, ve2ij or ve1asj.

elections for crrl regional directors will be held this fall. ar

From -1131061383438412493
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8566e14d854e0f57,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-12 05:50:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 44
Message-ID: <9862@mgweed.UUCP>
Date: Tue, 12-Jun-84 08:50:32 EDT
Article-I.D.: mgweed.9862
Posted: Tue Jun 12 08:50:32 1984
Date-Received: Wed, 13-Jun-84 00:20:58 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr arrl bulletin nr 44   from arrl headquarters   newington ct
june 6 1984   to all radio amateurs bt

uosat oscar 11 ground controllers at the university of surrey switched on the vita/amsat digital communications experiment for the first time. current drain is within the range expected. the first major operational test was carried out successfully when the dce was given control of the downlink beacon. indications were that the rom based bootloader was active and awaiting software load commands from the ground. the first software tests were scheduled for today. ar

From -7334285926383808424
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cd05307e1b1872a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-12 05:50:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP

Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 24
Message-ID: <9863@mgweed.UUCP>
Date: Tue, 12-Jun-84 08:50:58 EDT
Article-I.D.: mgweed.9863
Posted: Tue Jun 12 08:50:58 1984
Date-Received: Wed, 13-Jun-84 00:21:10 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 31

qst de k9eui
hr propagation bulletin nr 24 from arrl headquarters newington ct
june 11 1984 to all radio amateurs bt

from early january through late may, the sun was more active than would have been expected so late in the solar cycle, but it lost most of its spots in the last two weeks. the solar flux was 66 points lower on may 27 than on april 29, one solar rotation earlier, and down to 90 on june 10. this was its lowest level since january 10.

the best part of this picture is that the effekts of lower solar flux and lower sunspot numbers are minimal at this season. if the sun should recover somewhat in the autumn, it will do more for northern hemisphere dx then than now. more on this prospect will be given in late summer bulletins.

a portion of the sun with that flux peak of 140 on may 21 will come into view about june 14. for the week, it is expected that hf propagation will be fair to good june 11 to 13, but recurrent geomagnetic disturbances are due june 16 through 21.

sporadic e layer ionization increases gradually in june, helping to keep things happening on 21, 28, 50 and possibly 144 mhz almost regardless of flux or sunspot numbers.

american sunspot numbers for may 31 through june 6 were between 24 and 48 with a mean of 37.3. ar

From -9077214297225355794
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,985b14796355789c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-12 07:28:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!mikey

From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Review - MFJ 304 Auto SW converter - (nf)
Message-ID: <52800020@trsvax.UUCP>
Date: Tue, 12-Jun-84 10:28:00 EDT
Article-I.D.: trsvax.52800020
Posted: Tue Jun 12 10:28:00 1984
Date-Received: Fri, 15-Jun-84 00:15:36 EDT
References: <673@abnjh.UUCP>
Lines: 13
Nf-ID: #R:abnjh:-67300:trsvax:52800020:000:362
Nf-From: trsvax!mikey   Jun 12 09:28:00 1984

#R:abnjh:-67300:trsvax:52800020:000:362
trsvax!mikey   Jun 12 09:28:00 1984

If it cut down the AM sensitivity, retune the car radio. There should be some external adjustment labeled "ant tune". It may be internal to the radio and more trouble than it's worth, especially if you don't care about AM that much. However, you may want to retune it for maximum reception of the shortwave to increase sensitivity.

mikey at trsvax
KA5MJQ

From 4890269167187713587
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4acc688b36ec18ca,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-12 11:01:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2f.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hou2f!4391aas
From: 4391aas@hou2f.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: Bus to NYC Nat. Convention
Message-ID: <251@hou2f.UUCP>
Date: Tue, 12-Jun-84 14:01:03 EDT
Article-I.D.: hou2f.251
Posted: Tue Jun 12 14:01:03 1984
Date-Received: Wed, 13-Jun-84 01:16:34 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 21

Any one interested in going to the national convention in NYC this July by bus can reserve a seat or obtain further info by writing:

Garden State Amateur Radio Assoc.

P.O. Box 74
Allenhurst, N.J. 07711

The cost is $10 for just the convention, $36 for the convention and banquet. When you consider tolls, gas, the admission price, and cost of parking (if you can find a space on convention weekend) it's not a bad deal. The trip is on the day of the banquet, which is Saturday July 21. Both buses depart at 0830 from Boro Bus Terminal, near the intersection of Sycamore and Newman Springs Rd. in Red Bank. The convention only bus leaves NYC at 1630; the banquet bus about 2300. Please put call and tel. no. on check and make payable to Garden State Amateur Radio Assoc. Remember, national conventions don't occur all that often, and it will be a long, long time before another one is in the NYC area again. Hurry, time is short.

From 202092225187316462
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3235f830fe330a46,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-12 11:14:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site tekig.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!cornell!uw-beaver!
tektronix!tekig!petel
From: petel@tekig.UUCP (Pete Lancashire)
Newsgroups: net.ham-radio
Subject: Collins R389/R390(A)/R391
Message-ID: <2096@tekig.UUCP>
Date: Tue, 12-Jun-84 14:14:18 EDT
Article-I.D.: tekig.2096
Posted: Tue Jun 12 14:14:18 1984
Date-Received: Wed, 13-Jun-84 06:44:39 EDT
Organization: Tektronix, Beaverton OR
Lines: 20

[pre-Rockwell]

I'm looking for the late generation manuals (and there publication numbers)
for the R389/R390(A)/R391. I have the 1970 USN Technical Manual (NAVSHIPS
0967-063-2010) for the R390A with update T-1 through T-4 (Nov 1974).
The Air Force versions are preferred. How about the commercial printings ?

I am also looking to acquire an R389 and an R391; Have one for sale or
TRADE or know of someone that wants to get rid of one ?

Also looking for spares for the R389/R390(A)/R391.

I have a lot of 'stuff' that I can trade/barter.

I'm now working on FET substitution mods for the R390A, if interested I'll
do a write up and post it. The PTO (VFO) is being worked on now.

If the R390A mods workout, I'll do the SP600-JX next.

Pete Lancashire   ....tektronix!tekig!petel (503) 627-2566

From -1048783964633676056
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8fb5a9994c3df420
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-13 19:33:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <81@mouton.UUCP>
Date: Wed, 13-Jun-84 22:33:25 EDT
Article-I.D.: mouton.81
Posted: Wed Jun 13 22:33:25 1984
Date-Received: Thu, 14-Jun-84 01:55:46 EDT
Organization: Bell Communications Research, Inc
Lines: 203

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84158.37169531
   Wed Jun 6 08:55:14.474 1984 UTC
Element set: 648
Inclination: 97.5918 deg
RA of node: 132.7712 deg
Eccentricity: 0.0003783
Arg of perigee: 122.9760 deg
Mean anomaly: 237.1837 deg
Mean motion: 15.25848603 rev/day
Decay rate: 4.295e-05 rev/day^2
Epoch rev: 14789
Semi major axis: 6863.341 km
Anom period: 94.373714 min
Apogee: 502.580 km
Perigee: 497.387 km
Beacon: 145.8250 mhz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84155.14064979
   Sun Jun 3 03:22:32.141 1984 UTC
Element set: 105
Inclination: 25.6378 deg
RA of node: 196.2423 deg
Eccentricity: 0.6089574
Arg of perigee: 276.7795 deg

```
Mean anomaly:      21.6381 deg
Mean motion:    2.05850652 rev/day
Decay rate:      -1.36e-06 rev/day^2
Epoch rev:             732
Semi major axis: 26106.044 km
Anom period:    699.536283 min
Apogee:          35629.315 km
Perigee:          3834.378 km
Beacon:           145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84148.10356205
   Sun May 27 02:29:07.761 1984 UTC
Element set:     29
Inclination:       98.2421 deg
RA of node:       210.3619 deg
Eccentricity:    0.0014072
Arg of perigee:   358.1468 deg
Mean anomaly:       1.9676 deg
Mean motion:   14.61867821 rev/day
Decay rate:       2.58e-06 rev/day^2
Epoch rev:            1262
Semi major axis:  7062.366 km
Anom period:     98.504118 min
Apogee:            694.181 km
Perigee:           674.305 km
Beacon:           145.8260 mhz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84158.41862840
   Wed Jun  6 10:02:49.493 1984 UTC
Element set:     96
Inclination:       82.9602 deg
RA of node:       139.0647 deg
Eccentricity:    0.0059831
Arg of perigee:    11.3268 deg
Mean anomaly:     348.9129 deg
Mean motion:   12.15586960 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10961
Semi major axis:  7987.331 km
Anom period:    118.461291 min
Apogee:           1657.788 km
Perigee:          1562.210 km

Satellite: rs-4
Catalog number: 13000
Epoch time:      84156.04324497
   Mon Jun  4 01:02:16.365 1984 UTC
Element set:     201
Inclination:       82.9525 deg
```

```
RA of node:       148.9951 deg
Eccentricity:    0.0019332
Arg of perigee:    93.9820 deg
Mean anomaly:     266.3429 deg
Mean motion:   12.06665385 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10850
Semi major axis:  8026.679 km
Anom period:    119.337143 min
Apogee:           1685.013 km
Perigee:          1653.979 km

Satellite: rs-5
Catalog number: 12999
Epoch time:      84147.12198177
   Sat May 26 02:55:39.224 1984 UTC
Element set:     169
Inclination:       82.9529 deg
RA of node:       155.2656 deg
Eccentricity:    0.0011108
Arg of perigee:   137.6944 deg
Mean anomaly:     222.4971 deg
Mean motion:   12.05045307 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10728
Semi major axis:  8033.876 km
Anom period:    119.497582 min
Apogee:           1674.198 km
Perigee:          1656.350 km

Satellite: rs-6
Catalog number: 13002
Epoch time:      84144.42449493
   Wed May 23 10:11:16.361 1984 UTC
Element set:     81
Inclination:       82.9626 deg
RA of node:       148.7570 deg
Eccentricity:    0.0051579
Arg of perigee:    58.5039 deg
Mean anomaly:     302.1055 deg
Mean motion:   12.13561845 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10771
Semi major axis:  7996.220 km
Anom period:    118.658971 min
Apogee:           1674.634 km
Perigee:          1592.146 km

Satellite: rs-7
Catalog number: 13001
Epoch time:      84159.01667609
   Thu Jun  7 00:24:00.814 1984 UTC
Element set:     159
```

```
Inclination:       82.9608 deg
RA of node:       145.3040 deg
Eccentricity:    0.0023678
Arg of perigee:    51.3077 deg
Mean anomaly:     309.0069 deg
Mean motion:   12.08681440 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10904
Semi major axis:  8017.745 km
Anom period:    119.138092 min
Apogee:           1671.417 km
Perigee:          1633.448 km

Satellite: rs-8
Catalog number: 12998
Epoch time:      84158.99569942
   Wed Jun  6 23:53:48.429 1984 UTC
Element set:     275
Inclination:       82.9605 deg
RA of node:       150.7375 deg
Eccentricity:    0.0018326
Arg of perigee:   168.6980 deg
Mean anomaly:     191.4462 deg
Mean motion:   12.02945006 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           10852
Semi major axis:  8043.230 km
Anom period:    119.706220 min
Apogee:           1680.634 km
Perigee:          1651.154 km

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84159.74524170
   Thu Jun  7 17:53:08.882 1984 UTC
Element set:     263
Inclination:       99.0481 deg
RA of node:       131.0245 deg
Eccentricity:    0.0013703
Arg of perigee:   118.3758 deg
Mean anomaly:     241.8796 deg
Mean motion:   14.13046753 rev/day
Decay rate:       2.25e-06 rev/day^2
Epoch rev:           15252
Semi major axis:  7224.285 km
Anom period:    101.907456 min
Apogee:            872.185 km
Perigee:           852.386 km
Beacon:           137.6200 mhz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84159.62532953
```

```
   Thu Jun  7 15:00:28.471 1984 UTC
Element set:     84
Inclination:       98.7063 deg
RA of node:       190.7580 deg
Eccentricity:    0.0018139
Arg of perigee:    81.5268 deg
Mean anomaly:     278.7965 deg
Mean motion:   14.22415388 rev/day
Decay rate:        1.3e-06 rev/day^2
Epoch rev:            6211
Semi major axis:  7192.487 km
Anom period:    101.236250 min
Apogee:            847.830 km
Perigee:           821.737 km
Beacon:           137.5000 mhz


From 7501986121859700208
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c51a0b0e0c4f6e36,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-14 14:56:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ncsu.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!zehntel!hplabs!sdcrdcf!sdcsvax!
dcdwest!ittvax!decvax!mcnc!ncsu!dm
From: dm@ncsu.UUCP
Newsgroups: net.ham-radio
Subject: antenna help
Message-ID: <2616@ncsu.UUCP>
Date: Thu, 14-Jun-84 17:56:19 EDT
Article-I.D.: ncsu.2616
Posted: Thu Jun 14 17:56:19 1984
Date-Received: Fri, 22-Jun-84 04:33:47 EDT
Organization: N.C. State University, Raleigh
Lines: 15

pppppppp


Can anyone give me info, based on experience or otherwise, concerning
the B&W folded dipole model 370-15? How well does it perform, both
receiving and transmitting?


Please mail replies to:

Dave McLin at NCSU

( dm @ decvax!mcnc!ncsu)

Thanks
```

From -1092230120853475560
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,11f80772e30c4853,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-15 11:50:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ucbvax!ucbcad!tektronix!hplabs!sri-unix!
RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA
Newsgroups: net.ham-radio
Subject: active antennas
Message-ID: <898@sri-arpa.UUCP>
Date: Fri, 15-Jun-84 14:50:23 EDT
Article-I.D.: sri-arpa.898
Posted: Fri Jun 15 14:50:23 1984
Date-Received: Tue, 19-Jun-84 01:08:14 EDT
Lines: 11

From: Richard Shapiro <RSHAPIRO@BBNA.ARPA>

Now that we've seen a review of the MFJ-1020, is anyone prepared to
offer reviews of some other active antennas? In particular I'm
wondering about the Dymek DA-100D and the Sony AN-1 (particularly
for apartment use). How about tuners for wire antennas?
Comparisons/contrasts appreciated.

Thanks,
richard shapiro/bbn cambridge,mass

From -7190247439900689351
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d470369d0247ba4c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-15 13:29:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ucbvax!ucbcad!tektronix!hplabs!sri-unix!KOLLAR@CMU-CS-
C.ARPA
From: KOLLAR@CMU-CS-C.ARPA
Newsgroups: net.ham-radio
Subject: UHF repeater antenna
Message-ID: <901@sri-arpa.UUCP>
Date: Fri, 15-Jun-84 16:29:54 EDT
Article-I.D.: sri-arpa.901
Posted: Fri Jun 15 16:29:54 1984
Date-Received: Tue, 19-Jun-84 01:08:36 EDT
Lines: 9

I am considering building an antenna composed of four (4) Ringo Ranger II
antennas (Cushcraft ARX-450B). The antennas would be mounted one above the
other, with the second and fourth (from the top) inverted (phased

appropriately), and (looking from the top down) at 90 deg. angles on a
1 1/4" mast. The justification for doing this is that the performance should
rival that of the commercial collinear antennas at a fraction of the cost.
If you have made such a thing I would like to hear your comments. TNX
-chuck (N3BEZ)

From -1633944166994078971
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c979f85f6d586443,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-15 14:13:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou2e.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!hou2e!w2iy
From: w2iy@hou2e.UUCP (M.TORTORELLA)
Newsgroups: net.ham-radio
Subject: Receiver for Sale
Message-ID: <161@hou2e.UUCP>
Date: Fri, 15-Jun-84 17:13:45 EDT
Article-I.D.: hou2e.161
Posted: Fri Jun 15 17:13:45 1984
Date-Received: Fri, 22-Jun-84 00:32:42 EDT
Organization: Bell Labs, Holmdel NJ
Lines: 5

I have a Heathkit SB-303 ham band receiver for sale.
Mint condition, with SSB and CW filters.
Asking $220.00.
                  Mike
                  hou2d!w2iy

From 3259697405531586231
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c47241a1cb0e91c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-15 15:48:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site shark.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!drutx!houxe!hogpc!houti!ariel!vax135!
cornell!uw-beaver!tektronix!orca!shark!barbara
From: barbara@shark.UUCP
Newsgroups: net.ham-radio
Subject: Last Chance - Electronic Parts for Sale
Message-ID: <823@shark.UUCP>
Date: Fri, 15-Jun-84 18:48:02 EDT
Article-I.D.: shark.823
Posted: Fri Jun 15 18:48:02 1984
Date-Received: Fri, 22-Jun-84 03:42:20 EDT
Organization: Tektronix, Wilsonville OR
Lines: 19

A local Portland company has surplus electrical parts
for sale (in bulk). The parts are basically components
for answering machines and include:

- motors
- stuffed circuit boards
- small speakers
- small tape drives
- wire
- wire harnesses
- screws, nuts, bolts
- misc phone handsets

and the like.

If you are interested in buying a large quantity of parts,
or know of a local organization which can benefit from
a donation, please respond to :

Barbara Siefken
tektronix!shark!barbara

From 723066571129391619
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d88c8d6b9729a5e0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-16 10:31:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!houxz!vax135!floyd!cmcl2!seismo!
hao!hplabs!sri-unix!JSTARR@SIMTEL20.ARPA
From: JSTARR@SIMTEL20.ARPA
Newsgroups: net.ham-radio
Subject: RINGO
Message-ID: <925@sri-arpa.UUCP>
Date: Sat, 16-Jun-84 13:31:13 EDT
Article-I.D.: sri-arpa.925
Posted: Sat Jun 16 13:31:13 1984
Date-Received: Fri, 22-Jun-84 09:27:37 EDT
Lines: 13

From: Jim Starr <JSTARR@SIMTEL20.ARPA>

MY EXPERENCE WITH RINGO RANGERS, EVEN THE LATEST VERSIONS, IS THAT ONE
RINGO RANGER HAS A GAIN OF 3DB.

OVER A DUMMY LOAD!! THAT IS.

JIM

WA4QLB

From 379322838961681098
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d88c8d6b9729a5e0
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-17 09:27:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!houxz!vax135!floyd!cmcl2!seismo!
hao!hplabs!sri-unix!KOLLAR@CMU-CS-C.ARPA
From: KOLLAR@CMU-CS-C.ARPA
Newsgroups: net.ham-radio
Subject: Re: RINGO
Message-ID: <946@sri-arpa.UUCP>
Date: Sun, 17-Jun-84 12:27:27 EDT
Article-I.D.: sri-arpa.946
Posted: Sun Jun 17 12:27:27 1984
Date-Received: Fri, 22-Jun-84 09:48:51 EDT
Lines: 7

Though claims that the RINGO has 3dB gain over a dummy load are amusing,
I was hoping for serious (showing or characterized by deep thought) replys.
Indeed if this is a serious reply then you need to have someone help you
tune (or even assemble) the RINGO before you measure its radiation pattern.
-good luck
-chuck(N3BEZ)

From -693240743096216179
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,165d0b52487172e9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-17 12:00:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!houxz!vax135!floyd!cmcl2!seismo!
hao!hplabs!sri-unix!MCNULTY%UCI-20A@UCI-750a
From: MCNULTY%UCI-20A%UCI-750a@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: RINGO stack and handhelds
Message-ID: <947@sri-arpa.UUCP>
Date: Sun, 17-Jun-84 15:00:00 EDT
Article-I.D.: sri-arpa.947
Posted: Sun Jun 17 15:00:00 1984
Date-Received: Fri, 22-Jun-84 09:49:10 EDT
Lines: 39

From: "Dale M. McNulty" <MCNULTY%UCI-20A@UCI-750a>

What kind of performance do you expect to get out of this stack?
>From personal experience I can tell you that a Hustler G6 or G7
outperforms the single RINGO hands down. I can't quantify the
difference, but I can tell you that side by side tests have

sent a number of people away shaking their heads. Of course, these are both end-fed units and I suggest you try center-fed if you really want to see a difference. I regularly use a center-fed which is only seven feet high because the end-fed units are ten to seventeen feet long. My apartment manager objects to seventeen foot 'decorations'. I find the performance almost identical. If I put the center-fed up as high as the Hustler, the center-fed is noticeably better and occupies less space. Austin has a center-fed which is composed of two arms which can be swung up, down, and sideways. This has some potential for switching between vertical and horizontal polarization (maybe even both simultaneously). I ordered one this week.

Someone asked about handhelds. I can't find time to read and respond as often as I would like so here are my belated comments. I own a Yaesu 208R. I really like it. It is tough as nails. I was talking to someone yesterday who drove off down the freeway with his 208 on top of his car. 208's don't come with mag mounts so it slid off at about 50mph. It bounced a great distance. The case is badly torn up. Even the battery case was ground down by all the sliding. Well, the 208 "took a licking, and kept on ticking". When I talked to him he was pushing buttons with an eraser but he still sounded great. The shops tell me it is the most reliable unit they (don't) see. I suggest the NC-8 Power Supply and Charger. For two years I operated base with this rig and I'm still using the same battery. I just did buy a 708R to see what the 450 band is like. Anybody have any comments about 450?

Dale McNulty
N6HUU
P.O. Box 2926
Newport Beach, CA 92663

From 3473428219398604162
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82a4aacc342adda9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-18 10:02:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: UHF Ringo bad news!
Message-ID: <10019@mgweed.UUCP>
Date: Mon, 18-Jun-84 13:02:53 EDT
Article-I.D.: mgweed.10019
Posted: Mon Jun 18 13:02:53 1984
Date-Received: Fri, 22-Jun-84 07:15:21 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

I would strongly recommend NOT using the UHF Ringo Ranger!!!!!

I have one up at home, fed with 1/2 inch hard-line and it fails to
work under certain conditions of moisture. The SWR is ridiculously
high especially in fog. I intend to replace it as soon as I determine
what I want to replace it with.

How about building a collinear using coax sections (that's what
Andrew and Phelps-Dodge do)? Use pvc to house the antenna.

Bob K9EUI (WA9AAC/R)

From -8142464724469390424
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,459ad8f9e4379ad3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-18 10:42:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!mhuxl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <82@mouton.UUCP>
Date: Mon, 18-Jun-84 13:42:00 EDT
Article-I.D.: mouton.82
Posted: Mon Jun 18 13:42:00 1984
Date-Received: Fri, 22-Jun-84 09:24:46 EDT
Organization: Bell Communications Research, Inc
Lines: 203

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84165.38856834
   Wed Jun 13 09:19:32.304 1984 UTC
Element set: 652
Inclination: 97.5908 deg
RA of node: 139.8964 deg
Eccentricity: 0.0004093
Arg of perigee: 109.2855 deg
Mean anomaly: 250.8828 deg
Mean motion: 15.25893867 rev/day
Decay rate: 3.124e-05 rev/day^2
Epoch rev: 14896
Semi major axis: 6863.205 km
Anom period: 94.370915 min
Apogee: 506.589 km
Perigee: 500.971 km
Beacon: 145.8250 mhz

```
Satellite: oscar-10
Catalog number: 14129
Epoch time:      84155.14064979
   Sun Jun  3 03:22:32.141 1984 UTC
Element set:     105
Inclination:       25.6378 deg
RA of node:       196.2423 deg
Eccentricity:    0.6089574
Arg of perigee:   276.7795 deg
Mean anomaly:      21.6381 deg
Mean motion:    2.05850652 rev/day
Decay rate:      -1.36e-06 rev/day^2
Epoch rev:             732
Semi major axis: 26106.044 km
Anom period:    699.536283 min
Apogee:          35629.315 km
Perigee:          3834.378 km
Beacon:           145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84162.20344175
   Sun Jun 10 04:52:57.367 1984 UTC
Element set:     30
Inclination:       98.2408 deg
RA of node:       224.4232 deg
Eccentricity:    0.0012980
Arg of perigee:   313.1681 deg
Mean anomaly:      46.8425 deg
Mean motion:   14.61873472 rev/day
Decay rate:       1.58e-06 rev/day^2
Epoch rev:            1468
Semi major axis:  7062.348 km
Anom period:     98.503737 min
Apogee:            704.512 km
Perigee:           686.178 km
Beacon:           145.8260 mhz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84158.41862840
   Wed Jun  6 10:02:49.493 1984 UTC
Element set:     96
Inclination:       82.9602 deg
RA of node:       139.0647 deg
Eccentricity:    0.0059831
Arg of perigee:    11.3268 deg
Mean anomaly:     348.9129 deg
Mean motion:   12.15586960 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10961
Semi major axis:  7987.331 km
```

```
Anom period:    118.461291 min
Apogee:           1657.788 km
Perigee:          1562.210 km

Satellite: rs-4
Catalog number: 13000
Epoch time:      84162.42749975
   Sun Jun 10 10:15:35.978 1984 UTC
Element set:     203
Inclination:       82.9543 deg
RA of node:       145.5204 deg
Eccentricity:    0.0019015
Arg of perigee:    80.0069 deg
Mean anomaly:     280.3135 deg
Mean motion:   12.06664729 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10927
Semi major axis:  8026.682 km
Anom period:    119.337208 min
Apogee:           1684.229 km
Perigee:          1653.703 km

Satellite: rs-5
Catalog number: 12999
Epoch time:      84147.12198177
   Sat May 26 02:55:39.224 1984 UTC
Element set:     169
Inclination:       82.9529 deg
RA of node:       155.2656 deg
Eccentricity:    0.0011108
Arg of perigee:   137.6944 deg
Mean anomaly:     222.4971 deg
Mean motion:   12.05045307 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10728
Semi major axis:  8033.876 km
Anom period:    119.497582 min
Apogee:           1674.198 km
Perigee:          1656.350 km

Satellite: rs-6
Catalog number: 13002
Epoch time:      84160.41806966
   Fri Jun  8 10:02:01.218 1984 UTC
Element set:     82
Inclination:       82.9616 deg
RA of node:       139.9238 deg
Eccentricity:    0.0051524
Arg of perigee:    25.5252 deg
Mean anomaly:     334.8343 deg
Mean motion:   12.13562071 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10965
```

```
Semi major axis:  7996.219 km
Anom period:    118.658949 min
Apogee:           1663.185 km
Perigee:          1580.786 km

Satellite: rs-7
Catalog number: 13001
Epoch time:      84159.01667609
   Thu Jun  7 00:24:00.814 1984 UTC
Element set:     159
Inclination:       82.9608 deg
RA of node:       145.3040 deg
Eccentricity:    0.0023678
Arg of perigee:    51.3077 deg
Mean anomaly:     309.0069 deg
Mean motion:   12.08681440 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10904
Semi major axis:  8017.745 km
Anom period:    119.138092 min
Apogee:           1671.417 km
Perigee:          1633.448 km

Satellite: rs-8
Catalog number: 12998
Epoch time:      84164.15216517
   Tue Jun 12 03:39:07.70  1984 UTC
Element set:     276
Inclination:       82.9602 deg
RA of node:       147.9478 deg
Eccentricity:    0.0018081
Arg of perigee:   158.1835 deg
Mean anomaly:     201.9977 deg
Mean motion:   12.02944350 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10914
Semi major axis:  8043.233 km
Anom period:    119.706286 min
Apogee:           1682.540 km
Perigee:          1653.454 km

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84159.74524170
   Thu Jun  7 17:53:08.882 1984 UTC
Element set:     263
Inclination:       99.0481 deg
RA of node:       131.0245 deg
Eccentricity:    0.0013703
Arg of perigee:   118.3758 deg
Mean anomaly:     241.8796 deg
Mean motion:   14.13046753 rev/day
Decay rate:       2.25e-06 rev/day^2
```

```
Epoch rev:           15252
Semi major axis:  7224.285 km
Anom period:    101.907456 min
Apogee:            872.185 km
Perigee:           852.386 km
Beacon:           137.6200 mhz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84159.62532953
   Thu Jun  7 15:00:28.471 1984 UTC
Element set:     84
Inclination:       98.7063 deg
RA of node:       190.7580 deg
Eccentricity:    0.0018139
Arg of perigee:    81.5268 deg
Mean anomaly:     278.7965 deg
Mean motion:   14.22415388 rev/day
Decay rate:        1.3e-06 rev/day^2
Epoch rev:            6211
Semi major axis:  7192.487 km
Anom period:    101.236250 min
Apogee:            847.830 km
Perigee:           821.737 km
Beacon:           137.5000 mhz


From -6401539050358976602
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba45170fd8f6b30c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-18 11:01:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2a.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!houxm!hou2a!sg
From: sg@hou2a.UUCP (S.GROSS)
Newsgroups: net.ham-radio
Subject: Scanner Info Wanted
Message-ID: <369@hou2a.UUCP>
Date: Mon, 18-Jun-84 14:01:25 EDT
Article-I.D.: hou2a.369
Posted: Mon Jun 18 14:01:25 1984
Date-Received: Fri, 22-Jun-84 08:34:39 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 11

I'm looking to buy a scanner.  Can anyone out there give
me any information?  For example, what do people on the
net own?
    I guess the choice is either Bearcat or Regency.  I'm
thinking of spending about $200.  I can buy the Bearcat
210XL for that price.  The only thing that disturbs me
is that most scanners at that price don't have the
```

118-136 aero band. Is this not a popular band?
    Anyway, please send or post any info. Thanks!

w

From 1968757252146342322
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5198ed6bc3495db9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-18 15:36:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 47
Message-ID: <10028@mgweed.UUCP>
Date: Mon, 18-Jun-84 18:36:57 EDT
Article-I.D.: mgweed.10028
Posted: Mon Jun 18 18:36:57 1984
Date-Received: Fri, 22-Jun-84 09:22:01 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 16

qst de k9eui
hr arrl bulletin nr 47 from arrl headquarters
newington ct june 15, 1984
to all radio amateurs bt

the fcc has denied the arrl petition for rulemaking, rm 4040.
the league had requested that cable tv operations be prohibited
on amateur frequencies, but the fcc felt that this was too
drastic an action. however, it is not a total loss for amateur
radio. in denying the leagues request, the fcc used strong
language to remind the cable tv companies of their
responsibilities not to leak excessively and to eliminate
harmful interference even if leakage is within fcc limits.
details will appear in the arrl letter and qst ar

From -394773155780878666
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d29e9865ceee7e8b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-18 15:37:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 46

Message-ID: <10029@mgweed.UUCP>
Date: Mon, 18-Jun-84 18:37:45 EDT
Article-I.D.: mgweed.10029
Posted: Mon Jun 18 18:37:45 1984
Date-Received: Fri, 22-Jun-84 09:22:36 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr arrl bulletin nr 46 from arrl headquarters
newington ct june 15, 1984
to all radio amateurs bt

w2duc will operate on packet radio on 145.010 mhz with a pk1 control board and an output power of 10 watts while flying between rochester, ny, and rockport, me, each weekend during the summer. look for him on friday evenings starting at 1830 to 1900 edt and on sundays starting at about 1630 the flight time is about 60 to 90 minutes. for further information, contact w2duc or wa2ryt ar

From 2537418011678209092
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a795e14afc03d80,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-18 15:38:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 25
Message-ID: <10030@mgweed.UUCP>
Date: Mon, 18-Jun-84 18:38:16 EDT
Article-I.D.: mgweed.10030
Posted: Mon Jun 18 18:38:16 1984
Date-Received: Fri, 22-Jun-84 09:23:01 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 29

qst de k9eui
hr propagation forecast bulletin nr 25 from arrl headquarters
newington ct june 18, 1984
to all radio amateurs bt

after several days of solar flux levels in the low 90s, solar activity began to rise on june 13. by the 15th, the flux was up to 114. the indications are for gradually lower readings during the forecast week and through the end of june. the level of geomagnetic activity is no (garbled copy here) in

propagation factor at this season, especially in our northern states and adjacent areas. on this basis, fair to poor propagation is predicted through june 20, improving to fair to good through the 28th. the early part of the arrl fd weekend should have good summer conditions on our lower frequencies in areas not plagued by thunderstorms. the usefulness of ??? 28 and 50 mhz will depend to a large extent on sporadic e layer ionization which peaks in late june. short skip, often with high signal levels, can break out suddenly, so field day teams keep continuous watches on these bands, especially 28 and 50 mhz. e skip is most common in late morning and early evening hours, local time, but it can show up at any hour. stable, calm weather makes for above average signal levels and extended range on 50 mhz and higher frequencies.

american sunspot numbers for june 7 through 13 were between 22 and 45 with a mean of 30.9 ar

From 7728617760768661470
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a7dd21ce0c6cf76b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-19 05:33:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!floyd!vax135!houxz!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 45
Message-ID: <10039@mgweed.UUCP>
Date: Tue, 19-Jun-84 08:33:23 EDT
Article-I.D.: mgweed.10039
Posted: Tue Jun 19 08:33:23 1984
Date-Received: Thu, 21-Jun-84 00:58:08 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr bulletin nr 45 from arrl headquarters newington ct
june 12 1984 to all radio amateurs bt

the following have been elected without balloting as sms for their respective sections...

connecticut...k1wgo	eastern pennsylvania...ka3a
idaho...w7jmh	minnesota...kc0t
north dakota...kn0abn	ohio...k8nd
southern florida...wa4pfk	western new york...w2mta

those elected will begin new terms october 1 1984. ar

From 4095443625715399307
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5f7d656e15a3ef0e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-19 05:33:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!floyd!vax135!houxz!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 21
Message-ID: <10040@mgweed.UUCP>
Date: Tue, 19-Jun-84 08:33:36 EDT
Article-I.D.: mgweed.10040
Posted: Tue Jun 19 08:33:36 1984
Date-Received: Thu, 21-Jun-84 00:58:43 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 44

qst de k9eui
hr dx bulletin nr 21 from arrl headquarters newington ct
june 15 1984 to all radio amateurs bt

faroe islands. four danish amateurs will operate /oy from the faroes from june 18 to 28. they will be on 160 through 10 , including warc bands, on ssb and cw with possibly some rtty. qsl via the bureau or direct to the operator worked.

tahiti. five californians will operate fo0ile between july 11 and 21, using the usual dx frequencies from 80 through 10 meters, ssb and cw. there may also be some oscar 10 and rtty operation.

egypt. ka4sbe/su has been active on 20 meter ssb, and will go to 40 meters on request.

kampuchea. xu2aa is still on sunday mornings at 1130z in a list operation.

itu/vienna. 4u1vic is on almost daily during their lunch period, around 1130z to shortly after 1200z on 14200 khz. they plan to be on extensively on weekends.

central african republic. tl8tx may be found between 1700 and 2000z on 21355 khz almost daily. also look for tl8ge/st0, southern sudan, and zd9bv, tristan da cunha, at the same times and frequency.

iraq. yi1bgd is active on 21342 khz at 2000z, and will switch to cw on request.

rhodes. sv5th has been worked at 2130z on 21252 khz. qsl to

box 282, rhodes, greece. he will also go on cw on request.

monaco. 3a2ee, john, works on 3800 khz at 0400z. qsl via f9rm.

andorra. c30lbk can be found on 14007 khz at 0100z. qsl to ea3tj.

turkey. ta1mb is active on 14011 khz at 0100z. qsl to box 1167, instanbul, turkey. ar

From 7434292940716449373
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a2e79475eb2d9ed2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-19 05:45:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!whuxle!spuxll!abnjh!u1100a!pyuxn!pyuxww!gamma!
ulysses!mhuxl!ihnp4!zehntel!hplabs!sri-unix!ERWINVL.DLOS@XEROX.ARPA
From: ERWINVL.DLOS@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: HF Transceivers
Message-ID: <1017@sri-arpa.UUCP>
Date: Tue, 19-Jun-84 08:45:19 EDT
Article-I.D.: sri-arpa.1017
Posted: Tue Jun 19 08:45:19 1984
Date-Received: Fri, 22-Jun-84 06:33:24 EDT
Lines: 19

PETER...

I ALSO HAVE A 757. MINE IS AT YAESU FOR REPAIR AFTER A 61ST DAY FAILURE.
I ATTENDED THE HAMCOM CONVENTION HERE IN DALLAS RECENTLY ES THE YAESU
BOOTH WAS ATTACKED BY ANGRY HAMS COMPLAINING ABOUT THEIR 757'S. IT SEEMS
THAT MANY OF THE 757'S WIL OSCILLATE WHEN OPPERATING 10 ES 15 METERS. BE
SURE AND CHECK YOURS FOR THIS. SOME OF THE PEOPLE WERE ALSO SAYING THE
FM DIDN'T WORK. TOWARDS THE
END OF THE CONVENTION, THE YAESU PEOPLE WERE GETTING VERY FRUSTRATED
WHEN ANYBODY EVEN MENTIONED THE 757. I STILL THINK IT HAS THE POTENTIAL
OF BEING A VERY GOOD RIG BUT THEY ARE QUITE OBVIOUSLY HAVING SOME
PROBLEMS WITH IT. ANY WAY, I HAVE BEEN ASSURED BY THE YAESU SERVICE
MANAGER THAT MINE WIL RETURNED WITH THE LATEST UPDATES WHICH IS
REASSURING. YAESU CLAIMS THESE RADIOS ARE PUT TOGETHER BY
ROBOTICS....PERHAPS MY RADIO WAS ASSEMBLED BY A ROBOT WITH A SAKE
HANGOVER??

W5PPUT
DALLAS, TX

From 1270702222401455101
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,4c9a63006d1c6a48,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-19 10:17:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!floyd!vax135!houxz!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Convention/Trade Show scanner freqs
Message-ID: <2262@ihuxf.UUCP>
Date: Tue, 19-Jun-84 13:17:40 EDT
Article-I.D.: ihuxf.2262
Posted: Tue Jun 19 13:17:40 1984
Date-Received: Thu, 21-Jun-84 03:29:43 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 24

Conference & Meeting...(USA-wide) conventions.................
      464.5500 it KNAA310
Convention Exhibits (USA-wide) conventions.....................
      464.5500 it KB21108
Exhibitgroup Chicago (USA-wide) conventions...................
      464.5000 it KA44933
Exhibitors Service of America (Chicago)   conventions............
      461.3500 .. KNDX841
           "   461.3500 .. KNHB909
Good Displays Inc, entertainment (USA-wide) conventions........
      464.5500 it KB29087
Greyhound Exhibition (Chicago) conventions.....................
      462.7000 .. KAD1721
Greyhound Exhibition (Chicago, Des Plaines) conventions........
      463.4250 .. KRI427
McCormack Display Contractor, id="MDC" (Chicago) conventions...
      471.8625 .. ?   h
           "   474.8625 mo WIF588   h
McCormack Place, entertainment (Chicago) conventions...........
      453.0500 .. KWY270   o
Noble Rich Trade Show (Chicago) conventions...................
      461.5750 .. KQ4099
Odeum-Midwest Stadium aka/Odeum Inc, entertainment (Villa Park)
      463.6250 .. KNCX219
           "   469.4250 mo KNCX219
Poirot Exhibitors Svc (Chicago, Des Plaines) conventions.......
      462.7000 .. KAB7782
Smith Concessions, entertainment (USA-wide) conventions........
      464.5500 it KB22719
Trade Show Specialists (USA-wide) conventions..................
      464.5500 it KNHA417

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Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 1189897504830070967
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,663f22dea1decaa1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-03 11:43:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: MFJ-1224/C64 SOFTWARE PROBLEM
Message-ID: <531@inuxd.UUCP>
Date: Thu, 3-May-84 14:43:58 EDT
Article-I.D.: inuxd.531
Posted: Thu May 3 14:43:58 1984
Date-Received: Fri, 4-May-84 04:59:19 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 23

For those of us who bought the MFJ-1224 RTTY/CW modem at Dayton, there seems to be a possible problem with the first RTTY program on the cassette. Mine wouldn't work and neither did the CW program.

I called the MFJ technician (601/323-5869) to check out the problem. He confirmed the following cable connections for the "C64": RTTY(demod) pins L,B,C   GND pin N   CWID pin H RTTY pins J,M CW KEY pin K.

The CW program does not work unless you jumper RTTY(demod) to CW(demod). The RTTY may have a problem and is being re-written and will send a new copy to those who request it. """NOTE""" THERE ARE "2" RTTY AND "2" CW PROGRAMS ON EACH SIDE OF THE CASSETTE. TRY THE SECOND RTTY PROGRAM AND IT SHOULD WORK.

I have not tested these fixes but if any of you are as frustrated as I was when I couldn't get it to work may want to try this info as it may be a while befor I can.

73 KN9K

From 8328956424117558761
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,742e2229834bf619,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,742e2229834bf619,start

X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1984-05-03 12:14:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio,net.space
Subject: Bulletin Boards in Space
Message-ID: <2452@allegra.UUCP>
Date: Thu, 3-May-84 15:14:51 EDT
Article-I.D.: allegra.2452
Posted: Thu May 3 15:14:51 1984
Date-Received: Fri, 4-May-84 04:40:24 EDT
Organization: Bell Communications Research, Inc
Lines: 5

Be sure to see this article on page 88 of the May 1984 BYTE. It is
an excellent description of the proposed PACSAT (Packet Radio Satellite)
that AMSAT and VITA are working on.

Phil Karn, KA9Q

From -9005957363857400848
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f37102c9ae4e4230,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-03 14:05:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site tesla.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hogpc!houti!ariel!vax135!
cornell!tesla!c-hunt
From: c-hunt@tesla.UUCP
Newsgroups: net.ham-radio
Subject: Shortwave Frquency Listing Needed
Message-ID: <355@tesla.UUCP>
Date: Thu, 3-May-84 17:05:39 EDT
Article-I.D.: tesla.355
Posted: Thu May 3 17:05:39 1984
Date-Received: Sat, 5-May-84 01:40:52 EDT
Organization: Cornell Electrical Eng.
Lines: 10

I have recently acquired a nice short-wave radio, but I don't know what
I am getting. Where can I get a listing of the frequencies that the big
broadcasters (ie BBC, Voice of America, Radio Moscow, etc.) use. Also,
is there any info available about scheduled program times for these
broadcasters? I am interested in finding specific programming (for example,
the sports reports on BBC), but don't want to use trial and error.
In advance, thanks for any help given.

tesla!c-hunt@cornell   =Charles E. Hunt
                            607-256-8281

From -2913977167778321535
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9e2189cc2d1da261,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-07 16:06:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 35
Message-ID: <9005@mgweed.UUCP>
Date: Mon, 7-May-84 19:06:39 EDT
Article-I.D.: mgweed.9005
Posted: Mon May 7 19:06:39 1984
Date-Received: Tue, 8-May-84 00:55:56 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 33

qst de k9eui

hr arrl bulletin nr 35 from arrl headquarters

newington ct may 7, 1984

to all radio amateurs bt

the 1984 world communications day contest, phone and cw, sponsored by labre, the iaru society of brazil, will be from 0000z may 19 until 2400z may 20. 160 through 10 meters may be used. entry categories are single operator single transmitter all bands, multi operator single transmitter all bands, and club competition. stations may be worked once per band, exchanging signal report and itu zone. your own country may be contacted for zone credit but not for qso points. for contacts between different continents, count 2 points for 10/15/20 meters and 4 points for 40/80/160 meters. for different countries on the same continent, count 1 point on 10/15/20 meters and 2 points on 40/80/160 meters the multiplier is the sum of the number of itu zones worked on each band. keep a separate log for each band/mode, remove dupes, include a summary sheet, and mail your entry to,

   labre
   itu contest committee
   p.o. box 07 004,
   70000 brasilia, df, brazil.

entries must be postmarked by july 31. include an s.a.e. and 5 ircs for a copy of the results ar

From 1259076505248643506
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8b6f042061eeae61,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-07 16:07:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 34
Message-ID: <9006@mgweed.UUCP>
Date: Mon, 7-May-84 19:07:02 EDT
Article-I.D.: mgweed.9006
Posted: Mon May 7 19:07:02 1984
Date-Received: Tue, 8-May-84 00:56:18 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

qst de k9eui

hr arrl bulletin nr 34 from arrl headquarters

newington ct may 3, 1984

to all radio amateurs bt

a temporary third party traffic agreement between zimbabwe and the united states, to permit u.s. amateur stations to handle third party messages between the olympic village in los angleles and zimbabwe, will be in effect from july 1 through august 31 ar

From 6559405353256646245
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9b899a4fd45052a4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-07 16:07:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 19
Message-ID: <9007@mgweed.UUCP>
Date: Mon, 7-May-84 19:07:28 EDT
Article-I.D.: mgweed.9007
Posted: Mon May 7 19:07:28 1984
Date-Received: Tue, 8-May-84 00:56:45 EDT

Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 84

qst de k9eui

hr propagation forecast bulletin nr 19 from arrl headquarters

newington ct may 7, 1984

to all radio amateurs bt

as predicted last week, the solar flux went into a steep decline, from 183 on april 29 to 106 on may 6. the large and varied active spot groups responsible for the years highest flux level have now disappeared around the west limb. some new activity is showing in the east but so far it has merely slowed the rate of decline. some upward movement is expected around the middle of the forecast week.

the barrage of solar flares continues, and with this have come more almost total ionospheric blackouts and auroral effects in the northern states and adjacent areas of canada. propagation conditions will continue very variable much of the time, but with improving signal levels and reduced fading late in the forecast week. some increase in the number and duration of e skip openings on 28 and 50 mhz will be noticed, and some e skip may appear briefly on 144 mhz, although major openings on this frequency are unlikely until late may or early june.

american sunspot numbers for april 26 through may 2 were between 82 and 123 with a mean of 101.7 ar

From 3347202115460450701
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,126df3699c7a93e6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-07 16:18:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin
Message-ID: <9009@mgweed.UUCP>
Date: Mon, 7-May-84 19:18:22 EDT
Article-I.D.: mgweed.9009
Posted: Mon May 7 19:18:22 1984
Date-Received: Tue, 8-May-84 00:57:07 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 10

If you are after a book on cryptology, I do not recommend this one.
Kahn's book "The Codebreakers" was a great book, however "Kahn on
Codes" is a waste of time and money. It is mainly a collection of
various papers previously presented elsewhere and does not offer
anything new or different.

The arrl did not have a dx bulletin available again this week!

From -4161025763363643251
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f37102c9ae4e4230
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-08 05:59:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-vgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!harpo!decvax!ittvax!dcdwest!sdcsvax!
sdcrdcf!hplabs!hao!seismo!brl-tgr!brl-vgr!wmartin
From: wmartin@brl-vgr.UUCP
Newsgroups: net.ham-radio
Subject: Re: Shortwave Frquency Listing Needed
Message-ID: <1582@brl-vgr.ARPA>
Date: Tue, 8-May-84 08:59:44 EDT
Article-I.D.: brl-vgr.1582
Posted: Tue May 8 08:59:44 1984
Date-Received: Sun, 13-May-84 00:33:34 EDT
References: <355@tesla.UUCP>
Organization: Ballistics Research Lab
Lines: 41

For those interested in listening to programming on shortwave,
the BEST source for info, including extensive reprints from the BBC's
program magazine, London Calling [which has to be ordered direct
from Britain with all the hassle of getting an international draft
or money order] is a subscription to the privately-published magazine
REVIEW OF INTERNATIONAL BROADCASTING. [Address: PO Box 6287, Knoxville,
TN 37914] A sample copy is $1.50, subscriptions $18.00 for 12 issues.

This is published by a well-known DXer and SWL, Glenn Hauser (he does
the DX News segments for Radio Canada International's SWL Digest program,
and has a radio show called "World of Radio", aired on some FM stations
and on WRNO shortwave -- best time is 0430 GMT Saturdays on 6185 kHz --
that's Friday night 2330 CDT). The magazine was created to fill a void
in the DX/SWL community for something oriented toward program listeners,
as opposed to DXers who just log stations and care little about program
content, though it does have DX info (new and rare station data, etc.).

The magazine has periodic listings of "Broadcasts in English", either
by country of origin or by time & frequency, usually each seasonal
change period, when the broadcasters shift frequency. These are more
current and accurate than the listings in Popular Communications,

because this isn't a slick magazine with 3-month-minimum leadtime.
Glenn gets the data updated at the last minute and keeps it current
with followup updates in succeeding issues.

The magazine is much like a print version of a network digest, with
reader contributions forming the majority of the contents. There
are listings by country of discussions and program info of various
broadcasters, articles on stations or personalities, and equipment
reviews and discussions on modifications or technical details of
receivers, antennas, and accessories.

Everybody with a general-coverage receiver should have a subscription
to RIB; it's the handiest and most worthwhile adjunct to SWLing
available. Membership in one or more DX clubs can be quite worthwhile
in addition to RIB, but no club has the depth of program info RIB has.

Will Martin

PS - I hope I got the zip right above; I'm doing this from memory.
If I made an error, I'll send in a follow-up after checking at home. WM

From 4022411002909309362
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f37102c9ae4e4230
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-08 06:06:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!ecsvax!mjg
From: mjg@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: Shortwave Frquency Listing Needed
Message-ID: <2454@ecsvax.UUCP>
Date: Tue, 8-May-84 09:06:44 EDT
Article-I.D.: ecsvax.2454
Posted: Tue May 8 09:06:44 1984
Date-Received: Wed, 9-May-84 03:08:58 EDT
References: tesla.355
Lines: 12

If you want to know what programs are coming up on the BBC World service,
you need 'London Calling', a monthly put out by the BBC. Its about 16 pages
of program info and articles plus a frequency-time transmission plan.

It costs UK Pounds 8 i think, - around $12 a year for air mail.

Most other large national services put out some kind of a flyer for free
- just write to BBC, London England, or Radio Moscow, Moscow, You Know Where
it's amazing how the postman knows where to deliver it.

Mike Gingell,
                ...decvax!mcnc!ecsvax!mjg

From 7650600406562890706
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,df5e0370c175c4ac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-08 06:19:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mhuxv.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!mhuxv!wmb
From: wmb@mhuxv.UUCP (W. M. Brelsford)
Newsgroups: net.ham-radio
Subject: Olympic Torch Relay frequencies?
Message-ID: <110@mhuxv.UUCP>
Date: Tue, 8-May-84 09:19:00 EDT
Article-I.D.: mhuxv.110
Posted: Tue May 8 09:19:00 1984
Date-Received: Wed, 9-May-84 01:41:41 EDT
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 7

Does anyone know what frequencies are being used
to coordinate the Olympic Torch Relay?

Bill Brelsford K2DI
AT&T Communications
{ihnp4,..}!mhuxv!wmb
201 221-7713

From 1081766755618866220
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,839c5eb6729a9087,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-09 11:23:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <9@mouton.UUCP>
Date: Wed, 9-May-84 14:23:23 EDT
Article-I.D.: mouton.9
Posted: Wed May 9 14:23:23 1984
Date-Received: Thu, 10-May-84 00:30:49 EDT
Organization: Bell Communications Research, Inc
Lines: 203

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84124.39799910
   Thu May 3 09:33:07.122 1984 UTC
Element set: 629

```
Inclination:       97.5901 deg
RA of node:        98.2908 deg
Eccentricity:    0.0000549
Arg of perigee:   262.7448 deg
Mean anomaly:      97.3687 deg
Mean motion:   15.25531912 rev/day
Decay rate:       6.21e-05 rev/day^2
Epoch rev:           14271
Semi major axis:  6864.291 km
Anom period:     94.393306 min
Apogee:            507.200 km
Perigee:           506.446 km
Beacon:           145.8250 mhz

Satellite: oscar-10
Catalog number: 14129
Epoch time:      84125.51259330
   Fri May  4 12:18:08.61  1984 UTC
Element set:     99
Inclination:       25.5369 deg
RA of node:       201.4590 deg
Eccentricity:    0.6089402
Arg of perigee:   268.3321 deg
Mean anomaly:      25.6162 deg
Mean motion:    2.05844462 rev/day
Decay rate:       1.61e-06 rev/day^2
Epoch rev:             671
Semi major axis: 26106.574 km
Anom period:    699.557319 min
Apogee:          35629.742 km
Perigee:          3835.057 km
Beacon:           145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84123.59972395
   Wed May  2 14:23:36.149 1984 UTC
Element set:     24
Inclination:       98.2440 deg
RA of node:       185.9254 deg
Eccentricity:    0.0014951
Arg of perigee:    69.4410 deg
Mean anomaly:     290.8396 deg
Mean motion:   14.61856627 rev/day
Decay rate:       3.56e-06 rev/day^2
Epoch rev:             904
Semi major axis:  7062.403 km
Anom period:     98.504872 min
Apogee:            713.180 km
Perigee:           692.062 km
Beacon:           145.8250 mhz

Satellite: rs-3
```

```
Catalog number: 12997
Epoch time:      84108.13087927
   Tue Apr 17 03:08:27.968 1984 UTC
Element set:     93
Inclination:       82.9627 deg
RA of node:       166.9413 deg
Eccentricity:    0.0060132
Arg of perigee:   115.2903 deg
Mean anomaly:     245.4408 deg
Mean motion:   12.15586233 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10350
Semi major axis:  7987.334 km
Anom period:    118.461361 min
Apogee:           1674.438 km
Perigee:          1578.379 km

Satellite: rs-4
Catalog number: 13000
Epoch time:      84122.38086176
   Tue May  1 09:08:26.456 1984 UTC
Element set:     193
Inclination:       82.9733 deg
RA of node:       167.3726 deg
Eccentricity:    0.0018770
Arg of perigee:   165.8457 deg
Mean anomaly:     194.3131 deg
Mean motion:   12.06670928 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10444
Semi major axis:  8026.654 km
Anom period:    119.336595 min
Apogee:           1664.835 km
Perigee:          1634.703 km

Satellite: rs-5
Catalog number: 12999
Epoch time:      84124.12440589
   Thu May  3 02:59:08.668 1984 UTC
Element set:     164
Inclination:       82.9534 deg
RA of node:       167.7564 deg
Eccentricity:    0.0010002
Arg of perigee:   185.8197 deg
Mean anomaly:     174.2733 deg
Mean motion:   12.05048656 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10451
Semi major axis:  8033.861 km
Anom period:    119.497250 min
Apogee:           1663.968 km
Perigee:          1647.897 km
```

```
Satellite: rs-6
Catalog number: 13002
Epoch time:      84122.49509319
   Tue May  1 11:52:56.51  1984 UTC
Element set:     80
Inclination:       82.9634 deg
RA of node:       160.8624 deg
Eccentricity:    0.0051501
Arg of perigee:   103.4771 deg
Mean anomaly:     257.2038 deg
Mean motion:   12.13561344 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10505
Semi major axis:  7996.222 km
Anom period:    118.659020 min
Apogee:           1679.179 km
Perigee:          1596.816 km

Satellite: rs-7
Catalog number: 13001
Epoch time:      84113.15981527
   Sun Apr 22 03:50:08.39  1984 UTC
Element set:     153
Inclination:       82.9660 deg
RA of node:       170.3915 deg
Eccentricity:    0.0022824
Arg of perigee:   145.0116 deg
Mean anomaly:     215.2468 deg
Mean motion:   12.08681023 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10350
Semi major axis:  8017.746 km
Anom period:    119.138133 min
Apogee:           1664.827 km
Perigee:          1628.227 km

Satellite: rs-8
Catalog number: 12998
Epoch time:      84123.06683012
   Wed May  2 01:36:14.122 1984 UTC
Element set:     272
Inclination:       82.9621 deg
RA of node:       170.1726 deg
Eccentricity:    0.0017729
Arg of perigee:   244.8032 deg
Mean anomaly:     115.1181 deg
Mean motion:   12.02943778 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10420
Semi major axis:  8043.236 km
Anom period:    119.706343 min
Apogee:           1696.597 km
Perigee:          1668.078 km
```

```
Satellite: noaa-7
Catalog number: 12553
Epoch time:      84120.44630536
   Sun Apr 29 10:42:40.783 1984 UTC
Element set:     259
Inclination:       99.0438 deg
RA of node:        91.3136 deg
Eccentricity:    0.0012212
Arg of perigee:   232.9379 deg
Mean anomaly:     127.0676 deg
Mean motion:   14.13027084 rev/day
Decay rate:        2.7e-06 rev/day^2
Epoch rev:           14697
Semi major axis:  7224.352 km
Anom period:    101.908875 min
Apogee:            868.311 km
Perigee:           850.666 km
Beacon:           137.6200 mhz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84124.80553755
   Thu May  3 19:19:58.444 1984 UTC
Element set:     80
Inclination:       98.7087 deg
RA of node:       156.3568 deg
Eccentricity:    0.0016836
Arg of perigee:   178.1023 deg
Mean anomaly:     182.0219 deg
Mean motion:   14.22405207 rev/day
Decay rate:       1.28e-06 rev/day^2
Epoch rev:            5716
Semi major axis:  7192.522 km
Anom period:    101.236975 min
Apogee:            826.509 km
Perigee:           802.291 km
Beacon:           137.5000 mhz


From -3375323703316810649
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,db52ad20025e2443,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-09 13:41:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-vgr.ARPA
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!hao!seismo!brl-tgr!brl-vgr!
wmartin
From: wmartin@brl-vgr.ARPA (Will Martin )
Newsgroups: net.ham-radio
Subject: Followup on the ICOM R71
Message-ID: <1702@brl-vgr.ARPA>
```

Date: Wed, 9-May-84 16:41:38 EDT
Article-I.D.: brl-vgr.1702
Posted: Wed May 9 16:41:38 1984
Date-Received: Sat, 12-May-84 12:06:58 EDT
Organization: Ballistics Research Lab
Lines: 49

There seems to be some hang-up somewhere on the chain between the net.ham-radio newsgroup on USENET and the ARPA mailing list INFO-HAMS@SIMTEL20. For example, I submitted this response to the ICOM R71 inquiry several weeks ago from my SIMTEL20 account to the Info-Hams list, but I never saw it appear on net.ham-radio here at brl-vgr, where I read USENET newsgroups. In case it never got promulgated over net.ham-radio, I am resubmitting it as a newsgroup posting.

This receiver has been reviewed and discussed in the SWL press and on the DX programs of major shortwave broadcasters, like Radio Nederland's "Media Network" and Radio Canada International's "SWL Digest". The general consensus has been that it, like the preceeding R70, is a great receiver for the money, but that ICOM came out with this new model with a great flurry of bells & whistles, but left out basic features like an RIT, which will impact RTTY use.

Most of the problems reported with the R70 came from Europe, where there were a number of models with VERY poor performance -- seemed to be a quality control problem. I had put out an inquiry about this on USENET's net.ham-radio some months ago, asking if ICOM had shown similiar model-to-model quality variations on other products, but saw no replies or comments. (As an SWL, I see those ham products that are receiver-oriented, and the R70 was about the first ICOM product that got wide coverage in the SWL press, so I was not aware of much data on the preceeding ICOM product range, like their 2m gear.)

For those who are interested in the computer-controlled features of the R71A, a warning -- all the ads and reviews I have seen have MENTIONED the computer-interface unit, along with the voice frequency readout and other accessories, but NOBODY has yet seen them, used them, or PRICED them! This usually means a "paper product" -- not yet built. I wouldn't count on one being available any time soon.

A Swiss firm had announced a multi-channel memory unit for the R70, which I believe had some computer-controlled capabilities. I don't know if it became a viable product; ICOM announced the R71, with its built-in memories, just after that item had some publicity, which probably killed it off by pulling the rug out from under its market. (What a mix of metaphors!) However, it also was designed to work on at least one other popular model of shortwave receiver, so it might still be viable. Haven't seen any ads in the last few months, though.

Has anybody seen any closeout bargain deals on ICOM R70's since the R71 was announced? Best price I had seen for the R70 was $574; surely somebody is dumping the remaining stock for less, unless they are

all gone by now...

Will Martin

From 6950442464217114169
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2609345d293ff307,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-10 05:44:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!decvax!ittvax!dcdwest!sdcsvax!sdcrdcf!hplabs!
sri-unix!TAKAHASHI@SRI-KL.ARPA
From: TAKAHASHI@SRI-KL.ARPA
Newsgroups: net.ham-radio
Subject: Radio nets
Message-ID: <578@sri-arpa.UUCP>
Date: Thu, 10-May-84 08:44:19 EDT
Article-I.D.: sri-arpa.578
Posted: Thu May 10 08:44:19 1984
Date-Received: Sun, 13-May-84 07:28:44 EDT
Lines: 11

I am new to the hobby, and am wondering if there is an organized way of relaying messages on the 2 meter band. I will be driving a van full of scouts to New Mexico, and am curious whether I could use a 2 meter handheld transceiver as back-up communications to allow parents in the Berkeley, Ca. area to get hold of us in an emergency. Is there a number that the parents could call to get the name of an operator willing and close enough geographically to contact us? Thanks in advance,

Allen Takahashi, N6KDM
TAKAHASHI@SRI-KL

From -3474147754133813223
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f37102c9ae4e4230
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-10 12:54:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site abnjh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!abnjh!cbspt002
From: cbspt002@abnjh.UUCP (Ed Tsang)
Newsgroups: net.ham-radio
Subject: Re: Shortwave Frquency Listing Needed
Message-ID: <592@abnjh.UUCP>
Date: Thu, 10-May-84 15:54:04 EDT
Article-I.D.: abnjh.592
Posted: Thu May 10 15:54:04 1984
Date-Received: Sat, 12-May-84 08:48:59 EDT
References: <355@tesla.UUCP>

Organization: ATTIS, NJ
Lines: 13

No one has yet mentioned The World Radio and TV Handbook (WRTH). A yearly
compendium of broadcast station info, the WRTH is probably the best
you can own. It contains all freq listings, service HQ addresses and even
,for those who can read music, a few bars that help identify interval signals.
The WRTH is available in bookstores, hamfests and some electronics stores.
Can be mail ordered from Gilfer.

Would there be an interest in SWL sufficient to try to start a net newsgroup?
Send me an indication if this tickles anybodies fancy.

  Marc Kenig (no matter what the From: line might say...)
  ATT-IS
  Piscataway NJ   [Share and enjoy!]

From 5944376098772861579
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31155ba3667eb121,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-10 13:45:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: MFJ1224 HELP NEEDED
Message-ID: <537@inuxd.UUCP>
Date: Thu, 10-May-84 16:45:55 EDT
Article-I.D.: inuxd.537
Posted: Thu May 10 16:45:55 1984
Date-Received: Sat, 12-May-84 09:00:01 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 13

    Is there anyone out there who is using the MFJ-1224 RTTY
    modem and the Dayton Hamfest give-a-way software?? If so
    does it work with the C64??? I can not get the RTTY receive
    to work. Also the CW program receive does not work. MFJ
    assures me that the RTTY program is good but the CW has a
    bug. I get no printed characters on the screen. The MFJ
    1224 works fine with the Kantronix and Atari software and
    computer. I am wondering if it is my C64 if so I have a
    short time left on warranty and need to know what to do next.
    I would greatly appreciate any info you can give me.

                        73 KN9K RICH

From -1490066303664971432

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e0b0aa37c279ca92,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-11 10:03:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: ELF & EHF radio users
Message-ID: <2190@ihuxf.UUCP>
Date: Fri, 11-May-84 13:03:09 EDT
Article-I.D.: ihuxf.2190
Posted: Fri May 11 13:03:09 1984
Date-Received: Sat, 12-May-84 11:32:12 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 22

x
I just received over 24,000 pages of unclassified federal
government frequency listings (on 80 microfiche cards).

The lowest frequency listed is:

     9.375 KHz USN Fairbanks Alaska (Experimental) emission=.10A1 power=   200w
     9.375 KHz USN Sentinel Ariz   (Experimental) emission=.10A1 power=
     70w
       10.200 KHz USCG Haiku Hawaii (radionav)   emission=.10A9 power= 20000w

The highest frequency listed is:

       863.500 THz Army Wsmr NM   (Experimental) emission=10.00P0
     power=20000w

THz means terrahertz!

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==
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -7376954758724704631
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,839c5eb6729a9087
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-12 00:56:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!sri-unix!Schauble@MIT-
MULTICS.ARPA
From: Schauble@MIT-MULTICS.ARPA

Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <623@sri-arpa.UUCP>
Date: Sat, 12-May-84 03:56:00 EDT
Article-I.D.: sri-arpa.623
Posted: Sat May 12 03:56:00 1984
Date-Received: Mon, 14-May-84 00:14:29 EDT
Lines: 6

From: Paul Schauble <Schauble@MIT-MULTICS.ARPA>

Now, does anyone have a program, in some reasonable language, that will
give transit times and positions from these elements?

          Paul

From 6734756411406654007
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27526859aa2b4c5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-12 08:52:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!decvax!harpo!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: freqs licensed to Radio Shack
Message-ID: <2194@ihuxf.UUCP>
Date: Sat, 12-May-84 11:52:36 EDT
Article-I.D.: ihuxf.2194
Posted: Sat May 12 11:52:36 1984
Date-Received: Sun, 13-May-84 09:51:02 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 18

From FCC records (dated 02/07/84):

  KWW712   157.6200   Radio Shack (Gilford, NH)
  WFS366   468.6000 mo Radio Shack (Grove, OK)
  KA52114   468.6000 mo Radio Shack (OK)
  WFS365   468.6000 mo Radio Shack (Pryor, OK)
  WYY398   151.8950   Radio Shack (York, NE)
  KNAV545   462.1000   "
  KAC3687   462.6000   Radio Shack 2603 (New York State)
  KNFP786   151.6850   Radio Shack 7178 (Muskogee, OK)
  WSR432   463.2000   Radio Shack Dealer (Rayville, LA)

       (Note: 468.600 is the input to a 463.600 MHz repeater.)

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Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -4549368687494021159
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1bfefbac98d132a7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-12 10:48:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!decvax!harpo!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Playboy Club & Casino freqs
Message-ID: <2195@ihuxf.UUCP>
Date: Sat, 12-May-84 13:48:42 EDT
Article-I.D.: ihuxf.2195
Posted: Sat May 12 13:48:42 1984
Date-Received: Sun, 13-May-84 10:06:18 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 19

WSK962	463.8250		Playboy	(Atlantic City, NJ)
KNGH213	151.8350		Playboy	Club of New York (New York, NY)
WQT469	463.7000		Playboy	Elsinore (Atlantic City, NJ)
WRL970	464.9250		Playboy	Elsinore Ass... (Atlantic City, NJ)
KA89663	464.5375		Playboy	Elsinore Ass... (NJ)
KA93136	462.0125		Playboy	Elsinore Inc (NJ)
KR4889	816.8375		Playboy	Enterprises (CA)
KR4889	817.8375		"	
KR4889	818.8375		"	
KR4889	819.8375		"	
KR4889	820.8375		"	
WQN784	462.8250	pg	Playboy	of Atlantic... (Atlantic City, NJ)
KK8633	154.5700	2w	Playboy	Resort & Cou... (NJ)

--
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -6573522704892464016
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2c184c7da610dd3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-12 14:51:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cp1.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!decvax!harpo!ulysses!mhuxl!houxm!hogpc!houti!
ariel!vax135!floyd!cmcl2!seismo!rlgvax!cvl!umcp-cs!aplvax!cp1!hart

From: hart@cp1.UUCP
Newsgroups: net.ham-radio
Subject: dc area packet radio user log
Message-ID: <669@cp1.UUCP>
Date: Sat, 12-May-84 17:51:04 EDT
Article-I.D.: cp1.669
Posted: Sat May 12 17:51:04 1984
Date-Received: Mon, 14-May-84 01:24:46 EDT
Organization: C and P Tel. Co., Balto., Maryland
Lines: 42

DC/NORVA/MD
HAM PACKET RADIO USER LIST

THE FOLLOWING IS A LIST OF CALL SIGNS
AND NAMES OF PACKETEERS IN THE DC AREA.

(T) = TAPR TNC	(V) = VADCG TNC
K1HTV (T) RICH	KA1GD (T) ANDY
KA1TB (V) JOHN	
WB2KDR (?) JERRY	
K3HOI (V) JOHN	KE3Z (T) JOHN
W3AUN (T) BILL	W3IWI (VT) TOM
W3OTC (T) BOB	W3TMZ (T) JACK
K3TCT (T) BOB	N3DCI (V) BILL
WA3MEZ (V) ROD	WA3WQZ (V) CHUCK
W4CQI (T) CLIFF	W4PUJ (T) DICK
W4MIB (V) BILL	WB4NFB (V) BILL
WB4APR (V) BOB	WB4JFI (V) TERRY
WB5MMB (V) SANDY	WD5DBC (V) HOWARD
K8MMO (V) DAVE	
AJ9X (V) MIKE	KA9NWB (T) GEORGE

ANY CORRECTIONS OR ADDITIONS TO THE
ABOVE LIST? 73 , RICH -- K1HTV
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==========
signed: Rod Hart (wa3mez)
Chesapeake & Potomac Tel. Co.
Bell Atlantic Inc.
Silver Spring, Md.
gamma!cp1!hart - umcp-cs!cp1!hart - aplvax!cp1!hart
==========

From 5277168462572808179
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5934503ea5013219,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-12 20:35:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site tekig.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!tektronix!tekig!
petel
From: petel@tekig.UUCP (Pete Lancashire)
Newsgroups: net.ham-radio
Subject: Replacement for National HRO-500 (mild flame about ICOM)
Message-ID: <2025@tekig.UUCP>
Date: Sat, 12-May-84 23:35:33 EDT
Article-I.D.: tekig.2025
Posted: Sat May 12 23:35:33 1984
Date-Received: Mon, 21-May-84 04:45:24 EDT
Organization: Tektronix, Beaverton OR
Lines: 22

[ARRL]
Advanced SWL, (may even get my lic back some day) 1.6-30Mhz, remote
control (computer), all internal sigs should be accessible, at least
the IF (Have Panadapter, home brew digital FAX, etc.)

It is time to retire to standby my National HRO-500. Any suggestions out
there ? I have heard some bad news on the Icom R-71(A?), and I saw someone
post on the net (usenet) that there has been news on another net not getting
gated to usenet, true ? The ICOM would be at the bottom of my list, I have
had access to a Harris 550 from time to time, nice. Now that it is no
longer in production has anyone seen one on the market ?

On the Icom R-71; what is this I here about remote/computer access ?, is it
true, is it really there, I called ICOM and they just read me the glossies,
I can do that. I asked about a service manual, the best I could get is that
the preliminary version (English, I hope), might be here sometime in
NOVEMBER !!@#*@)!! (didn't ask if that was 1984).

What filters are there for the ICOM ?

Pete Lancashire ...tektronix!tekig!petel
(503)627-2566

From -2487899357676186454
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7ab29c88f7099249,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-13 19:20:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP

Path: utzoo!watmath!clyde!akgua!mcnc!decvax!harpo!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Re: RTTY/ASCII on 20 meters
Message-ID: <26@mouton.UUCP>
Date: Sun, 13-May-84 22:20:36 EDT
Article-I.D.: mouton.26
Posted: Sun May 13 22:20:36 1984
Date-Received: Mon, 14-May-84 07:16:42 EDT
References: <607@sri-arpa.UUCP>
Organization: Bell Communications Research, Inc
Lines: 11

Regarding packet radio and TAPR: The TAPR TNC (and others) can be used
on any frequency, subject to bandwidth and signalling speed limits.
The TAPR board can go as slow as 50 bits/sec, although it is normally
run at 1200 bps over VHF FM transceivers. It has an on-board modem
equivalent to the Bell 202, but it can be easily bypassed to use an
external modem (such as an RTTY TU). The protocol might be a bit
bulky at slow speeds on HF channels so you might want to try AMTOR
instead, but AX.25 is a much more modern protocol and is clearly the
way to go for serious networking.

Phil

From 9090995081670133035
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2eb8bee7753b19d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-14 08:40:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!decvax!harpo!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT-Oscar-11 Lives!
Message-ID: <30@mouton.UUCP>
Date: Mon, 14-May-84 11:40:28 EDT
Article-I.D.: mouton.30
Posted: Mon May 14 11:40:28 1984
Date-Received: Tue, 15-May-84 05:42:45 EDT
Organization: Bell Communications Research, Inc
Lines: 7

UoSAT-Oscar-11 was successfully commanded on for the first time in
over two months this morning from Surrey. It was heard from KA9Q
on the first pass this morning on 145.825 with very good signals.
Initial analysis of telemetry shows everything to be in pretty good
condition!

Phil

From 1081043425071960387
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ebefd5dc4233196d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-14 09:31:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-vgr.ARPA
Path: utzoo!watmath!clyde!akgua!sdcsvax!dcdwest!ittvax!decvax!harpo!ulysses!mhuxl!
houxm!hogpc!houti!ariel!vax135!floyd!cmcl2!seismo!brl-tgr!brl-vgr!wmartin
From: wmartin@brl-vgr.UUCP
Newsgroups: net.ham-radio
Subject: Shortwave Broadcast Info Source
Message-ID: <1994@brl-vgr.ARPA>
Date: Mon, 14-May-84 12:31:47 EDT
Article-I.D.: brl-vgr.1994
Posted: Mon May 14 12:31:47 1984
Date-Received: Thu, 17-May-84 05:31:03 EDT
Organization: Ballistics Research Lab
Lines: 19

An item of interest to all shortwave listeners, from this weekend's
Radio Canada International's SWL Digest program:

A free sample issue of the new "International Shortwave Listener's
Program Guide" periodical is being made available on request for the
cost of postage. US residents send 37 cents in coin (Canadians send
70 cents in [I suppose] Canadian coin, overseas send 7 IRC's) to:

Larry Miller
Miller Publishing
424 W. Jefferson St.
Media, PA 19063 USA

Along with your name & address, so they know where to send it.

(I don't know why they want coins instead of stamps from US respondents,
but I sent them the coins as requested.)

Will Martin

From 6132591484815067269
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cfb45d51da304da1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-14 10:06:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mhuxv.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!decvax!harpo!ihnp4!houxm!mhuxl!mhuxv!wmb
From: wmb@mhuxv.UUCP (W. M. Brelsford)
Newsgroups: net.ham-radio
Subject: Olympic Torch Relay frequencies

Message-ID: <112@mhuxv.UUCP>
Date: Mon, 14-May-84 13:06:34 EDT
Article-I.D.: mhuxv.112
Posted: Mon May 14 13:06:34 1984
Date-Received: Tue, 15-May-84 05:44:58 EDT
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 12

> Does anyone know what frequencies are being used
> to coordinate the Olympic Torch Relay?

To answer my own question, they're using a series of local
repeaters along the route. The torch came through New Jersey
Saturday, and the amateur radio part of the operation was
first class.

Bill Brelsford K2DI
AT&T Communications
{ihnp4,..}!mhuxv!wmb
201 221-7713

From 3096696745118529769
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f3de791af69fa329,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-14 10:46:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!decvax!harpo!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UO-11 First USA Telemetry
Message-ID: <31@mouton.UUCP>
Date: Mon, 14-May-84 13:46:30 EDT
Article-I.D.: mouton.31
Posted: Mon May 14 13:46:30 1984
Date-Received: Wed, 16-May-84 03:18:48 EDT
Organization: Bell Communications Research, Inc
Lines: 385

Here are the first two frames that were received solid at KA9Q this
morning from UO-11, followed by decoded versions. I've got
tons more of this stuff if anybody wants it.

73, Phil

UOSAT-2   0002523191217

00522501300202492D03693F040554050401060237070513080 37C09031B
10475711339912000313094F14000515000416000717505618543B195195
20512421059F22661123000124000625000726103627478E28313B29501F
304061310389322838330000340007353 92E36456237434738511E39512C

```
40837841000542677043000744169E450023460002474997485180494 72C
505440510747526 95D53292F5496795500005600035750 8F58501959514C
60800E615BC562800C6302436400026500036 6C00C67000168000E69000F
UOSAT-2           0002523191222

00522501314702495A037004040554050401060237070513080 37C09031B
10497B11339912000313094F14000515000416000717505618542A195184
20523621061422661123000124000625000726103627478E28312A29501F
30382A31039832283833000034000735392E36456237434738511E39512C
40851841000542677043000744169E450023460002474997485180494 72C
505437510730526 96E532958540023550000560003575 08F58501959514C
60800E615BC562800C6302436400026500036 6C00C67000168000E69000F

Here are the same two frames as decoded by my C language program. Each
line is echoed, then followed by the interpretation. Note that the
clock was running, but it had never been properly initialized.

73, Phil
UOSAT-2           0002523191217
Date: 02/52/00 Time: 19:12:17 Day of wk: 3

00522501300202492D03693F040554050401060237070513080 37C09031B
00522:  -11.400 mA Solar array current -Y
01300:  -63.545 uT Nav mag X axis
02492:    5.632 uT Nav mag Z axis
03693:   35.435 uT Nav mag Y axis
04055:    0.000 sun sensor
05040:    0.000 sun sensor
06023:    0.000 sun sensor
07051:    0.000 sun sensor
08037:    0.000 sun sensor
09031:    0.000
10475711339912000313094F14000515000416000717505618543B195195
10475:   77.900 mA Solar array current +Y
11339:   -2.609 C  Nav mag (wing) temp
12000:    0.000 horizon sensor
13094:    0.000 (spare)
14000:    0.000 DCE ramunit current
15000:    0.000 DCE cpu current
16000:    0.000 DCE gmem current
17505:   -5.000 C  Facet temp +X
18543:  -12.600 C  Facet temp +Y
19519:   -7.800 C  Facet temp +Z
20512421059F22661123000124000625000726103627478E28313B29501F
20512:    7.600 mA Solar array current -X
21059:   57.230 mA +10v line current
22661:    9.915 V  PCM voltage +10v
23000:  -70.000 mA P/W logic current (+5v)
24000:    0.000 mA P/W geiger current
25000:    0.000 mA P/W elec sp.curr (+10v)
26103:    9.579 mA P/W elec sp.curr (-10v)
27478:    0.400 C  Facet temp -X
28313:   33.400 C  Facet temp -Y
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```
29501:   -4.200 C  Facet temp -Z
3040613103893228383300003400073539 2E36456237434738511E39512C
30406:  209.000 mA Solar array current +X
31038:   18.240 mA -10v line current
32283:   10.188 V  PCM voltage -10v
33000:    0.000 mA 1802 comp curr (+10v)
34000:    0.000 mA Digitalker current (+5v)
35392:  705.000 MW 145mhz beacon power o/p
36456:  100.320 mA 145mhz beacon current
37434:    9.200 C  145mhz beacon temp
38511:   -6.200 C  Command decoder temp (+Y)
39512:   -6.400 C  Telemetry temp (+X)
4083784100054267704300074416 9E450023460002474997485180494 72C
40837:   32.100 V  Solar array voltage (+30v)
41000:    0.000 mA +5v line current
42677:    5.687 V  PCM voltage +5v
43000:    0.000 mA DSR current (+5v)
44169:  155.480 mA Command rx current
45002: -195.000 MW 435mhz beacon power o/p
46000:    0.000 mA 435mhz beacon current
47499:   -3.800 C  435 mhz beacon temp
48518:   -7.600 C  P/W temp (-x)
49472:    1.600 C  P/W BCR temp
5054405107475269 5D53292F5496795500005600035750 8F58501959514C
50544:  272.800 mA Battery charge/dischg current
51074:  370.000 mA +14v line current
52695:   14.595 V  Battery voltage (+14v)
53292:    0.000    Battery cell volts (mux)
54967:   19.340 mA Telemetry current (+10v)
55000:    5.208 mw 2.4GHZ beacon power o/p
56000:    0.000 mA 2.4GHZ beacon current
57508:   -5.600 C  Battery temp
58501:   -4.200 C  2.4GHZ beacon temp
59514:   -6.800 C  CCD imager temp
60800E615BC562800C6302436400026500 0366C00C67000168000E69000F
01: 1 145 MHZ general downlink power          off/on
02: 0 435 MHZ engineering downlink power      off/on
03: 0 2401 MHZ engineering downlink power     off/on
04: 0 Telemetry channel mode select           run/dwell
05: 0 Telemetry channel dwell address load    off/on
06: 0 Telemetry channel dwell address source  gnd/computer
07: 0 Primary spacecraft computer power       off/on
08: 0 Primary spacecraft computer error count bit-1
09: 0 Primary spacecraft computer error count bit-2
10: 0 Primary spacecraft computer bootstrap   prom/uart
11: 0 Primary spacecraft computer error count bit-3
12: 0 Primary spacecraft computer bootstrap   a/b
13: 0 Gravity gradient boom deployment pyros  safe/arm
14: 1 Gravity gradient boom deployment pyros  hold/fire
15: 0 Gravity gradient boom deployment        safe/arm
16: 1 Gravity gradient boom deployment        hold/deploy
17: 1 Gravity gradient boom deployment        extend/retract
18: 0 Attitude control magnetorquers          safe/arm
```

```
19: 1 Attitude control magnetorquer -x        on/off
20: 1 Attitude control magnetorquer -y        on/off
21: 1 Attitude control magnetorquer -z        on/off
22: 1 Attitude control magnetorquer           reverse/forward
23: 0 435 MHZ PSK mode                        NRZI/NRZIC
24: 0 2401 MHZ PSK mode                       NRZI/NRZIC
25: 1 Attitude control magnetorquers          high/low power
26: 0 Digitalker expt. power                  off/on
27: 0 CCD camera expt. power                  off/on
28: 0 CCD camera expt. integration period     bit 0
29: 0 CCD camera expt. integration period     bit 1
30: 0 CCD camera expt. video amp. gain        bit 0
31: 0 CCD camera expt. video amp. gain        bit 1
32: 0 DSR power                               off/on
33: 0 DSR mode                                read/write
34: 0 DSR mode                                run/reset
35: 0 Radiation detectors geiger-a EHT power  off/on
36: 0 Radiation detectors geiger-b EHT power  off/on
37: 0 Radiation detectors geiger-c EHT power  off/on
38: 0 Electron spectrometer sensor EHT power  off/on
39: 0 DCE experiment power                    off/on
40: 0 DCE expt.                               reset/run
41: 0 DCE expt. prom select                   a/b
42: 0 DCE expt. cpu clock rate select         0.9/1.8 mhz
43: 1 Navigation magnetometer power           off/on
44: 0 Space dust experiment power             off/on
45: 0 Spare dust experiment level select      bit 0
46: 1 BCR status                              0/1
47: 0 435 MHZ downlink modulation select      AFSK/PSK
48: 0 2401 MHZ downlink modulation select     AFSK/PSK
49: 0 1802 serial command                     disable/enable
50: 0 DCE expt serial command                 disable/enable
51: 0
52: 0
53: 0
54: 0 Command watchdog enable
55: 0 Command watchdog reset
56: 0 145 MHZ downlink data select            a
57: 0 145 MHZ downlink data select            b
58: 0 145 MHZ downlink data select            c
59: 0 145 MHZ downlink data select            d
60: 0 145 MHZ downlink data select            e
61: 0 145 MHZ downlink data select            f
62: 0 145 MHZ downlink data rate              a
63: 0 145 MHZ downlink data rate              b
64: 0 435 MHZ downlink data rate              a
65: 0 435 MHZ downlink data rate              b
66: 0 435 MHZ downlink data rate              c
67: 0 Particle/wavecounter control            count/reset
68: 0 Downlink lockout                        enable/disable
69: 0 (spare)
70: 0
71: 0
```

```
72: 0
73: 1 P/W channel plate control bit 0
74: 1 P/W channel plate control bit 1
75: 0 P/W channel plate control bit 2
76: 0 Space dust
77: 0 Space dust
78: 0 Space dust
79: 0 Space dust
80: 0 Space dust
81: 0 Space dust
82: 0 Space dust
83: 0 Space dust
84: 0 DSR write cycle complete
85: 0 1802 CWO output
86: 0 1802 tlm port (msb)
87: 0 1802 tlm port
88: 0 1802 tlm port
89: 0 1802 tlm port
90: 0 1802 tlm port
91: 0 1802 tlm port
92: 0 1802 tlm port
93: 0 1802 tlm port
94: 0 1802 tlm port
95: 0 1802 tlm port
96: 0 1802 tlm port (lsb)
UOSAT-2           0002523191222
Date: 02/52/00 Time: 19:12:22 Day of wk: 3

00522501314702495A037004040554050401060237070513080 37C09031B
00522:  -11.400 mA Solar array current -Y
01314:  -63.337 uT Nav mag X axis
02495:    6.088 uT Nav mag Z axis
03700:   36.490 uT Nav mag Y axis
04055:    0.000 sun sensor
05040:    0.000 sun sensor
06023:    0.000 sun sensor
07051:    0.000 sun sensor
08037:    0.000 sun sensor
09031:    0.000
10497B11339912000313094F14000515000416000717505618542A195184
10497:   36.100 mA Solar array current +Y
11339:   -2.609 C  Nav mag (wing) temp
12000:    0.000 horizon sensor
13094:    0.000 (spare)
14000:    0.000 DCE ramunit current
15000:    0.000 DCE cpu current
16000:    0.000 DCE gmem current
17505:   -5.000 C  Facet temp +X
18542:  -12.400 C  Facet temp +Y
19518:   -7.600 C  Facet temp +Z
20523621061422661123000124000625000726103627478E28312A29501F
20523:  -13.300 mA Solar array current -X
21061:   59.170 mA +10v line current
```

```
22661:    9.915 V  PCM voltage +10v
23000:  -70.000 mA P/W logic current (+5v)
24000:    0.000 mA P/W geiger current
25000:    0.000 mA P/W elec sp.curr (+10v)
26103:    9.579 mA P/W elec sp.curr (-10v)
27478:    0.400 C  Facet temp -X
28312:   33.600 C  Facet temp -Y
29501:   -4.200 C  Facet temp -Z
30382A3103983228383300003400073539 2E36456237434738511E39512C
30382:  254.600 mA Solar array current +X
31039:   18.720 mA -10v line current
32283:   10.188 V  PCM voltage -10v
33000:    0.000 mA 1802 comp curr (+10v)
34000:    0.000 mA Digitalker current (+5v)
35392:  705.000 MW 145mhz beacon power o/p
36456:  100.320 mA 145mhz beacon current
37434:    9.200 C  145mhz beacon temp
38511:   -6.200 C  Command decoder temp (+Y)
39512:   -6.400 C  Telemetry temp (+X)
40851841000542677043000744169E450023460002474997485180 49472C
40851:   33.500 V  Solar array voltage (+30v)
41000:    0.000 mA +5v line current
42677:    5.687 V  PCM voltage +5v
43000:    0.000 mA DSR current (+5v)
44169:  155.480 mA Command rx current
45002: -195.000 MW 435mhz beacon power o/p
46000:    0.000 mA 435mhz beacon current
47499:   -3.800 C  435 mhz beacon temp
48518:   -7.600 C  P/W temp (-x)
49472:    1.600 C  P/W BCR temp
505437510730526 96E5329585400235500005600035 7508F58501959514C
50543:  264.000 mA Battery charge/dischg current
51073:  365.000 mA +14v line current
52696:   14.616 V  Battery voltage (+14v)
53295:    0.000    Battery cell volts (mux)
54002:    0.040 mA Telemetry current (+10v)
55000:    5.208 mw 2.4GHZ beacon power o/p
56000:    0.000 mA 2.4GHZ beacon current
57508:   -5.600 C  Battery temp
58501:   -4.200 C  2.4GHZ beacon temp
59514:   -6.800 C  CCD imager temp
60800E615BC562800C6302436400026500 0366C00C67000168000E69000F
01: 1 145 MHZ general downlink power          off/on
02: 0 435 MHZ engineering downlink power      off/on
03: 0 2401 MHZ engineering downlink power     off/on
04: 0 Telemetry channel mode select           run/dwell
05: 0 Telemetry channel dwell address load    off/on
06: 0 Telemetry channel dwell address source  gnd/computer
07: 0 Primary spacecraft computer power       off/on
08: 0 Primary spacecraft computer error count bit-1
09: 0 Primary spacecraft computer error count bit-2
10: 0 Primary spacecraft computer bootstrap   prom/uart
11: 0 Primary spacecraft computer error count bit-3
```

```
12: 0 Primary spacecraft computer bootstrap   a/b
13: 0 Gravity gradient boom deployment pyros  safe/arm
14: 1 Gravity gradient boom deployment pyros  hold/fire
15: 0 Gravity gradient boom deployment        safe/arm
16: 1 Gravity gradient boom deployment        hold/deploy
17: 1 Gravity gradient boom deployment        extend/retract
18: 0 Attitude control magnetorquers          safe/arm
19: 1 Attitude control magnetorquer -x        on/off
20: 1 Attitude control magnetorquer -y        on/off
21: 1 Attitude control magnetorquer -z        on/off
22: 1 Attitude control magnetorquer           reverse/forward
23: 0 435 MHZ PSK mode                        NRZI/NRZIC
24: 0 2401 MHZ PSK mode                       NRZI/NRZIC
25: 1 Attitude control magnetorquers          high/low power
26: 0 Digitalker expt. power                  off/on
27: 0 CCD camera expt. power                  off/on
28: 0 CCD camera expt. integration period     bit 0
29: 0 CCD camera expt. integration period     bit 1
30: 0 CCD camera expt. video amp. gain        bit 0
31: 0 CCD camera expt. video amp. gain        bit 1
32: 0 DSR power                               off/on
33: 0 DSR mode                                read/write
34: 0 DSR mode                                run/reset
35: 0 Radiation detectors geiger-a EHT power  off/on
36: 0 Radiation detectors geiger-b EHT power  off/on
37: 0 Radiation detectors geiger-c EHT power  off/on
38: 0 Electron spectrometer sensor EHT power  off/on
39: 0 DCE experiment power                    off/on
40: 0 DCE expt.                               reset/run
41: 0 DCE expt. prom select                   a/b
42: 0 DCE expt. cpu clock rate select         0.9/1.8 mhz
43: 1 Navigation magnetometer power           off/on
44: 0 Space dust experiment power             off/on
45: 0 Spare dust experiment level select      bit 0
46: 1 BCR status                              0/1
47: 0 435 MHZ downlink modulation select      AFSK/PSK
48: 0 2401 MHZ downlink modulation select     AFSK/PSK
49: 0 1802 serial command                     disable/enable
50: 0 DCE expt serial command                 disable/enable
51: 0
52: 0
53: 0
54: 0 Command watchdog enable
55: 0 Command watchdog reset
56: 0 145 MHZ downlink data select            a
57: 0 145 MHZ downlink data select            b
58: 0 145 MHZ downlink data select            c
59: 0 145 MHZ downlink data select            d
60: 0 145 MHZ downlink data select            e
61: 0 145 MHZ downlink data select            f
62: 0 145 MHZ downlink data rate              a
63: 0 145 MHZ downlink data rate              b
64: 0 435 MHZ downlink data rate              a
```

```
65: 0 435 MHZ downlink data rate              b
66: 0 435 MHZ downlink data rate              c
67: 0 Particle/wavecounter control            count/reset
68: 0 Downlink lockout                        enable/disable
69: 0 (spare)
70: 0
71: 0
72: 0
73: 1 P/W channel plate control bit 0
74: 1 P/W channel plate control bit 1
75: 0 P/W channel plate control bit 2
76: 0 Space dust
77: 0 Space dust
78: 0 Space dust
79: 0 Space dust
80: 0 Space dust
81: 0 Space dust
82: 0 Space dust
83: 0 Space dust
84: 0 DSR write cycle complete
85: 0 1802 CWO output
86: 0 1802 tlm port (msb)
87: 0 1802 tlm port
88: 0 1802 tlm port
89: 0 1802 tlm port
90: 0 1802 tlm port
91: 0 1802 tlm port
92: 0 1802 tlm port
93: 0 1802 tlm port
94: 0 1802 tlm port
95: 0 1802 tlm port
96: 0 1802 tlm port (lsb)

For those of you using my C-language telemetry decoding program for
UO-11, I've discovered two minor bugs:

Change the line which reads
     if(sscanf(cp,"UOSAT-2%2d%2d%2d%1d%2d%2d%2d",&year,&month,&day,
to
     if(sscanf(cp,"\036UOSAT-2%2d%2d%2d%1d%2d%2d%2d",&year,&month,&day,

Since I had never received telemtry direct before, I didn't know about
the leading "funny character" which the various electronic mail systems
had stripped off.

Also change the line which reads
     n = sscanf(cp,"%1d%1d%1d%1d%1d%1x",&chan1,&chan0,&n2,&n1,&n0,&chk);
to
     n = sscanf(cp,"%1d%1d%1x%1x%1x%1x",&chan1,&chan0,&n2,&n1,&n0,&chk);

I didn't notice that hex digits were valid in the status bit channels
of the telemetry (those greater than 60.)  In particular, this kept channels
61 and 66 from decoding.
```

73, Phil

From -6312401039215686095
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,425711e727ab00b0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-14 10:47:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!hao!seismo!harpo!ulysses!
allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UO-11 News
Message-ID: <32@mouton.UUCP>
Date: Mon, 14-May-84 13:47:12 EDT
Article-I.D.: mouton.32
Posted: Mon May 14 13:47:12 1984
Date-Received: Thu, 17-May-84 04:44:15 EDT
Organization: Bell Communications Research, Inc
Lines: 503

Posted: Mon May 14, 1984   3:30 PM GMT   Msg: FGIE-1790-6513
From: LKAYSER
To: MSweeting, AMSAT
Subj: We heard it!!!!!

TO TMAIL MSWEETING,AMSAT
FROM L. S. Kayser, WA3ZIA
UO11 finally heard in Ottawa!!!!!
at 1425 to 1436 Z this date UO11 was copied by VE3BNO in Ottawa.
Congratulations all, we will start now collecting Telem
regularly. It has been worth the wait!
Surrey note please PRIME link wont be bsck until I return to work
around june 1.

Regards, Larry

Posted: Mon May 14, 1984   4:24 PM GMT   Msg: BGIE-1790-7269
From: LKAYSER
To: msweeting, amsat
Subj: Again!!! UO11

To Msweeting,AMSAT
To PRNET ALL
From L. S. Kayser, WA3ZIA
UO11 AOS 1601, LOS 1611, strong signals, sounds good, telemetry
follows
de Larry

Posted: Mon May 14, 1984 5:08 PM GMT Msg: SGIE-1790-7766
From: MSWEETING
To: AMSAT
Subj: Oscar-11

The following report was circulated within the G.B; it is the only output we are likely to generate for a few hours. The telemetry received so far appears very good.

Following persistent commanding from the Guildford command station, the University of Surrey's second spacecraft, UoSAT-Oscar-11 (UoSAT-2) is now transmitting telemetry data after weeks of silence.

Over the weekend of 11th to 13th May, dedicated radio amateurs at Stanford Research International in California and their outpost in Greenland heard very weak signals emanating from the satellite command RECEIVERS which, by their nature of operation, generate small signals on a frequency near to that which they normally listen. These signals told the University satellite team that their craft was still alive, although at this time the chances of complete recovery were not known. Although this observation, the first one confirmed since launch, did not lead directly to recovering the satellite, it did confirm that the orbital predictions provided by the NASA tracking organisations were correct and that the object being tracked by the Surrey team was indeed UoSAT-2.

This morning (14th May) at 10:24 GMT, with Dr. Martin Sweeting (UoSAT project manager) abroad on holiday, Neville Bean and Roger Peel, full time satellite researchers in the Department of Electronic and Electrical Engineering continued to command the satellite using its 144MHz uplink, to no effect. At 11:01GMT (12:01 BST), Neville made further command attempts on 438MHz, and after a brief stream of initialisation commands, the main UoSAT-2 beacon (145.825MHz) was powered up at 11:05.

The signals from the spacecraft were as strong as the last ones heard from it on the 1st March, when it stopped transmitting shortly after launch. Telemetry data, from the initial two orbital passes over Guildford, appears to be very encouraging, with temperatures around -5 to 0 degrees centigrade, as expected, and a battery voltage of 14.6 volts. The spacecraft is still spinning, but this will have stabilised since the previous data received immediately after launch, ready for attitude control manoeuvres. These will not start until after the causes of the 11 week silence have been investigated, a process that itself may take many weeks in order to exercise the caution necessary in this situation.

The UoSAT-2 spacecraft will be transmitting telemetry data continuously for the next few days while initial checks are made on the telecommand system, but after this other data formats will be generated using the spacecraft computer to check further the spacecraft's health.

Initially, the University of Surrey is encouraging radio amateurs and schools used to collecting data from UoSAT-1 to send them all the telemetry they receive from UoSAT-2, so that the picture of its current state can be generated as soon as possible. The AMSAT series of amateur-radio oriented satellites benefit greatly from the thousands of receiving stations around the world who are able to send such data back to the controlling organisation.

Roger G8NEF

Outgoing messages:
c
amsat

First UO-11 Telem Frames at KA9Q
Here are the first two frames that were solidly recieved at KA9Q
on the first pass this morning. A decoded version of these same
frames is on the 'eng' bb. I've got tons more of this stuff.
Enjoy!
Phil

UOSAT-2 0002523191217

00522501300202492D03693F040554050401060237070513080 37C09031B
10475711339912000313094F14000515000416000717505618543B195195
20512421059F22661123000124000625000726103627478E28313B29501F
30406131038932283833000034000735392E36456237434738511E39512C
40837841000542677043000744169E450023460002474997485180 49472C
50544051074752695D53292F54967955000056000357508F58501959514C
60800E615BC562800C630243640002650003 66C00C67000168000E69000F
UOSAT-2 0002523191222

00522501314702495A037004040554050401060237070513080 37C09031B
10497B11339912000313094F14000515000416000717505618542A195184
20523621061422661123000124000625000726103627478E28312A29501F
30382A31039832283833000034000735392E36456237434738511E39512C
40851841000542677043000744169E450023460002474997485180 49472C
50543751073052696E532958540023550000560003575 08F58501959514C
60800E615BC562800C630243640002650003 66C00C67000168000E69000F
.
y
c
eng

Decoded UO-11 Frames

The program echoes each raw format line, then follows it with the
interpretation. Note that the clock was running, but it had not
been intialized.
73, Phil

```
UOSAT-2           0002523191217
Date: 02/52/00 Time: 19:12:17 Day of wk: 3

0052250130020249 2D03693F040554050401060237070513080 37C09031B
00522:  -11.400 mA Solar array current -Y
01300:  -63.545 uT Nav mag X axis
02492:    5.632 uT Nav mag Z axis
03693:   35.435 uT Nav mag Y axis
04055:    0.000 sun sensor
05040:    0.000 sun sensor
06023:    0.000 sun sensor
07051:    0.000 sun sensor
08037:    0.000 sun sensor
09031:    0.000
1047571133991200031 3094F14000515000416000717505618543B195195
10475:   77.900 mA Solar array current +Y
11339:   -2.609 C  Nav mag (wing) temp
12000:    0.000 horizon sensor
13094:    0.000 (spare)
14000:    0.000 DCE ramunit current
15000:    0.000 DCE cpu current
16000:    0.000 DCE gmem current
17505:   -5.000 C  Facet temp +X
18543:  -12.600 C  Facet temp +Y
19519:   -7.800 C  Facet temp +Z
20512421059F22661123000124000625000726103627478E28313B29501F
20512:    7.600 mA Solar array current -X
21059:   57.230 mA +10v line current
22661:    9.915 V  PCM voltage +10v
23000:  -70.000 mA P/W logic current (+5v)
24000:    0.000 mA P/W geiger current
25000:    0.000 mA P/W elec sp.curr (+10v)
26103:    9.579 mA P/W elec sp.curr (-10v)
27478:    0.400 C  Facet temp -X
28313:   33.400 C  Facet temp -Y
29501:   -4.200 C  Facet temp -Z
3040613103893228383300003 4000735392E36456237434738511E39512C
30406:  209.000 mA Solar array current +X
31038:   18.240 mA -10v line current
32283:   10.188 V  PCM voltage -10v
33000:    0.000 mA 1802 comp curr (+10v)
34000:    0.000 mA Digitalker current (+5v)
35392:  705.000 MW 145mhz beacon power o/p
36456:  100.320 mA 145mhz beacon current
37434:    9.200 C  145mhz beacon temp
38511:   -6.200 C  Command decoder temp (+Y)
39512:   -6.400 C  Telemetry temp (+X)
```

```
40837841000542677043000744169E450023460002474997485180494720
40837:   32.100 V  Solar array voltage (+30v)
41000:    0.000 mA +5v line current
42677:    5.687 V  PCM voltage +5v
43000:    0.000 mA DSR current (+5v)
44169:  155.480 mA Command rx current
45002: -195.000 MW 435mhz beacon power o/p
46000:    0.000 mA 435mhz beacon current
47499:   -3.800 C  435 mhz beacon temp
48518:   -7.600 C  P/W temp (-x)
49472:    1.600 C  P/W BCR temp
505440510747526953D53292F5496795500005600035750 8F58501959514C
50544:  272.800 mA Battery charge/dischg current
51074:  370.000 mA +14v line current
52695:   14.595 V  Battery voltage (+14v)
53292:    0.000    Battery cell volts (mux)
54967:   19.340 mA Telemetry current (+10v)
55000:    5.208 mw 2.4GHZ beacon power o/p
56000:    0.000 mA 2.4GHZ beacon current
57508:   -5.600 C  Battery temp
58501:   -4.200 C  2.4GHZ beacon temp
59514:   -6.800 C  CCD imager temp
60800E615BC562800C6302436400026500 0366C00C67000168000E69000F
01: 1 145 MHZ general downlink power          off/on
02: 0 435 MHZ engineering downlink power      off/on
03: 0 2401 MHZ engineering downlink power     off/on
04: 0 Telemetry channel mode select           run/dwell
05: 0 Telemetry channel dwell address load    off/on
06: 0 Telemetry channel dwell address source  gnd/computer
07: 0 Primary spacecraft computer power       off/on
08: 0 Primary spacecraft computer error count bit-1
09: 0 Primary spacecraft computer error count bit-2
10: 0 Primary spacecraft computer bootstrap   prom/uart
11: 0 Primary spacecraft computer error count bit-3
12: 0 Primary spacecraft computer bootstrap   a/b
13: 0 Gravity gradient boom deployment pyros  safe/arm
14: 1 Gravity gradient boom deployment pyros  hold/fire
15: 0 Gravity gradient boom deployment        safe/arm
16: 1 Gravity gradient boom deployment        hold/deploy
17: 1 Gravity gradient boom deployment        extend/retract
18: 0 Attitude control magnetorquers          safe/arm
19: 1 Attitude control magnetorquer -x        on/off
20: 1 Attitude control magnetorquer -y        on/off
21: 1 Attitude control magnetorquer -z        on/off
22: 1 Attitude control magnetorquer           reverse/forward
23: 0 435 MHZ PSK mode                        NRZI/NRZIC
24: 0 2401 MHZ PSK mode                       NRZI/NRZIC
25: 1 Attitude control magnetorquers          high/low power
26: 0 Digitalker expt. power                  off/on
27: 0 CCD camera expt. power                  off/on
28: 0 CCD camera expt. integration period     bit 0
29: 0 CCD camera expt. integration period     bit 1
30: 0 CCD camera expt. video amp. gain        bit 0
```

```
31: 0 CCD camera expt. video amp. gain        bit 1
32: 0 DSR power                               off/on
33: 0 DSR mode                                read/write
34: 0 DSR mode                                run/reset
35: 0 Radiation detectors geiger-a EHT power  off/on
36: 0 Radiation detectors geiger-b EHT power  off/on
37: 0 Radiation detectors geiger-c EHT power  off/on
38: 0 Electron spectrometer sensor EHT power  off/on
39: 0 DCE experiment power                    off/on
40: 0 DCE expt.                               reset/run
41: 0 DCE expt. prom select                   a/b
42: 0 DCE expt. cpu clock rate select         0.9/1.8 mhz
43: 1 Navigation magnetometer power           off/on
44: 0 Space dust experiment power             off/on
45: 0 Spare dust experiment level select      bit 0
46: 1 BCR status                              0/1
47: 0 435 MHZ downlink modulation select      AFSK/PSK
48: 0 2401 MHZ downlink modulation select     AFSK/PSK
49: 0 1802 serial command                     disable/enable
50: 0 DCE expt serial command                 disable/enable
51: 0
52: 0
53: 0
54: 0 Command watchdog enable
55: 0 Command watchdog reset
56: 0 145 MHZ downlink data select            a
57: 0 145 MHZ downlink data select            b
58: 0 145 MHZ downlink data select            c
59: 0 145 MHZ downlink data select            d
60: 0 145 MHZ downlink data select            e
61: 0 145 MHZ downlink data select            f
62: 0 145 MHZ downlink data rate              a
63: 0 145 MHZ downlink data rate              b
64: 0 435 MHZ downlink data rate              a
65: 0 435 MHZ downlink data rate              b
66: 0 435 MHZ downlink data rate              c
67: 0 Particle/wavecounter control            count/reset
68: 0 Downlink lockout                        enable/disable
69: 0 (spare)
70: 0
71: 0
72: 0
73: 1 P/W channel plate control bit 0
74: 1 P/W channel plate control bit 1
75: 0 P/W channel plate control bit 2
76: 0 Space dust
77: 0 Space dust
78: 0 Space dust
79: 0 Space dust
80: 0 Space dust
81: 0 Space dust
82: 0 Space dust
83: 0 Space dust
```

```
84: 0 DSR write cycle complete
85: 0 1802 CWO output
86: 0 1802 tlm port (msb)
87: 0 1802 tlm port
88: 0 1802 tlm port
89: 0 1802 tlm port
90: 0 1802 tlm port
91: 0 1802 tlm port
92: 0 1802 tlm port
93: 0 1802 tlm port
94: 0 1802 tlm port
95: 0 1802 tlm port
96: 0 1802 tlm port (lsb)
UOSAT-2           0002523191222
Date: 02/52/00 Time: 19:12:22 Day of wk: 3

00522501314702495A037004040554050401060237070513080 37C09031B
00522:  -11.400 mA Solar array current -Y
01314:  -63.337 uT Nav mag X axis
02495:    6.088 uT Nav mag Z axis
03700:   36.490 uT Nav mag Y axis
04055:    0.000 sun sensor
05040:    0.000 sun sensor
06023:    0.000 sun sensor
07051:    0.000 sun sensor
08037:    0.000 sun sensor
09031:    0.000
10497B11339912000313094F14000515000416000717505618542A195184
10497:   36.100 mA Solar array current +Y
11339:   -2.609 C  Nav mag (wing) temp
12000:    0.000 horizon sensor
13094:    0.000 (spare)
14000:    0.000 DCE ramunit current
15000:    0.000 DCE cpu current
16000:    0.000 DCE gmem current
17505:   -5.000 C  Facet temp +X
18542:  -12.400 C  Facet temp +Y
19518:   -7.600 C  Facet temp +Z
20523621061422661123000124000625000726103627478E28312A29501F
20523:  -13.300 mA Solar array current -X
21061:   59.170 mA +10v line current
22661:    9.915 V  PCM voltage +10v
23000:  -70.000 mA P/W logic current (+5v)
24000:    0.000 mA P/W geiger current
25000:    0.000 mA P/W elec sp.curr (+10v)
26103:    9.579 mA P/W elec sp.curr (-10v)
27478:    0.400 C  Facet temp -X
28312:   33.600 C  Facet temp -Y
29501:   -4.200 C  Facet temp -Z
30382A3103983228383300003400073539 2E36456237434738511E39512C
30382:  254.600 mA Solar array current +X
31039:   18.720 mA -10v line current
32283:   10.188 V  PCM voltage -10v
```

```
33000:    0.000 mA 1802 comp curr (+10v)
34000:    0.000 mA Digitalker current (+5v)
35392:  705.000 MW 145mhz beacon power o/p
36456:  100.320 mA 145mhz beacon current
37434:    9.200 C  145mhz beacon temp
38511:   -6.200 C  Command decoder temp (+Y)
39512:   -6.400 C  Telemetry temp (+X)
4085184100054267704300074416 9E450023460002474997485180 49472C
40851:   33.500 V  Solar array voltage (+30v)
41000:    0.000 mA +5v line current
42677:    5.687 V  PCM voltage +5v
43000:    0.000 mA DSR current (+5v)
44169:  155.480 mA Command rx current
45002: -195.000 MW 435mhz beacon power o/p
46000:    0.000 mA 435mhz beacon current
47499:   -3.800 C  435 mhz beacon temp
48518:   -7.600 C  P/W temp (-x)
49472:    1.600 C  P/W BCR temp
5054375107305269 6E5329585400235500005600035750 8F58501959514C
50543:  264.000 mA Battery charge/dischg current
51073:  365.000 mA +14v line current
52696:   14.616 V  Battery voltage (+14v)
53295:    0.000    Battery cell volts (mux)
54002:    0.040 mA Telemetry current (+10v)
55000:    5.208 mw 2.4GHZ beacon power o/p
56000:    0.000 mA 2.4GHZ beacon current
57508:   -5.600 C  Battery temp
58501:   -4.200 C  2.4GHZ beacon temp
59514:   -6.800 C  CCD imager temp
60800E615BC562800C6302436400026500 0366C00C67000168000E69000F
01: 1 145 MHZ general downlink power          off/on
02: 0 435 MHZ engineering downlink power      off/on
03: 0 2401 MHZ engineering downlink power     off/on
04: 0 Telemetry channel mode select           run/dwell
05: 0 Telemetry channel dwell address load    off/on
06: 0 Telemetry channel dwell address source  gnd/computer
07: 0 Primary spacecraft computer power       off/on
08: 0 Primary spacecraft computer error count bit-1
09: 0 Primary spacecraft computer error count bit-2
10: 0 Primary spacecraft computer bootstrap   prom/uart
11: 0 Primary spacecraft computer error count bit-3
12: 0 Primary spacecraft computer bootstrap   a/b
13: 0 Gravity gradient boom deployment pyros  safe/arm
14: 1 Gravity gradient boom deployment pyros  hold/fire
15: 0 Gravity gradient boom deployment        safe/arm
16: 1 Gravity gradient boom deployment        hold/deploy
17: 1 Gravity gradient boom deployment        extend/retract
18: 0 Attitude control magnetorquers          safe/arm
19: 1 Attitude control magnetorquer -x        on/off
20: 1 Attitude control magnetorquer -y        on/off
21: 1 Attitude control magnetorquer -z        on/off
22: 1 Attitude control magnetorquer           reverse/forward
23: 0 435 MHZ PSK mode                        NRZI/NRZIC
```

```
24: 0 2401 MHZ PSK mode                          NRZI/NRZIC
25: 1 Attitude control magnetorquers             high/low power
26: 0 Digitalker expt. power                     off/on
27: 0 CCD camera expt. power                     off/on
28: 0 CCD camera expt. integration period        bit 0
29: 0 CCD camera expt. integration period        bit 1
30: 0 CCD camera expt. video amp. gain           bit 0
31: 0 CCD camera expt. video amp. gain           bit 1
32: 0 DSR power                                  off/on
33: 0 DSR mode                                   read/write
34: 0 DSR mode                                   run/reset
35: 0 Radiation detectors geiger-a EHT power     off/on
36: 0 Radiation detectors geiger-b EHT power     off/on
37: 0 Radiation detectors geiger-c EHT power     off/on
38: 0 Electron spectrometer sensor EHT power     off/on
39: 0 DCE experiment power                       off/on
40: 0 DCE expt.                                  reset/run
41: 0 DCE expt. prom select                      a/b
42: 0 DCE expt. cpu clock rate select            0.9/1.8 mhz
43: 1 Navigation magnetometer power              off/on
44: 0 Space dust experiment power                off/on
45: 0 Spare dust experiment level select         bit 0
46: 1 BCR status                                 0/1
47: 0 435 MHZ downlink modulation select         AFSK/PSK
48: 0 2401 MHZ downlink modulation select        AFSK/PSK
49: 0 1802 serial command                        disable/enable
50: 0 DCE expt serial command                    disable/enable
51: 0
52: 0
53: 0
54: 0 Command watchdog enable
55: 0 Command watchdog reset
56: 0 145 MHZ downlink data select               a
57: 0 145 MHZ downlink data select               b
58: 0 145 MHZ downlink data select               c
59: 0 145 MHZ downlink data select               d
60: 0 145 MHZ downlink data select               e
61: 0 145 MHZ downlink data select               f
62: 0 145 MHZ downlink data rate                 a
63: 0 145 MHZ downlink data rate                 b
64: 0 435 MHZ downlink data rate                 a
65: 0 435 MHZ downlink data rate                 b
66: 0 435 MHZ downlink data rate                 c
67: 0 Particle/wavecounter control               count/reset
68: 0 Downlink lockout                           enable/disable
69: 0 (spare)
70: 0
71: 0
72: 0
73: 1 P/W channel plate control bit 0
74: 1 P/W channel plate control bit 1
75: 0 P/W channel plate control bit 2
76: 0 Space dust
```

```
77: 0 Space dust
78: 0 Space dust
79: 0 Space dust
80: 0 Space dust
81: 0 Space dust
82: 0 Space dust
83: 0 Space dust
84: 0 DSR write cycle complete
85: 0 1802 CWO output
86: 0 1802 tlm port (msb)
87: 0 1802 tlm port
88: 0 1802 tlm port
89: 0 1802 tlm port
90: 0 1802 tlm port
91: 0 1802 tlm port
92: 0 1802 tlm port
93: 0 1802 tlm port
94: 0 1802 tlm port
95: 0 1802 tlm port
96: 0 1802 tlm port (lsb)
.
y
c
eng

C-language UO-11 decoder fix
For those of you using my C-language telemetry decoding program for
UO-11, I've discovered two minor bugs:

Change the line which reads
     if(sscanf(cp,"UOSAT-2%2d%2d%2d%1d%2d%2d%2d",&year,&month,&day,
to
     if(sscanf(cp,"\036UOSAT-2%2d%2d%2d%1d%2d%2d%2d",&year,&month,&day,

Since I had never received telemtry direct before, I didn't know about
the leading "funny character" which the various electronic mail systems
had stripped off.

Also change the line which reads
     n = sscanf(cp,"%1d%1d%1d%1d%1d%1x",&chan1,&chan0,&n2,&n1,&n0,&chk);
to
     n = sscanf(cp,"%1d%1d%1x%1x%1x%1x",&chan1,&chan0,&n2,&n1,&n0,&chk);

I didn't notice that hex digits were valid in the status bit channels
of the telemetry (those greater than 60.)  In particular, this kept channels
61 and 66 from decoding.

73, Phil
.
y


From 6647032000533120799
```

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,425711e727ab00b0
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-14 10:49:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!decvax!harpo!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UO-11 News
Message-ID: <33@mouton.UUCP>
Date: Mon, 14-May-84 13:49:57 EDT
Article-I.D.: mouton.33
Posted: Mon May 14 13:49:57 1984
Date-Received: Wed, 16-May-84 03:09:23 EDT
Organization: Bell Communications Research, Inc
Lines: 100

Posted: Mon May 14, 1984   3:30 PM GMT   Msg: FGIE-1790-6513
From: LKAYSER
To: MSweeting, AMSAT
Subj: We heard it!!!!!

TO TMAIL MSWEETING,AMSAT
FROM L. S. Kayser, WA3ZIA
UO11 finally heard in Ottawa!!!!!
at 1425 to 1436 Z this date UO11 was copied by VE3BNO in Ottawa.
Congratulations all, we will start now collecting Telem
regularly. It has been worth the wait!
Surrey note please PRIME link wont be bsck until I return to work
around june 1.

Regards, Larry

Posted: Mon May 14, 1984   4:24 PM GMT   Msg: BGIE-1790-7269
From: LKAYSER
To: msweeting, amsat
Subj: Again!!! UO11

To Msweeting,AMSAT
To PRNET ALL
From L. S. Kayser, WA3ZIA
UO11 AOS 1601, LOS 1611, strong signals, sounds good, telemetry
follows
de Larry

Posted: Mon May 14, 1984   5:08 PM GMT   Msg: SGIE-1790-7766
From: MSWEETING
To: AMSAT
Subj: Oscar-11

  The following report was circulated within the G.B; it is

the only output we are likely to generate for a few hours. The telemetry received so far appears very good.

Following persistent commanding from the Guildford command station, the University of Surrey's second spacecraft, UoSAT-Oscar-11 (UoSAT-2) is now transmitting telemetry data after weeks of silence.

Over the weekend of 11th to 13th May, dedicated radio amateurs at Stanford Research International in California and their outpost in Greenland heard very weak signals emanating from the satellite command RECEIVERS which, by their nature of operation, generate small signals on a frequency near to that which they normally listen. These signals told the University satellite team that their craft was still alive, although at this time the chances of complete recovery were not known. Although this observation, the first one confirmed since launch, did not lead directly to recovering the satellite, it did confirm that the orbital predictions provided by the NASA tracking organisations were correct and that the object being tracked by the Surrey team was indeed UoSAT-2.

This morning (14th May) at 10:24 GMT, with Dr. Martin Sweeting (UoSAT project manager) abroad on holiday, Neville Bean and Roger Peel, full time satellite researchers in the Department of Electronic and Electrical Engineering continued to command the satellite using its 144MHz uplink, to no effect. At 11:01GMT (12:01 BST), Neville made further command attempts on 438MHz, and after a brief stream of initialisation commands, the main UoSAT-2 beacon (145.825MHz) was powered up at 11:05.

The signals from the spacecraft were as strong as the last ones heard from it on the 1st March, when it stopped transmitting shortly after launch. Telemetry data, from the initial two orbital passes over Guildford, appears to be very encouraging, with temperatures around -5 to 0 degrees centigrade, as expected, and a battery voltage of 14.6 volts. The spacecraft is still spinning, but this will have stabilised since the previous data received immediately after launch, ready for attitude control manoeuvres. These will not start until after the causes of the 11 week silence have been investigated, a process that itself may take many weeks in order to exercise the caution necessary in this situation.

The UoSAT-2 spacecraft will be transmitting telemetry data continuously for the next few days while initial checks are made on the telecommand system, but after this other data formats will be generated using the spacecraft computer to check further the spacecraft's health.

Initially, the University of Surrey is encouraging radio amateurs and schools used to collecting data from UoSAT-1 to send them all the telemetry they receive from UoSAT-2, so that the picture of its current state can be generated as soon as possible. The AMSAT series of amateur-radio oriented satellites benefit greatly from the thousands of receiving stations around the world who are able to send such data back to the controlling organisation.

Roger G8NEF

From 3844137515134919540
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5ecd94a64400a70c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-15 05:30:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: freqs for Shadow Traffic reports
Message-ID: <2197@ihuxf.UUCP>
Date: Tue, 15-May-84 08:30:25 EDT
Article-I.D.: ihuxf.2197
Posted: Tue May 15 08:30:25 1984
Date-Received: Wed, 16-May-84 04:11:09 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 15

These licenses were valid as of February 1984:

o KAC9310 462.6000 Lee Communications/aka Gary Lee, traffic reports (Chicago)
WRP570 452.9750 Shadow Network Inc (New York, NY)
KAC5714 462.5500 "
KAC5716 462.5500 Shadow Network Inc (NJ)
KAC5235 462.5500 Shadow Network Inc (Philadelphia)
KAC5715 467.5500 mo Shadow Network Inc (Union City, NJ)
KNDH468 453.0000 Shadow Network Inc (W Orange, NJ)
KAC4321 462.5500 Shadow Network Inc - no longer in use (Chicago)

--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -3406316410483488907
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7ddaa89f0530aa9b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-15 05:39:15 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: users of 17.8 KHz
Message-ID: <2198@ihuxf.UUCP>
Date: Tue, 15-May-84 08:39:15 EDT
Article-I.D.: ihuxf.2198
Posted: Tue May 15 08:39:15 1984
Date-Received: Wed, 16-May-84 04:11:49 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 26

x
The September 1981 unclassified IRAC microfiche of US Govt
allocations lists the following users of 17.8 KHz:

Lualuale, HI (NPM)
Finegayn, Guam
Skaggs, CA
Annapolis, MD (NSS)
Cutler, ME (NAA)
ships in Atlantic Ocean
ships in Pacific Ocean

Notes:

o+ All are US Navy

o+ All are allowed 1,000,000 watts of power

o+ Stations are Fixed, and Fixed Coastal

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==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -7500490317238493936
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3912fd566a386889,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-15 05:47:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 17

Message-ID: <9141@mgweed.UUCP>
Date: Tue, 15-May-84 08:47:59 EDT
Article-I.D.: mgweed.9141
Posted: Tue May 15 08:47:59 1984
Date-Received: Thu, 17-May-84 05:18:39 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 39

qst de k9eui
dx bulletin nr 17 from arrl headquarters newington ct
may 10 1984 to all radio amateurs bt

egypt. su1er, ezaat, is active thursday nights at 0300zhon 3778 khz. he sometimes has help from w4zwe. su1xj has been active on 14223 khz at 2315z.

lebanon. ted, od5lx, has been active on 7018 khz at 0230z. qsl via sm0djz.

swaziland. 3d6am has been active on 14197 khz at 1200z, which is long path to the u.s.

pitcairn island. vr6ky, kari, can sometimes be found on 21304 khz at 2330z.

panama. h31 is a special callsign for panama. h31lr has been active on 28515 khz at 2230z.

4u1itu. john, w1rr, will be in geneva through may 17 and hopes to activate 4u1itu while there.

martinique. fm7wd is active on the family hour net on 21345 khz at 2300z. he has also been heard on 7014 khz at 0200z. fm7we has been active on 14197 khz at 2300z.

djibouti. j28ep has been active on 14236 khz at 0230z.

crozet. fb8ww has been worked on 21304 khz at 1315z. qsl to w4fru.

oh2bh. martti, oh2bh, hopes to be able to operate from ceuta and melilla, ea9, and gibraltar, zb2, on his way home. qsl to oh2bh.

san andres. hk0heu has been active on 21295 khz at 2230z. qsl via hk0bfb. ar

From -7829432498263241830
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e423952bbf407cff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-15 06:05:32 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some Palo Alto freqs for scanner freaks
Message-ID: <2199@ihuxf.UUCP>
Date: Tue, 15-May-84 09:05:32 EDT
Article-I.D.: ihuxf.2199
Posted: Tue May 15 09:05:32 1984
Date-Received: Wed, 16-May-84 04:13:10 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 21

As of Feb 1984:

```
  WXN372    151.7150   American Patrol    Service  (Palo Alto, CA)
  KVC202    151.8350   Hewlett  Packard  Co (Palo Alto, CA)
  WXD901    151.8350          "
  KXB965    484.3375          "
  KNCX688   468.4750 mo Radar Sentry Patrol (Palo Alto,  CA)
  KM2XBR     43.5000   SRI International, experimental  (Palo Alto, CA)
  KM2XBR    154.4900          "
  KX5779    483.8125   Xerox International (Palo Alto,  CA)
  KZR714    483.8125          "
  KX5779    486.8125          "

    (Many others listed, especially in microwave region.)

     mo = mobiles only (repeater input)
```

--
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 6814081161942457206
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cd8f2de76bd29e5f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-15 15:16:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UO-11 Command Status
Message-ID: <39@mouton.UUCP>
Date: Tue, 15-May-84 18:16:23 EDT
Article-I.D.: mouton.39
Posted: Tue May 15 18:16:23 1984
Date-Received: Wed, 16-May-84 04:30:45 EDT

Organization: Bell Communications Research, Inc
Lines: 52

Posted: Tue May 15, 1984 8:28 PM GMT Msg: OGIE-1792-3618
From: MSWEETING
To: AMSAT
Subj: Oscar-11 status

Oscar-11 continues to transmit telemetry on 145.825 MHz while we examine the telemetry received and investigate the reasons for the last 11 weeks of silence.

The telemetry looks very good - in other words, as when the craft 'died', we have no indication of a failure mode. The only major difference is that the overall temperature has fallen from around 15c at launch to around 0c or -5 (which is close to that expected).

The telecommand reliability is currently very poor on 438MHz, indeed following the one 438 command which switched the 145MHz beacon, only 4 more commands were accepted during the following 4 passes on Monday. Today (still trying 438MHz for completeness over passes under all orbital conditions) we only succeeded in successfully entering 2 more sets of 2 commands. All commands so far have purely toggled a status bit in the telemetry (the LSB in channel 61) and not had any switching effect.

Efforts later this evening and tomorrow will centre on sending short bursts of commands on 144MHz. Bearing in mind that the command station 145MHz receivers will be flattenned by the transmissions, we will have to stop to see whether the commands have had any effect. [Remember that G3YJO is on holiday and that our remote receiving station is in his spare room!]

Assuming no major discoveries, we will switch the 145MHz beacon to audio and digital "bent pipe" modes in the next couple of days to check the command receivers and decoders. This may tell us how to modify our transmissions to improve the command uplink performance. Note that these diagnostics will generate peculiar noises and/or digital data on the 145MHz downlink - this is expected and unavoidable if we are to sort the problems out in finite time. We will try and restore telemetry before the weekend, and leave Oscar-11 in this mode over the weekend.

Please note that, due to the current state of the command uplink, bootstrapping the 1802 computer will be time consuming (at == 6-10 commands / day!) and we do not intend to do this until after the weekend. Then we will start expanding the output repertoire.

Roger G8NEF

From 5002247075221339192
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b15cdd5f7b06a28,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-16 08:02:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site gang.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!ihnp4!afinitc!wuphys!gang!eric
From: eric@gang.UUCP (Eric Kiebler)
Newsgroups: net.ham-radio
Subject: non-ham needs info
Message-ID: <142@gang.UUCP>
Date: Wed, 16-May-84 11:02:37 EDT
Article-I.D.: gang.142
Posted: Wed May 16 11:02:37 1984
Date-Received: Fri, 18-May-84 02:37:49 EDT
Organization: A galaxy far, far away... St. Louis
Lines: 21

[]

The folks here in St. Louis rely almost entirely on one site for news feeds.
Most of the sites are low-budget and/or university sites, and just can't
afford to call ihnp4 continuously. There is a local packet radio group
which I have not yet been able to contact, but thought I would bring
the question up here anyway.

What we would like to do is get news via radio from any reliable site.
I know nothing about this technology other than the software end of
data communications and some satellite experience. Could those with
information please mail me with any ideas? Are other people passing news
via radio elsewhere in the world?

thanks in advance,
eric
--
from the gang down at... 38.37.45 N   90.12.22 W
     ..!ihnp4!afinitc!{gang|wucs!gang}!eric

I stand corrected but indifferent.

From -7388859821942765462
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f1f3354c2c1a069e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-16 11:11:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site abnjh.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!abnjh!cbspt002

From: cbspt002@abnjh.UUCP (Marc E. Kenig @ ATT-IS Piscataway NJ)
Newsgroups: net.ham-radio
Subject: BBC World Svce June 84 Freq Sked (London Calling)
Message-ID: <608@abnjh.UUCP>
Date: Wed, 16-May-84 14:11:39 EDT
Article-I.D.: abnjh.608
Posted: Wed May 16 14:11:39 1984
Date-Received: Thu, 17-May-84 03:37:32 EDT
Organization: ATTIS, NJ
Lines: 83

<this line to be snarfed by a Russian woodpecker?>

BBC World Service Frequencies - June 1984
Target areas: Canada USA Mexico Central America Caribbean Equador
Peru Venezuela

Letter in grid denotes xmittion from that time for the next 15 min.
from that xmitter (see key below). All times GMT.

```
MHz    00  01  02  03  04  05  06  07  08  09  10  11 GMT  MHz  Meter
       ..............................................
21.55  +   +   +   +   +   +   +   +   +   +   +   GGGG+  21.55  13.92
15.42  CCCCCCCCCC  +   +   +   +   +   +   +   +   +   +  15.42  19.46
15.26  +   +   +   +   +   +   +   +   +   +   +   +   +  15.26  19.66
15.215 +   +   +   +   +   +   +   +   +   +   +   GGGG+  15.215 19.72
15.07  GG  +   +   +   +   +   +   +   +   +   +   +   +  15.07  19.91
11.91  GG  +   +   +   +   +   +   +   +   +   +   +   +  11.91  25.19
11.835 + GGGGGGGG  +   +   +   +   +   +   +   +   +   +  11.835 25.35
11.775 +   +   +   +   +   +   +   +   +   +   +   WWWW+  11.775 25.48
11.75  AAAAAAAAAA  +   +   +   +   +   +   +   +   +   +  11.75  25.53
 9.915 GGGGGGGGGG  +   +   +   +   +   +   +   +   +   +   9.915 30.26
 9.74  +   +   +   +   +   +   +   +   +   +   +   +   +   9.74  30.80
 9.59  SS  +   +   +   +   +   +   +   +   +   +   +   +   9.59  31.28
 9.515 + KKKKKKKKKKK  +   +   +   +   +   +   +   +   +   9.515 31.53
 9.51  +   +   +   +   + WWWWWWWWWWWWWWWWWW   +   +   +   9.51  31.55
 7.325 GGGGGGGGGGGGG  +   +   +   +   +   +   +   +   +   7.325 40.96
 6.195 +   +   +   +   +   +   +   +   +   W   +   WWWW+   6.195 48.43
 6.175 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWW  +   +   +   +   +   6.175 48.58
 6.12  SSSSSSSSSSSSS  +   +   +   +   +   +   +   +   +   6.12  49.02
 6.085 AA  +   +   +   +   +   +   +   +   +   +   +   +   6.085 49.30
 6.02  + AAAAAAAAAAA  +   +   +   +   +   +   +   +   +   6.02  49.83
 6.005 +   +   +   +   +   +   +   +   +   +   +   +   +   6.005 49.96
 5.975 GGGGGGGGGGGGGGGGGGGGG+   +   +   +   +   +   +   5.975 50.21
 5.965 +   +   +   +   +   +   +   +   +   +   +   +   +   5.965 50.29
       ..............................................

MHz    12  13  14  15  16  17  18  19  20  21  22  23 GMT  MHz  Meter
       ..............................................
21.55  GGGGGG  +   +   +   +   +   +   +   +   +   +   +  21.55  13.92
15.42  +   +   +   +   +   +   +   +   +   +   CCCCCCCCC  15.42  19.46
15.26  +   +   +   ssssSSSSSss +   +   +   +   +   +   +  15.26  19.66
15.215 GGGGGG  +   +   +   +   +   +   +   +   +   +   +  15.215 19.72
```

```
15.07  +   +   +   GGGGGGGGGG +   +   GGGGGGGGGGGGGGGG  15.07  19.91
11.91  +   +   +   +   +   +   +   +   +   +   +   GGGGG  11.91  25.19
11.835 +   +   +   +   +   +   +   +   +   +   +   +   +  11.835 25.35
11.775 WWWWWW  +   ssssSSSSSss +   +   +   +   +   +   +  11.775 25.48
11.75  +   +   +   FFFFF   +   +   +   AAAAAAAAAAAAAAAA  11.75  25.53
 9.915 +   +   +   +   +   +   +   +   +   +   GGGGGGGGG   9.915 30.26
 9.74  +   +   +   FFFFF   +   +   +   +   +   +   +   +   9.74  30.80
 9.59  +   +   +   +   +   +   +   +   +   +   SSSSSSSSS   9.59  31.28
 9.515 +   +   +   +   +   +   +   +   +   +   +   +   +   9.515 31.53
 9.51  +   SS  +   +   +   +   +   +   +   +   +   +   +   9.51  31.55
 7.325 +   +   +   +   +   +   +   +   +   +   +   GGGGG   7.325 40.96
 6.195 WWWWWW  +   +   +   +   +   +   +   +   +   +   +   6.195 48.43
 6.175 +   +   +   +   +   +   +   +   WWWWWWWWWWWWWWWWW   6.175 48.58
 6.12  +   +   +   +   +   +   +   +   +   +   SSSSSSSSS   6.12  49.02
 6.085 +   +   +   +   +   +   +   +   +   +   +   + AAA   6.085 49.30
 6.02  +   +   +   +   +   +   +   +   +   +   +   +   +   6.02  49.83
 6.005 +   +   +   +   +   +   +   +   +   +   +  AAA  +   6.005 49.96
 5.975 +   +   +   +   +   +   +   +   +   +   +  GGGGGG   5.975 50.21
 5.965 SSSSSS  +   +   +   +   +   +   +   +   +   +   +   5.965 50.29
       ...............................................
```

Key to transmitters:

```
       A - Atlantic Relay (Ascension)   C - East Mediterranean Relay
       F - Far East Relay               G - United Kingdom
       S - North America (Sackville)    W - Caribbean Relay
```

Lower case indicate transmissoins available as follows:

```
      s - 1500-1600 Sat/Sun only        1709-1745 Sat/Sun only
```

```
  My Music returns from the 16th Sats (ex 2nd, 30th) 1030 rep Suns
0330 Mons 1715!
  I'm Sorry, I'll Read That Again also returns (reruns of '60's shows)
Tues (ex 5th, 19th) 1430 rep Weds (ex 6th) 0830, Thurs (ex 7th) 0045, 1030.
  Wimbledon - Preview on Saturday Special 23rd repp 2115, 24th 0430.
              Daily report - daily 2115 rep 0430 and 1015.

  M. Kenig   [Share and Enjoy!]
  ATT-IS
  ...abjnh!cbspt002


From -2481951001835098311
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a5e2d16328c82e20,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-16 15:45:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.13 $; site iuvax.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!iuvax!k9iu
From: k9iu@iuvax.UUCP
Newsgroups: net.ham-radio
Subject: Uosat 11 telemetry
```

Message-ID: <8500004@iuvax.UUCP>
Date: Wed, 16-May-84 18:45:00 EDT
Article-I.D.: iuvax.8500004
Posted: Wed May 16 18:45:00 1984
Date-Received: Fri, 18-May-84 01:39:29 EDT
Lines: 10
Nf-ID: #N:iuvax:8500004:000:279
Nf-From: iuvax!k9iu   May 16 17:45:00 1984

What does someone with a Bell 202 modem have to do to receive the
telemetry? We have hardware and software expertise available.

k9iu - Indiana University Amateur Radio Club

uucp: ...ihnp4!inuxc!iuvax!k9iu
csnet: k9iu@Indiana
ARPA: k9iu.Indiana@CSnet-Relay

From 6125788234878311096
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3a6ea4eb1f32584,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-16 15:47:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: TAPR TNC question
Message-ID: <47@sask.UUCP>
Date: Wed, 16-May-84 18:47:43 EDT
Article-I.D.: sask.47
Posted: Wed May 16 18:47:43 1984
Date-Received: Thu, 17-May-84 04:46:29 EDT
Organization: U of Saskatchewan, Canada
Lines: 9

Would someone please explain the difference between versions 3.0 and
3.1 of the TAPR TNCs? (P.S. the answer '0.1' has been received and rejected)

Ta

Pete Hardie VE5BEL

                        Daleks Rule
mail via   ihnp4!sask!hardie

From 335680725585479855
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,a5e2d16328c82e20
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-17 08:05:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Re: Uosat 11 telemetry
Message-ID: <41@mouton.UUCP>
Date: Thu, 17-May-84 11:05:20 EDT
Article-I.D.: mouton.41
Posted: Thu May 17 11:05:20 1984
Date-Received: Fri, 18-May-84 02:15:59 EDT
References: <8500004@iuvax.UUCP>
Organization: Bell Communications Research, Inc
Lines: 25

Receiving UO-11 telemetry is much like UO-9, except that there are some
important differences.

1. The deviation of the data subcarrier is considerably higher. This makes
for much improved copy in my experience.
2. THE MARK AND SPACE TONES ARE REVERSED relative to UO-9 (and to the Bell
202 modem standard.) If you cannot hack up your modem to invert data,
you'll have to do it externally. My own solution to this problem was to
add a 7486 exclusive-OR gate to the serial/parallel I/O card on my
computer. A bit from the parallel port controls whether the 7486 inverts
the incoming data stream that is fed to the UART.
3. The resulting data stream is conventional 1200 baud asynchronous ASCII,
and may be displayed directly on a terminal. However, the telemetry mode
that the spacecraft is currently in produces page after page of hexadecimal
digits, so the best way to see what's going on is with a decoding program.
Since each channel is checksummed this time, decoding is much more
reliable. I have written a C program to do this which works pretty well,
and even regains "synchronization" with the data stream quickly after
a noise burst. I can post this program here or on net.sources if anyone
is interested.

On the pass that just ended at my QTH, UO-11 is still transmitting
strong telemetry on 145.825.

73, Phil, KA9Q

From -6888986247262769846
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,839c5eb6729a9087
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-17 10:52:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn

From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <42@mouton.UUCP>
Date: Thu, 17-May-84 13:52:44 EDT
Article-I.D.: mouton.42
Posted: Thu May 17 13:52:44 1984
Date-Received: Fri, 18-May-84 02:35:17 EDT
Organization: Bell Communications Research, Inc
Lines: 203

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84135.08936496
   Mon May 14 02:08:41.132 1984 UTC
Element set: 636
Inclination: 97.5902 deg
RA of node: 109.1397 deg
Eccentricity: 0.0001529
Arg of perigee: 185.8728 deg
Mean anomaly: 174.2484 deg
Mean motion: 15.25613522 rev/day
Decay rate: 4.216e-05 rev/day^2
Epoch rev: 14434
Semi major axis: 6864.046 km
Anom period: 94.388256 min
Apogee: 487.170 km
Perigee: 485.071 km
Beacon: 145.8250 mhz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84130.85545387
   Wed May 9 20:31:51.214 1984 UTC
Element set: 100
Inclination: 25.5752 deg
RA of node: 200.3768 deg
Eccentricity: 0.6092698
Arg of perigee: 269.8549 deg
Mean anomaly: 24.9305 deg
Mean motion: 2.05848786 rev/day
Decay rate: -6e-08 rev/day^2
Epoch rev: 682
Semi major axis: 26106.208 km
Anom period: 699.542624 min
Apogee: 35637.772 km
Perigee: 3826.324 km
Beacon: 145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time: 84134.14050737
   Sun May 13 03:22:19.836 1984 UTC

```
Element set:     26
Inclination:       98.2429 deg
RA of node:       196.4397 deg
Eccentricity:    0.0014596
Arg of perigee:    39.2928 deg
Mean anomaly:     320.9333 deg
Mean motion:   14.61859953 rev/day
Decay rate:       1.55e-06 rev/day^2
Epoch rev:            1058
Semi major axis:  7062.392 km
Anom period:     98.504648 min
Apogee:            702.955 km
Perigee:           682.339 km
Beacon:           145.8250 mhz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84132.49292821
   Fri May 11 11:49:48.997 1984 UTC
Element set:     94
Inclination:       82.9604 deg
RA of node:       153.4371 deg
Eccentricity:    0.0060213
Arg of perigee:    65.0224 deg
Mean anomaly:     295.7082 deg
Mean motion:   12.15586150 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10646
Semi major axis:  7987.335 km
Anom period:    118.461369 min
Apogee:           1674.592 km
Perigee:          1578.404 km

Satellite: rs-4
Catalog number: 13000
Epoch time:      84132.49614255
   Fri May 11 11:54:26.716 1984 UTC
Element set:     194
Inclination:       82.9698 deg
RA of node:       161.8617 deg
Eccentricity:    0.0018802
Arg of perigee:   143.8761 deg
Mean anomaly:     216.3567 deg
Mean motion:   12.06669855 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10566
Semi major axis:  8026.658 km
Anom period:    119.336701 min
Apogee:           1670.926 km
Perigee:          1640.742 km

Satellite: rs-5
Catalog number: 12999
```

```
Epoch time:      84133.17398800
   Sat May 12 04:10:32.563 1984 UTC
Element set:     166
Inclination:       82.9518 deg
RA of node:       162.8388 deg
Eccentricity:    0.0009636
Arg of perigee:   171.6026 deg
Mean anomaly:     188.5191 deg
Mean motion:   12.05046892 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10560
Semi major axis:  8033.869 km
Anom period:    119.497425 min
Apogee:           1663.915 km
Perigee:          1648.432 km

Satellite: rs-6
Catalog number: 13002
Epoch time:      84122.49509319
   Tue May  1 11:52:56.51  1984 UTC
Element set:     80
Inclination:       82.9634 deg
RA of node:       160.8624 deg
Eccentricity:    0.0051501
Arg of perigee:   103.4771 deg
Mean anomaly:     257.2038 deg
Mean motion:   12.13561344 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10505
Semi major axis:  7996.222 km
Anom period:    118.659020 min
Apogee:           1679.179 km
Perigee:          1596.816 km

Satellite: rs-7
Catalog number: 13001
Epoch time:      84128.47305621
   Mon May  7 11:21:12.56  1984 UTC
Element set:     154
Inclination:       82.9622 deg
RA of node:       162.0113 deg
Eccentricity:    0.0022974
Arg of perigee:   112.6225 deg
Mean anomaly:     247.7263 deg
Mean motion:   12.08680093 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10535
Semi major axis:  8017.751 km
Anom period:    119.138224 min
Apogee:           1675.973 km
Perigee:          1639.134 km

Satellite: rs-8
```

```
Catalog number: 12998
Epoch time:      84123.06683012
   Wed May  2 01:36:14.122 1984 UTC
Element set:     272
Inclination:       82.9621 deg
RA of node:       170.1726 deg
Eccentricity:    0.0017729
Arg of perigee:   244.8032 deg
Mean anomaly:     115.1181 deg
Mean motion:   12.02943778 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10420
Semi major axis:  8043.236 km
Anom period:    119.706343 min
Apogee:           1696.597 km
Perigee:          1668.078 km

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84129.50989081
   Tue May  8 12:14:14.565 1984 UTC
Element set:     260
Inclination:       99.0459 deg
RA of node:       100.4732 deg
Eccentricity:    0.0012415
Arg of perigee:   204.9175 deg
Mean anomaly:     155.1398 deg
Mean motion:   14.13031769 rev/day
Decay rate:       2.54e-06 rev/day^2
Epoch rev:           14825
Semi major axis:  7224.336 km
Anom period:    101.908537 min
Apogee:            858.862 km
Perigee:           840.924 km
Beacon:           137.6200 mhz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84129.23716454
   Tue May  8 05:41:31.16  1984 UTC
Element set:     81
Inclination:       98.7092 deg
RA of node:       160.7367 deg
Eccentricity:    0.0017074
Arg of perigee:   165.3873 deg
Mean anomaly:     194.7797 deg
Mean motion:   14.22406077 rev/day
Decay rate:        9.8e-07 rev/day^2
Epoch rev:            5779
Semi major axis:  7192.519 km
Anom period:    101.236913 min
Apogee:            827.984 km
Perigee:           803.423 km
```

Beacon: 137.5000 mhz

From 6960532360086242966
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,25d34d2be2dc87e1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-20 23:32:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: W5YI Report 5/15/84
Message-ID: <44@mouton.UUCP>
Date: Mon, 21-May-84 02:32:27 EDT
Article-I.D.: mouton.44
Posted: Mon May 21 02:32:27 1984
Date-Received: Mon, 21-May-84 07:59:06 EDT
Organization: Bell Communications Research, Inc
Lines: 242

```
.::::::::::::::::::::::::::::::::::
.::                              ::
.::  T H E   W 5 Y I   R E P O R T  ::
.::                              ::
.::      D i t s   &   B i t s     ::
.::                              ::
.::      Vol 6 #10 --  5/15/84    ::
.::                              ::
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Up to the minute news from the worlds of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

In this issue:

- Dayton HamVention News
- Packet Radio
- FCC Issues More Ham Tests
- and more...

HamNet thanks Fred Maia, W5YI, for permission to excerpt this Electronic Edition of his W5YI Report. The full ten-page biweekly newsletter is available by mail for $18 per year from Fred at PO Box 10101, Dallas, TX 75207.

DAYTON HAMVENTION '84 - Huge Success

Around 21,000 avid amateurs enjoying splendid weather crowded the Hara

Arena this year for the 33rd annual Dayton GamVention. Reports from exhibitors as well as flea market operators indicated record sales! Smiling amateurs loaded with new purchases and flea market treasures confirmed that visitors were not just looking.

Around 350 applicants took the amateur exams under the new VE (Volunteer Examiner) program. This was the first large scale test session under the new amateur self-testing concept. The exams were held at the Maridale High School close to the arena. About 600 Technician and General Class Elements were administered. Observers were on hand from several other VEC's (Volunteer Examiner Coordinators) and the ARRL to observe the process and obtain first hand experience.

The reorganized flea market operation drew high praise from the exhibitors. All spaces were reserved through advance sales. The 1280 spaces on about 15 acres (all on black top) were sold out a month prior to the HamVention.

Some 30 forums covering just about every aspect of amateur radio drew good crowds as usual. The new forum rooms isolated from other HamVention activities were a great improvement and released the area previously used for about 50 additional exhibitors.

About 1,250 people attended the Grand Banquet on Saturday evening April 28th, 1984, to honor this year's award winners and hear former ARRL president Harry Dannals (W2HD) speak on his favorite subject, Amateur Radio.

This year a new category was added to the HamVention banquet awards. In recognition of the fact that amateur radio contributed greatly to the technical advancement of electronics and that amateurs are still advancing the state of the art, the Board decided to add the Technical Award. The award recognizes the technical contribution the individual has made.

This year's winners are:

Amateur of the Year: Dave Bell (W6AQ). Dave was recognized for applying his movie making talents to furthering amateur radio. Dave has produced many of the promotional films currently available on amateur radio.

Special Achievement Award: Ethel Smith (K4LMB) was recognized for her successful efforts to bring women into amateur radio. As founder of the YLRL, she has been an inspiration to many a young lady.

Technical Achievement: Lyle Johnson (WA7GXB) was recognized for his technical contribution in the packet radio area - especially the development of the Terminal Node Controller.

In addition to the three HamVention Awards, a new Dayton Amateur Radio Association award was presented during the ceremony - the DARA Distinguished Service Award went to Robert S. Zimmerman (W8ZM). Bob was recognized for his many years of dedicated service to the Dayton Amateur Radio Association.

The winner of the main prize (a complete Drake TR-5 station) was

Camille S. Marie (W8EPR) of Pikeville, Maryland. This year's prize chest broke all records with about $43,000 in prizes awarded to the lucky ticketholders over the three day period. The exhibitors were especially generous this year.

The top prize winners:

Complete ICOM IC-751 station (including the 2 KL linear amplifier): Catherine Hodson, (XYL of W9HOT), Greencastle, IN.

Complete Kenwood TS-430S station and accessories: James Leonard of Aliquitta, PA (W3GQT).

Solarex Photovoltaic System to Thomas Jenkins (N9AMR) of Indianapolis, IN.

Drake L-& Linear Amplifier was won by Walter Caudle of Connersville, IN.

The Ladies Alternative Activities Program, as usual, had many outstanding attractions and was very well attended. The parting comments of the visitors this year were highly complimentary.

PACKET RADIO - Mode of the Future

Every year at Dayton, I try to find a new technology sneaking into amateur radio. Code readers, computer-interfaced RTTY, amateur earth stations were new to me in prior years. Last year, I saw AMTOR error-free RTTY terminals. This year packet radio emerged with commercial offerings by both AEA (Advanced Electronic Applications, Inc.) and TAPR, the Tucson Amateur Packet Radio Corporation (PO Box 22888, Tucson, AZ 85734).

TAPR is a non-profit research and development group comprised solely of volunteers who are dedicated to the development of packet radio technology for the amateur radio community. It was formed in 1981 originally as a club and incorporated in 1982. From the beginning, the intention was to create an inexpensive way for hams to participate in this mode of communication.

Dayton attendees were very interested in it, but few seemed to know what it was. After the banquet which honored (among others) Lyle Johnson, WA7GXD, for his amateur packet radio development work, I went by the TAPR booth and spoke to Lyle to learn about packet radio.

Packet radio is a means of digital communication not too much unlike RTTY or AMTOR except (at 1200 baud) about 15 QSO's can be supported on a packet channel - each having the equivalent of 60 WPM RTTY. A very efficient use of point-to-point, rather than a braodcast medium in that it is addressable to a particular terminal.

AMTOR is a 3-character self-checking communications system. Packet radio, on the other hand, has 128 ASCII character "packets" each with an address "header". Like AMTOR, it has an error-checking mechanism with automatic repeat if a damaged message is transmitted.

To operate packet radio you need a transceiver, a terminal (such as a personal computer) and a controller to direct the message to your terminal or retransmit it further down the line. Packet radio not only operates on VHF, but on HF... even through satellites such as AMSAT OSCAR 10 and PACSAT - a new satellite designed for packet radio.

PACSAT will have a microprocessor and 4 million bytes (characters) of memory. A ground station can send a message intended for another ham to the satellite. The bird will store the message in its memory until the other hamd checks in and retrieves his messages... sort of a Buck Rogers "flying mailbox".

PACSAT will be in a low earth polar orbit (400-600 miles high) providing coverage of the entire earth. Because it will be in low orbit and becasue it will use a form of wide shift FSK, there will be no need for large steerable antennas and doppler correction. This makes automatic operation very simple and relatively inexpensive. You will need only about ten watts and a ground plane antenna to reach the satellite.

The AEA PKT-1 Packet Controller or the TAPR TNC allow you to "digipeat" your messages to their final desitnations through up to eight separate digital packet repeaters. Every packet radio station is actually an unattended repeater with automatic CW ID. If the message isn't for you, it is further retransmitted to the next nearest packet station and on the call sign names in the header.

Cost of the controller is in the $175 to $350 range. TAPR's is in kit form and is one of the finest products I have ever seen when you consider that it was designed and produced by amateur volunteers - truly a very professional job. The documentation and workmanship is absolutely marvelous!

Packet radio isn't new (although new to me!). As early as 1978, Canadian amateurs (whose government had the early foresight to allow other than the Morse and Baudot codes) were communicating via packet radio. (See 73 Magazine, December 1978, page 192). It wasn't until our FCC allowed ASCII that US amateurs took up the technology seriously. It is clearly the mode of the future and the DARA was clearly "on target" in honoring Lyle Johnson, WA7GXD, president of the TAPR Corporation for his development work.

NEW AMATEUR TESTS ISSUED

The FCC has re-issued the Novice Amateur Radio Operator License (Element 2) examination to coincide with recent changes in Part 97 Rules. The new NOvice Test question edition is dated February 1984 and replaces the July 1983 version.

In addition, the Commission had released the Advanced (Element 4A) and Amateur Extra Class (Element 4B) test questions. These were supposed to have been ready in time for the Dayton HamVention, but were still at the printers when Johnny Johnston (W3BE), FCC Personal Radio Branch Chief came to Dayton. He mailed them to me as soon as he returned to Washington.

Since all question lists have now been developed, the new volunteer examination program can now proceed in its entirety. Up until now, only Technician and General Class examinations could be given under the new (Tech and up) VE program. The Technician Class through Amateur Extra volunteer ham exam program is completely different from that of the Novice.

The Element 4A (Advanced Class) questions consist of:

Sub. Sec.	Total Questions	Subject	To Be Selected:
4A-A	60	Rules & Regulations	6
4A-B	10	Amateur Radio Practice I	1
4A-C	20	Radio Wave Propagation	2
4A-D	40	Amateur Radio Practice II	4
4A-E	100	Electrical Principles	10
4A-F	60	Circuit Components	6
4A-G	100	Practical Circuits	10
4A-H	60	Signals & Emissions	6
4A-I	50	Antennas & Feedlines	5

Total: 500 Questions of which 50 are selected. Passing score is 37 correct out of 50.

The Element 4B (Amateur Extra Class) questions consist of:

Sub. Sec.	Total Questions	Subject	To Be Selected:
4B-A	80	Rules and Regulations	8
4B-B	20	Operating Procedures	2
4B-C	10	Radio Wave Propagation	1
4B-D	30	Amateur Radio Practice	3
4B-E	70	Electrical Principles	7
4B-F	50	Circuit Components	5
4B-G	60	Practical Circuits	6
4B-H	30	Signals & Emissions	3
4B-I	50	Antennas & Feedlines	5

Total: 400 Questions of which 40 are selected. Passing score is 30 correct out of 40.

A booklet containing the FCC Amateur Radio Operator Study Guide and all 1,600 actual test questions for all ham classes (Novice through Extra) is available for $2.00 plus 50 cents postage from:

The W5YI Report - Test Questions
PO Box 10101
Dallas, TX 75207

[End this issue]

From 2629296159791847403
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,271d82a0a2b6f98,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-21 06:22:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site eosp1.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!eosp1!hawk
From: hawk@eosp1.UUCP (Jim Hawkins)
Newsgroups: net.ham-radio
Subject: RIG FOR SALE
Message-ID: <889@eosp1.UUCP>
Date: Mon, 21-May-84 09:22:47 EDT
Article-I.D.: eosp1.889
Posted: Mon May 21 09:22:47 1984
Date-Received: Tue, 22-May-84 07:11:50 EDT
Distribution: net.wanted
Organization: Exxon Office Systems, Princeton, NJ
Lines: 26

COMPLETE AMATEUR RIG for sale, cost $1800.00 asking $1200.00.
Included are as follows:

TENTEC Transceiver model OMNI D
     200 Watts input Pwr. Digital tuning, 6 bands

TENTEC 12 V power supply for transceiver

GONSET 1KW linear amplifier

ASTATIC D104 MICROPHONE with PTT stand.

TA-33 Triband beam antenna

CDR HAM-III Heavy Duty antenna rotor and control box

1KW low pass filter

100' RG8/U COAX

Transmit receive coaxial relay (necessary only when linear used).

Home brew solid state electronic keyer.

**** After 7:00PM call (609)890-6645 ask for JIM ****

From 3998193912070061679
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5f0d80df0e182220,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-21 06:45:56 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Hamfest: June 10 in Willow Springs, IL
Message-ID: <2209@ihuxf.UUCP>
Date: Mon, 21-May-84 09:45:56 EDT
Article-I.D.: ihuxf.2209
Posted: Mon May 21 09:45:56 1984
Date-Received: Tue, 22-May-84 08:17:22 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 14

x
HAMFEST AT SANTA FE SPEEDWAY - JUNE 10, 1984

The Six Meter Club of Chicago is sponsoring a Hamfest on Sunday, June 10 at Santa Fe Speedway, located at 91st and Wolf Rd in Willow Springs, Illinois. Gates will open at 6 AM.

--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 5937247317537686462
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,79fb59feb0a20a4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-22 06:33:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou2e.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hou2e!54127mm
From: 54127mm@hou2e.UUCP (M.MARKUS)
Newsgroups: net.ham-radio
Subject: video monitor
Message-ID: <151@hou2e.UUCP>
Date: Tue, 22-May-84 09:33:43 EDT
Article-I.D.: hou2e.151
Posted: Tue May 22 09:33:43 1984
Date-Received: Wed, 23-May-84 19:07:20 EDT
Organization: Bell Labs, Holmdel NJ
Lines: 4

Need schematic, service and operating manuals for Video Monitor
manufactured by Nippon Television Industry Corp, (NTI).

Model VMVM-685. Will copy and return originals.
Contact Mike Markus, K2RMD, 201-949-4919.

From -9203156114303509480
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc572b81b9d03d16,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-22 06:42:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Shortwave Broadcast Info -- New Magazine Review
Message-ID: <3000@brl-tgr.ARPA>
Date: Tue, 22-May-84 09:42:51 EDT
Article-I.D.: brl-tgr.3000
Posted: Tue May 22 09:42:51 1984
Date-Received: Sat, 26-May-84 12:05:55 EDT
Organization: Ballistics Research Lab
Lines: 69

I just received the sample issue of "The International Shortwave Listener's Program Guide", which I requested just a week ago, and the offer of which I posted on net.ham-radio last week. It is Vol 1, No. 2, and is better than issue number 1, it seems, according to the description of that earlier issue posted by another as a followup to my announcement. It was also really free; I had sent 37 cents as requested, and this copy has an uncancelled 37-cent stamp!

Anyway, the subscription rate is $19.95 for 12 issues, which is higher than Review of International Broadcasting, and I think RIB is somewhat better than this. However, they are distinctly different types of publications, so, if the cost is unimportant to you, it may well be worthwhile to get both. RIB is a listeners/readers' forum. The ISWLPG is more of a traditional magazine, with articles and columns. It is rather cheaply made, printed on pulp newsprint-type paper, 32 pages, the cover is the same newsprint, 8 1/2 X 11-inch format, with a readable typewriter-style typeface. The "Program Guide" section is in much smaller, rather harder-to-read print.

About two-thirds of the magazine is articles; the rest is listings of broadcasts in English, program summaries from BBC and RCI (very limited; the BBC info is one page obviously photo-copied from London Calling with new headlines typed in; probably a cut-and-paste-up process), and the "Program Guide". The notes clearly state that this "Guide" section is limited to about 10 major broadcasters, with a Malaysian station thrown in for grins. The "Guide" section lists GMT times, station name, and program title. No frequencies. To find the appropriate frequency for the time and station you see listed in the "Guide", you have to turn back to the separate listings of "Broadcasts in English". Rather annoying unless you have memorized the best frequencies for your usual listening times and favorite stations. Another side effect of the style is a wasted string of listings each hour for "news".

The articles are rather good. They have a number of well-known DXers on the staff who have contributed some surveys and discussions that are worth reading. A few articles are fairly obviously station PR handouts, but not the majority. The main article is a long interview with Ian McFarland of RCI. A technical questions column is planned, but this issue had no receiver reviews or other technical information.

I still haven't decided whether or not to subscribe myself. These SWL magazines have come and gone over the past decades, and subscribers have been left with lost funds when they failed. RIB has been a notable exception; it has continued for 7 or 8 years steadily. (I think that is because the others have been explicitly commercial ventures, and never could turn a profit. RIB is a one-man labor of dedication, and has been priced to recover costs, not to make Glenn Hauser a living. [He's not rich, he just works 27 hours a day!])

In case you didn't keep my original posting, with the address and info on the free sample, I append it below:

An item of interest to all shortwave listeners, from this weekend's Radio Canada International's SWL Digest program:

A free sample issue of the new "International Shortwave Listener's Program Guide" periodical is being made available on request for the cost of postage. US residents send 37 cents in coin (Canadians send 70 cents in [I suppose] Canadian coin, overseas send 7 IRC's) to:

Larry Miller
Miller Publishing
424 W. Jefferson St.
Media, PA 19063 USA

Along with your name & address, so they know where to send it.

(I don't know why they want coins instead of stamps from US respondents, but I sent them the coins as requested.)

Will Martin

From -4047747163701220147
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6f6cd5c022fde182,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-22 16:04:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 18
Message-ID: <9347@mgweed.UUCP>

Date: Tue, 22-May-84 19:04:38 EDT
Article-I.D.: mgweed.9347
Posted: Tue May 22 19:04:38 1984
Date-Received: Wed, 23-May-84 19:21:29 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 50

qst de k9eui
hr dx bulletin nr 18 from arrl headquarters
newington ct may 18, 1984
to all radio amateurs bt

thanks to k1xm, k1mm, w1trc and the southern new england dx association for the following dx information.

south sudan. rumor has it that tl8ge/st0 will be on 14225 khz at 0400z friday.

kermadec. zl8afh has been active at 2215z on 21272 khz.

martinique. fm7wd continues to be active on 28525 khz at 2230z. qsl to w3hnk.

french polynesia. fo8kp has been active on 14002 khz at 0130z. he has also been active on 40 meters at around 0800z.

the gambia. c53al has been active on 3798 khz at 0115 to 0130z. qsl to ka2cde.

cape verde. d44bs, sergio, has been on 3798 khz after about 0100z.

turkey. ta1mn, mustas, continues to be active on 14035 khz at 0200z.

china qsls. at dayton, ve7bc reported that cards from the recent by4aa operation are being answered by his xyl at the rate of 70 per night. please be patient.

san felix. from dxpedition leader ce3gn comes word that no licenses or landing permit have been obtained for an operation from san felix.

wallace island. fw8af, francis, will be on saturday at 0800z on 14236 khz.

late news. check 14236 khz each day at 0300z. the international dx association net often has late breaking dx information.

6 meters. the band continues to be hot with sporadic e openings almost daily. best times to watch are late morning

and late evening hours, local time. also, dont forget the 6 meter sprint contest from 7 to 11 pm local time this saturday ar

From 6208640167450733180
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1292d898e1e8c587,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-22 16:04:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 38
Message-ID: <9348@mgweed.UUCP>
Date: Tue, 22-May-84 19:04:52 EDT
Article-I.D.: mgweed.9348
Posted: Tue May 22 19:04:52 1984
Date-Received: Wed, 23-May-84 19:22:12 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 25

qst de k9eui
hr arrl bulletin nr 38 from arrl headquarters
newington ct may 18, 1984
to all radio amateurs bt

space shuttle audio from the sts 41d mission will be retransmitted by the goddard amateur radio club, wa3nan, beginning approximately one hour before launch time and continuing until the shuttle lands. the launch of the discovry is scheduled for 8 am edt on june 19.

interested persons in the washington, dc, area will be able to listen to shuttle communications on 147.45 mhz. garc will also transmit shuttle audio on a maximum of three hf frequencies at a time, using 3860, 7185, 14295, 21390 and 28650 khz. the primary frequency will be 3860 khz.

the retransmissions will be intermittent as dictated by the astronauts sleep schedule, loss of signal, los, or acquisition of signal, aos, and wa3nan operator scheduling.

there is no amateur radio activity scheduled for this mission ar

From -5389888165930495183
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,318ce7a5f38ef776,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-22 16:05:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 21
Message-ID: <9349@mgweed.UUCP>
Date: Tue, 22-May-84 19:05:27 EDT
Article-I.D.: mgweed.9349
Posted: Tue May 22 19:05:27 1984
Date-Received: Wed, 23-May-84 19:23:03 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 27

qst de k9eui
hr propagation forecast bulletin nr 21 from arrl headquarters
newington ct may 21, 1984
to all radio amateurs bt

as of may 20, the solar flux has been higher than at the same point in previous solar rotations continuously for 30 days. in addition, the daily flux average for all of 1984 to date is some 15 percent above the 1983 daily average.

the flux was rising at bulletin time, but at a slower rate than in april, so the flux curve is likely to drop below that of a month ago during this week. as in late april, major solar flares are occurring frequently. these will bring degraded propagation on all hf bands may 21 through 26 and 28 through 31. a major geomagnetic storm in progress as this bulletin was in preparation brought auroral conditions on 50 and 144 mhz in the northeastern u.s. there was also a late season transequatorial 50 mhz opening to south and central america on may 19. sporadic e propagation was almost a daily occurrence on 28 and 50 mhz after the middle of may. it will reach a broad peak during june.

american sunspot numbers for may 3 through 9 were between 25 and 79 with a mean of 48.9 ar

From 6283535395228131335
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,df9fdf2d16f61ed7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-23 01:43:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio

Subject: Packet Pete moves on
Message-ID: <297@dsd.UUCP>
Date: Wed, 23-May-84 04:43:03 EDT
Article-I.D.: dsd.297
Posted: Wed May 23 04:43:03 1984
Date-Received: Sat, 26-May-84 12:37:38 EDT
Lines: 103

TO : Packet Radio
FR : Lyle
RE : Pete Moves On

On May 9th, I received a telephone call from TAPR Executive Vice President, Peter Eaton, WB9FLW. The purpose of the call was singular -- Pete was resigning from Office in TAPR.

Pete explained that he had devoted the last 2-1/2 years of his life to Amateur packet radio activities, but the time had come for him to end his "retirement" and divert his energies to his personal life. He requested that we respect his decision.

Reluctantly, but in conformance with Pete's desires, I accepted.

Pete's will be a tough act to follow.

He was first involved with TAPR in early 1982. He represented TAPR at the Dayton Packet Forum that April, showing off one of the then-new Alpha boards.

In June, 1982, he founded SLAPR, a St. Louis-based packet group that achieved national recognition. He was SLAPR's President from its inception until last December, when he resigned to more fully devote his energies at the national and international levels.

Acting as Beta Coordinator for the St. Louis area, Pete went into every corner of the metropolitan environs and spoke of Packet to every ham he met. The St. Louis Beta site was the first on the air, with Beta boards hand-carried from Tucson, by Pete, on January 31, 1983.

In June of '82, he flew to San Diego to help work the Convention that launched TAPR as a more-than-Arizona organization.

During the summer of 1982, Pete located a transformer manufacturer in Illinois to make the custom power transformers for the Beta boards.

He also came to Arizona and video-taped the June TAPR meeting and subsequent introductory tape that followed.

During the October, 1982, AMSAT-sponsored meeting that adopted the AX.25 protocol, Pete accepted the responsibility for getting the Beta PC board laid out.

When push came to shove in November, 1982, Pete arranged to have a couple prototype Beta boards made and shipped to Tucson. He then came himself and spent nearly a month with us in Tucson, working 16-hour days, day after day, to help hauncho the Beta production.

He was with us on Black Thursday, and helped TAPR survive that crisis.

After spending so much time in Tucson, Pete nevertheless flew back for the Annual Meeting. This was less than 1 week after hand-carrying the Beta Boards to St. Louis...

He was primarily responsible for the Amateur Packet Radio booth at Dayton last year, working tirelessly for the professional appearance and good first impression that so many of you commented on.

He was on-camera for the "Introduction to Packet Radio" videotape done in Des Moines last summer.

Pete helped in the preparation of the kit TNC manual, and did considerable work on the PC-board illustrations.

He arranged for the kit board layout, and was one of the kit test-board assemblers (his is kit TNC number one...).

The 3-ring TNC manual cover was Pete's doing.

After his election to Executive Vice President at the Board of Director's meeting last February, he plunged into the tasks of coordinating the cabinet project and preparing for Dayton.

Pete was a prime instigator of the efforts to have the first-ever Dayton Hamvention Award for Technical Excellence bestowed on the TAPR TNC.

The new TNC brochure was arranged by him.

In the midst of all of this activity, Pete has travelled extensively throughout the midwest, spreading the word on packet to hamfests, clubs, conventions -- anyone who would listen.

As you can see, Pete Eaton has been a selfless dynamo, directing considerable energy, time and money into packet radio. Without his efforts, packet radio as a whole, and TAPR in particular, would not be close to the stature it presently enjoys. He has earned the nickname, "Packet Pete".

We will miss the insight, devotion and energy he brought to the
Office of TAPR Executive Vice President.

We offer him our full support for his future endeavors, and wish
him the best of the best in all he undertakes.

From -165433448056766629
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69d45240b3b291c4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-23 01:45:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: UOSAT 2 Accepts new command mode
Message-ID: <298@dsd.UUCP>
Date: Wed, 23-May-84 04:45:23 EDT
Article-I.D.: dsd.298
Posted: Wed May 23 04:45:23 1984
Date-Received: Sat, 26-May-84 12:38:37 EDT
Lines: 48

Posted: Tue May 22, 1984   7:29 AM PDT   Msg: PGIE-1797-6899
From: MSWEETING
To: AMSAT
Subj: Oscar-11 status
  During the morning passes here at Surrey, the first
successful attempt at commanding Oscar-11 has been made,
following the rise in temperatures on board.
  The three commands to switch the beacon into audio
feed-through mode were accepted within 2 seconds of each other
and the uplink at 438MHz was inspected on the 145MHz downlink.
 Digital data transmitted through this path was successfully
decoded and compared back in the groundstation, indicating
that the receivers are functioning, but the command
reliability is still poor, although good enough to switch back
to telemetry using the feedback from the received audio.
Further tests on the decoders on the spacecraft will be done
when possible in the next few days. Further audio tests are
also required.
  The rising temperature, and effect on command reliability,
will determine whether we can boot the main computer and
perform several other checks in the next few days.
  Roger G8NEF

Posted: Tue May 22, 1984   7:48 AM PDT   Msg: TGIE-1797-7123
From: MSWEETING
To: AMSAT
Subj: Uo11 status (funny noises)
Sorry, folks!

Due to the loss of our IPSS link for nearly 36 hours from
Sunday through yesterday, (due initially to a power cut), we
were unable to let you all know that we have succeeded in
putting UoSAT-2 into a digital feed-through mode to
investigate the command unreliability.

The audio feed-through (described in the preceeding message
which we have just sent) showed that the receiver on 438MHz is
working adequately, if not well, and that further tests will
have to be done in the near future to further characterise the
situation.

The digital loop-through tests are not producing sensible
outputs as yet, indicating possilble problems with the
receiver / decoder interface. We are currently analysing the
results of this morning's latest efforts and will report when
appropriate.

Roger G8NEF

From -6096207660668462044
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31c1c368c6b803f4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-23 01:47:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Comparison of TAPR and GLB TNCs
Message-ID: <299@dsd.UUCP>
Date: Wed, 23-May-84 04:47:40 EDT
Article-I.D.: dsd.299
Posted: Wed May 23 04:47:40 1984
Date-Received: Sat, 26-May-84 12:38:51 EDT
Lines: 183

K5JB06.TXT   15-May-84 8580   Accesses: 18

    Keywords: K5JB PACKET

    Column by Joe Bushwell, K5JB, describing his Packet Radio
    experiences at the 1984 Dayton HamVention.

DAYTON - PACKET UPDATE

During the visit to Dayton, I got an opportunity to attend the
Packet Radio presentation and meet some of tne movers and
shakers. Two people whom I especially admire, Lyle Johnson,
WA7GXD, President of Tucson Amateur Packet Radio Corp. and Gil
Boelke, W2EUP, of GLB Electronics took turns on the platform
along with representatives from St Louis (SLAPR), Dayton (Miami

Valley FM Association), AMRAD, and the ARRL (Paul Rinaldo, W4RI) . After the presentation I got to meet Gil and ask him if he minded my modifying the code in the PK-1. He said heck no and to call the company later to get specific answers to my questions. (...which I subsequently did, and to which they responded in writing with specific answers to my questions. This is without any knowlege of my reputation as an agitator/ instigator). I chose my questions carefully though because firmware is a really touchy subject. I have a real warm feeling about the GLB folks. I think their aim is to please. The next morning I got to visit briefly with Lyle Johnson, WA7GXD, who is certainly one of the most energetic and creative persons I have encountered. I can understand how he has been such a sparkplug for the TAPR activity...).

There are currently six sources of TNC's or alternate methods of getting into Packet Radio; AEA's, Ashby and Son's (K2TKN & KA2OEG), GLB's, Bob Richardson's (W4UCH), TAPR's, and VADCG's. Someone in AMRAD is working on a TNC called a PAD (Packet Assembler - Disassembler) which is apparently slanted toward S-100 Bus Computer systems. AEA (Advanced Electronic Applications) announced its TNC at the Hamvention but had no representative on the program. AEA has a handsome design that looks like a development from the TAPR TNC, for a price of about $500. I saw no evidence of the Ashby and Son TNC at the show but I could have missed it. Likewise, I saw no evidence of Bob Richardson's (W4UCH) Radio Snack model 1 and 3 program, though it was respectfully mentioned by Gil Boehm from GLB. It seems that since Bob and Gil are neighbors, they regularlly communicate on program design questions but developed their programs independently.

Gil defended the GLB's Spartan design by statingthat he Value Engineered the problem to strike an economical compromise in hardware v.s. software trade-offs and decide whether to add audio shaping and filtering to the PK-1. He was challanged by a later AMRAD speaker who felt that the five bucks the filter would have cost would be a cheap 1.5 dB improvement if one were working satellites. Later when Gil answered a question about whether the TP-1 would run 300 Baud for HF operation, he answered both points when he stated that its design goal just didn't include those applications.

There still is no absolute answer to the question, "Which is better, the GLB or the TAPR?" It depends for which use the TNC is intended. For the benefit of you who have not been following this discussion since last January, the following salient differences exist between the two.

The TAPR TNC costs approximately $250.00 in kit form, has an optional cabinet for about $70.00, runs Vancouver and AX.25 protocol and runs on 120 Vac.

The GLB costs approximately $150.00 assembled, has an optional cabinet for about $25.00, runs both protocols and runs on 12 Vdc.

The TAPR TNC uses hardware (Western Digital 1933 SDLC) to make and read packets, the GLB TNC does all in software (firmware). The hardware v.s. software is the major difference between the two and accounts for most of the cost difference. The only performance disadvantage I have found in the GLB approach is the packet reception disruption that occurs if a key is touched on the terminal during the reception process. The keyboard has interrupt priority and the Processor must service the keyboard at the expense of its packet activities. Gil (and the accompanying TP-1 literature) advises that the computer, which is most often the case used to act as a terminal, be programmed to accept the input off-line from the TNC and send it, when ready, to he TNC at a high data rate, reducing the probability of a clash with packet operation. The TAPR TNC, with its packet handling hardware, is not placing any strain on the processor to make the data input and output process appear transparent to the operator. Mark, WD5DYI, is now using his TP-1 regularlly and this disadvantage is much more apparent as he creates his epistle sized packets. I had not noticed the problem so much because I usually send rather terse packets, or type in short, five character, bursts of about a thousand words per minute, spending the rest of the time looking for the next five keys! Packets easily slip in while I am looking. Mark is not a programmer but he will eventually want to do the line editing on his computer. I toyed with the idea on the Model-100 but got bogged down in the creeping elegance of interrupt handling from the RS-232 port.

The TAPR documention is awesome and contributes to a portion of the price difference. Since this is a kit, construction and adjustment instructions cause some of the book's volume but, in fact, the TNC is one of the most thoroughly documented pieces of hardware I have ever seen.

The GLB documentation has come a long way since I bought mine. It is now 35 typewritten pages bound looseleaf between a couple of nice, blue covers, with a command cross reference chart printed on the back for easy reference. Also, it now has a schematic! The manual is certainly adequate to support the PK-1 and its many features.

The TAPR hardware was designed for flexibility in order to enable as many conceivable modifications as possible so that it could be used for other applications. It has a socket for an external modem in case one is impatient with 1200 Baud, or just wants to try external hardware. Its audio filtering can be easily modified for HF use by installing suitable resistors on DIP headers. As already mentioned, with the GLB you roll your own if you want audio filtering or shaping. If you run out of

Packet things to do with the TAPR TNC, you can get the EPROM programmer from TAPR, plug it into the socket provided on the TNC and do your own thing. These functions were simply not part of the requirements in the GLB design concept. (Like a friend of mine says, "If you wanted the Penguin to fly you should have included it in the specs!"

The TAPR TNC can be made to operate the radio side from 50 to 4800 Baud half or full duplex while the GLB PK-1 is restricted to 600 and 1200 Baud, half duplex. N5MS and I experimented with 600 Baud over a noisy path and it didn't seem to be any better than the 1200 Baud speed. To gain full benefit we should have modified the firs (Mark, WD5DYI, Joe, WA5FLT, and I) rate them in day-to-day use. So far, I have enjoyed my particular application, using it portable with the Model-100 computer as a terminal. Joe, WA5FLT, also has a TAPR TNC and can provide his opinions as soon as he gains experience. He intends to put his into remote operation. This is a special feature incorporated in the GLB that requires adding only a transceiver, watchdog timer and transmitter timeout time. The TNC receives its commands via the packet channel.

The decision on which TNC to buy is a personal one. One has to first determine the function he wishes to perform. Lyle, WA7GXD, put it most succinctly when he commented that the TAPR TNC was intended for the bearded experimenter down in the basement (He sports a handsome bush). On the other hand, Gil claims the GLB PK-1 was not intended to be all things to all people.

The following addresses may be useful for more information:

Advanced Electronic Applications
P.O. Box C2160
Bldg O & P - 2006 - 196th SW
Linnwood WA 98036-0918

Bill Ashby & Son
P.O. Box 332
Plukemin NJ 07978

AMRAD
1819 Anderson Rd
Falls Church VA 22043

GLB Electronics
1952 Clinton St
Buffalo NY 14206

Richcraft Engineering Ltd
#1 Wahmeda Industrial Park
Chatauqua NY 14722.

Tucson Amateur Packet Radio, Corp.
P.O. Box 22888
Tucson AZ 85734

VADCG
818 Rondeau St
Coquitlam, BC, Canada

Joe Buswell, K5JB

From 2073850517532524662
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aa27c20cfc274e48,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-23 01:50:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: There is life at the ARRL
Message-ID: <300@dsd.UUCP>
Date: Wed, 23-May-84 04:50:07 EDT
Article-I.D.: dsd.300
Posted: Wed May 23 04:50:07 1984
Date-Received: Sat, 26-May-84 12:39:07 EDT
Lines: 39

AS PROMISED, HERE IS AN UPDATE ON PACKET RADIO IN HARTFORD, AND AT ARRL HEADQUARTERS.

AT LEAGUE HEADQUARTERS, WE HAVE THE W1INF-5 DIGIPEATER. THE REPEATER IS A VHF ENGINEERING JOB RUNNING ON 145.01. WE ARE USING A VANCOUVER TNC WHICH BELONGS TO THE LEAGUE. THE MODEM IS THE BREAD-BOARD PROTOTYPE OF THE AM-7910 BASED MODEM WHICH I BUILT FOR THE 1985 HANDBOOK.

UNFORTUNATELY, HQ IS IN A HOLE, AND THE COVERAGE OF OUR 18-W MACHINE IS NOT GREAT. WE ARE LOOKING FOR A SITE WITH BETTER RANGE, BUT HAVE HAD NO TAKERS.

WE HAVE 3 OR 4 ACTIVE USERS AND MANY INTERESTED PARTIES -- WAITING FOR US TO GET THE GROUND-WORK DONE. THE PRESENT USERS ARE: KE3Z, WA1LOU AND I. JOHN BLOOM, KE3Z, RECENTLY JOINED THE ARRL LAB STAFF. JOHN IS FROM THE WASHINGTON, D.C. (AMRAD) GROUP. WA1LOU IS STAN HORZEPA, AUTHOR OF THE QST "ON LINE" COLUMN. WE ALSO HAVE AT LEAST ONE MYSTERY STATION -- THIS AFTERNOON I HEARD AB1U.

SINCE THE NEPRA PEOPLE HAVE PLACED A DIGIPEATER ON MT. GREYLOCK (MA) , WE MAY BE ABLE TO LINK TO BOSTON, COMPLETING HALF OF EASTNET. ALL THAT WE NEED IS A SLIGHTLY BETTER SITE, AND MULTI-REPEATER SOFTWARE FOR OUR VANCOUVER REPEATER.

WE HAVE BEGUN COLLECTING EQUIPMENT FOR A SATELLITE GATEWAY AT W1AW. BY THE TIME THE STA FOR AUTOMATED GATEWAY OPERATION GOES THROUGH, WE WILL BE ON THE AIR. THE ARRL WILL BE GIVING SOME FINANCIAL SUPPORT TO THE EFFORT, BUT WE STILL HAVE TO SCROUNGE AND "BOOST" A LOT OF EQUIPMENT.

FOR CONTROL OF THE TELEPORT, AND FOR A PACKET BULLETIN BOARD, WE HAVE

A COUPLE OF THE XEROX 820 BOARDS.
   JOHN AND I HAVE TO SPEND MUCH OF OUR TIME ON QST AND OTHER PUBLICATIONS, BUT WE HAVE BEEN DEVOTING A LOT OF TIME TO PACKET RELATED PROJECTS. SOME OF THESE PROJECTS: THE PACKET ADAPTIVE MODEM (FOR HF), A TUNING INDICATOR FOR HF AND SATELLITE PACKET, A SINGLE CHIP MODEM FOR BELL 202 AND 103 RADIO LINKS.
    WE HAVE HIT SOME SNAGS, AND HAVEN'T MET WITH AS MUCH LOCAL ENTHUSIASM AS WE WOULD LIKE, BUT WE WILL PUT NEWINGTON BACK ON THE TECHNICAL MAP. SINCE PLR HAS COME TO THE LEAGUE, WE STAND A CHANCE OF GETTING A DECENT TECHNICAL REPUTATION. IF THERE IS ANYTHING WE MIGHT BE ABLE TO HELP YOU WITH, GIVE ME A CALL. IF YOU HAVE ANYTHING THAT COULD BE PUBLISHED, SEND IT!
73,
JEFF WARD, K8KA.

From -7097671344198217378
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2fc0d1ddc5155c8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-23 05:58:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: users of 390 - 420 MHz in Illinois
Message-ID: <2211@ihuxf.UUCP>
Date: Wed, 23-May-84 08:58:15 EDT
Article-I.D.: ihuxf.2211
Posted: Wed May 23 08:58:15 1984
Date-Received: Sat, 26-May-84 10:09:08 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 130

Until recently, most scanners have started their UHF coverage at 420 MHz. The newer models are providing broader frequency coverage of this area. My Radio Shack PRO-30, provides UHF FM reception down to 390 MHz.

I have often been asked: "Who uses this frequency range?"
The most interesting stations in this range are those of a law enforcement nature (FBI, DEA, Border Patrol, etc.), but this information is a bit sensitive.

Here is an UNCLASSIFIED list of US Government stations purported to operate in Illinois (an perhaps other areas) in this frequency range:

390.8000	?	US: Air Force, Scott AFB, airdrome ctl stn, AM (Belleville)
390.9000	?	US: FAA, airdrome ctl stn, AM (Chicago)
394.5000	?	US: Air Force, O'Hare Airport, 400F9 emission (Chicago)

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 395.8000    ?          US: FAA, airdrome ctl stn, AM (Springfield)
 396.0000    ?          US: Air Force, Scott AFB, airdrome ctl stn, AM
(Belleville)
 397.9000    ?          US: FAA, aero stn, AM (Bloomington)
             ?          US: FAA, aero stn, AM (Danville)
 398.5000    ?          US: Air Force, O'Hare Airport, 400F9 emission (Chicago)
 400.1500    ?          US: Commerce, radiosonde stn, 1F9 emission (Chicago)
             ?          US: Commerce, telecommand land stn, 200A9 emission
(Peoria)
             ?          US: Energy, Argonne Natl Lab, radiosonde stn, 600A2
(Argonne)
 401.7099    ?          US: Army, meteorological-sat earth stn, 1.5F9 (Breese)
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Grafton)
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Msr
Landing)
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Vndy Sta)
 401.7100    ?          US: Army, meteorological-sat earth stn, 1.5F9 (Hickorycr)
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Jonesville)
 401.7520    ?          US: Army, meteorological-sat earth stn, 1.5F9 (Brookport)
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Cairo)
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Carlyle)
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Chester)
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Thebes)
 401.7820    ?          US: Army, meteorological-sat earth stn, 1.5F9 (Benton)
             ?          US: Army, meteorological-sat earth stn, 1.5F9
(Shelbyville)
 401.8000    ?          US: Army, meteorological-sat earth stn, 1.5F9 (Hurrcncr)
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Kaskskrv))
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Meredosi)
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Posey)
             ?          US: Army, meteorological-sat earth stn, 1.5F9 (Red Bud)
 406.2000    ?        p US: Labor (Chicago)
 406.3250    ?          US: Postal Svc (Des Plaines)
 406.6000    ?        h US: Energy, Fermi Natl Lab, telemetering fxd stn (Batavia)
 406.9375    ?          US: Army, 50F9 emission (Milo)
             ?          US: Army, 50F9 emission (Peoria)
             ?          US: Army, 50F9 emission, repeater (Batchtown)
             ?          US: Army, 50F9 emission, repeater (Carlyle)
             ?          US: Army, 50F9 emission, repeater (Milo)
             ?          US: Army, 50F9 emission, repeater (Summerfield)
             WUG55      US: Army, 50F9 emission, repeater (Rend Lake)
 407.2000    KHA203     US: State (Chicago)
 407.2375    ?          US: Army, 50F9 emission (Joliet)
             ?          US: Army, 50F9 emission (Marseilles)
             ?          US: Army, 50F9 emission, repeater (Fillmore)
             ?          US: Army, 50F9 emission, repeater (Summerfield)
 407.3750    ?          US: Air Force, Scott AFB, 15F2 and 16F9 emission
(Belleville)
             ?        o US: Air Force, O'Hare Airport, Air Natl Guard (Chicago)
 407.4500    ?        o US: Air Force, O'Hare Airport, Air Natl Guard (Chicago)
 407.4750    ?          US: Navy, Great Lakes Trng Ctr
 407.5625    ?          US: Army, 50F9 emission (Batchtown)
             ?          US: Army, 50F9 emission (Marseilles)
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             ?          US: Army, 50F9 emission (Milo)
             ?          US: Army, 50F9 emission, repeater (Fillmore)
             ?          US: Army, 50F9 emission, repeater (Rockwood)
             ?          US: Army, 50F9 emission, repeater (Shelbyville)
 408.0250    KGW285     US: Postal Svc (Chicago)
 408.0500    KBZ415     US: Postal Svc (Chicago)
 408.4250    KAZ599     US: Veterans Admin, veterans' hospital (Hines)
 409.0000    ?          US: Health & Human Svcs (Chicago)
 409.0250    ?          US: Labor (Wilmington)
 409.2000    KGI305     US: Energy, Argonne Natl Lab (Argonne)
 409.3000    KLB812     US: Veterans Admin (Lakeside)
 409.5000    KGI305     US: Energy, Argonne Natl Lab (Argonne)
 409.5250    KKG214     US: Energy, Argonne Natl Lab (Lemont)
 409.6250    ?        p US: State (Chicago)
 409.7500    KKG214     US: Energy, Argonne Natl Lab (Lemont)
 410.0000    KGW285     US: Postal Svc, repeater (Chicago)
 410.2000    KBZ415     US: Postal Svc, repeater (Chicago)
 410.3250    KHA325     US: Postal Svc (Chicago)
 410.8000    KCI797     US: Energy, Fermi Natl Lab (Batavia)
 411.2000    KAF30      US: Energy, Argonne Natl Lab (Argonne)
 412.7750    KOX91      US: TVA, hydrolgc & metrolgc fxd stn (Metropolis)
             KOX96      US: TVA, hydrolgc & metrolgc fxd stn (Joppard)
 412.8250    AAF278     US: Army, Rock Is Arsenal (Rock Island)
 412.8375    ?          US: Army, 50F9 emission, repeater (Batchtown)
             ?          US: Army, 50F9 emission, repeater (Fillmore)
             ?          US: Army, 50F9 emission, repeater (Rockwood)
 413.0000    ?          US: Air Force, Scott AFB (Belleville)
 413.0500    ?          US: Air Force, Scott AFB (Belleville)
 413.1000    ?          US: Air Force, O'Hare Airport (Chicago)
 413.1500    ?          US: Air Force, Scott AFB (Belleville)
 413.2000    ?          US: Air Force, O'Hare Airport (Chicago)
             ?          US: Air Force, Scott AFB (Belleville)
 413.2375    ?          US: Army, 50F9 emission (Milo)
             ?          US: Army, 50F9 emission (Peoria)
             ?          US: Army, 50F9 emission, repeater (Fillmore)
             ?          US: Army, 50F9 emission, repeater (Rockwood)
             ?          US: Army, 50F9 emission, repeater (Summerfield)
 413.3000    ?          US: Air Force, O'Hare Airport (Chicago)
             ?          US: Air Force, Scott AFB (Belleville)
 413.5625    ?          US: Army, 50F9 emission (Joliet)
             ?          US: Army, 50F9 emission (Marseilles)
             ?          US: Army, 50F9 emission, repeater (Batchtown)
             ?          US: Army, 50F9 emission, repeater (Carlyle)
             ?          US: Army, 50F9 emission, repeater (Rend Lake)
             ?          US: Army, 50F9 emission, repeater (Rockwood)
             ?          US: Army, 50F9 emission, repeater (Summerfield)
 413.9500    KPA723     US: GSA (Springfield)
             KPA725     US: GSA (Chicago)
 415.2000    KPA714     US: GSA Federal Protective Svc, security guards (E St
Louis)
             KPA723     US: GSA Federal Protective Svc, security guards, repeater
(E St
             KPA725   h US: GSA Federal Protective Svc, security guards, repeater
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(Chic
 415.3000   KKM867   US: Agriculture, repeater (Chicago)
 415.4500   ?   US: Labor (Wilmington)
 415.6250   KQF70   US: Health & Human Svcs, repeater (Chicago)
             ?   h US: unidentified: 5/19/84
 416.3500   KAF30   US: Energy, Argonne Natl Lab, repeater (Argonne)
 416.9750   KGW285   US: Postal Svc (Chicago)
 417.6500   KHA215   US: GSA (Chicago)
             KHA215   US: GSA (Lake Zurich)
             KHA215   US: GSA (Lockport)
             KHA215   US: GSA (Plato Ctr)
             ?   h US: unidentified: digital paging, 5/19/84
 418.0750   KFW609   US: Energy, Argonne Natl Lab (Argonne)
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==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 4460805572748505325
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1828c79aca060115,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-23 08:49:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!sri-unix!RSHAPIRO@BBNA.ARPA
From: RSHAPIRO@BBNA.ARPA
Newsgroups: net.ham-radio
Subject: request to be added to the mailing list
Message-ID: <1128@sri-arpa.UUCP>
Date: Wed, 23-May-84 11:49:22 EDT
Article-I.D.: sri-arpa.1128
Posted: Wed May 23 11:49:22 1984
Date-Received: Fri, 1-Jun-84 03:45:51 EDT
Lines: 12

From: Richard Shapiro <RSHAPIRO@BBNA.ARPA>

Sorry to clutter up this mailing list with a request like
this, but I don't know who the administrator is. Hopefully
s/he is listening. Or someone who knows will forward this
message. In any case, I would like RSHAPIRO@BBNA to be added
to the info-hams mailing list.

Thanks,
richard

From -3462553592921650435
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2fc0d1ddc5155c8
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-05-23 11:33:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!hao!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Re: users of 390 - 420 MHz in Illinois
Message-ID: <3007@brl-tgr.ARPA>
Date: Wed, 23-May-84 14:33:19 EDT
Article-I.D.: brl-tgr.3007
Posted: Wed May 23 14:33:19 1984
Date-Received: Thu, 31-May-84 19:21:53 EDT
References: <2211@ihuxf.UUCP>
Organization: Ballistics Research Lab
Lines: 16

Just like to mention that I, for one, am glad to see the scanner frequency
information, no matter the geographic area, posted on the net. In regards
to this particular posting, this might be old news to those of you with
scanners, but many Regency synthesized models can be programmed out-of-band
simply by pressing the decimal point keypad before entering the frequency
while in "program" mode. This works on my K500, but either there is no
traffic locally (St. Louis) on the frequencies or at the times I've tried
this, or the scanner's RF circuits are not responsive out-of-band. (Probably
the latter -- I've tried scanning thru the CB band this way and got nothing,
while there are many signals on CB coming in on a shortwave radio right
next to the scanner.)

Bearcat scanners can be tricked to respond out-of-band with complex
series of commands. These have been written up in Monitoring Times.

Will

From 4716037005669432814
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1070bc19724c00,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-24 11:34:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site tellab1.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!tellab1!popes
From: popes@tellab1.UUCP (Jerry Pople)
Newsgroups: net.ham-radio
Subject: How can I become a Radio Amatuer?
Message-ID: <195@tellab1.UUCP>
Date: Thu, 24-May-84 14:34:31 EDT
Article-I.D.: tellab1.195
Posted: Thu May 24 14:34:31 1984
Date-Received: Thu, 31-May-84 19:04:06 EDT
Organization: Tellabs, Inc., Lisle, Ill.
Lines: 9

Something I've always wanted to do was become a ham radio operator. I
don't know anyone who is, nor do I know where to get information on
how to get started. Can any of you folks help?

                        Jerry Pople
                        ihnp4!tellab1!popes

From 6565619317153729298
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,df9fdf2d16f61ed7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-24 11:48:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!hao!seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Re: Packet Pete moves on
Message-ID: <3012@brl-tgr.ARPA>
Date: Thu, 24-May-84 14:48:37 EDT
Article-I.D.: brl-tgr.3012
Posted: Thu May 24 14:48:37 1984
Date-Received: Fri, 1-Jun-84 03:38:13 EDT
References: <297@dsd.UUCP>
Organization: Ballistics Research Lab
Lines: 1

What was/is "Black Thursday"?

From -5984142909509789443
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6bd8b0a738f58196,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-24 13:09:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!sri-unix!W8SDZ@SIMTEL20
From: W8SDZ%SIMTEL20@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: Teletype Synchronism question
Message-ID: <1193@sri-arpa.UUCP>
Date: Thu, 24-May-84 16:09:00 EDT
Article-I.D.: sri-arpa.1193
Posted: Thu May 24 16:09:00 1984
Date-Received: Fri, 1-Jun-84 04:30:57 EDT
Lines: 25

From: Keith Petersen <W8SDZ@SIMTEL20>

From: Bill Johnston CD-SP <bjohnsto at wsmr70a>
To: w8sdz
Re: Synchronism

Keith,

Some years ago I saw a good explanation of how a teletype printer becomes synchronized if the signal is turned on in the middle of a character.

That is, suppose you just happen to switch the signal on in the middle of a character, and the first bit it sees is a spacing data character. How does it finally figure out that what it saw wasn't a start bit, and get itself properly synchronized with the real start bit of subsequent characters?

Do you recall such an article, or do you have a good description of the process yourself?

Seems to me that I might even have included a description of it in one of my articles in RTTY Journal about 10 or 12 years ago, but I can't find it, and I can't recall my favorite description that I like to give to newcomers!

Thanks -- Bill, N5KR

From -6497356937674705797
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,25d34d2be2dc87e1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-24 15:25:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!sri-unix!
Sewhuk.HENR@XEROX.ARPA
From: Sewhuk.HENR@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: W5YI Report 5/15/84
Message-ID: <1202@sri-arpa.UUCP>
Date: Thu, 24-May-84 18:25:00 EDT
Article-I.D.: sri-arpa.1202
Posted: Thu May 24 18:25:00 1984
Date-Received: Fri, 1-Jun-84 04:34:19 EDT
Lines: 6

In the packet arena you forgot a long time ham company GLB. Their TNC is $150 wired and tested. They had a booth inside. Plus they announced a whole packet station, transmitter/receiver and watchdog timer for use as a digipeater and/or a home station.....

Dave N2GH

From -6389202411528247098
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d5ebaa9ece8e9787,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-24 19:02:31 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!sri-unix!andy@aids-unix
From: andy%aids-unix@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: Packet bulletin board software?
Message-ID: <1208@sri-arpa.UUCP>
Date: Thu, 24-May-84 22:02:31 EDT
Article-I.D.: sri-arpa.1208
Posted: Thu May 24 22:02:31 1984
Date-Received: Fri, 1-Jun-84 04:36:57 EDT
Lines: 16

From: Andy Cromarty <andy@aids-unix>

  I'm in the process of attempting to set up a bulletin board and
computer mail system accessible by packet radio, under the auspices
of the local Red Cross. Once installed, the system will be available
to all hams in the Palo Alto area (although we have a special interest
in Red Cross disaster-related traffic handling).

  We have an old TRS-80/I with one floppy drive available, plus the necessary
radio & TNC equipment. All that's lacking now is the bulletin board software.

  Does anyone have good bulletin board software (or a reliable pointer
to it) that will run on a TRS-80 or can be easily converted?

     thanks,   andy N6JLJ

From -6939381669627220515
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d5ebaa9ece8e9787
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-24 19:39:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!sri-unix!clements@bbn-
cd.arpa
From: clements@bbn-cd.arpa
Newsgroups: net.ham-radio
Subject: Re: Packet bulletin board software?
Message-ID: <1210@sri-arpa.UUCP>
Date: Thu, 24-May-84 22:39:04 EDT
Article-I.D.: sri-arpa.1210
Posted: Thu May 24 22:39:04 1984
Date-Received: Fri, 1-Jun-84 04:38:46 EDT
Lines: 23

From: Bob Clements <clements@bbn-cd.arpa>

Andy, and net:

We in the greater Boston area are a veritable hotbed of Packet Radio

activity. We have over 50 stations on within the range of a couple
of digipeaters. There are three bulletin boards on in this group.
As it happens, I will be posting this software in a couple of weeks
for all to use. Unfortunately, your specific request for TRS-80
environment means you won't be able to use this directly.
What we have is a system that runs on the Xerox 820 board with
a TAPR TNC. I have one running beside me (at K1BC) and the other
two are at K1OJH (who used to run a BBS on a TI99 and TAPR TNC)
and at W0RLI who is the main author of this system.

Given the recent burst of Xerox 820's you might want to scrounge one up
and use this system.

I'll be putting it on the repository at SIMTEL20, and will send out
a message when it's there. We are late in the Beta test phase now, and
copies are going to KA9Q and to some of the other groups this week.

/Rcc

From -647457729131495252
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d5ebaa9ece8e9787
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-24 20:38:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!sri-unix!W8SDZ@SIMTEL20
From: W8SDZ%SIMTEL20@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: Packet bulletin board software?
Message-ID: <1211@sri-arpa.UUCP>
Date: Thu, 24-May-84 23:38:00 EDT
Article-I.D.: sri-arpa.1211
Posted: Thu May 24 23:38:00 1984
Date-Received: Fri, 1-Jun-84 04:39:14 EDT
Lines: 17

From: Keith Petersen <W8SDZ@SIMTEL20>

Here's a list of we at SIMTEL20 have available via FTP for packet
software and information.
--Keith W8SDZ

SIG/M   Volume 143

index   name   size   crc   description

143.10   DGPTR   .PQS   7K   FE 08 Packet Radio Software for CP/M Systems
143.11   PACKET .AQM   25K   98 C9   /
143.12   PACKET .DOC   6K   05 2A   /
143.13   PACKET .RPT   12K   3A 64   /
143.14   PACKET-0.DOC   3K   A2 CC   /
143.15   PACKET2 .TXT   14K   0D 18   /

143.16   PACKETCF.TQT   15K   8A 6D /

From 5468339419834085435
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,da447051638890bf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-25 06:01:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: shuttle related HF freqs (NASA, USAF)
Message-ID: <2219@ihuxf.UUCP>
Date: Fri, 25-May-84 09:01:07 EDT
Article-I.D.: ihuxf.2219
Posted: Fri May 25 09:01:07 1984
Date-Received: Thu, 31-May-84 20:25:33 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 33

x

The May 1983 issue of Popular Communications magazine lists the following HF frequencies for Space Shuttle related monitoring:

2.622 NASA booster rocket recovery
3.385 NASA tracking
3.395 NASA tracking
5.190 NASA tracking vessels
5.810 NASA booster recovery vessels
6.708 NASA aircraft
6.896 NASA aircraft
6.983 NASA tracking
7.461 NASA aircraft
7.675 NASA Kennedy operations
7.765 NASA aircaft
10.780 USAF "Cape Radio" (primary)
11.205 NASA Pacific operations
11.407 NASA booster rcoket recovery
14.456 NASA tracking
20.186 NASA tracking (Ascension Island)
20.191 NASA tracking (Ascension Island)
20.390 USAF "Cape Radio" (secondary)

Other VHF, UHF, and microwave frequencies are listed in this article on pages 38 and 39.

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Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -5722158045303875810
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1070bc19724c00
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-25 06:17:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!mb2c!gbr
From: gbr@mb2c.UUCP (Jerry Ruhno)
Newsgroups: net.ham-radio
Subject: Re: How can I become a Radio Amatuer?
Message-ID: <249@mb2c.UUCP>
Date: Fri, 25-May-84 09:17:46 EDT
Article-I.D.: mb2c.249
Posted: Fri May 25 09:17:46 1984
Date-Received: Thu, 31-May-84 23:49:15 EDT
References: tellab1.195
Lines: 8

(take this)

 I would also like to know more about amatuer radio, and what equipment
 I should buy if I just want to listen and not broadcast(so I don't sink
 a lot of money into at first.

Jerry Ruhno
sb1!mb2c!gbr

From 7684922061468544710
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ff13d9cee97bac9f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-25 06:55:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: unclassified US Post Office freqs in IL
Message-ID: <2220@ihuxf.UUCP>
Date: Fri, 25-May-84 09:55:17 EDT
Article-I.D.: ihuxf.2220
Posted: Fri May 25 09:55:17 1984
Date-Received: Thu, 31-May-84 20:26:20 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 28

x

Aside from a few "sensitive" frequencies used by Postal Inspectors
for law enforcement type activities, here are some unclassified
Post Office frequencies for Illinois.

They are likely used in other areas of the country:

```
  27.5750    KSJ899    US: Postal Svc,    AM (Chicago)
 162.2250    KLM472   hUS: Postal Svc,    Bulk Mail Ctr, repeater
    (Forest  Park)
 163.3750    KLM547    US: Postal Svc (Marion)
         KTM447   US: Postal Svc (Chicago)
 164.9625    ?         US: Postal Svc (Chicago)
 164.9875    KUK226    US: Postal Svc (Chicago)
 170.1250    KVO711    US: Postal Svc (Chicago)
 171.6250    KPS247    US: Postal Svc (Forest Park)
 172.3000    KPS247    US: Postal Svc (Forest Park)
 406.3250    ?         US: Postal Svc (Des Plaines)
 408.0250    KGW285    US: Postal Svc (Chicago)
 408.0500    KBZ415    US: Postal Svc (Chicago)
 410.0000    KGW285    US: Postal Svc,    repeater (Chicago)
 410.2000    KBZ415    US: Postal Svc,    repeater (Chicago)
 410.3250    KHA325    US: Postal Svc (Chicago)
 416.9750    KGW285    US: Postal Svc (Chicago)
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Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 544142153397309253
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3cff92ddb566c312,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-25 10:24:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Becoming a ham
Message-ID: <47@mouton.UUCP>
Date: Fri, 25-May-84 13:24:45 EDT
Article-I.D.: mouton.47
Posted: Fri May 25 13:24:45 1984
Date-Received: Fri, 1-Jun-84 00:03:04 EDT
Organization: Bell Communications Research, Inc
Lines: 13

Perhaps the best way to find out about the subject if you're completely
new is to find an electronics or ham radio store. Many have books for
sale, including those sold by the American Radio Relay League (ARRL),
the primary US/Canadian ham organization. In particular, there are several
books which are written especially for the newcomer, containing license

study guides, etc. You should also locate a local ham club;
many have ongoing license study classes and in any case is a good way to
meet hams in your area. Most hams are very helpful to newcomers and you
may very well find an "Elmer" (a ham term for an experienced amateur who
befriends a beginner.) If you wish, you can write the ARRL at
225 Main St., Newington, CT 06111. Good luck!

Phil

From -4495042581549761999
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,185a60725e22246f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-25 12:54:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site vax135.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!decvax!ucbvax!vax135!hpk
From: hpk@vax135.UUCP (Howard Katseff)
Newsgroups: net.ham-radio
Subject: SWL Listening Guide recommendation
Message-ID: <696@vax135.UUCP>
Date: Fri, 25-May-84 15:54:34 EDT
Article-I.D.: vax135.696
Posted: Fri May 25 15:54:34 1984
Date-Received: Fri, 1-Jun-84 03:18:44 EDT
Organization: AT&T Bell Labs, Holmdel, NJ
Lines: 37

The most useful program guide that I have found is the "International
Listening Guide: The Complete Directory of External Services in
English."

Most of it consists of program listings. Each pair of pages covers a 2
hour period. It lists transmissions in this period sorted by starting
time. It gives the frequencies and target areas for each. Each page
also lists separately news broadcasts during that time period, and DX
programs. The listings are more accurate than those of other publications
that I have seen.

The end of each issue gives a list of frequencies and the broadcasts on
each frequency. To save space, it only lists times here in 6 hour
segments.

The format of this publication changes slightly each time it is
published (mostly for the better). I conjecture that this is a result
of improvements to the computer program that prints the schedules. By
the way, the current issue is Volume 7, Number 25, so it has been
around for quite a while.

It is printed 4 times per year, corresponding to the seasonal broadcast
changes. It is printed and mailed (first class airmail) in W Germany
and arrives a few weeks after the program changes. The cost is only $6

(US) a year.

You can order from N.-American-Rep., Rob Harrington, PO Box 3434, Littleton, CO 80161. He takes USA checks or US dollar bills only! Outside the US, you can order direct from DX Listeners Service, c/o Bernd Friedewald, Merianstr. 2, D-3588 Homberg, West Germany. You can pay in bills, bank notes or checks. Some rates are: 4 British pounds, 8 Canadian dollars, 15 Dutch guilders, 10000 Italian Lira, 1500 Japanese yen, 6 US dollars, and 7 Australian dollars, all for a one year (four issue) subscription.

The deadline for getting the next issue is Aug 18 to the Colorado address and Aug 25 to West Germany.

From -9216747103007382027
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e5f2aabce31c4a53,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-25 13:40:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!hpda!fortune!amd70!dual!zehntel!ihnp4!mgnetp!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: UO-11 Status Report
Message-ID: <48@mouton.UUCP>
Date: Fri, 25-May-84 16:40:23 EDT
Article-I.D.: mouton.48
Posted: Fri May 25 16:40:23 1984
Date-Received: Fri, 1-Jun-84 21:29:07 EDT
Organization: Bell Communications Research, Inc
Lines: 130

The following is extracted from this week's Oscar-9 bulletin, giving the latest Oscar-11 news.

**** UoSAT Bulletin-76 25th May 1984 ****

** UoSAT-Oscar-11 Status **

Over the weekend of 11th to 13th May, dedicated radio amateurs at Stanford Research International in California and their outpost in Greenland (headed by Bob Leonard, KD6DG, at Stanford and Finn Steenstrup, OX3FS, at Sondre Stromfjord) heard very weak signals emanating from Oscar-11's command RECEIVERS which, by their nature of operation, generate small signals on a frequency near to that which they normally listen. These signals told the University satellite team

that their craft was still alive, although at this time the chances of complete recovery were not known. Although this observation, the first one confirmed since launch, did not lead directly to recovering the satellite, it did confirm that the orbital predictions provided by the NASA tracking organisations were correct and that the object being tracked by the Surrey team was indeed UoSAT-2.

On the morning of 14th May at 10:24 GMT, Neville Bean, G8NOB, and Roger Peel, G8NEF, continued to command the satellite using its 144MHz uplink, to no effect. At 11:01GMT (12:01 BST), Neville made further command attempts on 438MHz, and after a brief stream of initialisation commands, the main UoSAT-2 beacon (145.825MHz) was powered up at 11:05.

The signals from the spacecraft were as strong as the last ones heard from it on the 1st March, when it stopped transmitting shortly after launch. Telemetry data, from the initial two orbital passes over Guildford, appeared to be very encouraging, with temperatures around -5 to 0 degrees centigrade, as expected, and a battery voltage of 14.6 volts. The spacecraft was still spinning, but this had stabilised since the previous data received immediately after launch, ready for attitude control manoeuvres. These will not start until after the causes of the 11 week silence have been investigated, a process that itself may take many weeks in order to exercise the caution necessary in this situation.

The UoSAT-2 spacecraft will be transmitting telemetry data continuously for the next few days while initial checks are made on the telecommand system, but after this other data formats will be generated using the spacecraft computer to check further the spacecraft's health.

The most likely cause of the last 10 weeks silence is indicated by the very poor command uplinks. Indeed, only 8 commands were loaded into the spacecraft in the first 2 days after recovery. This accompanies a decrease in command decoder and battery temperatures, which is cyclic between -5c and -12c with a period of about 10 days. Commands are received - albeit infrequently - over only about 3-4 days of this cycle, explaining why the current investigations are proceeding cautiously. Since temperature fluctuations are connected intimately with sun-angle, and hence attitude, the command problems could be purely due to the spacecraft antennas pointing away from the earth during some parts of the precession cycle.

Further investigations are continuing with efforts to characterise the signals received by the spacecraft receivers, which are not performing as well as expected. In addition,

experiments to improve the performance of the data decoders (which convert the audio signals received into digital data for use by the telecommand logic) are under way, concentrating on pre-distortion of the uplink waveforms.

Stephen Hodgart, our attitude control expert at Guildford, has been working on an elementary magnetorquing manoeuvre which can be controlled to improve the average sun angle (and hence the temperature), the antenna pointing (always towards the ground over the Northern Hemisphere), and hence the command success rate, given a minimum of ground interaction in the process. This will be attempted on one of the next few 'warm' cycles, once all the possible side-effects have been evaluated.

** Oscar-11 Attitude - from Stephen Hodgart (UoS) **

The angular motion of UoSAT-2 has been estimated from the magnetometer data extracted from the pass over Guildford on orbit 1076.

This reveals a dominant transverse motion, a spin state approximating a 'flat spin' or 'tumbling', defined by a rotation of the z-axis about a spin axis in the plane of the x and y axes of the spacecraft. This arbitrary spin axis is the direction of the overall angular momentum vector and is parallel, within 1 or 2 degrees, to the plane of the orbit. The period is 42 seconds.

The motion is complicated by a slow z-spin oscillation with a period of 165 secs and an amplitude of +/- 45 degrees. This oscillation couples to the dominant transverse motion causing the flat spin to modulate into a nutational cone of a wide half-angle varying between 84 and 96 degrees, in synchronism with the z-spin oscillation. Every half-cycle this cone flattens for an instant to the pure flat spin and then inverts.

Further analysis using other orbital data is required to test for possible precessional change in the angular momentum, also to test for any continuous advance in the z-axis rotation in addition to its angular oscillation

** UoSAT-Oscar-9 Schedule **

The 21MHz beacon will be in use this weekend. In addition, the bulletin will run until Tuesday morning due to (yet) another public holiday in the U.K., preventing access to the ground station.

Friday	Load bulletin
Saturday	Bulletin / 1200 bd telemetry / Digitalker
Sunday	Bulletin / 1200 bd telemetry / Digitalker

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  Monday    Bulletin / 1200 bd telemetry / Digitalker
  Tuesday   Checksummed telemetry
  Wednesday 1200 bd telemetry and Digitalker
  Thursday  Whole-orbit telemetry data
  Friday    Load bulletin


From 6368036913803945470
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a2acec839b35348,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-25 13:43:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!hpda!fortune!amd70!dual!
zehntel!ihnp4!mgnetp!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Satellite Orbital Elements
Message-ID: <49@mouton.UUCP>
Date: Fri, 25-May-84 16:43:23 EDT
Article-I.D.: mouton.49
Posted: Fri May 25 16:43:23 1984
Date-Received: Fri, 1-Jun-84 21:28:53 EDT
Organization: Bell Communications Research, Inc
Lines: 203

Satellite: oscar-9
Catalog number: 12888
Epoch time:      84143.09104858
   Tue May 22 02:11:06.597 1984 UTC
Element set:     640
Inclination:       97.5902 deg
RA of node:       117.2607 deg
Eccentricity:    0.0002293
Arg of perigee:   165.2693 deg
Mean anomaly:     194.8648 deg
Mean motion:   15.25699258 rev/day
Decay rate:      5.655e-05 rev/day^2
Epoch rev:           14556
Semi major axis:  6863.789 km
Anom period:     94.382952 min
Apogee:            488.576 km
Perigee:           485.429 km
Beacon:           145.8250 mhz

Satellite: oscar-10
Catalog number: 14129
Epoch time:      84140.56935458
   Sat May 19 13:39:52.235 1984 UTC
Element set:     102
Inclination:       25.5982 deg
RA of node:       198.7006 deg
```

```
Eccentricity:    0.6092883
Arg of perigee:   272.6685 deg
Mean anomaly:      23.5121 deg
Mean motion:    2.05844992 rev/day
Decay rate:        3.9e-07 rev/day^2
Epoch rev:             702
Semi major axis: 26106.528 km
Anom period:    699.555518 min
Apogee:          35638.768 km
Perigee:          3825.964 km
Beacon:           145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84139.06865379
   Fri May 18 01:38:51.687 1984 UTC
Element set:     27
Inclination:       98.2426 deg
RA of node:       201.3545 deg
Eccentricity:    0.0014348
Arg of perigee:    25.3613 deg
Mean anomaly:     334.8282 deg
Mean motion:   14.61861825 rev/day
Decay rate:       1.57e-06 rev/day^2
Epoch rev:            1130
Semi major axis:  7062.386 km
Anom period:     98.504522 min
Apogee:            698.217 km
Perigee:           677.951 km
Beacon:           145.8250 mhz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84132.49292821
   Fri May 11 11:49:48.997 1984 UTC
Element set:     94
Inclination:       82.9604 deg
RA of node:       153.4371 deg
Eccentricity:    0.0060213
Arg of perigee:    65.0224 deg
Mean anomaly:     295.7082 deg
Mean motion:   12.15586150 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10646
Semi major axis:  7987.335 km
Anom period:    118.461369 min
Apogee:           1674.592 km
Perigee:          1578.404 km

Satellite: rs-4
Catalog number: 13000
Epoch time:      84142.19687821
   Mon May 21 04:43:30.277 1984 UTC
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```
Element set:     197
Inclination:       82.9602 deg
RA of node:       156.5575 deg
Eccentricity:    0.0019738
Arg of perigee:   123.1937 deg
Mean anomaly:     237.0987 deg
Mean motion:   12.06667686 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10683
Semi major axis:  8026.668 km
Anom period:    119.336916 min
Apogee:           1679.117 km
Perigee:          1647.431 km

Satellite: rs-5
Catalog number: 12999
Epoch time:      84135.24958122
   Mon May 14 05:59:23.817 1984 UTC
Element set:     167
Inclination:       82.9534 deg
RA of node:       161.7168 deg
Eccentricity:    0.0010264
Arg of perigee:   165.5610 deg
Mean anomaly:     194.5705 deg
Mean motion:   12.05046463 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           10585
Semi major axis:  8033.871 km
Anom period:    119.497467 min
Apogee:           1665.282 km
Perigee:          1648.790 km

Satellite: rs-6
Catalog number: 13002
Epoch time:      84122.49509319
   Tue May  1 11:52:56.51  1984 UTC
Element set:     80
Inclination:       82.9634 deg
RA of node:       160.8624 deg
Eccentricity:    0.0051501
Arg of perigee:   103.4771 deg
Mean anomaly:     257.2038 deg
Mean motion:   12.13561344 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10505
Semi major axis:  7996.222 km
Anom period:    118.659020 min
Apogee:           1679.179 km
Perigee:          1596.816 km

Satellite: rs-7
Catalog number: 13001
Epoch time:      84140.47530240
```

```
   Sat May 19 11:24:26.127 1984 UTC
Element set:     156
Inclination:       82.9617 deg
RA of node:       155.4448 deg
Eccentricity:    0.0023683
Arg of perigee:    89.4850 deg
Mean anomaly:     270.8942 deg
Mean motion:   12.08681858 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10680
Semi major axis:  8017.743 km
Anom period:    119.138050 min
Apogee:           1679.649 km
Perigee:          1641.672 km

Satellite: rs-8
Catalog number: 12998
Epoch time:      84140.44908988
   Sat May 19 10:46:41.365 1984 UTC
Element set:     273
Inclination:       82.9621 deg
RA of node:       160.7736 deg
Eccentricity:    0.0018448
Arg of perigee:   207.7942 deg
Mean anomaly:     152.2162 deg
Mean motion:   12.02945232 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10629
Semi major axis:  8043.229 km
Anom period:    119.706198 min
Apogee:           1684.502 km
Perigee:          1654.826 km

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84139.49396864
   Fri May 18 11:51:18.890 1984 UTC
Element set:     261
Inclination:       99.0464 deg
RA of node:       110.5601 deg
Eccentricity:    0.0012824
Arg of perigee:   175.5652 deg
Mean anomaly:     184.5624 deg
Mean motion:   14.13035965 rev/day
Decay rate:       2.09e-06 rev/day^2
Epoch rev:           14966
Semi major axis:  7224.322 km
Anom period:    101.908234 min
Apogee:            855.566 km
Perigee:           837.037 km
Beacon:           137.6200 mhz

Satellite: noaa-8
```

```
Catalog number: 13923
Epoch time:      84140.35138654
   Sat May 19 08:25:59.797 1984 UTC
Element set:     82
Inclination:       98.7060 deg
RA of node:       171.7194 deg
Eccentricity:    0.0017661
Arg of perigee:   134.6623 deg
Mean anomaly:     225.6003 deg
Mean motion:   14.22409117 rev/day
Decay rate:        1.2e-06 rev/day^2
Epoch rev:            5937
Semi major axis:  7192.509 km
Anom period:    101.236696 min
Apogee:            837.637 km
Perigee:           812.232 km
Beacon:           137.5000 mhz


From -2038544054235192131
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,991bc137357c31e0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-25 14:01:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxj.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!zehntel!ihnp4!houxm!whuxl!
whuxj!wjm
From: wjm@whuxj.UUCP (MITCHELL)
Newsgroups: net.ham-radio
Subject: Re: How to become a ham
Message-ID: <248@whuxj.UUCP>
Date: Fri, 25-May-84 17:01:24 EDT
Article-I.D.: whuxj.248
Posted: Fri May 25 17:01:24 1984
Date-Received: Fri, 1-Jun-84 01:17:12 EDT
Organization: Bell Labs, Whippany, N.J.
Lines: 51

<munch munch munch>
Rather than answer all these inquiries by mail ... methinks I'll post it to the
net.
The main way to get started in ham radio is via the Novice license, which
requires (as do all ham licenses) knowledge of the Morse Code and some radio
theory and the FCC regulations pertaining to amateur radio
(International Note - What follows uses USA FCC licensing procedures as an
example - while the general concepts are probably correct, readers in other
countries should check with their government for the proper procedures)
Quite often amateur radio clubs and/or adult education classes provide Novice
courses, or you can study on your own.
The American Radio Relay League (ARRL) - 225 Main Street, Newington CT
has a series of four booklets you can buy that will tell you how to learn the
code, what to study for the theory exam, and how to set up a ham station.
```

They also provide code practice over their station, W1AW - check the most recent issue of QST magazine for times and frequencies.
You may be able to find a ham near you to help you learn the code and the theory.
The Novice license exam is given by a volunteer ham (who must have a General Class or higher license and be over 21). After you pass the code test, he/she will request the written theory test from the FCC and will give it to you when it arrives. After you take the exam, it is sent back to the FCC for grading and when you pass, they will send you your license, and you can get on the air.
As for equipment, you can build your own or buy it. The ARRL books mentioned earlier provide plans for a simple code station. If there are no stores near you, there are several reputable mail order houses you can deal with (I've heard Long's Electronics in Alabama is OK, although I haven't dealt with them personally).
By all means, get a receiver first - that way you can listen to the ham bands and to code practice on W1AW while you're studying for your license.
Don't skimp here, a good receiver is quite useful since you can't work stations you don't hear.
At this time, you should start thinking about the most important part of a ham station, a good antenna. A dipole can work well IF it is up high (great if you live near the top of a hill)_. Otherwise, look at some of the designs in the ARRL's Radio Amateur's Handbook. VERY IMPORTANT DON'T FORGET PROPER LIGHTNING PROTECTION - THE LIFE AND PROPERTY YOU SAVE MAY BE YOUR OWN.
There are lightning arrestors that one can install in coax feed lines, and also models for open wire / twin lead lines, be sure to use one and to properlyy install and GROUND it.
When you get your license, its time to get a transmitter. Its generally a good idea to get a unit that can grow with you when you upgrade to General or Advanced. Also, you may wish to get a transcever instead of a separate transmitter and receiver to save the cost of another power supply and chassis. There are some drawbacks - but those are the subject of a more advanced article
Welcome to the world of ham radio and good luck on the exam!
Bill Mitchell, WB2IAU
Bell Communications Research, Inc.
Whippany, NJ (whuxj!wjm)

From 9004666654933948513
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1363ce,de39d1d6d0f886ac,start
X-Google-Attributes: gid1363ce,public
X-Google-Thread: 151e61,de39d1d6d0f886ac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-27 15:43:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!zehntel!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.auto,net.ham-radio
Subject: sports-related scanner frequencies
Message-ID: <2221@ihuxf.UUCP>

Date: Sun, 27-May-84 18:43:19 EDT
Article-I.D.: ihuxf.2221
Posted: Sun May 27 18:43:19 1984
Date-Received: Fri, 1-Jun-84 02:35:26 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 147
Xref: 991 237

I have a few friends that enjoy listening to race car drivers
on their portable scanners during a race. Some of the frequencies
racers use are contained in this list (please pardon the non-auto freqs):

```
  KNEU448   461.0500    AAR Toyota Motor Sports (USA-wide)
  KNEU447   466.0250 mo All American Racers, racing (USA-wide)
  KP3213    154.6000 2w Allied Auto Racing (USA-wide)
  KB29116   154.6000 2w American Bicycle Assn, sports (USA-wide)
  KA96286   151.9550    American Honda,    motorsports? (USA-wide)
  KB38932   469.5000 mo American Speed Assn, racing (USA-wide)
  KT5645    467.8000 2w Apple Jack Racing (Lake Zurich)
o WQH523    464.9750    Arlington Park Racetrack, paging, sports (Arlington Hts)
o ?      151.6250 it    Arlington Park Racetrack, sports (Arlington Hts)
o WQH523    464.4750           "
  KCR961    151.6550    Arrowhead Golf Club, sports (Wheaton)
  KA52803   154.5300    Auto Race Promotions, sports (USA-wide)
  KS4358    154.5700 2w Balmoral Racing    Club, sports (Illinois)
  KS4358    469.8250 mo        "
  KS4358    469.8750 mo        "
  KB40093   469.5500 mo Baton Rouge Road Run..., racing? (USA-wide)
  KJ3823    469.5000 mo Bayside  Racing Team (USA-wide)
  KK8624    469.5500 mo BDR Racing (USA-wide)
  KNFW308   464.3250    Bon Temps Racing Inc (USA-wide)
  KA46958    42.9800 2w Brinks Racing Team, sports (USA-wide)
  KB28380   466.3000 mo Brune, Leslie V    Racing (USA-wide)
  KA92953   151.6250 it Butler National    Golf Course, sports (Illinois)
  KX4444    151.6250 it Butler National    Golf Course, sports (Oak Brook)
p ?      154.6000 2w    Byron Dragway, sports
  KA80464   154.5700 2w Calumet  Raceway  Assn, sports (Illinois)
  KA44115   464.7500    Championship Auto Racing (USA-wide)
  KA77887   151.6250 it Chicago  Bears, sports (USA-wide)
  KA88023   151.9250    Chicago  Stadium  Corp, sports (Illinois)
  KA93479   151.6250 it Chicago  White Sox, sports (USA-wide)
  KK7097    151.9550    Clarke Race Cars, sports (USA-wide)
  KB24827   469.5000 mo Cobra Racing (USA-wide)
  KB24827   469.5500 mo        "
  KA7851     35.0400 it Competition Limited, sports (USA-wide)
  KB35171   154.5700 2w Daredevil Attractions, sports (USA-wide)
  KWJ865    471.3625    Dependable Swimming, sports (Lake Zurich)
  KU4811    469.5000 mo Desperado Racing (USA-wide)
  KB32647   469.5000 mo Electronic Race    Patrol,  auto racing? (USA-wide)
  KA91151   466.9875 mo Events and Entertainment, sports (Illinois)
  KS8119    154.6000 2w Executive Sports (USA-wide)
  KVG357     35.0800    Exmoor Country Club, sports (Highland Park)
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  KB30672   469.5000 mo Falcon Racing (USA-wide)
  KAD6220   462.5750    Fast Trucks Inc, motorsports? (USA-wide)
  KA33486   464.7250    Fletcher Racing    (USA-wide)
  KA83937   151.7750    Gilmore  Enterprises, auto sports racing
     (USA-wide)
  KCC776    151.8350    Glencoe  Golf Club, sports (Glencoe)
o ?      151.6250 it    Goodyear Blimp,    sports,  entertainment
p WQP6       132.0000          "
p KA73209   154.5700 2w Great Lakes Dragway, sports
  KA51269   464.5000 it Gymnastic Federation, sports (USA-wide)
  KB35540   151.9550    Hallett  Motor Racing (USA-wide)
  KNHD830   463.5000    Hawkins, Bobby Racing (USA-wide)
p KN3447    154.6000 2w Hawthorne Race Track, sports (Cicero)
  KB31930   464.4500    Hayes, Johnny Racing (USA-wide)
  WFX64      464.1750  Hidden Cove Marina, sports (Lake Zurich)
  KNDX844   151.9250    High Sierra Sports, sports (USA-wide)
  KB34600   469.4250 mo Hooker Racing Enterprises (USA-wide)
  KM7823    460.5500    I 70 Speedway Inc, sports (USA-wide)
  KM7823    460.8250          "
p KMD637    151.8650    IL: Bureau of Race Track Police, sports
p KL3446    154.6000 2w Indian Speedway, sports
  KB25794   461.1000    Jarrett, Glen Racing (USA-wide)
  KB36366   469.5000 mo JET Racing (USA-wide)
  KA33482   464.7500    Kent & Bagly Racing (USA-wide)
  KNFP607   461.0250    Kent Racing Inc    (USA-wide)
  KNFP607   466.0250 mo       "
  KAD3316   462.5500    Keystone Sports    Foundation (USA-wide)
  KNCV313   464.8000    Kyle Racing (USA-wide)
  KS9804    467.9000 2w Malibu Grand Prix Inc, racing (USA-wide)
  KZ9888    467.8000 2w Market Square Associates, Indy Sports Arena (Indianapolis)
  KNCP944   463.4000    Martin,  Mark Racing (USA-wide)
  KB33210   464.0500    Mash Racing (USA-wide)
  KKW345    151.6550    Medinah  Country  Club, sports (Medinah)
  KA90320   154.6000 2w Megabucks Racing (USA-wide)
  KB24275   154.6000 2w Midwest  Regional Gun..., sports (USA-wide)
  KB28185   469.5000 mo Milwaukee Sports Svc (USA-wide)
p KA70237   154.6000 2w Mt Lawn  Speedway, sports
  KZU768    464.6750    National Jockey    Club, sports (Cicero)
  KQ3618    467.8250 2w       "
  KAC3246   467.6000 mo National Rifle Assn, sports (USA-wide)
  KNGX824   464.3250    Olympia  Fields Country Club, sports (Illinois)
  KNBV535    35.0400 it P & S Racing (USA-wide)
  KC8627    469.5000 mo Parnelli Jones Racing
  KNEE321   464.8250    Parrott, Buddy Racing (USA-wide)
  KA95649   464.5000 it Patrick  Racing Team, auto sports racing
     (USA-wide)
  KA95649   464.5500 it       "
  KA95649   464.7000          "
  KA95649   464.7500          "
  KQ9180    469.7250 mo Peles Racing (USA-wide)
  KV8498    154.6000 2w Penske Speedway    Inc, auto sports racing
     (USA-wide)
  KNAP470   464.7250    Petty Enterprises Inc, auto racing? (USA-wide)
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  KB27126   469.5500 mo Prime Time Racing (USA-wide)
  ?      151.6250 it    Pro Golf Association, sports (Oak Brook)
  KB24788   464.5500 it       "
  KB20325   461.7875   R & S Racing (USA-wide)
  KG2971    468.8125 mo Road Inc, racing? (USA-wide)
  KB35895   463.8000   Rose Racing Inc    (USA-wide)
  KGU383    151.9250   Santa Fe Park Enterprises, sports, entertainment (Hinsdale)
  KNDD389   151.9250          "
o KA72881   151.6250 it Skip Barber Racing, spotter's ht (USA-wide)
  KB31929   464.4250   Skoal Bandit Racing (USA-wide)
  KQ3450    151.6250 it Sports Car Club    of America, Chicago chapter (Chicago)
  KH8971    151.6250 it Sports Car Club    of America, Raleigh NC (USA-wide)
  ?      467.7750 2w    Sportsman Park (Cicero)
p ?      464.6750         "
p KZU769    464.9250          "
  KA95890   151.9250   St Louis Drag Boat Assn, sports  (USA-wide)
  KA95890   151.9550          "
  KA37393   151.9550   Stadium  Motorsports (USA-wide)
  KO7779    154.5150   Stadium  View Inc, sports? (Illinois)
  KU4287    469.5500 mo Starr Racing (USA-wide)
  KYT865    151.8950   Sycamore Speedway, sports (Sycamore)
  KA96176   467.8500 2w Teleview Racing    Patrol (USA-wide)
  KA96176   467.8750 2w       "
  KJ8784    154.5700 2w Tri City Speedway, sports (Illinois)
p KA75440   154.5700 2w Tri State Speedway, sports
  KB29026   467.7500 2w True Sports Company (USA-wide)
  KB29026   468.2500 mo       "
  KA91935   460.7500   Ultralight Flying Machines, sports (USA-wide)
  KB39795   151.9250   United States Ski Team, sports (USA-wide)
  KB39795   151.9550          "
  KAD0450   467.7250 mo United States Snowmobile..., sports/racing? (USA-wide)
  KJ9237    151.6250 it US Auto  Club - Speedway, IN, sports (USA-wide)
  KB23467   469.5500 mo US Figure Skating, sports (USA-wide)
  KMB476    151.7150   Villa Olivia Country Club, sports (Bartlett)
  KB38764   151.6550   Wicker Basket Balloon, sports (USA-wide)
  KA47606   464.5000 it Womens Professional..., sports?  (USA-wide)
  KU4357    457.5250 2w YMCA (USA-wide)    sports
  KU4357    457.5500 2w       "
  KU4357    457.5750 2w       "
  KU4357    457.6000 2w       "
  KU4357    467.7500 2w       "
  KU4357    467.7750 2w       "
  KU4357    467.8000 2w       "
  KU4357    467.8250 2w       "
  KU4357    467.8500 2w       "
  KU4357    467.8750 2w       "
  KU4357    467.9000 2w       "
  KU4357    467.9250 2w       "
  KNFY906   464.5750   YMCA, West Suburban (LaGrange) sports
--
======================================================================
Bob Parnass,  AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414
```

From -6911852175617780443
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b7cf740c55ca2eff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-27 16:13:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!zehntel!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: USA-wide entertainment freqs (Jimmy Swaggart?)
Message-ID: <2222@ihuxf.UUCP>
Date: Sun, 27-May-84 19:13:51 EDT
Article-I.D.: ihuxf.2222
Posted: Sun May 27 19:13:51 1984
Date-Received: Fri, 1-Jun-84 02:32:49 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 23

```
  KA53020   464.5000 it Atlanta  Rhythm Section,    entertainment (USA-wide)
  KG3221     33.1400 2w Bingo King Co Inc, entertainment (USA-wide)
o KA81615   151.6250 it Blomsess Allstars Inc, carnival, entertainment (USA-wide)
  KA43296   464.5000 it Chicago  Lyric Opera, entertainment (USA-wide)
  KA90210   464.5000 it Cross Country Concerts, entertainment (USA-wide)
  KLL957    464.6000   Disney,  Walt Distribu..., entertainment
     (USA-wide)
  KA44933   464.5000 it Exhibitgroup Chicago (USA-wide)
  KJ3264    464.5000 it Festival Productions, entertainment (USA-wide)
  KA3362    469.5500 mo Gibb, Andy, entertainment (USA-wide)
  KD4131     33.1400 2w Godfrey, Arthur    Productions, entertainment (USA-wide)
  KB22339   469.5000 mo Grateful Dead Productions, entertainment (USA-wide)
  KX9443    457.5250 2w Great America, Marriott's (USA-wide) entertainment
  KVB365     35.0400 it Heart of Dixie Shows, entertainment (USA-wide)
  KA63922   464.5000 it Oak Ridge Boys Leasing, entertainment? (USA-wide)
  KA20017   469.4000 mo Pioneer  Music Corp, entertainment (USA-wide)
p ?     151.6250 it    Ringling Brothers, Barnum & Bailey Circus, entertainment
(USA-w
  KA90412   151.9550   Rosedale Amusements, entertainment (USA-wide)
  KN9103    154.5700 2w RSVP Productions, entertainment? (USA-wide)
  KA2372    467.8500 2w Swaggart, Jimmy    Evangelical, entertainment? (USA-wide)
--
==========================================================================
Bob Parnass,  AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414
```

From 6943103379074761988
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2179bbec39ab5ae4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-28 08:31:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: Notesfiles; site trsvax.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Freedom in MASS - (nf)
Message-ID: <52800018@trsvax.UUCP>
Date: Mon, 28-May-84 11:31:00 EDT
Article-I.D.: trsvax.52800018
Posted: Mon May 28 11:31:00 1984
Date-Received: Fri, 1-Jun-84 08:30:01 EDT
Lines: 15
Nf-ID: #N:trsvax:52800018:000:533
Nf-From: trsvax!mikey   May 28 10:31:00 1984

#N:trsvax:52800018:000:533
trsvax!mikey   May 28 10:31:00 1984

Yesterday I was listening on 40 meters and heard a net discussing
(read that B*TCHING) about a new proposed law in Mass that had something
to do with the state trying to controll a Ham's ERP. Has anyone heard of
this? Is Mass really trying to step on the FCC again?? (They once tried
to separately license CB for use in cars! Don't snicker, if they could
have gotten away with it, how long do you think mobile Ham operations would
be safe?) Is this a fantasy or just another example of M*SSHOLE government?

mikey KA5MJQ

From 6913591478227835653
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,efd669c8ea6ccb2e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-28 18:42:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cp1.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!houxz!vax135!floyd!cmcl2!seismo!
rlgvax!cvl!umcp-cs!aplvax!cp1!hart
From: hart@cp1.UUCP
Newsgroups: net.ham-radio
Subject: vadcg tnc update
Message-ID: <678@cp1.UUCP>
Date: Mon, 28-May-84 21:42:36 EDT
Article-I.D.: cp1.678
Posted: Mon May 28 21:42:36 1984
Date-Received: Fri, 1-Jun-84 06:13:11 EDT
Organization: C & P Tel. Co., Balto., Md.
Lines: 182

TO: All Vancouver Packet Terminal Node Controller Users

From: Amateur Radio Research and Development (AMRAD)
and Terry Fox, WB4JFI

Subject: New Life for an Old Friend

The Amateur Radio Research and Development Corporation, AMRAD (originators of the now popular AX.25 Level 2 protocol) is pleased to announce that it is now possible to expand the original Vancouver Terminal Node Controller board's memory without raising an X-Acto knife! AMRAD President Terry Fox, WB4JFI has designed a daughter board that plugs into an unmodified VADCG TNC and expand the TNC memory from 4 kilobytes each of EPROM and RAM to up to 32 kilobytes of each. In addition, three software programmable timers are also provided. One timer is used to provide the clock for the 8273 (HDLC chip) on the VADCG TNC. The other two timers are used to generate timed interrupts for the VADCG TNC (8085). One timer generates maskable interrupts (INTR pin), while the other timer generates non-maskable interrupts (TRAP pin). These timers can be used to give the programmer a more accurate method of controlling protocol functions.

In addition, there are several 16 pin sockets, one 24 pin socket, and a general kludge area provided for the user. This allows for additions such as transmitter time-out timers, or modems.

EPROM Description

There are four EPROM sockets provided. The sockets are spaced so that Zero Insertion Force (ZIF) sockets can be used if frequent EPROM changing is expected. The board uses the present memory decoder chip (relocated onto the daughter board), with a jumper area used to define what type of EPROM is being used. The board comes jumpered for 2732 type EPROMs, but 2716, and 2764 types are also usable. JEDEC 28 pin socket layout is used.

RAM Description

As in the EPROM area above, the RAM sockets also conform to the 28 pin Jedec layout. The four RAM sockets will accept either 2K devices (6116 type), or 8K devices (either static or psuedo-static that are Intel 2186 compatible. The RAM address decoder is similar to the EPROM decoder, except that the jumper is set to 6116 type devices. RAM address mapping is set to begin at 8000 hex, to conform with older mods to the Vancouver TNC.

Timer Description

In addition to the new memory used on the daughter board, an Intel 8253 timer is implemented. This device has three independant software controllable timers, each with a sixteen bit divider. The old hardware baud-rate divider (CD4024) for the HDLC channel has been

moved up to the daughter board, and acts as a pre-divider to the 8253 chip. Each of the 8253 timer's clock inputs are jumperable to one of the outputs of the CD4024, allowing timed interrupts over a large variation of times. Timer 0 is now used to generate the clock for the HDLC channel. Timer 1 is normally jumpered to the 8085 trap pin on the Vancouver TNC, which is non-maskable. Timer 2 is normally jumpered to the 8085 INTR pin. The INTR pin creates an interrupt that is maskable by the CPU. The two-interrupt system allows versatile programming techniques to be used, along with better error recovery.

Daughter Board Installation

The daughter board is about 4.5 by 9 inches in size. Installation requires no wire jumpers between the two boards, and may not require any trace cutting on the Vancouver board. If timed interrupts are to be used from the daughter board timer chip, two traces must be cut on the VADCG TNC, since both the Trap and INTR pins are normally shorted to ground. NO OTHER TRACES ARE CUT!! The only other requirement is that several IC sockets on the Vancouver TNC must be capable of accepting large pins.

Connections made between the Vancouver board and the AMRAD daughter board are made through four wirewrap sockets that plug into the Vancouver board instead of the IC's that would otherwise be there. These four IC's are:

U1	8085 CPU chip
U18	2708 EPROM, upper left corner
U9	74LS138 I/O port decoder
U11	CD-4024 Baud rate divider.

All power and signals are sent between the two boards using these four sockets. It should be noted that since 2708 EPROMs are no longer being used, the minus five volt supply can be eliminated.

The first step (after making sure that the TNC board operates properly without modification) is to remove several of the Integrated Circuits from the VADCG TNC. They are:

U1	8085 CPU
U7	74LS00 Memory decoder logic.
U8	74LS138 Memory decoder.
U9	74LS138 I/O port decoder.
U11	CD-4024 Baud-rate divider.
U15-U18	2708 EPROM chips.
U19-U26	2114 RAM chips.

Now, check out the jumpers and alter them as required for the configuration required.

The next installation step is to place the daughter board over the Vancouver board so that the long wire-wrap socket pins extend into

the IC sockets U1, U9, U11, and U18. Once the pins line up properly, gently press the wire-wrap socket pins into the VADCG IC sockets. Make sure that all pins line up properly, and none are bent.

It is possible that the present IC sockets on the Vancouver TNC will not accept the larger pins of the wire-wrap sockets on the daughter board. If this happens, the IC offending sockets must be replaced in order to use the daughter board. This isn't as hard as it seems (I had to do it for the prototype board). Be careful, and use a good solder-sucker when removing the old sockets.

Now plug U1 (8085) and U9 (74LS138) into their wire-wrap sockets on the daughter board. Place some tape over U18 and U11, so no ICs are accidentally plugged into them (they are only used to gain access to certain lines on the Vancouver board).

Next, plug in the rest of the IC's and test the board out.

Parts Required

The daughter board has been designed to require a minimum of additional components, while maintaining a high degree of operation. Actually, there are only two additional support IC's required (in addition to the EPROMs and RAMs of course).

1	AMRAD Daughter Board.
1	74LS138 decoder IC.
1	Intel 8253 interval timer IC.
4	EPROMS, 2732 nominal (2716, 2764 optionally).
4	RAMs, 6116 nominal (8K parts optional).
1	40 pin wire-wrap socket.
1	24 pin wire-wrap socket.
1	16 pin wire-wrap socket.
1	14 pin wire-wrap socket.
8	28 pin solder-tail sockets.
1	24 pin solder-tail socket.
2	16 pin solder-tail sockets.
2	14 pin solder-tail sockets.
2	14 pin solder-tail sockets (optional).
2	14 pin DIP headers (optional).
1	100 UF 10 volt Electrolytic capacitor.
5	.1 UF 50 volt disc ceramic capacitors.

End of Parts List

Well, that's a brief description of the AMRAD Vancouver Daughter Board. The initial run of boards are being made now, watch for more information here, or in the AMRAD Newsletter (yes, it is still around, with a new editor, Deborah Borden). Or write to:

AMRAD, PO Drawer 6148, McLean Virginia, 22106-6148, or:

Terry Fox, WB4JFI, 1819 Anderson Rd., Falls Church VA 22043

Also, watch for a completely new set of Assembly-language code from AMRAD for the Vancouver board, AMRAD PAD (coming out soon), or most any other 8080, 8085, or Z80 based computer (including CP/M, S100, and Xerox 820 systems). NETWARE (TM) is written in modular form, similar to Ward Christensen's Computerized Bulletin Board System (CBBS)TM software, with hooks and modules coming for AX.25 Level 3 (networking).

Thank you for your time, and happy framing!!!
Terry Fox, WB4JFI

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signed: Rod Hart (wa3mez)
Chesapeake & Potomac Tel. Co.
Bell Atlantic Inc.
Silver Spring, Md.
gamma!cp1!hart - umcp-cs!cp1!hart - aplvax!cp1!hart
==========

From 5332015460263935921
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8ca81bac67d8a3e8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-28 19:17:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site pur-ee.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!pur-ee!ecn-ee!mahler
From: mahler@ecn-ee.UUCP
Newsgroups: net.ham-radio
Subject: Salt Lake Meeting - (nf)
Message-ID: <1883@pur-ee.UUCP>
Date: Mon, 28-May-84 22:17:21 EDT
Article-I.D.: pur-ee.1883
Posted: Mon May 28 22:17:21 1984
Date-Received: Fri, 1-Jun-84 21:53:55 EDT
Sender: notes@pur-ee.UUCP
Organization: Electrical Engineering Department , Purdue University
Lines: 12

#N:ecn-ee:14900001:000:275
ecn-ee!mahler May 28 18:23:00 1984

Is there a 2M repeater in Salt Lake (open access) that USENIX attendees can meet on? ... Is a meeting/party for hams planned?

And on a totally different topic ... has anyone used the TAPR board to a UNIX system ?? ... how did it work ...

cu in 7 land 73 Steve , N9DRR

From -5587962541314497976
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6479f5c9077f448f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-28 19:17:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sbcs.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!hocda!houxm!hogpc!houti!ariel!vax135!floyd!
cmcl2!philabs!sbcs!root
From: root@sbcs.UUCP
Newsgroups: net.ham-radio
Subject: Oscar 10 ground station
Message-ID: <647@sbcs.UUCP>
Date: Mon, 28-May-84 22:17:51 EDT
Article-I.D.: sbcs.647
Posted: Mon May 28 22:17:51 1984
Date-Received: Fri, 1-Jun-84 21:59:12 EDT
Organization: SUNY at Stony Brook
Lines: 10

It's time to upgrade my station to include Oscar 10 capability --
what equipment is recommended for Mode B? Any comments on
antennas, transceivers, etc would be appreciated. Also, is there
anyone on the net who is active in packet on the Oscar series
satellites?

Rick,
wb2cfv

From 3179851081660176256
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,557f8fe9e4be6c0e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-29 05:33:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2f.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hou2f!jca
From: jca@hou2f.UUCP (J.ANTROSIGLIO)
Newsgroups: net.ham-radio
Subject: Help - frequency wanted
Message-ID: <234@hou2f.UUCP>
Date: Tue, 29-May-84 08:33:53 EDT
Article-I.D.: hou2f.234
Posted: Tue May 29 08:33:53 1984
Date-Received: Fri, 1-Jun-84 21:25:06 EDT
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 21

>

HELP!

Could anyone in New Jersey tell what frequency the Millburn, NJ police operate on. They were in the low vhf band but from the new 18" whip it looks like they moved to the high vhf band. I've been scanning the band for four days with no luck.

Also, I'm new to this new hobby of monitoring and would like to know if there are any clubs, journals, etc...

Thank You,

John Antrosiglio
AT&T Bell Laboratories
Holmdel, New Jersey
(201)949-2374
hou2f!jca
hotlv!jca

From -1839919121492213964
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3b7e4090480cf669,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-29 06:14:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 39
Message-ID: <9514@mgweed.UUCP>
Date: Tue, 29-May-84 09:14:56 EDT
Article-I.D.: mgweed.9514
Posted: Tue May 29 09:14:56 1984
Date-Received: Fri, 1-Jun-84 21:30:31 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 9

qst de k9eui
hr bulletin nr 39 from arrl headquarters newington ct
may 22 1984 to all radio amateurs bt

ballots for the section manager election for santa clara valley have been counted according to the prescribed rules. kb6zv has been declared elected. his term begins july 1 1984. ar

From 7787143145964731614

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ebea7289eed52e3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-29 06:15:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 19
Message-ID: <9515@mgweed.UUCP>
Date: Tue, 29-May-84 09:15:16 EDT
Article-I.D.: mgweed.9515
Posted: Tue May 29 09:15:16 1984
Date-Received: Fri, 1-Jun-84 21:30:42 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 40

qst de k9eui
hr dx bulletin nr 19 from arrl headquarters newington ct
may 25 1984 to all radio amateurs bt

kampuchea. xu1ss has been active on sundays at 1200z on 14335 khz with a list operation controlled by vs6ct.

tristan de cunha. zd9bv is active on 3782 khz from 0700 to 0800z. he also has a schedule with his qsl manager, w4fru, on 21262 khz.

ethiopia. et8ml has been heard on 3790 khz between 0145 and 0215z.

norfolk island. vk9zg has been worked on 3795 khz at 0930z.

sri lanka. 4s7tpr has been active on 7007 khz at 2200z.

surinam. pz1dv and pz1ab have been very active daily on 7005 khz between 0900 and 1050z.

hong kong. vs6do has been active on 14180 khz at 1100z and on 7001 khz at 1000z.

saudi arabia. hz1hz, ahmed, has been active on 7002 khz. he plans to be on during the wpx contest this weekend. qsl via n7ro.

seychelles. s79sm0 has been worked on 14025 khz at 2130z. he plans to be on 7 mhz after may 26.

chatham island. ron, zl1amo, is now active as zl7amo on chatham. he plans to be there for two wzeks and will operate on 20, 40, 80 and 160 meters.

6 meters. sporadic e propagation and late season transequatorial openings have been keeping the band hopping. many lu stations, including lu8yyo, lu1ybv and lu2wm, have been worked from new england. ar

From -8345666488850681578
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 1363ce,de39d1d6d0f886ac
X-Google-Attributes: gid1363ce,public
X-Google-Thread: 151e61,de39d1d6d0f886ac
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-29 06:24:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hou2h!an
From: an@hou2h.UUCP (A.NGUYEN)
Newsgroups: net.auto,net.ham-radio
Subject: Re: sports-related scanner frequencies
Message-ID: <469@hou2h.UUCP>
Date: Tue, 29-May-84 09:24:48 EDT
Article-I.D.: hou2h.469
Posted: Tue May 29 09:24:48 1984
Date-Received: Fri, 1-Jun-84 21:31:30 EDT
References: <2221@ihuxf.UUCP>
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 6

--
Here's a couple more:

151.625 & AAMRR motorcycle roadracing, Loudon, Pocono,
151.250 and Bridgehampton.

From -4690493001621506693
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1fec02f607cf846,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-29 06:39:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: list of press services
Message-ID: <9516@mgweed.UUCP>
Date: Tue, 29-May-84 09:39:20 EDT
Article-I.D.: mgweed.9516
Posted: Tue May 29 09:39:20 1984
Date-Received: Fri, 1-Jun-84 21:32:56 EDT
Organization: AT&T Consumer Products - Montgomery Illinois

Lines: 192

Here is a list of press services that one may encounter on RTTY:

RTTY-ID	CITY	COUNTRY	PRESS SERVICE TITLE
AA	ANKARA	TURKEY	ANADOLU AJANSI
AAP	SYDNEY	AUSTRALIA	AUSTRALIAN ASSOCIATED PRESS
ABP	BUJUMBURA	BURUNDI	A. BURUNDAISE DE PRESSE
ABP	COTONOU	BENIN	A. BENINOISE DE PRESSE
ACAN	PANAMA CITY	PANAMA	A. CENTRO AMERICANA DE NOTICIA
ACAP	BANGUI	C.AFRICAN REP.	A. CENTRAFRICAINE DE PRESSE
ACI	BRAZZAVILLE	CONGO	A. CONGOLAISE DE INFORMATION
ADN	BERLIN	E. GERMANY	ALLGEMEINER DEUTSCHER NACHRICHT.
AEP	GUAYAGUIL	ECUADOR	A. ECUATORIANA DE PRENSA
AESA	SAO PAULO	BRAZIL	A. DE ESTADO DE SAO PAULO
AFP	PARIS	FRANCE	A. FRANCE-PRESSE
AFRTS	U.S.A.		AMERICAN FORCES RADIO & TV SVC
AGER	BUCHAREST	ROMANIA	A. ROMANA DE PRESA
AGNC	RIO DE JANEIRO	BRAZIL	A. NACIONAL
AGP	LIBREVILLE	GABON	A. GABONAISE DE PRESSE
AIC	GUATEMALA CITY	GUATEMALA	A. INFORMATIVA CENTROAMERICANA
AIM	MAPUTO	MOZAMBIQUE	A. DE INFORMACAO DE MOCAMBIQUE
AIP	ABIDJAN	IVORY COAST	A. IVOIRIENNE DE PRESSE
AKP-AUI	PHNOM PENH	KAMPUCHEA	A. NATIONALE DE INFORMATION
ALASEI	CARACAS	VENEZUELA	A. LATINOAMERICANA DE SERVICE
AMAP	BAMAKO	MALI	A. MALIENNE DE PRESSE
AMP	NOUAKCHOTT	MAURITANIA	A. MAURITANIENNE DE PRESS
AMP	TANANARIVE	MALAGASY REP.	A. MADAGASCAR PRESSE
ANA	ADEN	S. YEMEN	ADEN NEWS A.
ANA	ATHENS	GREECE	ATHENS NEWS A.
ANF	LA PAZ	BOLIVIA	A. NOTICIAS FIDES
ANGOP	LUANDA	ANGOLA	A. ANGOLANA DE PRENSA
ANI	LISBON	PORTUGAL	A. DE NOTICIAS INFORMACOES
ANM	FLORIANA	MALTA	ASSOCIATED NEWS MALTA
ANOP	LISBON	PORTUGAL	A. NOTICIOSA PORTUGESA
ANP	THE HAGUE	NETHERLANDS	ALGEMEEN NEDERLANDS PERSBUREAU
ANPE	MEXICO CITY	MEXICO	ASOCIACION NACIONAL PERIODISTICA
ANS	ARGENTINA		ARGENTINE NEWS SVC
ANSA	ROME	ITALY	A. NAZIONALE STAMPA ASSOCIATA
ANT	INDONESIA		
ANTARA	JAKARTA	INDONESIA	LEMBAGA KANTOR BERITA NASIONAL
AP	NEW YORK	USA	ASSOCIATED PRESS
APA	VIENNA	AUSTRIA	AUSTRIA PRESSE-AGENTUR
APN	MOSCOW	USSR	A. PETSCHATO NOWOSTI
APP	ISLAMABAD	PAKISTAN	ASSOCIATED PRESS OF PAKISTAN
APS	ALGIERS	ALGERIA	ALGERIE PRESSE SERVICE
APS	DAKAR	SENEGAL	A. DE PRESSE DU SENEGAL
ARF	U.S.A.		AMERICAN REPUBLIC FILE (STATE DEPT)
ARP	KIGALI	RWANDA	A. RWANDAISE DE PRESSE
ATA	TIRANA	ALBANIA	A. TELEGRAFIKE SHQIJETARA

ATOP	LOME	TOGO	A. TOGOLAISE DE PRESSE
ATP	N'DJAMENA	CHAD	A. TCHADIENNE DE PRESSE
ATS-SDA	BERN	SWITZERLAND	A. TELEGRAPHIQUE SUISSE
AUP	SYDNEY	AUSTRALIA	AUSTALIAN UNITED PRESS
AVP	OUAGADOUGOU	UPPER VOLTA	A. VOLTAIQUE DE PRESSE
AZAP	KINSHASA	ZAIRE	A. ZAIRE PRESS
BAKHTAR	KABUL	AFGHANISTAN	BAKHTAR NEWS A.
BELGA	BRUSSELS	BELGIUM	A. TELEGRAPHIQUE BELGE
BERNAMA	KUALA LUMPUR	MALAYSIA	PERTTUBOHAN BERITA NACIONAL
BOLPREES	LA PAZ	BOLIVIA	A. NOTICIOSA BOLIVIANA DE PRENSA
BSS	BACCA	BANGLADESH	BANGLADESH SANGBAD SANGSTHA
BTA	SOFIA	BULGARIA	BULGARSKI TELEGRAFITSCHEKA A.
CANA	ST. MICHAEL	BARBADOS	CARIBBEAN NEWS A.
CETEKA	PRAGUE	CZECHOSLOVAKIA	CESKOSLOVENSKA TISKOVA KANCELAR
CNA	NICOSIA	CYPRUS	CYPRUS NEWS A.
CNA	TAIPEI	TAIWAN	CENTRAL NEWS A. INC.
COLPRESS	BOGOTA	COLUMBIA	SECRETARIA DE PRENSA COLPRESS
CP	BOGOTA	COLOMBIA	COLOMBIA PRESS
CP	TORONTO	CANADA	CANADIAN PRESS
DDP	BONN	W. GERMANY	DEUTSCHE DEPESCHEN-DIENST
DIPLO	PARIS	FRANCE	SERVICE DE PRESSE DIPLO
DPA	HAMBURG	W. GERMANY	DEUTSCHE PRESSE-A.
DYN	BUENOS AIRES	ARGENTINA	DIARIO Y NOTICIAS
EDAB	SAO PAULO	BRAZIL	ABRIL PRESS
EFE	MADRID	SPAIN	A. EFE
ENA	ADDIS ABEBA	ETHIOPIA	ETHIOPIAN NEWS A.
EPD	FRANKFURT	W. GERMANY	EVANGELISCHER PRESSE-DIENST
ESI	LIMA	PERU	ESI-ANDIAN NEWS A.
FANA	BEIRUT	LEBANON	FEDERATION A. DE PRESSE ARABES
FIDES	VATICAN CITY	VATICAN	A. INTERANTIONALE FIDES
GIS	GEORGETOWN	GUYANA	GUYANA INFORMATION SERVICES
GIS	PRETORIA	S. AFRICA	GENERAL INFORMATION SERVICE
GNA	ACCRA	GHANA	GHANA NEWS A.
GNA	MANAMA	BAHRAIN	GULF NEWS A.
HAPDONG	SEOUL	S. KOREA	HAPDONG NEWS A.
IDES	SAN SALVADOR	EL SALVADOR	IMAGENCES DE EL SALVADOR
IINA	JEDDAH	SAUDI ARABIA	INTERNATIONAL ISLAMIC NEWS A.
INA	BAGHDAD	IRAQ	IRAQI NEWS A.
INA	DUBLIN	IRELAND	IRISH NEWS A.
INFOIND	NEW DELHI	INDIA	INFORMATION SERVICE OF INDIA
INFORMEX	MEXICO CITY	MEXICO	A. NOTICIOSA INFORMACIONES MEX.
INNAC	CARACAS	VENEZUELA	INFORMACIONES NACIONALES
IPS	ROME	ITALY	INTER PRESS SERVICE
IRNA	TEHRAN	IRAN	ISLAMIC REPUBLIC NEWS A.
ITIM	JERUSALEM	ISRAEL	ITONJ ISRAEL MEUCHADIN
JANA	TRIPOLI	LIBYA	JAMAHIRIYAH ARAB NEWS A.
JBSA	RIO DE JANEIRO	BRAZIL	A. JORNAL DO BRASIL
JIJI	TOKYO	JAPAN	JIJI TSUSHIN SHA PRESS
JNA	AMMAN	JORDAN	JORDAN NEWS A.
JUEGOS	LATIN AMER.		
KCNA	PYONGYANG	N. KOREA	KOREAN CENTRAL NEWS A.
KNA	BONN	W. GERMANY	KATHOLISCHE NACHRICHTEN-A.
KNA	NAIROBI	KENYA	KENYA NEWS A.

KUNA	KUWAIT	KUWAIT	KUWWAIT NEWS A.
KYODO	TOKYO	JAPAN	KYODO TSUSHIN NEWS SERVICE
LANKA	COLOMBO	SRI LANKA	LANKA PUVATH NATIONAL NEWS A.
LATIN	BUENOS AIRES	ARGENTINA	A. LATINOAMERICANA DE INFORMACION
LINA	MONROVIA	LIBERIA	LIBERIAN NEWS A.
LPS	LONDON	ENGLAND	LONDON PRESS SERVICE
MANA	MZUZU	MALAWI	MALAWI NEWS A.
MANCHET	RIO DE JANEIRO	BRAZIL	MANCHETTE PRESS
MAP	RABAT	MOROCCO	MAHREB ARAB PRESSE
MENA	CAIRO	EGYPT	MIDDLE EAST NEWS A.
MFA	BERLIN	E. GERMANY	MINISTRY OF FOREIGN AFFAIRS
MONCAME	ULAN BATOR	MONGOLIA	MONGOL TSAHILGAAN MEDEENIY A.
MTI	BUDAPEST	HUNGARY	MAGYAR TAVIRATI IRODA
NA	BUENOS AIRES	ARGENTINA	NOTICIAS ARGENTINAS
NAB	RANGOON	BURMA	NEWS A. OF BURMA
NAN	LAGOS	NIGERIA	NEWS A. OF NIGERIA
NNA	BEIRUT	LEBANON	NATIONAL NEWS A.
NOTIMEX	MEXICO CITY	MEXICO	NOTICIAS MEXICANOS
NTB	OSLO	NORWAY	A. NORSK TELEGRAMBYRA
NZPA	WELLINGTON	NEW ZEALAND	NEW ZEALAND PRESS ASSOC.
OANA	KUALA LUMPUR	MALAYSIA	ASIA-PACIFIC NEWS NETWORK
ONA	BUENOS AIRES	ARGENTINA	A. ONA
OPECNA	VIENNA	AUSTRIA	OPEC NEWS A.
ORBE	SANTIAGO	CHILE	A. INFORMATIVAS ORBE CHILENA
PA	LONDON	ENGLAND	THE PRESS ASSOC.
PANA	DAKAR	SENEGAL	PAN AFRICAN NEWS A.
PANA	PANAMA CITY	PANAMA	A. PANAPRESS
PAP	WARSAW	POLAND	POLSKA A. PRASOWA
PET		JORDAN	JORDAN PRESS
PL	HAVANNA	CUBA	PRENSA LATINA
PM	HAVANA	CUBA	PRENSA MINREX
PNA	MANILA	PHILIPPINES	PHILIPPINES NEWS A.
PPI	KARACHI	PAKISTAN	PAKISTAN PRESS INTERNATIONAL
PPL	BONN	W. GERMANY	PRESSE-PLAN-FUNK
PTI	BOMBAY	INDIA	PRESS TRUST OF INDIA
QNA	DOHA	QATAR	QATAR NEWS A.
RB	COPENHAGEN	DENMARK	RITZAUS BUREAU
RDS	ROME	ITALY	ROME SPORT PRESS
REUTER	LONDON	ENGLAND	REUTERS NEWS A.
RSS	KATMANDU	NEPAL	RASTRIYAH SAMACHAR SAMITI
SABAA	SANA	N. YEMEN	SABAA NEWS A.
SALPRESS	SAN SALVADOR	EL SALVADOR	A. SALVADORIANA DE PRENSA
SAMACHAR	NEW DELHI	INDIA	HINDUSTAN SAMACHAR BHARATI
SANA	DAMASCUS	SYRIA	SYRIAN ARAB NEWS A.
SAP	MAHE	SEYCHELLES	SEYCHELLES A. PRESSE
SAPA	JOHANNESBURG	S. AFRICA	S. AFRICAN PRESS A.
SAPORITI	BUENOS AIRES	ARGENTINA	A. NOTICIOSA SAPORITI
SENDIP	QUITO	ECUADOR	A. NOTICIOSA SENDIP
SHIHATA	DAR ES SALAAM	TANZANIA	TANZANIAN NEWS A.
SID	DUSSELDORF	W. GERMANY	SPORT INFORMATIONSDIENST
SLBC	COLOMBO	SRI LANKA	SRI LANKA NEWS A.
SLNA	FREETOWN	SIERRA LEONE	SIERRA LEONE NEWS A.
SNA	PARAMARIBO	SURINAM	SURINAM NEWS A.

SNA	RIYADH	SAUDI ARABIA	SAUID NEWS A.
SONNA	MOGADISHU	SOMALIA	SOMALI NATIONAL NEWS A.
SOPECAM	YAOUNDE	CAMEROON	A. CAMEROUNAISE DE PRESSE
SPA	RIYADH	SAUDI ARABIA	SAUDI PRESS A.
SPA	SANTIAGO	CHILE	SERVICIOS DE PRENSA ASSOC.
SPK	PHNOM PENH	KAMPUCHEA	SERVICE DE PRESSE KAMPUCHEENNE
STT-FNB	HELSINKI	FINLAND	OY SUOMEN TIETOTOIMISTO-FINSKA
SUNA	KHARTOUM	SUDAN	SUDAN NEWS A.
TANJUG	BELGRADE	YUGOSLAVIA	TELEGRAFSKA A. NOVA JUGOSLAVIJA
TAP	TUNIS	TUNISIA	TUNIS-AFRIQUE PRESSE
TASS	MOSCOW	USSR	TELEGRAFNOIE A. SOVIETSKAVO SOIUZ
TELAM	BUENOS AIRES	ARGENTINA	A. DE NOTICIAS TELAM
TNNA	BANGKOK	THAILAND	THAI NATIONAL NEWS A.
TT	STOCKHOLM	SWEDEN	TIDNINGARNAS TELEGRAMBYRA
U.N.			UNITED NATIONS
UNEWS	KAMPALA	UGANDA	UGANDA NEWS A.
UNI	NEW DELHI	INDIA	UNITED NEWS OF INDIA
UPI	NEW YORK	USA	UNITED PRESS INTERNATIONAL
UPL	VIENTIANE	LAOS	AGENCE KHAOSAN THET LAO
USIA	NEW YORK	USA	U.S. INFORMATION A.
VENPRESS	CARACAS	VENEZUELA	A. VENEZUELA DE PRENSA
VNA	HANOI	N. VIETNAM	VIETNAMESE NEWS A. THONG TAN XA
VOA	U.S.A.		VOICE OF AMERICA (SEE USIA)
VWD	ESCHBORN	W. GERMANY	VEREINIGTE WIRTSCHAFTSDIENSTE GMB
WAFA	BEIRUT	LEBANON	A. DE PRESSE PALESTINIENNE
WAM	ABU ZABY	U.ARAB EMIR.	UNITED ARAB EMIRATES NEWS A.
WID	COLOGNE	W. GERMANY	WIRTSCHAFTS INFORMATIONSDIENST
XINHUA	PEKING	CHINA	NEW CHINA NEWS A.
YONHAP	SEOUL	S. KOREA	YONHAP NEWS A.
ZANA	LUSAKA	ZAMBIA	ZAMBIA NEWS A.
ZIANA	SALISBURY	ZIMBABWE	ZIMBABWE AFRICAN NEWS A.
ZID	BERLIN	E. GERMANY	ZENTRALER INFORMATIONSDIENST
REV:	29-MAY-84	NOTE:	A. IS "AGENCY" IN NATIVE SPELLING

From 8369813215457761480
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,95be65948e1c382d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-30 16:55:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 40
Message-ID: <9549@mgweed.UUCP>
Date: Wed, 30-May-84 19:55:52 EDT
Article-I.D.: mgweed.9549
Posted: Wed May 30 19:55:52 1984
Date-Received: Sat, 2-Jun-84 07:58:06 EDT
Organization: AT&T Consumer Products - Montgomery Illinois

Lines: 15

qst de k9eui
hr arrl bulletin nr 40 from arrl headquarters
newington ct may 29, 1984
to all radio amateurs bt

a third party agreement was signed on may 23 permitting amateurs of the united states and of belize, prefix v3, to exchange messages on behalf of persons other than the amateurs involved. while the text has not yet reached hq, the agreement is believed to contain the usual restrictions against business traffic and against messages sufficiently important to justify using the common carrier networks. the agreement becomes effective june 22 ar

From 329626901026151367
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,719ff1366938cf3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-30 16:56:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 19/20
Message-ID: <9550@mgweed.UUCP>
Date: Wed, 30-May-84 19:56:13 EDT
Article-I.D.: mgweed.9550
Posted: Wed May 30 19:56:13 1984
Date-Received: Sat, 2-Jun-84 07:58:40 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

qst de k9eui
hr crrl bulletin nr 19/20 from crrl headquarters
london ont may 29, 1984
to all radio amateurs bt

doc has hinted that they will soon be proposing a major restructuring of the various classes of licence available to canadian amateurs, and that a no code entry level licence, with privileges on 50 mhz and up, may be included.

the alberta amateur radio communications service recently signed a memorandum of understanding with the alberta disaster service, the provincial emergency organization ar

From 5483510801848038893
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5e015c7d2519cbb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-30 16:56:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 22
Message-ID: <9551@mgweed.UUCP>
Date: Wed, 30-May-84 19:56:48 EDT
Article-I.D.: mgweed.9551
Posted: Wed May 30 19:56:48 1984
Date-Received: Sat, 2-Jun-84 07:59:24 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 27

qst de k9eui
hr propagation forecast bulletin nr 22 from arrl headquarters
newington ct may 27, 1984
to all radio amateurs bt

the solar flux dropped below its level at the same point in the previous solar rotation on may 21. it fell steadily through the past week, reaching 117 on may 27. this was 66 points below the april 29 peak of 183. remnants of the large sunspot groups seen in late april are coming into view again, but they appear to have faded markedly in both number and size.

coming in early summer, this quieting down of exceptionally active solar areas will not affect hf propagation severely, but similar losses next fall would cause significant changes in the hf dx picture in the direction of lower muf and longer skip on our lower dx frequencies.

conditions were generally poor in the last week, mainly the result of frequent solar flares. propagation was improving at bulletin time, but this will not last. high latitude propagation will be no better than fair may 29 through june 2, but it will improve june 3 to 5. seasonal e layer activity will be common on 28 and 50 mhz, and the likelihood of 144 mhz e skip will improve during june ar

From 5839637560366401159
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f4120f0ec086c07e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-31 06:30:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!houxz!houxm!ihnp4!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: list of English language rtty press stations
Message-ID: <9556@mgweed.UUCP>
Date: Thu, 31-May-84 09:30:59 EDT
Article-I.D.: mgweed.9556
Posted: Thu May 31 09:30:59 1984
Date-Received: Sat, 2-Jun-84 10:47:12 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 330

The following is a list of frequencies where English language press stations can be found on HF. This list is from personal monitoring over the last 10 years and is not copied from any other lists.

These press stations all transmit in English, some all the time, others just occasionally.

The "SB" column indicates USB or LSB to be selected for normal copy. The apostrophe next to the L or U indicates that the station is still on the air as of the last 12 months. (I don't drop any from the list unless I am sure they are no longer on).

The "SH" column indicates the shift (Mark to Space frequency difference) used. Note that most use 425Hz shift.

The "BD" column indicates the baud rate, not words per minute. This is standard Baudot rtty code. Most foreign stations use "FIGS J" as the bell and "FIGS S" as apostrophe, which is the reverse of American machines.

The "M" in the "BD" column indicates that the station is a frequency division multiplex transmission, usually with 16 subcarriers. The shift is usually 85 Hz and many terminal units will not copy this. Receiving these fdm stations with the bfo off sounds like a buzz-saw. These stations are the best source of AP/UPI news, quite similar in format to the wire line press service sent to radio stations. The best way to tune these in is to select USB, tune onto the station from the high frequency side to the upper-most subcarrier. This subcarrier is usually the one carrying the news.

The "SVC" column shows the abbreviation of the news service.

The "CALL" column is obvious. Not all stations give identify with a call sign. Some use the same call sign on all frequencies at once, and some have calls for each frequency in use, but do not indicate which call is for which transmitter.

Not all stations of a particular service carry the same text. The VOA, for example carries as many as 4 different "programs" at the same

time. the ARF, however, has the same text on all 4 frequencies at once.

I have not given times of transmissions. That is too difficult to pin down accurately. Many stations are on continuously.

The frequencies given are within 2 kHz. Some stations do slide up or down a little, reverse their mark and space frequencies on occasion, and my receiver readout does not include the amount of bfo offset (about 1.5 kHz).

Later this year, when the list is updated, I will send the complete HF rtty list, including utility stations (weather, military, embassy, etc).

Happy tuning de K9EUI

FREQ	SB	SH	BD	SVC	CALL
2024	U	85	50M	AP/UPI	AFRTS
4045	U'	85	50M	AP/UPI	AFRTS
4515	U'	85	50M	AP/UPI	AFRTS
4620	U'	85	50M	AP/UPI	AFRTS
5435	L'	425	74	VOA	VOA
5460	L'	425	74	VOA	VOA
6834	U'	85	50M	AP/UPI	AFRTS
6853	U	425	50	REUTER	GPE26
6941	U'	170	74	VOA	VOA
6983	U'	425	50	AP	GIC26B
6992	U'	85	50M	AP/UPI	AFRTS
7442	U'	425	74	VOA	VOA
7478	U'	425	74	VOA	VOA
7534	U'	85	50M	AP/UPI	AFRTS
7784	U'	85	50M	AP/UPI	AFRTS
7970	L	425	50	PL	
8000	U'	85	50M	AP/UPI	AFRTS
8022	L'	425	50	AFP	
8029	U'	85	50M	AP/UPI	AFRTS
8148	U	85	50M	AP/UPI	AFRTS
8182	L	425	50	UPI	PDK68
8192	L'	425	50	PAP	SOI31
8506	U'	85	50M	AP/UPI	AFRTS
9050	U'	85	50M	AP/UPI	AFRTS

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9053  L' 425 50  ANSA    ISX90
9070  U  425 50  REUTER
9080  U  425 50  REUTER
9102  U  425 50  REUTER
9120  U' 425 50  REUTER  GPN29
9214  U'  85 50M AP/UPI  AFRTS
9259  U'  85 50M AP/UPI  AFRTS
9285  U'  85 50M AP/UPI  AFRTS
9349  U' 425 50  AP      GIC29B
9381  U'  85 50M AP/UPI  AFRTS
9397  L' 425 50  AFP     FTJ39A
9405  U'  85 50M AP/UPI  AFRTS
9855  L' 425 74  VOA     VOA
10134 U'  85 50M AP/UPI  AFRTS
10185 L  425 50  AFP     FPK8
10410 L' 425 74  VOA     VOA
10413 U'  85 50M AP/UPI  AFRTS
10460 U' 425 74  U.N.    4UZ
10543 L' 425 50  ADN
10598 U' 425 50  VNA     VNA25
10616 L' 425 50  AFP     FTK61
10648 U' 425 50  AP      GIC30B
10785 L' 425 50  ADN     Y2V43B
10879 U' 425 50  TASS
10880 U' 425 74  VOA     VOA
10882 L' 425 50  REUTER
10905 U'  85 50M AP/UPI  AFRTS
10958 U' 425 50  REUTER  GPE30B
10960 U' 425 50  REUTER  GPE30
10972 L' 425 74  VOA     VOA
10985 U  425 50  BAK     RCB53
11004 U'  85 50M AP/UPI  AFRTS
11048 U'  85 50M AP/UPI  AFRTS
11170 L' 425 50  KCNA
11539 U'  85 50M AP/UPI  AFRTS
11540 L  425 50  REUTER  GPE30B
11599 U'  85 50M AP/UPI  AFRTS
11622 U' 425 50  PAP     SOL36
12085 U  425 50  BAK     RCB55
12128 L' 425 50  ANSA    IRJ31
12185 U' 425 50  JANA
12224 L' 425 74  VOA     VOA
12280 U  425 50  AP      GBU32
13238 U   85 50M AP/UPI  AFRTS
13410 L  425 50  VNA     VNA16
13438 L' 425 50  DPA
13460 U' 425 50  VNA     VNA16
13487 L' 425 50  ANSA    ISX35
13490 U  425 50  BAK     RCG77
13493 U  425 50  TASS    RCG77
13504 L  425 50  KCNA    MVS19
13563 U' 850 50  CNA     3MA22
13580 L' 425 50  KCNA    MVS19
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13598 L  425 50  CETEKA
13612 U  425 50  REUTER
13623 U' 425 50  REUTER
13625 U' 425 50  REUTER
13626 U' 425 50  REUTER
13628 U  425 50  REUTER
13648 L' 425 50  CETEKA
13652 U' 425 50  MENA    SUA50
13676 U'  85 50M AP/UPI  AFRTS
13730 L' 425 50  AFP
13770 L' 425 74  VOA     VOA
13895 L' 425 50  ADN     Y2V47
13898 L  425 50  ANSA
13975 L' 425 50  ANSA    ISX19
13995 L' 425 74  VOA     VOA
14360 U  425 50  PAP
14366 U' 425 50  XINHUA
14387 U'  85 50M AP/UPI  AFRTS
14420 U'  85 50M AERO    AFRTS
14420 U'  85 50M AP/UPI  AFRTS
14469 U' 425 50  TASS
14490 U  425 50  TASS    RNK36
14513 U  425 50  REUTER  GPN34
14523 U  425 50  REUTER  GPN34
14525 L' 425 74  VOA     PRS
14547 L  425 50  KYODO   JAL44
14562 U'  85 50M AP/UPI  AFRTS
14565 U' 425 50  PL
14568 L  425 50  KCNA    HML61
14572 U' 425 50  JANA
14631 L' 425 50  ANSA
14638 L' 425 74  ARF     WFK54
14698 U' 425 50  TASS    REB24
14718 U' 425 50  KYODO
14720 U  425 50  BAK     RKB58
14762 U  425 50  GNA
14796 L' 425 50  AFP
14800 L  425 50  ADN     DMV24
14825 L' 425 50  ADN     Y2V25
14832 U  425 50  KUNA
14901 L' 425 50  PL      CLN450
14901 L' 425 50  TASS
14928 L' 425 50  PL      CLN452
14974 U' 425 50  AP      GBW34B
15462 L' 425 50  JANA
15480 L' 425 50  KCNA
15482 L' 425 50  APS
15506 L' 425 50  CETEKA
15693 L' 425 50  ANSA    ISX56
15694 L' 425 50  ANSA    ISX56
15743 L' 425 50  VNA     VNA5
15749 U'  85 74  VOA     VOA
15750 U'  85 74  VOA     VOA
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15865 U  425 50  BAK     RBK79
15865 U' 425 50  TASS    RRG26
15875 L' 425 74  VOA     VOA
15896 U'  85 50M AP/UPI  AFRTS
15898 L' 425 50  CETEKA
15930 U  425 50  BAK     RBI78
15977 L' 425 50  AFP
15980 L' 425 50  AFP
15992 U' 425 50  INDFO   WER26
15996 L' 425 50  DPA
16055 U  425 50  INDFO   WER45
16092 U'  85 50M AP/UPI  AFRTS
16108 L' 425 50  AFP
16133 U'  85 50M AP/UPI  AFRTS
16135 U' 425 50  XINHUA  BZP54
16149 U  425 50  NEWS
16223 U  850 50  CNA     3MA35
16247 U' 425 50  PL
16336 U' 425 50  PL
16342 U' 425 50  TANJUG  YZJ4
16347 U' 425 50  TASS
16348 U' 425 50  PL
16348 U' 425 50  TASS
16380 U' 425 50  PL
16384 U  425 50  VNA     VNA30
16403 L' 425 50  ADN     Y2V57
16415 L  425 50  ADN
17210 L  170 74  AFRTS
17210 U  425 50  XINHUA
17370 U  425 50  BAK     RBI73
17390 U  425 50  PL
17393 L' 425 50  PL      CLN565
17415 L  425 50  PL
17475 L  425 50  PL
17509 U  425 50  TASS    RFD53
17519 U  425 50  TASS
17525 L  425 50  CETEKA  OLV3
17545 L' 425 50  AFP
17552 U   85 50M AP/UPI  AFRTS
17555 U' 425 50  MAP     CNM73
17564 U'  85 50M AP/UPI  AFRTS
17565 U  425 50  AP      GIW37B
18005 L  425 50  PL      CLN603
18012 U  425 50  PL
18050 U' 425 50  TASS
18101 U' 425 50  REUTER  GPU30
18159 U  425 50  TASS    RTU47
18193 U' 425 50  PL      CLN603
18198 U' 425 50  PL
18205 U'  85 50M AP/UPI  AFRTS
18245 U   85 50M AP/UPI  AFRTS
18261 L' 425 50  KUNA
18272 U   85 74  VOA     VOA
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18292 U  425 50  PL
18307 L' 425 50  KUNA
18331 U  425 50  REUTER
18333 U' 425 50  REUTER  GPE38B
18335 U' 425 50  REUTER  GPE38
18384 U  425 50  TASS    REB24
18392 U'  85 50M AP/UPI  AFRTS
18434 U'  85 50M AP/UPI  AFRTS
18519 L'  85 50  AFP
18540 U  425 50  PL
18543 L' 425 74  ARF     WFK48
18547 U  425 50  AP      GIY38B
18671 L' 425 50  AFP     FTS67
18675 L  425 50  IINA
18682 U  425 50  REUTER
18700 L' 425 50  DPA
18787 U' 425 50  SUNA
18824 L' 425 50  ADN     Y2V38A
18835 U' 425 50  TASS    RWN74
18871 U  425 50  XINHUA
18988 L  425 50  CETEKA
19148 U  425 50  XINHUA  BAJ29
19162 U'  85 50M AP/UPI  AFRTS
19171 U' 425 50  MAP     CNM85
19280 L' 425 74  UN      4UZ
19395 U  425 50  JIJI
19525 L  425 50  CETEKA  OLD4
19565 L' 425 50  ANA
19818 U'  85 50M AP/UPI  AFRTS
19825 L  425 50  OANA
19865 U' 425 74  TANJUG  YZJ4
19975 U  425 50  LPS
19981 U  425 50  PARS
20008 U' 425 50  BAKTAR
20080 L' 425 50  AFP
20085 L' 425 50  ANSA    ISX20
20100 L  425 50  REUTER
20105 L' 425 50  DIPLO   HSF212
20110 L  425 50  AFP
20152 U   85 50M AP/UPI  AFRTS
20155 L' 425 50  KUNA
20204 U  425 50  TANJUG  YZJ
20312 L' 425 50  AFP
20386 U' 425 50  REUTER
20420 L' 425 50  ADN     Y2V20A
20421 L' 425 50  ADN
20430 L' 425 50  ANSA    IRS24
20483 L' 425 74  VOA     PRS
20494 U  425 50  PAP     SOV249
20506 U  425 50  KUNA
20559 U' 425 50  JANA
20625 U'  85 50M AP/UPI  AFRTS
20728 L' 425 50  ANSA    IRS27
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          20776 U' 425 50  INDINFO
          20804 U  425 50  KUNA
          20837 U   85 50M AP/UPI  AFRTS
          21784 L' 425 50  KUNA
          21787 U' 425 50  KUNA
          21801 L   85 74  VOA     VOA
          21839 U  425 50  TASS
          22760 U' 425 50  AP      DZK79
          22781 U  425 50  TASS    RDD73
          22782 L' 425 74  ARF     WFN62
          22790 U' 425 50  TASS
          22813 L' 425 50  ADN     Y2V29
          22885 L' 425 50  ADN
          22909 U  425 50  KUNA
          22918 U'  85 50M AP/UPI  AFRTS
          22955 L  425 50  ANSA
          23315 U'  85 50M AP/UPI  AFRTS
          23499 U'  85 50M AP/UPI  AFRTS
          23542 U' 425 50  REUTER  GLF43
          23751 L  425 50  AFP
          23770 L' 425 74  ARF     WFG93
          24029 U'  85 50M AP/UPI  AFRTS
          24089 U   85 50M AP/UPI  AFRTS
          24790 L  425 50  ANSA    ISX24
          25377 L' 425 50  ANSA    IRX23
```


```
From -72283762270681102
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e78daa1b9ba1efd6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-31 08:47:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: some Motion Picture Industry freqs
Message-ID: <2231@ihuxf.UUCP>
Date: Thu, 31-May-84 11:47:44 EDT
Article-I.D.: ihuxf.2231
Posted: Thu May 31 11:47:44 1984
Date-Received: Sat, 2-Jun-84 09:43:35 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 33
```


These frequencies are used by the motion picture industry, usually
during the filming of movies:

```
  KET404    152.8700   ABC aka/American Broadcasting freq, press (USA-
  KB27135   152.9900   Ambrose  World Video (USA-wide)
  KB27135   153.0200          "
```

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  KA79334   173.2250   Braddy,  Jim Photography, motion pict ind (USA-wide)
  KB22264   152.8700   Columbia Pictures Inc (USA-wide)
  KB22264   152.9000          "
  KB23583   152.9300   Crown Films (USA-wide)
  KA62762   152.9300   Guy, Don Productions (USA-wide)
  KA62762   152.9600          "
  KA62762   152.9900          "
  KA62762   153.0200          "
  KA90540   173.3250   Lucas Film Ltd,    motion pict ind
     (USA-wide)
  KA90540   173.3750          "
  KNEJ332   154.5150   Mini-Cam Product..., motion pic  ind, press, entertainment
(Rose
  KB37735   152.9000   Multimedia Program Productions,  motion pict ind
     (USA-wide)
  KB37735   152.9600          "
  KB37735   153.0200          "
  KB29464   152.8700   Paradise Video Inc, motion pict  ind (USA-wide)
  KB29464   152.9000          "
  KA67754   173.2250   Rah Lighting Systems (USA-wide)
  KA67754   173.3750          "
  KB29465   152.9300   Teddy Jack Inc,    motion pict ind
     (USA-wide)
  KB29465   152.9600          "
  KB23593   152.8700   THT Productions    Inc (USA-wide)
  KB23593   152.9000          "

--
================================================================================
Bob Parnass,  AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414


From -590143633005630370
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13372f,7c565a508f2c3101,start
X-Google-Attributes: gid13372f,public
X-Google-Thread: 151e61,7c565a508f2c3101,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-31 10:44:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio,net.space
Subject: AMSAT article in L-5 News
Message-ID: <51@mouton.UUCP>
Date: Thu, 31-May-84 13:44:16 EDT
Article-I.D.: mouton.51
Posted: Thu May 31 13:44:16 1984
Date-Received: Sat, 2-Jun-84 10:02:20 EDT
Organization: Bell Communications Research, Inc
Lines: 7
```

Be sure to see the article "Low Cost Space Projects: Part 1" in the April 1984 issue of the L-5 News on page 3. This is an excellent discussion of AMSAT's activities in satellite construction. Is the author (Bill Ganoe, N7EAB) out there somewhere? I'd like to personally thank him.

73, Phil Karn, KA9Q
Asst VP Engineering, AMSAT

From -2441696808197542959
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f8ca77df79d99d9c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-31 12:25:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: Keplerian Orbital Elements
Message-ID: <53@mouton.UUCP>
Date: Thu, 31-May-84 15:25:24 EDT
Article-I.D.: mouton.53
Posted: Thu May 31 15:25:24 1984
Date-Received: Sat, 2-Jun-84 10:10:47 EDT
Organization: Bell Communications Research, Inc
Lines: 203

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84148.40336830
   Sun May 27 09:40:51.21 1984 UTC
Element set: 644
Inclination: 97.5903 deg
RA of node: 122.6521 deg
Eccentricity: 0.0003084
Arg of perigee: 149.0202 deg
Mean anomaly: 211.1146 deg
Mean motion: 15.25760066 rev/day
Decay rate: 5.097e-05 rev/day^2
Epoch rev: 14637
Semi major axis: 6863.607 km
Anom period: 94.379191 min
Apogee: 493.146 km
Perigee: 488.912 km
Beacon: 145.8250 mhz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84146.88369060
   Fri May 25 21:12:30.867 1984 UTC
Element set: 103
Inclination: 25.6202 deg

```
RA of node:       197.5898 deg
Eccentricity:    0.6089713
Arg of perigee:   274.5131 deg
Mean anomaly:      22.7147 deg
Mean motion:    2.05844694 rev/day
Decay rate:       1.21e-06 rev/day^2
Epoch rev:             715
Semi major axis: 26106.549 km
Anom period:    699.556531 min
Apogee:          35630.517 km
Perigee:          3834.239 km
Beacon:           145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84148.10356205
   Sun May 27 02:29:07.761 1984 UTC
Element set:     29
Inclination:       98.2421 deg
RA of node:       210.3619 deg
Eccentricity:    0.0014072
Arg of perigee:   358.1468 deg
Mean anomaly:       1.9676 deg
Mean motion:   14.61867821 rev/day
Decay rate:       2.58e-06 rev/day^2
Epoch rev:            1262
Semi major axis:  7062.366 km
Anom period:     98.504118 min
Apogee:            694.181 km
Perigee:           674.305 km
Beacon:           145.8250 mhz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84146.15537273
   Fri May 25 03:43:44.203 1984 UTC
Element set:     95
Inclination:       82.9606 deg
RA of node:       145.8645 deg
Eccentricity:    0.0060058
Arg of perigee:    36.9567 deg
Mean anomaly:     323.5616 deg
Mean motion:   12.15586627 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10812
Semi major axis:  7987.332 km
Anom period:    118.461323 min
Apogee:           1664.771 km
Perigee:          1568.830 km

Satellite: rs-4
Catalog number: 13000
Epoch time:      84148.16656589
```

```
   Sun May 27 03:59:51.292 1984 UTC
Element set:     198
Inclination:       82.9577 deg
RA of node:       153.2989 deg
Eccentricity:    0.0019552
Arg of perigee:   110.8283 deg
Mean anomaly:     249.4829 deg
Mean motion:   12.06666756 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10755
Semi major axis:  8026.673 km
Anom period:    119.337008 min
Apogee:           1682.622 km
Perigee:          1651.235 km

Satellite: rs-5
Catalog number: 12999
Epoch time:      84147.12198177
   Sat May 26 02:55:39.224 1984 UTC
Element set:     169
Inclination:       82.9529 deg
RA of node:       155.2656 deg
Eccentricity:    0.0011108
Arg of perigee:   137.6944 deg
Mean anomaly:     222.4971 deg
Mean motion:   12.05045307 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10728
Semi major axis:  8033.876 km
Anom period:    119.497582 min
Apogee:           1674.198 km
Perigee:          1656.350 km

Satellite: rs-6
Catalog number: 13002
Epoch time:      84144.42449493
   Wed May 23 10:11:16.361 1984 UTC
Element set:     81
Inclination:       82.9626 deg
RA of node:       148.7570 deg
Eccentricity:    0.0051579
Arg of perigee:    58.5039 deg
Mean anomaly:     302.1055 deg
Mean motion:   12.13561845 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10771
Semi major axis:  7996.220 km
Anom period:    118.658971 min
Apogee:           1674.634 km
Perigee:          1592.146 km

Satellite: rs-7
Catalog number: 13001
```

```
Epoch time:      84140.47530240
   Sat May 19 11:24:26.127 1984 UTC
Element set:     156
Inclination:       82.9617 deg
RA of node:       155.4448 deg
Eccentricity:    0.0023683
Arg of perigee:    89.4850 deg
Mean anomaly:     270.8942 deg
Mean motion:   12.08681858 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10680
Semi major axis:  8017.743 km
Anom period:    119.138050 min
Apogee:           1679.649 km
Perigee:          1641.672 km

Satellite: rs-8
Catalog number: 12998
Epoch time:      84145.27286685
   Thu May 24 06:32:55.695 1984 UTC
Element set:     274
Inclination:       82.9621 deg
RA of node:       158.1641 deg
Eccentricity:    0.0018655
Arg of perigee:   197.1727 deg
Mean anomaly:     162.8721 deg
Mean motion:   12.02946019 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10687
Semi major axis:  8043.226 km
Anom period:    119.706120 min
Apogee:           1681.922 km
Perigee:          1651.913 km

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84147.92021818
   Sat May 26 22:05:06.850 1984 UTC
Element set:     262
Inclination:       99.0473 deg
RA of node:       119.0749 deg
Eccentricity:    0.0013213
Arg of perigee:   151.5200 deg
Mean anomaly:     208.6694 deg
Mean motion:   14.13040614 rev/day
Decay rate:       2.28e-06 rev/day^2
Epoch rev:           15085
Semi major axis:  7224.306 km
Anom period:    101.907899 min
Apogee:            860.449 km
Perigee:           841.358 km
Beacon:           137.6200 mhz
```

```
Satellite: noaa-8
Catalog number: 13923
Epoch time:      84140.35138654
   Sat May 19 08:25:59.797 1984 UTC
Element set:     82
Inclination:       98.7060 deg
RA of node:       171.7194 deg
Eccentricity:    0.0017661
Arg of perigee:   134.6623 deg
Mean anomaly:     225.6003 deg
Mean motion:   14.22409117 rev/day
Decay rate:        1.2e-06 rev/day^2
Epoch rev:            5937
Semi major axis:  7192.509 km
Anom period:    101.236696 min
Apogee:            837.637 km
Perigee:           812.232 km
Beacon:           137.5000 mhz


From 5882748972094687007
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e2771e9d1d066676,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-01 05:18:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mhuxv.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!mhuxv!wmb
From: wmb@mhuxv.UUCP (W. M. Brelsford)
Newsgroups: net.ham-radio
Subject: Hamfest in Central New Jersey
Message-ID: <118@mhuxv.UUCP>
Date: Fri, 1-Jun-84 08:18:11 EDT
Article-I.D.: mhuxv.118
Posted: Fri Jun  1 08:18:11 1984
Date-Received: Sat, 2-Jun-84 12:19:39 EDT
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 11

The Raritan Valley Radio Club (W2QW) hamfest / flea market will
be held Saturday, June 16, at Columbia Park in Dunellen NJ.
Talk-in on 146.025/.625 and 146.52.  Contact me for further
information and advance-sale tickets.

Bill Brelsford  K2DI
AT&T Communications
mhuxv!wmb or atux02!wmb
201 221-7713
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From -6931949468845192930
```

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6a346b8d76842e86,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-03 16:55:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ucbvax.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!drutx!houxe!hogpc!houti!ariel!vax135!
cornell!uw-beaver!tektronix!hplabs!sdcrdcf!sdcsvax!dcdwest!ittvax!decvax!ucbvax!
medin
From: medin@ucbvax.UUCP
Newsgroups: net.ham-radio
Subject: 2M Handhelds
Message-ID: <958@ucbvax.UUCP>
Date: Sun, 3-Jun-84 19:55:35 EDT
Article-I.D.: ucbvax.958
Posted: Sun Jun 3 19:55:35 1984
Date-Received: Wed, 6-Jun-84 07:08:37 EDT
Organization: U.C. Berkeley
Lines: 17

I'm going to be buying a 2M hand-held within the month. I am
seriously considering a Santec ST-142, Lew McCoy reviewed it
in this month's CQ, and had nothing but praise for it. I am
wondering if any of you out there have any experience with one?
Also, would it be better to get a Icom IC-02 instead, or even
a Kenwood or Yaesu model? The Santec seems to have the most
features at a lower price than anyone else. Also, anyone
know where the best place to buy one via mail order is?

Thanks,
Milo Medin
KB6ADT
...!ucbvax!medin.UUCP
medin@ucbarpa.ARPA

From -1331179262933780301
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8562ae27837652fd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-04 07:27:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site bpa.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!floyd!cmcl2!
seismo!hao!hplabs!sdcrdcf!sdcsvax!akgua!psuvax!burdvax!bpa!espo
From: espo@bpa.UUCP (Bob Esposito)
Newsgroups: net.ham-radio
Subject: Aircraft Freq's
Message-ID: <237@bpa.UUCP>
Date: Mon, 4-Jun-84 10:27:40 EDT

Article-I.D.: bpa.237
Posted: Mon Jun 4 10:27:40 1984
Date-Received: Thu, 7-Jun-84 19:29:15 EDT
Organization: Wayne, Pennsylvania
Lines: 12

Does anyone have a listing of the freq's used by the major airlines for air-to-ground communications for their respective companies??

Also, I would appreciate ANY freq's given (towers, control, approach, departure, ground, etc).

Thanks in Advance

Bob Esposito (N3CTA).... bpa!espo

From 235349970656305298
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13372f,dfe0c954437cb289,start
X-Google-Attributes: gid13372f,public
X-Google-Thread: 151e61,dfe0c954437cb289,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-04 10:52:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio,net.space
Subject: Volunteering for AMSAT
Message-ID: <60@mouton.UUCP>
Date: Mon, 4-Jun-84 13:52:33 EDT
Article-I.D.: mouton.60
Posted: Mon Jun 4 13:52:33 1984
Date-Received: Wed, 6-Jun-84 04:34:21 EDT
Organization: Bell Communications Research, Inc
Lines: 23

We in AMSAT have recently been revamping the way we handle offers of volunteer help. Up 'till now, it has been a very informal thing, but we are coming to realize that a lot of excellent talent has slipped through the cracks because we haven't provided a central point of contact for initial inquiries.

Dick Jansson, WD4FAB, has taken on the job of coordinating volunteer services. He and I have drafted a form letter which he will send to anyone who expresses interest. This letter contains a list of the various project areas and the AMSAT people who are active in them. If you are interested in possibly helping out, please drop Dick a line. His address is:

Dick Jansson, WD4FAB
1130 Willowbrook Trail
Maitland, FL 32751

You can also reach him through the Washington PO Box address, but it takes
longer since the mail has to be forwarded.

Thanks & 73,
Phil Karn, KA9Q
Asst VP Engineering, AMSAT

From 5480882673778204175
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9342422f77850eff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-04 12:13:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site hou3c.UUCP
Path: utzoo!watmath!clyde!burl!hou3c!rs
From: rs@hou3c.UUCP (rs)
Newsgroups: net.ham-radio
Subject: Does anyone have a schematic for a HEATH SB-100?
Message-ID: <607@hou3c.UUCP>
Date: Mon, 4-Jun-84 15:13:21 EDT
Article-I.D.: hou3c.607
Posted: Mon Jun 4 15:13:21 1984
Date-Received: Wed, 6-Jun-84 04:29:41 EDT
References: <263@BBNA.UUCP> <16400002@acf4.UUCP>
Organization: Bell Labs, Holmdel, NJ
Lines: 11

< >

I am looking to obtain a schematic + owner's manual for
a recently acquired Heath SB-100 transceiver. A copy or
information on where to obtain one would be much appreciated.

Thanks,
R. Switzer KA2CZU
AT&T Bell Labs
...!houxf!hou3c

From -1233413633933260919
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,838040ddf92ff4fe,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-04 12:36:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!floyd!cmcl2!
seismo!hao!hplabs!hpda!fortune!dsd!dna

From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Sao Paulo Packets
Message-ID: <305@dsd.UUCP>
Date: Mon, 4-Jun-84 15:36:10 EDT
Article-I.D.: dsd.305
Posted: Mon Jun 4 15:36:10 1984
Date-Received: Wed, 6-Jun-84 07:26:17 EDT
Lines: 14

To: All packet stations
From: Hank Magnuski, KA6M
Subject: Sao Paulo Packets

Am pleased to report the reception of packet radio transmissions from
Sao Paulo, Brazil. On June 2nd, at approximately 0800 UTC, PY2BJO,
"Junior", was heard testing on the Oscar 10 digital channel. Using
a TAPR TNC, his signal was heard well, but I was unable to connect as
he was having difficulties tuning in and I think his receive margin was
small.

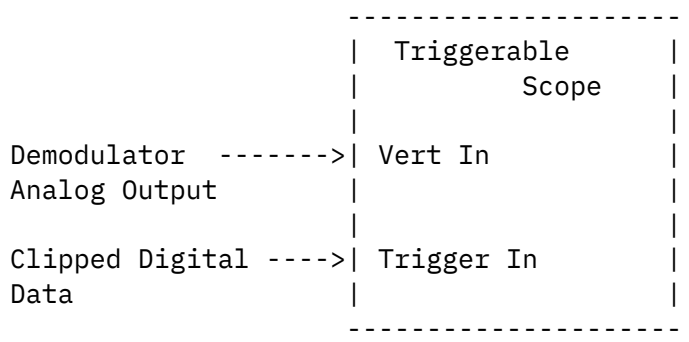
This is the first South American packet station that I am aware of.

73, Hank

From 772057468626886900
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2d47ad358888817d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-04 12:37:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!floyd!cmcl2!
seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Eye Patterns for Packet Radio Testing
Message-ID: <306@dsd.UUCP>
Date: Mon, 4-Jun-84 15:37:29 EDT
Article-I.D.: dsd.306
Posted: Mon Jun 4 15:37:29 1984
Date-Received: Wed, 6-Jun-84 07:26:30 EDT
Lines: 110

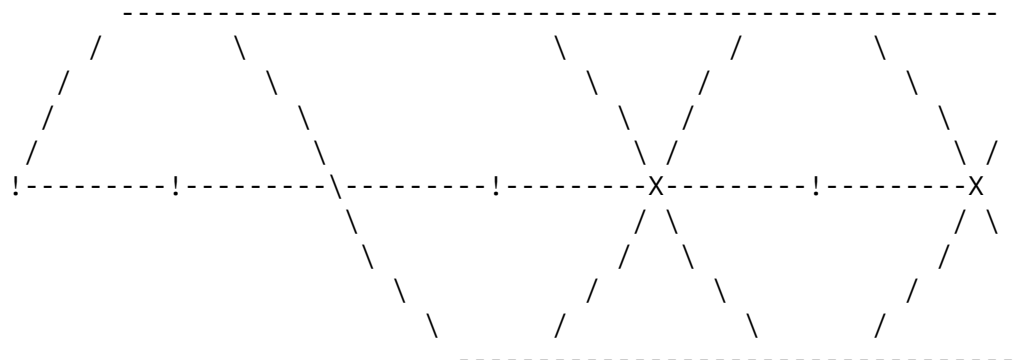
To: All packet stations
From: Tom Clark, W3IWI
Subject: Eye Patterns for packet radio testing
Date: 03 June 1984

I have been asked to explain a little more about eye-patterns for
testing the performance of demodulators. In my original note on the
FT726 performance I recommended the following setup:



The analog output from the demod should be taken off at the last point in the demod that the signal is still analog -- i.e. just before the clipper that converts it into digital format. On the TAPR TNC, this analog output is available on the XR2211 on pin 8. Similar points exist in commercial demods. The digital data should be the digital signal you are actually going to feed into your UART or your HDLC chip. On the TAPR TNC, use the pull-up resistor on pin 27 of the 1933 as a tap. (I am not referencing the test points and/or header pins on TAPR since the Beta and Kit versions have different designators).

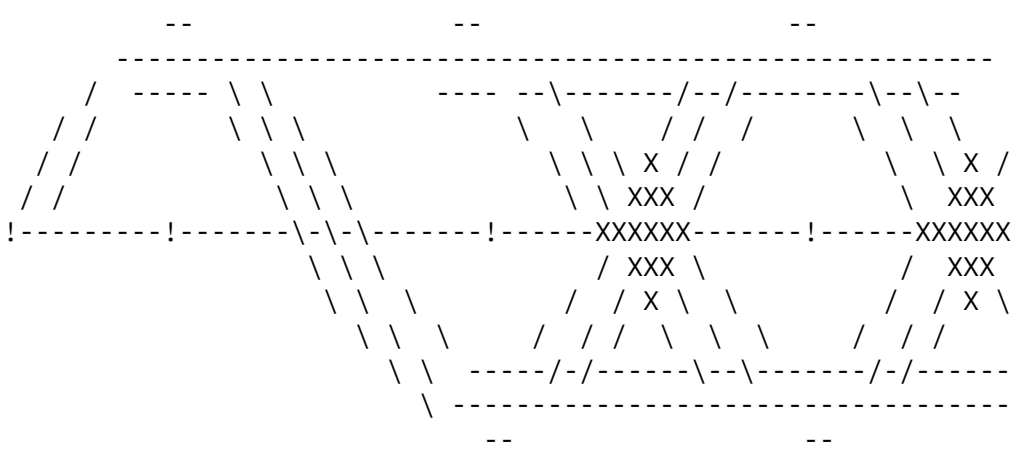
The decision on whether the analog signal is a 0 or a 1 is made in some sort of clipper thresholding device. This is in the 2211 on TAPR, it is often done in a 741 or 339 in other modems. This clipper is pretty dumb -- it only knows up and down. To make its life easiest, it wants to see a clean analog signal. The eye-pattern is the easiest way to test what type of signal it is being given. The following is a "perfect" eye-pattern (pardon the computer graphics!), assuming you are triggering on the + going edge :



The "eyes" are open, zero crossings are clean and repeatable. The first "eye" (or loop) has only a single loop since you triggered on the + going edge. For all succesive loops, the typical data stream as some cases when adjacent data bits are the same and some cases when they are different. When adjusting you modem, note that the DC level represented by the vertical position on the scope can be used to make the zero-crossings (denoted by X's) occur at the same voltage level as the clipper's 0/1 threshold. This is the best way to set a modem on

frequency. This is the trick I use for tuning in FSK packets on AO-10.

Now let us look at a poorer eye-pattern. Bad conditions include jitter in the zero-crossing times, un-equal amplitudes for the case of two adjacent data bits being the same vs. different, etc. The following might represent a very marginal demod:



Look for "droop" in the horizontal lines (horizontal lines connecting two "eyes" occur because of identical adjacent bits); such droop could be indicative of low-frequency response inadequacies in the demod. Un-equal amplitudes between single loops and multi-bit loops is usually a sign of amplitude imbalance between low and high tones or reflects bad predection filter values. Jitter in zero-crossing times combined with large amplitude excursions is often a sign of bad group-delay equal-ization in the modem or the radio. You also want to see "open eyes" with no zero crossing at the mid-bit time. Of course, on weak signals with lots of noise, you can expect to see more jitter. When you start seeing transitions in the middle of the eyes, the signal is too weak to get a good bit error rate.

I'd suggest that those of you trying these tests first look at the strong packet signals on a local FM channel. They should approach the "perfect" picture above. As the signal gets noisier, you will see the Bit Error Rate performance degrade.

When I reported on the FT726 originally, the eye patterns I observed were even worse than that depicted above -- in fact the eyes were not "open" and the pattern was not discernable. With the new filter I reported on about a week ago, the eye-patterns are acceptably "open". It is hard to describe this behavior quantitatively, but after you have looked at a few cases, it becomes obvious.

Hope this treatise helps. Keep me informed on what you find. 73, Tom

From 301484625293577756
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6f6fabfe13e8eee3,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-04 12:38:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!floyd!cmcl2!
seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Amsat/APL Packet Repeater W3VD
Message-ID: <307@dsd.UUCP>
Date: Mon, 4-Jun-84 15:38:58 EDT
Article-I.D.: dsd.307
Posted: Mon Jun 4 15:38:58 1984
Date-Received: Wed, 6-Jun-84 07:26:46 EDT
Lines: 3

For info -- the AMSAT/APL packet repeater in Maryland is now signing the call W3VD-5 on 145.01 running 25 watts. Reports from MD/DC users indicate very good coverage over a 30-50 mile radius.

From 5734705546635839987
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab09621dc561830d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-04 12:40:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!floyd!cmcl2!
seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Tom Clark QSY's
Message-ID: <308@dsd.UUCP>
Date: Mon, 4-Jun-84 15:40:13 EDT
Article-I.D.: dsd.308
Posted: Mon Jun 4 15:40:13 1984
Date-Received: Wed, 6-Jun-84 07:26:58 EDT
Lines: 36

For about 6 weeks beginning June 12, I must be in Fairbanks, AK on business. For those of you curious about why -- at NASA I direct the effort withing the Crustal Dynamics Project which inter-connects radio telescopes aroud the world using the technique known as Very Long Base-line interferometry. With VLBI, we are able to measure the distances between stations separated thousands of km to accuracies of 1-2 cm -- making this the most precise surveying technique available. This summer we are adding four new base stations to our network to measure the motions of the Pacific plate -- thought to be about 8 cm/yr. The new stations are in Alaska, Hawaii, Kwajalein and Canada. In addition, we will have two mobile VLBI stations running around Alaska and Canada to measure regional deformations in areas where earthquakes are likely to happen soon. Since Fairbanks is the "hub" of this global program for the summer, it is necessary for me to be there to direct a rather massive technical and logistics operation.

During the time I am in Fairbanks, I will be house-sitting for KL7GNG who lives only a few miles from the 26 meter antenna we will be using. Tom Walyer has an excellent station equipped for AO-10 on both mode-B and -L, for packets, and for HF. So expect to hear me on the air. In addition, the KL7RA QTH reknown for its contest performance on HF is on the site of the Fairbanks station, so I may be operating from there too.

Elizabeth plans to join me for about one week near the end of my sojurn. I should return home about July 22, too late for the ARRL national convention, but just in time to zip off to the Central States VHF Society meeting in Cedar Rapids.

During the time I am away, I will also be in contact with y'all on the air and via TeleMail. However, my remoteness and a very busy schedule will make it very difficult to attend to the day-to-day business of AMSAT. Therefore, I am asking AMSAT's second-in-command, Vern Riportella (WA2LQQ), to oversee the operations of the organization during my absence. I am sure that you will give Rip your full cooperation.

73,Tom

From -4776467636001444829
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,20ba8f0109e7e135,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-04 18:09:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mouton.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!ihnp4!mhuxl!ulysses!allegra!mouton!karn
From: karn@mouton.UUCP
Newsgroups: net.ham-radio
Subject: HT-to-HT QSO Via Oscar-10
Message-ID: <63@mouton.UUCP>
Date: Mon, 4-Jun-84 21:09:43 EDT
Article-I.D.: mouton.63
Posted: Mon Jun 4 21:09:43 1984
Date-Received: Wed, 6-Jun-84 05:30:58 EDT
Organization: Bell Communications Research, Inc
Lines: 54

First HT-to-HT QSO Scored Thru OSCAR 10

An important milestone was reached May 28th when amateurs in West Virginia and California apparently became the first ever to QSO using handheld transceivers (HT) through an amateur radio satellite. KD6DDQ in Los Angeles and KD8GL in Wheeling, WV, each using only a 2-m FM HT first established contact at 1458 UTC. The historic event was facilitated by so-called "gateway" stations which served to connect local terrestrial repeater systems to the high-flying AMSAT OSCAR 10 (AO-10) satellite. Although in the past CW QSOs have been reported where one of the stations keyed the transmit

switch of his HT for a crude key, it is believed the May 28th QSO comprised the first occasion on which both QSO participants used HTs.

In West Virginia, KD8GL used his 2-m HT to talk through the Triple States Radio Amateur Club repeater, KD8GL/R. Signals from the repeater were picked up by the local gateway station WB8ZTV which converted them from FM to SSB while converting them to the 435 MHz OSCAR 10 uplink frequency. Signals were then beamed by WB8ZTV to OSCAR 10 positioned high over the Western Hemisphere.

Meanwhile in L.A., gateway station N6JFD tuned to the AO-10 downlink and converted the SSB back to FM and forwarded the signals to the WA6OBT repeater to which KD6DDQ was tuned. The reverse path to Wheeling was the mirror image of this path. Both repeaters and gateway stations operated full duplex and the QSOs were two-way. Signals in both directions were excellent according to monitors.

Later, the W7LWE repeater/gateway in Lake Havasu City, AZ joined in the fun. This made it the first three-way gateway operation and effectively linked amateurs in three states using OSCAR 10's trunking capabilities.

According to an AMSAT official, "This historic event marks the vanguard of easy-access satellite communications for utility use by minimally equipped amateurs."

Particpating in the May 28th linkups also were KR3V, K8AN, K2QWD, N6IAW, W7MCF and numerous others.

Further dramatizing the significance of gateway operations, an event on the preceding day, May 27, vividly showed another aspect of the new, long duration coverage OSCAR: endurance. On May 27th the Wheeling gateway was linked to expert satellite station ZL1AOX in Christchurch, New Zealand for three hours continuously.

AMSAT is suggesting that demonstrations of satellite communications by using gateway interconnects may be just the vehicle to exhibit the new OSCAR 10 capabilities while reducing new-user costs to zero. According to AMSAT's WA2LQQ, "Nothing can beat the flexibility of your own OSCAR station, but for those just starting out, this seems a good way to taste the wine before one buys the bottle!"

A free information kit is available from AMSAT (for an SASE) at P.O. Box 27, Dept GW, Washington D.C. 20044.

From -9107313098481201784
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ea594cbf2877c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-05 03:33:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!floyd!cmcl2!
seismo!hao!hplabs!hpda!fortune!dsd!dna

From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Oscar 10 Voice Gateway Operation
Message-ID: <309@dsd.UUCP>
Date: Tue, 5-Jun-84 06:33:22 EDT
Article-I.D.: dsd.309
Posted: Tue Jun 5 06:33:22 1984
Date-Received: Thu, 7-Jun-84 08:01:16 EDT
Lines: 63

Posted: Mon Jun 4, 1984   5:52 PM PDT   Msg: EGIE-1808-8116
From: VRIP
To: AMSAT, ARRL
Subj: Gateway Precedent
The following is offered as a symbol of a potentially fertile area.

First HT-to-HT QSO Scored Thru OSCAR 10

An important milestone was reached May 28th when amateurs in West Virginia and California apparently became the first ever to QSO using handheld transceivers (HT) through an amateur radio satellite. KD6DDQ in Los Angeles and KD8GL in Wheeling, WV, each using only a 2-m FM HT first established contact at 1458 UTC. The historic event was facilitated by so-called "gateway" stations which served to connect local terrestrial repeater systems to the high-flying AMSAT OSCAR 10 (AO-10) satellite. Although in the past CW QSOs have been reported where one of the stations keyed the transmit switch of his HT for a crude key, it is believed the May 28th QSO comprised the first occasion on which both QSO participants used HTs.

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From -4903519834709477818
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 16082c,2c675ab5c66d3e5d,start
X-Google-Attributes: gid16082c,public
X-Google-Thread: 151e61,2c675ab5c66d3e5d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-05 05:51:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-tgr.ARPA
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxz!vax135!floyd!cmcl2!
seismo!brl-tgr!wmartin
From: wmartin@brl-tgr.ARPA (Will Martin)
Newsgroups: net.ham-radio,net.mag
Subject: Free British Electronics Magazine Sample
Message-ID: <3020@brl-tgr.ARPA>
Date: Tue, 5-Jun-84 08:51:12 EDT
Article-I.D.: brl-tgr.3020
Posted: Tue Jun 5 08:51:12 1984
Date-Received: Thu, 7-Jun-84 07:43:40 EDT
Organization: Ballistics Research Lab
Lines: 19

Heard the following advertisement, which you might be interested in, on Radio Earth, the shortwave service which is currently broadcasting using the facilities of WRNO shortwave, New Orleans:

The American distributors of the British electronics magazine, PRACTICAL WIRELESS, are offering a free sample copy along with subscription information. To get a sample, write the address below and mention the advertisement on Radio Earth:

Practical Wireless
IPC Magazines
205 E 42nd St.
New York, NY 10017

-- Will Martin

PS -- I've been hearing ads for this magazine on Radio Earth for a while now, but this is the first I've noted that made a free sample offer. If this is old hat, please forgive... WM

From 5836258034609441589
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,710c05a1f735e046,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-06-05 05:58:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!mgnetp!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 42
Message-ID: <9660@mgweed.UUCP>
Date: Tue, 5-Jun-84 08:58:16 EDT
Article-I.D.: mgweed.9660
Posted: Tue Jun 5 08:58:16 1984
Date-Received: Wed, 6-Jun-84 06:06:04 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

qst de k9eui
hr bulletin nr 42   from arrl headquarters   newington ct
may 31 1984   to all radio amateurs bt

on behalf of the iaru, we are very pleased to announce the adoption, effective today, of the new iaru constitution and by-laws as proposed by its administrative council. 106 of the 119 member societies participated in the voting. effective immediately, arrl has a new role as international secretariat of the iaru. officers of the iaru remain the same. ar

From 8937649265966515584
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5c2c4cd3450f6bf2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-04 14:16:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)

Newsgroups: net.ham-radio
Subject: Page 41 April QST
Message-ID: <2381@allegra.UUCP>
Date: Wed, 4-Apr-84 17:16:50 EST
Article-I.D.: allegra.2381
Posted: Wed Apr 4 17:16:50 1984
Date-Received: Thu, 5-Apr-84 02:21:56 EST
Organization: Bell Communications Research, Inc
Lines: 8

Everyone should be sure to see the article on page 41 of the new (April)
QST, entitled "Artificial Radio Aurora: The Sequel". The subtitle reads:
"Based on previous experiments, the authors deduced, contacts should be
possible via the RF energy produced from the massive competition
to work the Space Shuttle Columbia. Despite early setbacks, their
results exceeded their wildest expectations."

73, Phil

From -3151803184812033536
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15e263,acdb94790197e486,start
X-Google-Attributes: gid15e263,public
X-Google-Thread: 151e61,acdb94790197e486,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-04 19:38:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.08 10/3/83; site psuvax.UUCP
Path: utzoo!watmath!clyde!akgua!sb1!sb6!bpa!burdvax!psuvax!mancuso
From: mancuso@psuvax.UUCP
Newsgroups: net.ham-radio,net.micro.cpm
Subject: Xerox 820 REVEALED#4--Video fix!
Message-ID: <952@psuvax.UUCP>
Date: Wed, 4-Apr-84 22:38:35 EST
Article-I.D.: psuvax.952
Posted: Wed Apr 4 22:38:35 1984
Date-Received: Sat, 7-Apr-84 03:41:54 EST
Organization: Pennsylvania State Univ.
Lines: 28

If you have gotten the power connected to your 820 and hooked up
a video monitor to the HS VS and VO pins on J7, you may have no-
ticed that only the left half of the screen shows, and the right
half seems to run off the right edge of the screen. You are not
alone. I got my board up a couple of days ago, and I thought
that the problem was caused by the circuitry that I was using to
get composite video. After a couple of hours of dedicated (?)
work with an oscilliscope here at the computer lab, ace video
wizard Ralph Droms found that the horizontal sync signal that is
available at J7 was much too long. Somewhere between J7 and where
it is generated, the signal gets perverted, and it kills half of
the screen.   Ralph located a more reasonable signal to use for

the HS, and it works beautifully. To use this new and improved HS signal, forget about pin 4 on J7 and use pin 8 on U34 instead.

We found this error on both of our boards, so there is a good chance that it is on all of them. Please let me know if this is the case.

Happy Video!

Overall there is a smell of fried onions. (fnord)

:+: Pat Mancuso
:+: Penn State University
Usenet: :+: ...!psuvax!mancuso
Bitnet: :+: mancuso@psuvax1

From 8809864486978292851
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 12f221,9fa5f114753648b0,start
X-Google-Attributes: gid12f221,public
X-Google-Thread: 151e61,9fa5f114753648b0,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 142210,9fa5f114753648b0,start
X-Google-Attributes: gid142210,public
X-Google-Thread: 129c11,9fa5f114753648b0,start
X-Google-Attributes: gid129c11,public
X-Google-ArrivalTime: 1984-04-05 08:49:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site druxv.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!drutx!druxv!dlkj
From: dlkj@druxv.UUCP (Karmann)
Newsgroups: dr.misc,net.misc,net.micro,net.ham-radio
Subject: Mag. Card Equip. Suppliers
Message-ID: <1408@druxv.UUCP>
Date: Thu, 5-Apr-84 11:49:35 EST
Article-I.D.: druxv.1408
Posted: Thu Apr 5 11:49:35 1984
Date-Received: Sat, 7-Apr-84 02:56:13 EST
Organization: AT&T Information Systems Laboratories, Denver
Lines: 19

I am looking for the names of suppliers or manufacturers of magnetic card (plastic cards like credit cards with a magnetic strip on back) equipment. This equipment includes the basic card readers and the card programmers. Also needed are the names of suppliers of the custom or generic cards.

The application for this equipment is for controlled access to a building, so any and all other information about using this type of equipment would be welcomed.

Please respond in any manner available; email, phone,

U.S. Mail, or to this net. Thanks in advance.

Daniel L. Karmann
druxv!dlkj
(303) 538-4075
AT&T Information Systems
Rm. 30L15
11900 N. Pecos St.
Denver, CO 80234

From 7796735392464538297
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd9b7ac91630bae1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-05 09:26:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site aluxz.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!houxm!mhuxl!aluxz!mrh
From: mrh@aluxz.UUCP (HUDOCK)
Newsgroups: net.ham-radio
Subject: re: page 41 apr qst
Message-ID: <1235@aluxz.UUCP>
Date: Thu, 5-Apr-84 12:26:13 EST
Article-I.D.: aluxz.1235
Posted: Thu Apr 5 12:26:13 1984
Date-Received: Sat, 7-Apr-84 03:00:19 EST
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 8

Phil

seems that qst has some of there best technical articles in april.

73 wa2die

From 8045090649890670650
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7e6bc19aa043d615,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-05 13:13:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!decvax!decwrl!rhea!eiffel!maxwell
From: maxwell@eiffel.DEC
Newsgroups: net.ham-radio
Subject: Xerox's $50 computer...
Message-ID: <6860@decwrl.UUCP>
Date: Thu, 5-Apr-84 16:13:01 EST
Article-I.D.: decwrl.6860

Posted: Thu Apr 5 16:13:01 1984
Date-Received: Sat, 7-Apr-84 04:24:10 EST
Organization: DEC Engineering Network
Lines: 13

Based on information I believe orginated in this network newsletter, I recently purchased a copy of the Xerox 820 CPU board. No documentation was supplied with the board, and finding someone at Xerox who knows where/how I might find such documentation has been difficult.

Since the information I recieved mentioned that a ham group (in Little Rock?) had some success in bringing the boards up, I am hoping that someone has copies of Xerox technical documentation (hard- and software) for this board, and hoping even more that a CP/M 2.2 BIOS is available (on 8" single density...?). If anyone has such information, or knows how to get it, I'd greatly appreciate any/all assistance.

- Sid Maxwell

From 309795157441166503
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c5016df5631b7481,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-06 15:43:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 14
Message-ID: <8323@mgweed.UUCP>
Date: Fri, 6-Apr-84 18:43:41 EST
Article-I.D.: mgweed.8323
Posted: Fri Apr 6 18:43:41 1984
Date-Received: Sat, 7-Apr-84 05:07:22 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 30

qst de k9eui
hr arrl dx bulletin nr 14 from arrl headquarters
newington ct april 5, 1984
to all radio amateurs bt

mt. athos. eric, sm0agd, will be going to mt. athos. if he is able to get permission to operate, he will be on, on or about april 11 for five days using the call sm0agd/sv/a. he will be using the usual dxpedition frequencies, listening up.

dxcc. the arrl awards committee, in conjunction with the dx advisory committee, has adopted an accreditation criteria to be published with the dxcc rules and in june qst.

ascension island. zd8tm has been active around 28036 khz at
1900z. tom says he hopes to get up a new antenna and be on 40
meters by the end of this month.

sri lanka. 4s7ea has been active around 14209 khz at 1200z.

nigeria. 5n1ary continues to be very active, lately around
28590 khz at 1500z.

guyana. 8r1y can be found on 14243 khz at 0045z.

martinique. look for fm7we at 0100z around 14217 khz.

virgin islands. kp2j operates around 3795 khz at 0030z ar

From 3167895014827241124
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63e9d371b8d7d87e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-07 15:58:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!zehntel!dual!amd70!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: UOSAT 11 Update
Message-ID: <291@dsd.UUCP>
Date: Sat, 7-Apr-84 18:58:20 EST
Article-I.D.: dsd.291
Posted: Sat Apr 7 18:58:20 1984
Date-Received: Tue, 10-Apr-84 19:11:10 EST
Lines: 69

Posted: Fri Mar 30, 1984 11:17 AM PST   Msg: RGIE-1753-5069
From: MSWEETING
To: AMSAT
Subj: Uo-11 status
  ** UOSAT-2 Status Report **   Jodrell Bank 1725 30th March

    I have spent the last few days up here at Jodrell Bank
Radio Telescope on the 85 foot antenna with a crossed-dipole
feed on 145 MHz listening for anything emanating from UOSAT-2,
both within a narrow 2.5 kHz bandwidth and +- 100 kHz
wideband. The receiver & antenna system have been checked
using UOSAT-1, the sun and Cassiopia and appear to be
performing well. We have got probably the best UOSAT-1 data we
are ever likely to see! The UOSAT-1 signal was peaking +75 dB
above the minimum discernable signal level here, so I feel
that we should be able to hear something if UOSAT-2 is
radiating anything on the nominal frequency. The wideband
signal performance is about 20 to 30 dB worse.
    We also tracked OSCAR-10 and received good signal from out

at 42,000 km with the 145.810 MHz beacon peaking at +55 dB above noise - the passband noise was also detectable at some 10 - 15 dB above the rx noise. Some good ssb signals were also copied.

We have tracked UOSAT-2 last Thursday evening & Friday morning passes without anything detected at all that can be relied on - there were two bursts of carrier on the noise level, each of about 10 seconds duration, but these could not be identified positively and were most probably from other amateur activities.

We shall continue with further tests on tonight's pass (Friday) and, unless antthing interesting is heard, shall then head home to Surrey and have a council of war. We do have access to this facility until Thursday next week.

Roger & Neville have remained at Surrey to carry out command functions whilst the listening tests are carried out at Jodrell.

Well, now to think of the next theory!

Martin, G3YJO

Posted: Fri Mar 30, 1984 12:11 PM PST Msg: LGIE-1753-5783
From: PKARN
To: amsat
Subj: UO-11 Set #16

Whatever they're tracking is certainly consistent; AOS predicts between sets 15 and 16 are 110 milliseconds apart, and the straight-line distance between the two predicted positions varies between 1 and 2 km.

Phil

Satellite: oscar-11
Catalog number: 14781
Epoch time: 84080.20398124
Tue Mar 20 04:53:43.979 1984 UTC
Element set: 16
Inclination: 98.2503 deg
RA of node: 142.6310 deg
Eccentricity: 0.0013623
Arg of perigee: 201.0828 deg
Mean anomaly: 158.9799 deg
Mean motion: 14.61823559 rev/day
Decay rate: 2.3e-06 rev/day^2
Epoch rev: 270
Semi major axis: 7062.509 km
Anom period: 98.507100 min
Apogee: 696.695 km
Perigee: 677.453 km
Beacon: 145.8250 mhz

From -5598731905118951071

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d55fdca0d2ff4496,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-07 18:19:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: TAPR osc fix
Message-ID: <2387@allegra.UUCP>
Date: Sat, 7-Apr-84 21:19:35 EST
Article-I.D.: allegra.2387
Posted: Sat Apr 7 21:19:35 1984
Date-Received: Sun, 8-Apr-84 01:44:38 EST
Organization: Bell Communications Research, Inc
Lines: 61

All,

 !!! IMPORTANT !!!

TAPR has recently received reports of field failures of the 7.3728 MHz
oscillator on the TNC. The symptoms are improper reset of failed
operation.

Careful analysis of the problem indicated that the oscillator U1A, U1F,
X1 and assocaited components on the kit board, would free-run at 22 to
49 MHz.

The problem has been duplicated and confirmed here in Tucson. There is
a fix, however!

It appears that the fairchild 74LS14 ICs shipped in kits starting about
January may exhibit this symptom, sometimes when cold and starting up, other
times when warm. The cure is usually just a power off/on cycle or two. This
is not a fix, however...

We used several Fairchild Hitachi anf National parts as well as the Signetics
74LS14s that are scheduled for the next 1200 or so kits. The Fairchild
parts are the most susceptible to this fault, but the others may do it
as well.

The fix is as follows:

1) Replace R12 (1.5 k) with a 1k 5% carbon film resistor.

2) Replace R13 (1.5k) with a 1k 5% carbon film resistor.

3) Add a 20 or 22 pf ceramic disc capacitor at location Cy (previously
unused).

With the above mods, all Signetics, hitachi and National parts tested

performed flawlessly at hi and low Vcc, and at superhot (can't touch it) through very cold (lots of ice condensed on the part in the dry Arizona climate) temperatures. All but one Fairchild part worked under the same conditions, and the one that didn't simply had excessive frequency drift (about 50 kHz - waveform still clean, but may have drifted out of crystal-controlled lock).

If the unit is still malfunctioning in this area (unlikely), replace the 74LS14 with a non-Fairchild part.

All kits shipped after this date (6 April 1984) will have the proper parts along with an errata sheet describing the fix.

PLEASE SPREAD THE WORD OF THE PROBLEM AND THE FIX AS WIDELY AS POSSIBLE IN YOUR LOCAL PACKET AREAS!

A secondary benefit may be a reduction in the rate of NOVRAM "forgetting" symptoms -- this hasn't been confirmed, however. Feedback in this area would be appreciated. Some oscillators before the mod had the symptom of starting at a very high frequency, then locking to the crystal after a few hundred milliseconds, often requiring a toggle on the RESET switch to bring the TNC up.

Thank you for your assistance in spreading the word...

Lyle

From -8973752211512902079
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,f95f47866e5486f0,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,f95f47866e5486f0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-08 11:06:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cvl.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!rlgvax!cvl!louie
From: louie@cvl.UUCP (Louis A. Mamakos)
Newsgroups: net.ham-radio,net.columbia
Subject: STS 41C ground to air retransmissions
Message-ID: <915@cvl.UUCP>
Date: Sun, 8-Apr-84 14:06:00 EST
Article-I.D.: cvl.915
Posted: Sun Apr 8 14:06:00 1984
Date-Received: Mon, 9-Apr-84 06:01:29 EST
Organization: U. of Md. Computer Vision Lab
Lines: 26

.
Once again, the Goddard Amateur Radio Club will be rebroadcasting the Space Shuttle's ground-to-air voice transmissions. The operating schedule is as follows:

Frequencey	Times
3860 KHZ	0700 -> 1300 UTC
7185 KHZ	1300 -> 2200 UTC
14295 KHZ	0700 -> 2200 UTC
21390 KHZ	as band conditions permit
147.45 MHZ (FM)	0700 -> 2200 UTC (Washington DC - Baltimore MD area)

The station, WA3NAN will operate from 0700 UTC (2 AM EST) until 2200 UTC (5 PM EST), except during the crew's sleep periods. The station is located at the Goddard Space Flight Center, in Greenbelt, Maryland. This is about 10 miles or so north of Washington DC.

It's a great change from the sporadic and cursory coverage that the television news media provides. Three cheers for the guys at WA3NAN providing this service to the amateur community. Of course anyone with a shortwave radio or programmable police scanner are welcome to listen too!

- -

Louis A. Mamakos WA3YMH - Computer Science Center - Univ. of Maryland
Internet: louie@cvl.ARPA uucp: ...!{seismo,ihnp4,allegra}!rlgvax!cvl!louie

From 3978720147024191165
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9f681044517e40dd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-09 07:37:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: FCC Licensees to be grandfathered by NABER
Message-ID: <2142@ihuxf.UUCP>
Date: Mon, 9-Apr-84 10:37:11 EST
Article-I.D.: ihuxf.2142
Posted: Mon Apr 9 10:37:11 1984
Date-Received: Wed, 11-Apr-84 06:39:59 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 52

x

NABER INITIATES TECHNICIAN CERTIFICATION PROGRAM,
CURRENT FCC LICENSE HOLDERS TO BE GRANDFATHERED

This information from the National Association of Business and Educational Radio (NABER) will be of interest to holders of FCC Commercial Radiotelephone Operators Licenses:

"The FCC voted in its February 24, 1984, meeting

to
eliminate the license requirement for technicians installing, repairing, and maintaining radio transmitters in the Private Land Mobile, Fixed, and Personal Radio Services (General Docket 83-322). The FCC's Field Operations Bureau, however, did state that the Commission now 'strongly endorses and encourages' the establishment of a program or programs to ensure that maintenance, installation, and repair are performed only by certified technicians."

"....This is why NABER has developed a Technician Certification Program."

"....NABER is presently offering an Exemption Program for Charter Participants which will allow those persons who currently hold a valid General Radiotelephone Operator, First-Class, or Second-Class License to be 'grandfathered' into the NABER Technician Certification Program with a waiver of the examination requirement. The deadline for the Exemption Program is Aril 30, 1983...." (now July 30, 1984 - bp.)

There is a $10 fee, which will help to cover the certificate printing (with a calligraphied name) and verification card. More information and an application form are available from:

NABER
1330 New Hampshire Ave. NW
P.O. Box 19164
Washington, DC 20036

tel (202)887-0920

I'm not endorsing this program, but I mailed in my check for $10 today.

--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5760

From 8340314007648618612
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f95f47866e5486f0
X-Google-Attributes: gid151e61,public

X-Google-Thread: 116b5e,f95f47866e5486f0
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1984-04-09 14:54:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1+some 2/3/84; site dual.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!decvax!decwrl!dual!bill
From: bill@dual.UUCP (Bill Kanawyer)
Newsgroups: net.ham-radio,net.columbia
Subject: Re: STS 41C ground to air retransmissions
Message-ID: <426@dual.UUCP>
Date: Mon, 9-Apr-84 17:54:17 EST
Article-I.D.: dual.426
Posted: Mon Apr 9 17:54:17 1984
Date-Received: Wed, 11-Apr-84 05:08:19 EST
References: <915@cvl.UUCP>
Organization: Dual Systems, Berkeley, CA
Lines: 19

> Once again, the Goddard Amateur Radio Club will be rebroadcasting the Space
> Shuttle's ground-to-air voice transmissions. The operating schedule is as
> follows:

Is there any way that us folks without a radio might be able to hear these
rebroadcasts? Can a tape be made?

Would one of you bright guys into ham radio suggest something please. Thanks.

Hungry for more information,

Bill Kanawyer
Dual Systems
2530 San Pablo Ave.
Berkeley Ca.
(415) 549-3854 ext 35
{ucbvax,amd70,ihnp4,cbosgd,decwrl,fortune,zehntel}!dual!bill

From -3645899985139499160
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd91d84d32221cc1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-09 16:13:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 12
Message-ID: <8379@mgweed.UUCP>
Date: Mon, 9-Apr-84 19:13:25 EST
Article-I.D.: mgweed.8379

Posted: Mon Apr 9 19:13:25 1984
Date-Received: Wed, 11-Apr-84 00:25:30 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 23

qst de k9eui
hr crrl bulletin nr 12 from crrl headquarters
london ont april 5. 1984
to all radio amateurs bt

crrl has made several important requests of doc, 1, that doc remove all operating restrictions on the 160 metre band now that loran a has ceased, 2, that doc reinstate rtty privileges on 7050 to 7100 khz and delete the requirement to identify on cw or voice after rtty transmissions, 3, that doc allow specific amateurs to conduct low power tests on the 18 and 24.5 mhz bands, 4, that doc limit punctuation on code tests to period, question mark, comma, slant bar and double dash and q signals to those in common use, and, 5, that doc allow a few days grace, as required, for those wishing to write an advanced amateur exam one year after writing an amateur exam and for those wishing to use credits obtained one year ago on an amateur or digital amateur exam.   regulations changes, announced two years ago, having to do with reciprocal operating on 2 metres, repeaters on 10 metres and additional privileges on 160 metres are still stalled at the privy council office ar

From 1862523377852444636
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dbd881273aaeb507,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-09 16:13:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 15
Message-ID: <8380@mgweed.UUCP>
Date: Mon, 9-Apr-84 19:13:49 EST
Article-I.D.: mgweed.8380
Posted: Mon Apr 9 19:13:49 1984
Date-Received: Wed, 11-Apr-84 00:25:42 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 38

qst de k9eui
hr propagation forecast bulletin nr 15 from arrl headquarters
newington ct april 8, 1984
to all radio amateurs bt

sunspot numbers and the solar flux have been falling steadily since the end of march. the visible portion of the sun was almost devoid of spots at bulletin time. the solar flux was down to 101, and it is expected to drop further in the next few days. these conditions will make for lower f layer muf than would normally occur at this season. seasonal and solar effects will be most noticeable on 21 and 28 mhz. skip will be poorer on all frequencies, and the number of useable hours per day will go down.

the good side of this picture is that, with a quieter sun, the quality and strength of signals will improve, though the useful day is shorter. geomagnetic activity was above normal much of the time recently, and conditions tended to be below normal on all frequencies. we are also moving into the season for sporadic e propagation, which enlivens the 28 and 50 mhz bands at this time of year. characteristics to be expected are very high signal levels at times, but with frequent changes in skip distance and direction. there have been phenomenal e skip sessions on 50 mhz, and linkages of this mode with the seasonal transequatorial propagation have provided exciting 50 mhz dx. in the southern part of the country, 50 mhz was active nearly every day since the middle of march. on april 5 and 6 new zealand, australia and several small pacific islands were worked on 50 mhz from most u.s. call areas. obviously, the transequatorial mode does not require high solar flux levels. watch for it in the afternoon hours on days when the wwv k index is 3 or higher.

american sunspot numbers for march 29 through april 4 were between 63 and 118 with a mean of 89.1 ar

From 3880156345090386133
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bd327e2b44e5dc17,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-09 21:57:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Xerox 820 Questions
Message-ID: <2391@allegra.UUCP>
Date: Tue, 10-Apr-84 00:57:40 EST
Article-I.D.: allegra.2391
Posted: Tue Apr 10 00:57:40 1984
Date-Received: Wed, 11-Apr-84 01:43:14 EST
Organization: Bell Communications Research, Inc
Lines: 23

From Larry Kayser
Re Xerox 820 boards
I have been sort of tracking the 820 news and since one of these boards is due here soon I would like to determine some details so that we might make reasonably prompt use of the 820.

Specific Questions
-Does anyone have a complete assembler listing for the 820 BIOS? (I understand the BIOS is in two parts, disk for 6 sectors and EPROM as well)
-Has anyone brought up BYE running beneath the CCP, that is lower in the memory space?
-Has anyone brought up ZCPR2 on the 820?
-Has anyone brought up SIGNON on the 820?
-Has anyone brought up a Western Digital 1001 hard disk controller on an 820?
-Has anyone done a simple modification for double density?
-Has anyone added a large RAM capability to emulate a disk drive?

My specific interest is to use the 820 in a gateway to replace an old 8080 system. Any help will be appreciated.
Regards, Larry Kayser

From -7646597822000590173
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f95f47866e5486f0
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,f95f47866e5486f0
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1984-04-10 03:24:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site alice.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!alice!alb
From: alb@alice.UUCP (Adam L. Buchsbaum)
Newsgroups: net.ham-radio,net.columbia
Subject: Re: STS 41C ground to air retransmissions
Message-ID: <2698@alice.UUCP>
Date: Tue, 10-Apr-84 06:24:02 EST
Article-I.D.: alice.2698
Posted: Tue Apr 10 06:24:02 1984
Date-Received: Wed, 11-Apr-84 05:16:33 EST
References: <426@dual.UUCP>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 5

Amateur Radio rules prohibit broadcasting or rebroadcasting.
A blanket waiver has been granted by the FCC to cover shuttle flights (any ham may retransmit shuttle communications if they get NASA's permission first). However, I am afraid that taping them and redistributing them would be a violation.

From -56588840097263741
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ca583c68d27b6772,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-10 11:28:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!inuxg!wheatley
From: wheatley@inuxg.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Wanted: satellite elements
Message-ID: <283@inuxg.UUCP>
Date: Tue, 10-Apr-84 14:28:58 EST
Article-I.D.: inuxg.283
Posted: Tue Apr 10 14:28:58 1984
Date-Received: Wed, 11-Apr-84 07:08:09 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 9

Some time ago, someone posted the orbital elements for the various
amateur satellites, not the ones for Karn's software, but the ones
used with the various BASIC programs that exist, such as those from
AMSAT. I would appreciate if someone could send me a copy or repost
this info!

TNX, KU9C
Steve Wheatley
inuxg!wheatley

From -2963458874977832377
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f1c17c09e503edc5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-11 00:04:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Orbital elements
Message-ID: <2395@allegra.UUCP>
Date: Wed, 11-Apr-84 03:04:00 EST
Article-I.D.: allegra.2395
Posted: Wed Apr 11 03:04:00 1984
Date-Received: Thu, 12-Apr-84 04:43:09 EST
Organization: Bell Communications Research, Inc
Lines: 212

Here's a collection of the latest NASA keplerian elements I have for the
various interesting satellites. These can be used either with my
programs or with the W3IWI program versions available from AMSAT. These

can NOT be used with simple equator-crossing predictors, but since the
W3IWI program can be run even on the lowly ZX-81, there isn't much
excuse for still running obsolete code!

Phil

```
Satellite: oscar-9
Catalog number: 12888
Epoch time:      84095.40253995
   Wed Apr  4 09:39:39.451 1984 UTC
Element set:     611
Inclination:       97.5839 deg
RA of node:        68.8940 deg
Eccentricity:    0.0003924
Arg of perigee:    40.6699 deg
Mean anomaly:     319.4834 deg
Mean motion:   15.25153947 rev/day
Decay rate:       9.82e-05 rev/day^2
Epoch rev:           13829
Semi major axis:  6865.426 km
Anom period:     94.416698 min
Apogee:            498.899 km
Perigee:           493.511 km
Beacon:           145.8250 mhz

Satellite: oscar-10
Catalog number: 14129
Epoch time:      84086.65829178
   Mon Mar 26 15:47:56.409 1984 UTC
Element set:     95
Inclination:       25.5453 deg
RA of node:       208.0857 deg
Eccentricity:    0.6089657
Arg of perigee:   257.3819 deg
Mean anomaly:      32.1398 deg
Mean motion:    2.05849949 rev/day
Decay rate:       1.41e-06 rev/day^2
Epoch rev:             591
Semi major axis: 26106.110 km
Anom period:    699.538672 min
Apogee:          35629.477 km
Perigee:          3834.026 km
Beacon:           145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84091.63483038
   Sat Mar 31 15:14:09.344 1984 UTC
Element set:     18
Inclination:       98.2506 deg
RA of node:       154.0376 deg
Eccentricity:    0.0013724
Arg of perigee:   164.0431 deg
```

```
Mean anomaly:     196.1214 deg
Mean motion:   14.61833060 rev/day
Decay rate:       3.48e-06 rev/day^2
Epoch rev:             437
Semi major axis:  7062.479 km
Anom period:     98.506460 min
Apogee:            695.610 km
Perigee:           676.224 km
Beacon:           145.8250 mhz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84084.75638077
   Sat Mar 24 18:09:11.298 1984 UTC
Element set:     91
Inclination:       82.9623 deg
RA of node:       179.8902 deg
Eccentricity:    0.0059505
Arg of perigee:   163.4979 deg
Mean anomaly:     196.8061 deg
Mean motion:   12.15585101 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10066
Semi major axis:  7987.339 km
Anom period:    118.461472 min
Apogee:           1658.422 km
Perigee:          1563.365 km

Satellite: rs-4
Catalog number: 13000
Epoch time:      84095.43444966
   Wed Apr  4 10:25:36.450 1984 UTC
Element set:     188
Inclination:       82.9724 deg
RA of node:       182.0326 deg
Eccentricity:    0.0017957
Arg of perigee:   221.4603 deg
Mean anomaly:     138.5210 deg
Mean motion:   12.06667614 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10119
Semi major axis:  8026.668 km
Anom period:    119.336923 min
Apogee:           1672.171 km
Perigee:          1643.344 km

Satellite: rs-5
Catalog number: 12999
Epoch time:      84077.71442008
   Sat Mar 17 17:08:45.894 1984 UTC
Element set:     157
Inclination:       82.9665 deg
RA of node:       192.9694 deg
```

```
Eccentricity:    0.0009723
Arg of perigee:   286.5975 deg
Mean anomaly:      73.4019 deg
Mean motion:   12.05055416 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:            9892
Semi major axis:  8033.831 km
Anom period:    119.496579 min
Apogee:           1682.843 km
Perigee:          1667.221 km

Satellite: rs-6
Catalog number: 13002
Epoch time:      84083.33525437
   Fri Mar 23 08:02:45.977 1984 UTC
Element set:     77
Inclination:       82.9632 deg
RA of node:       182.4740 deg
Eccentricity:    0.0050618
Arg of perigee:   184.1808 deg
Mean anomaly:     175.8831 deg
Mean motion:   12.13560545 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10030
Semi major axis:  7996.226 km
Anom period:    118.659098 min
Apogee:           1658.668 km
Perigee:          1577.718 km

Satellite: rs-7
Catalog number: 13001
Epoch time:      84087.25143621
   Tue Mar 27 06:02:04.88  1984 UTC
Element set:     149
Inclination:       82.9623 deg
RA of node:       184.5500 deg
Eccentricity:    0.0022310
Arg of perigee:   196.0384 deg
Mean anomaly:     163.9972 deg
Mean motion:   12.08678508 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           10037
Semi major axis:  8017.758 km
Anom period:    119.138381 min
Apogee:           1659.108 km
Perigee:          1623.333 km

Satellite: rs-8
Catalog number: 12998
Epoch time:      84087.30431604
   Tue Mar 27 07:18:12.905 1984 UTC
Element set:     267
Inclination:       82.9604 deg
```

```
RA of node:       189.5113 deg
Eccentricity:    0.0018099
Arg of perigee:   321.4134 deg
Mean anomaly:      38.5608 deg
Mean motion:   12.02940977 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:            9990
Semi major axis:  8043.248 km
Anom period:    119.706621 min
Apogee:           1687.854 km
Perigee:          1658.739 km

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84095.66292292
   Wed Apr  4 15:54:36.540 1984 UTC
Element set:     254
Inclination:       99.0392 deg
RA of node:        66.2824 deg
Eccentricity:    0.0012340
Arg of perigee:   306.9749 deg
Mean anomaly:      53.0292 deg
Mean motion:   14.13012135 rev/day
Decay rate:         3.7e-06 rev/day^2
Epoch rev:           14348
Semi major axis:  7224.403 km
Anom period:    101.909953 min
Apogee:            868.485 km
Perigee:           850.655 km
Beacon:           137.6200 mhz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      84091.04064252
   Sat Mar 31 00:58:31.513 1984 UTC
Element set:     75
Inclination:       98.7146 deg
RA of node:       122.9812 deg
Eccentricity:    0.0015586
Arg of perigee:   280.2889 deg
Mean anomaly:      79.6544 deg
Mean motion:   14.22392845 rev/day
Decay rate:        2.27e-06 rev/day^2
Epoch rev:            5236
Semi major axis:  7192.564 km
Anom period:    101.237855 min
Apogee:            845.857 km
Perigee:           823.436 km
Beacon:           137.5000 mhz


From -8409535420693740926
X-Google-Language: ENGLISH,ASCII-7-bit
```

X-Google-Thread: 15e263,5363af15324de38a,start
X-Google-Attributes: gid15e263,public
X-Google-Thread: 151e61,5363af15324de38a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-11 09:45:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.08 10/3/83; site psuvax.UUCP
Path: utzoo!linus!vaxine!wjh12!genrad!grkermit!masscomp!clyde!akgua!psuvax!mancuso
From: mancuso@psuvax.UUCP
Newsgroups: net.ham-radio,net.micro.cpm
Subject: Xerox 820 REVEALED#5--updates & hints
Message-ID: <978@psuvax.UUCP>
Date: Wed, 11-Apr-84 12:45:50 EST
Article-I.D.: psuvax.978
Posted: Wed Apr 11 12:45:50 1984
Date-Received: Fri, 13-Apr-84 01:49:22 EST
Organization: Pennsylvania State Univ.
Lines: 130

It works!! We succeded in getting CP/M 2.0 up on one of the boards the
other night, so now it is official--it *is* possible. I wrote a boot
program and the CBIOS section and well, it works. The code still needs
some work to make it bulletproof, though. Most of the functions map right
over to the Xerox monitor ROM entry points with a bit of shuffling. There
are some little things that need to be changed (CP/M sends characters in the
C register to be output, and Xerox wants them in the A register...) but nothing
too difficult.

Some updates and hints:

In a previous article I mentioned that the monitor command 'B' also boots
the system. It does, but it boots from disk 01 instead of disk 00 like the
'A' command does. If your boot program (like mine) assumes that the system
will be cold-booted from drive 00, make sure you use the 'A' command to boot
the system.

I just got this update on the 'undocumented' monitor entry points:

****
From .....!ucbvax!waldron.wbst@Xerox.ARPA Wed Apr 11 07:32:57 1984
Subject: Re: Xerox 820 REVEALED#2--Monitor Jump Tables

I hope I can fill in some of the blanks. This info is from the 820
Software Development guide. I have not tested any of them. For those
that were short and
clear I typed the actual code listing with comments verbatim.

F033 SPACE   Print a space
         In : ??
         Out: ??

F03F ASCHEX   Convert ascii to hex

```
     ASCHEX:  SUB  '0'
          RET  C
          CP   10
          CCF
          RET  NC
          SUB  7
          CP   10
          RET  C
          CP   16
          CCF
          RET


F7F3 BLOCK    Block move routine

     BLOCK:   CP   3    ;CHECK IF PARAMETER COUNT IS 3
          SCF
          RET  NZ
          CALL BLOCAD
          LD   A,C
          OR   B
          RET  Z    ;EXIT NOW IF BC=0
          LDIR
          RET

     BLOCAD:  EX   DE,HL
          OR   A    ;CLEAR CARRY
          SBC  HL,DE     ;GET DIFFERENCE BETWEEN
          EX   DE,HL     ;HL & DE FOR BYTECOUNT
          PUSH DE
          PUSH BC
          POP  DE   ;GET OLD BC INTO DE
          POP  BC
          INC  BC   ;GET COUNT+1 INTO BC
          RET

F7F9 FILL Memory fill routine
F7FC TEST Memory diagnostics
F7FF GOTO Execution routine
F802 VERCMD   Memory block compare
          In : ??
          Out: ??



Hope this helps.

Brian
*************************************************************************

Thanks again.

The connections we used for the disk drive (SA800/801) are:
```

Xerox	Floppy	Name
01	NC	-
02	NC	-
03	NC	-
04	20	Index
05	26	Drive Select 1
06	28	Drive Select 2
07	NC	-
08	18	Head Load
09	34	Direction Select
10	36	Step
11	38	Write Data
12	40	Write Gate
13	42	Track 00
14	44	Write Protect
15	46	Read Data
16	NC	-
17	22	Ready
18	NC	-
19	NC	-
20-37	11-49(odd)	GND

We are using a separate power supply for the disk, so no power connections were made from the board to the floppy.

If you are looking for a cheap way to connect to J7, try cutting an IC socket in half. I used an 8 pin socket, cut it in half, trimmed it a little, and hooked up 3 leads to it. On the two boards here, the HS signal at J7 is garbage, so the eventual fix will be to cut the PC trace, and run a wire from U34 pin 8 to J7. (Has anyone else had this problem?)

Mail and news got screwed up here last week because of a major filesystem crash, so if you sent me something and I haven't replied, try me again.
I'd really like to hear if anyone else is making progress on these things.

Overall there is a smell of fried onions. (fnord)

:+: Pat Mancuso
:+: Penn State University
Usenet: :+: ...!psuvax!mancuso
Bitnet: :+: mancuso@psuvax1

From 6294833563232790331
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9dd88e26b9387073,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,9dd88e26b9387073,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1984-04-11 13:30:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 (Tek) 9/26/83; site shark.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!hao!hplabs!tektronix!orca!shark!philb
From: philb@shark.UUCP (Phil Biehl)
Newsgroups: net.ham-radio,net.columbia
Subject: Amateur Radio Obiter Air to Ground Rebroadcast Frequencies???
Message-ID: <688@shark.UUCP>
Date: Wed, 11-Apr-84 16:30:47 EST
Article-I.D.: shark.688
Posted: Wed Apr 11 16:30:47 1984
Date-Received: Fri, 13-Apr-84 20:38:18 EST
Organization: Tektronix, Wilsonville OR
Lines: 7

So I don't have to ask again. Are there a standard set of amatuer
radio (non-amateur???) frequencies that are used to rebroadcast
the air (space) to ground communications? Are these same freqs.
used for every shot???

Phil Biehl
Tektronix

From 4823144916620686078
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9730b85e4e8e8e1e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-13 07:09:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Denver Mods 4/2/84) 6/24/83; site drutx.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hogpc!houxe!drutx!trb
From: trb@drutx.UUCP
Newsgroups: net.ham-radio
Subject: Amateeur Radio Gear FOR SALE
Message-ID: <155@drutx.UUCP>
Date: Fri, 13-Apr-84 10:09:23 EST
Article-I.D.: drutx.155
Posted: Fri Apr 13 10:09:23 1984
Date-Received: Sun, 15-Apr-84 07:18:31 EST
Organization: AT&T Information Systems Laboratories, Denver
Lines: 25

...
MOVING SALE

The following items, mostly of interest to ham radio operators,
is in excellent condition (if it don't work right, I'll buy it
back). I'm moving, and just don't have room for this. If it
doesn't get sold, it will either go in storage or get trashed.

Kenwood MC-50 desk mike
Heathkit HM-102 SWR/Power meter
Heathkit Electronic keyer

Palomar Engineers 1.8-54 MHz pre-amp (this thing works GREAT!)
Johnson Kilowatt Matchbox (mint condition, paint has even been waxed!)
Ringo Ranger 2-meter base antenna
Heathkit speaker (matches old SB-600 line)
Hitachi AM car radio (from 1978 Honda Civic)

Make me an offer on any or all of the above items. No reasonable
offer refused. I can UPS for out-of-towners.

Tom Buckley, AT&T Information Systems
(303) 538-3442 work
(303) 442-2673 home answering machine
ihnp4!drutx!trb

From 4542551350868824773
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bfdcadbf2659151b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-13 16:36:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!ulysses!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 15
Message-ID: <8457@mgweed.UUCP>
Date: Fri, 13-Apr-84 19:36:02 EST
Article-I.D.: mgweed.8457
Posted: Fri Apr 13 19:36:02 1984
Date-Received: Sun, 15-Apr-84 01:30:51 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 62

qst de k9eui
hr dx bulletin nr 15 from arrl headquarters
newington ct april 12, 1984
to all radio amateurs bt

(note: some areas of the text are (questionable) due to
thunderstorm during bulletin time).

thanks to w1trc, k1mm, k1xm and the southern new england dx
association for the following dx information.

taiwan. pa0gam, sm0gmg and oh2bh have been granted permission
to operate from taipei for seven days, beginning april 17. the
authorization includes 80 and 40 meters for the first time
ever. two stations will be operating simultaneously, and the
callsign will be announced at the beginning of the operation.
qsl to oh2bh. there is a possibility of a side trip to cr9,
macao.

aland islands. oh1cn, oh1eb and oh1eh will operate oh0am on 10 through 80 meter ssb and cw april 19 to 23. they will go out of their way to meet (garble copy) mode requests. qsl to oh2bh.

africa. w4lzz will be traveling in africa and hopes to get permission to operate from angola, d2 and mozambique, c9.

comoros. d68am should be on tomorrow night at 2345z on 14235 khz.

franz josef land. uw3sy/1 was on last night on 14025 khz at 0115z.

seychelles. rudy, 5n3rtf, is going to the seychelles and hopes to operate s79m or (s79wwn?), beginning april (17?).

ascension island. zd8rc is on (213?5) khz around 2230 to 2300z.

ivory coast. special calls tu71, tu72 and tu73 will be operating through april and may. all three have been worked around 14225 khz at 2315z. qsls for tu71 and tu73 go via ak3f.

brunei. vs5hg has been on 14198 khz at 1400z.

swaziland. 3d6al has been on regularly on 14205 khz at 1300z, long path.

the gambia. c53al can sometimes be found on 7230 khz at 0800z.

corsica. look for special call tk5el on 14235 khz at 2330z.

senegal. another new call, 6v1a, appears on 14192 khz at 2045z.

san marino. t77c has been on 14220 khz around 2200z.

indonesia. john, yb5aso, has been worked on 7005 khz at 0000z.

american samoa. watch for wh8aaj on 14280 khz at 1250z ar

From -5768662703938990329
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 105955,c012d70220519fd3,start
X-Google-Attributes: gid105955,public
X-Google-Thread: 151e61,c012d70220519fd3,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 132415,c012d70220519fd3,start
X-Google-Attributes: gid132415,public
X-Google-ArrivalTime: 1984-04-14 07:34:41 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxu.UUCP
Path: utzoo!watmath!clyde!akgua!mhuxv!mhuxt!mhuxr!mhuxm!mhuxl!ihnp4!ihuxu!mgm
From: mgm@ihuxu.UUCP (C.A. Paluszek)
Newsgroups: bell.ham-radio,att.ham-radio,net.ham-radio
Subject: Rohn Tower Wanted
Message-ID: <288@ihuxu.UUCP>
Date: Sat, 14-Apr-84 10:34:41 EST
Article-I.D.: ihuxu.288
Posted: Sat Apr 14 10:34:41 1984
Date-Received: Sun, 15-Apr-84 08:41:36 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 6

Wanted in good condition

1 or 2 ten foot rohn triangular tower sections

C.A. Paluszek, KA9MNJ, 979-5727, ih 4b318 x5727

From 4669832280444193770
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,465cd297533c6343,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-16 08:57:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mhuxv.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!mhuxv!wmb
From: wmb@mhuxv.UUCP (W. M. Brelsford)
Newsgroups: net.ham-radio
Subject: DXCC Country List
Message-ID: <1220@mhuxv.UUCP>
Date: Mon, 16-Apr-84 11:57:06 EST
Article-I.D.: mhuxv.1220
Posted: Mon Apr 16 11:57:06 1984
Date-Received: Tue, 17-Apr-84 08:01:24 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 336

The current ARRL DXCC country list follows. The colon-separated
fields are:

1. primary prefix
2. country
3. continent
4. ITU zone(s)
5. CQ zone(s)
6. other prefixes, if any

For my own use, I added a first field containing a symbol
for status (- for worked, # for QSL received, etc.).
Using programs such as sort, awk and grep, one can use the file

for printing lists by prefix, country name, continent, etc.
Please send corrections and suggestions to me.

Bill Brelsford K2DI
AT&T Communications
..!mhuxv!wmb or ..!mhuxv!atux02!wmb

A2:Botswana:Af:57:38
A3:Tonga:Oc:62:32
A4:Oman:As:39:21
A5:Bhutan:As:41:22
A6:United Arab Emirates:As:39:21
A7:Qatar:As:39:21
A9:Bahrain:As:39:21
AP:Pakistan:As:41:21
BV:Taiwan:As:44:24
BY:China:As:33,42,43,44:23
C2:Nauru:Oc:65:31
C3:Andorra:Eu:27:14
C5:The Gambia:Af:46:35
C6:Bahamas:NA:11:08
C9:Mozambique:Af:53:37
CE:Chile:SA:14,16:12
CE9:Antarctica:An:67,69,70,71,72,73,74:12,13,29,30,32,38,39:DP,FB8Y,KC4,LA,LU-Z,OR4,VK0,VP8,ZL5,ZS1,3Y,4K,8J
CE0A:Easter Is:SA:63:12
CE0X:San Felix:SA:14:12
CE0Z:Juan Fernandez:SA:14:12
CM:Cuba:NA:11:08:CO
CN:Morocco:Af:37:33
CP:Bolivia:SA:12,14:10
CR9:Macao:As:44:24
CT:Portugal:Eu:37:14
CT2:Azores:Eu:36:14
CT3:Madeira Is:Af:36:14
CX:Uruguay:SA:14:13
D2:Angola:Af:52:36:D3
D4:Cape Verde:Af:46:35
D6:Comoros:Af:53:39
DL:Germany W:Eu:28:14:DA,DF,DJ,DK
DU:Philippines:Oc:50:17
EA:Spain:Eu:37:14
EA6:Balearic Is:Eu:37:14
EA8:Canary Is:Af:36:33
EA9:Ceuta & Melilla:Af:37:33
EI:Ireland:Eu:27:14
EL:Liberia:Af:46:35
EP:Iran:As:40:21
ET:Ethiopia:Af:48:37
F:France:Eu:27:14
FB8W:Crozet:Af:68:39
FB8X:Kerguelen Is:Af:68:39

FB8Z:Amsterdam & St Paul Is:Af:68:39
FC:Corsica:Eu:28:15
FG:Guadeloupe:NA:11:08
FH:Mayotte:Af:53:39
FK:New Caledonia:Oc:56:32
FM:Martinique:NA:11:08
FO:Clipperton Is:NA:10:07
FO:French Polynesia:Oc:63:32
FP:St Pierre & Miquelon:NA:09:05
FR:Glorioso Is:Af:53:39
FR:Juan de Nova, Europa:Af:53:39
FR:Reunion:Af:53:39
FR:Tromelin:Af:53:39
FS:St Martin:NA:11:08
FW:Wallis & Futuna Is:Oc:62:32
FY:French Guiana:SA:12:09
G:England:Eu:27:14
GD:Isle of Man:Eu:27:14
GI:No Ireland:Eu:27:14
GJ:Jersey:Eu:27:14:GC
GM:Scotland:Eu:27:14
GU:Guernsey:Eu:27:14:GC
GW:Wales:Eu:27:14
H4:Solomon Is:Oc:51:28
HA:Hungary:Eu:28:15:HG
HB:Switzerland:Eu:28:14
HB0:Liechtenstein:Eu:28:14
HC:Ecuador:SA:12:10
HC8:Galapagos Is:SA:12:10
HH:Haiti:NA:11:08
HI:Dominican Rep:NA:11:08
HK:Colombia:SA:12:09
HK0:Malpelo Is:NA:12:10
HK0:San Andres & Providencia:NA:11:07
HL:Korea:As:44:25:HM
HP:Panama:NA:11:07
HR:Honduras:NA:11:07
HS:Thailand:As:49:26
HV:Vatican:Eu:28:15
HZ:Saudi Arabia:As:39:21:7Z
I:Italy:Eu:28:15
IS:Sardinia:Eu:28:15
J2:Djibouti:Af:48:37
J3:Grenada:NA:11:08
J5:Guinea-Bissau:Af:46:35
J6:St Lucia:NA:11:08
J7:Dominica:NA:11:08
J8:St Vincent:NA:11:08
JA:Japan:As:45:25:JB-JS,KA
JD:Minami Torishima:Oc:45:27:KA1
JD:Ogasawara:Oc:45:27:KA1
JT:Mongolia:As:32,33:23
JW:Svalbard:Eu:18:40

JX:Jan Mayen:Eu:18:40
JY:Jordan:As:39:20
K:United States:NA:06,07,08:03,04,05:W,N,AA-AK
KC6:Belau:Oc:64:27
KC6:Micronesia:Oc:65:27
KG4:Guantanamo Bay:NA:11:08
KH1:Baker,Howland,Am Phoenix:Oc:61,62:31:KB6
KH2:Guam:Oc:64:27:KG6
KH3:Johnston Is:Oc:61:31:KJ6
KH4:Midway Is:Oc:61:31:KM6
KH5:Palmyra, Jarvis Is:Oc:61:31:KP6
KH5K:Kingman Reef:Oc:61:31:KP6K
KH6:Hawaii:Oc:61:31
KH7:Kure Is:Oc:61:31
KH8:Am Samoa:Oc:62:32:KS6
KH9:Wake Is:Oc:65:31:KW6
KH0:Mariana Is:Oc:64:27:KG6RST
KL7:Alaska:NA:01,02:01
KP1:Navassa Is:NA:11:08
KP2:Virgin Is:NA:11:08:KV4
KP4:Puerto Rico:NA:11:08
KP5:Desecheo Is:NA:11:08
KX6:Marshall Is:Oc:65:31
LA:Norway:Eu:18:14:LB-LN
LU:Argentina:SA:14,16:13
LX:Luxembourg:Eu:27:14
LZ:Bulgaria:Eu:28:20
OA:Peru:SA:12:10
OD:Lebanon:As:39:20
OE:Austria:Eu:28:15
OH:Finland:Eu:19:15
OH0:Aland Is:Eu:18:15
OJ0:Market Reef:Eu:18:15
OK:Czechoslovakia:Eu:28:15
ON:Belgium:Eu:27:14
OX:Greenland:NA:05,75:40:XP
OY:Faeroe Is:Eu:18:14
OZ:Denmark:Eu:18:14
P2:Papua New Guinea:Oc:51:28
PA:Netherlands:Eu:27:14:PB-PI
PJ2:Neth Antilles:SA:11:09:PJ3-4
PJ5:St Maarten, Saba, St Eus:NA:11:08:PJ6-8
PY:Brazil:SA:12,13,15:11:PP-PX
PY0:Fernando de Noronha:SA:13:11
PY0:St Peter & St Paul Rocks:SA:13:11
PY0:Trindade & Martin Vaz Is:SA:15:11
PZ:Surinam:SA:12:09
S2:Bangladesh:As:41:22
S7:Seychelles:Af:53:39
S9:Sao Tome & Principe:Af:47:36
SM:Sweden:Eu:18:14:SK,SL
SP:Poland:Eu:28:15
ST:Sudan:Af:48:34

ST0:Southern Sudan:Af:48:34
SU:Egypt:Af:38:34
SV:Greece:Eu:28:20
SV:Mt Athos:Eu:28:20
SV5:Dodecanese:Eu:28:20
SV9:Crete:Eu:28:20
T2:Tuvalu:Oc:65:31
T31:Central Kiribati:Oc:62:31
T32:East Kiribati:Oc:61:31
T30:West Kiribati:Oc:65:31
T7:San Marino:Eu:28:15
TA:Turkey:As:39:20
TF:Iceland:Eu:17:40
TG:Guatemala:NA:11:07
TI:Costa Rica:NA:11:07
TI9:Cocos Is:NA:11:07
TJ:Cameroon:Af:47:38
TL:Central African Rep:Af:47:36
TN:Congo:Af:52:36
TR:Gabon:Af:52:36
TT:Chad:Af:47:36
TU:Ivory Coast:Af:46:35
TY:Benin:Af:46:35
TZ:Mali:Af:46:35
UA1:European RSFSR:Eu:19,20,29,30:16:UK1346,UV,UW1-6,UN1
UA1:Franz Josef Land:Eu:75:40:UK1
UA2:Kaliningradsk:Eu:29:15:UK2F
UA9:Asiatic RSFSR:As:20,21,22,23,24,25,26,30,35,75:17,18,19,23:UA,UK,UV90
UB5:Ukraine:Eu:29:16:UK,UT,UY5
UC2:White RSFSR:Eu:29:16:UK2ACILOSW
UD6:Azerbaijan:As:29:21:UK6CDK
UF6:Georgia:As:29:21:UK6FOQV
UG6:Armenia:As:29:21:UK6G
UH8:Turkoman:As:30:17:UK8H
UI8:Uzbek:As:30:17:UK8
UJ8:Tadzhik:As:30:17:UK8JR
UL7:Kazakh:As:30:17:UK7
UM8:Kirghiz:As:31:17:UK8MN
UO5:Moldavia:Eu:29:16:UK5O
UP2:Lithuania:Eu:29:15:UK2BP
UQ2:Latvia:Eu:29:15:UK2GQ
UR2:Estonia:Eu:29:15:UK2RT
V2:Antigua, Barbuda:NA:11:08
V3:Belize:NA:11:07
VE:Canada:NA:02,03,04,09,75:01,02,03,04,05:VO,VY1
VE1:Sable Is:NA:09:05
VE1:St Paul Is:NA:09:05
VK:Australia:Oc:55,58,59:29,35
VK:Lord Howe Is:Oc:60:30
VK9:Mellish Reef:Oc:55:30
VK9:Willis Is:Oc:60:30
VK9N:Norfolk Is:Oc:60:32
VK9X:Christmas Is:Oc:54:29

VK9Y:Cocos-Keeling Is:Oc:54:29
VK0:Heard Is:Af:68:39
VK0:Macquarie Is:Oc:60:30
VP2E:Anguilla:NA:11:08
VP2K:St Kitts, Nevis:NA:11:08
VP2M:Montserrat:NA:11:08
VP2V:Br Virgin Is:NA:11:08
VP5:Turks & Caicos Is:NA:11:08
VP8:Falkland Is:SA:16:13
VP8:So Georgia Is:SA:73:13:LU-Z
VP8:So Orkney Is:SA:73:13:LU-Z
VP8:So Sandwich Is:SA:73:13:LU-Z
VP8:So Shetland Is:SA:73:13:LU-Z,CE9,HF0,4K
VP9:Bermuda:NA:11:05
VQ9:Chagos:Af:53:39
VR6:Pitcairn Is:Oc:63:32
VS5:Brunei:Oc:54:28
VS6:Hong Kong:As:44:24
VU:India:As:41:22
VU7:Andaman & Nicobar Is:As:49:26
VU7:Laccadive Is:As:41:22
XE:Mexico:NA:10:06:XF
XF4:Revilla Gigedo:NA:10:06
XT:Upper Volta:Af:46:35
XU:Kampuchea:As:49:26
XV:Vietnam:As:49:26
XW:Laos:As:49:26
XZ:Burma:As:49:26
Y2:Germany E:Eu:28:14:Y3-9
YA:Afghanistan:As:40:21
YB:Indonesia:Oc:54:28:YC
YI:Iraq:As:39:21
YJ:New Hebrides:Oc:56:32
YK:Syria:As:39:20
YN:Nicaragua:NA:11:07:HT
YO:Rumania:Eu:28:20
YS:El Salvador:NA:11:07
YU:Yugoslavia:Eu:28:15:YT,4N-O
YV:Venezuela:SA:12:09
YV0:Aves Is:NA:11:08
Z2:Zimbabwe:Af:53:38
ZA:Albania:Eu:28:15
ZB:Gibraltar:Eu:37:14
ZD7:St Helena:Af:66:36
ZD8:Ascension Is:Af:66:36
ZD9:Tristan da Cunha & Gough Is:Af:66:38
ZF:Cayman Is:NA:11:08
ZK1:No Cook Is:Oc:62:32
ZK1:So Cook Is:Oc:62:32
ZK2:Niue:Oc:62:32
ZK3:Tokelau Is:Oc:62:31
ZL:New Zealand:Oc:60:32
ZL7:Chatham Is:Oc:60:32

ZL8:Kermadec Is:Oc:60:32
ZL9:Auckland Is, Campbell Is:Oc:60:32
ZP:Paraguay:SA:14:11
ZS1:So Africa:Af:57:38:ZS2456,H5,S4,S8,T4,V9
ZS2:Pr Edward & Marion Is:Af:57:38
ZS3:Namibia:Af:57:38
1A0:S M O M:Eu:28:15
1S:Spratly Is:As:50:26
3A:Monaco:Eu:27:14
3B6:Agalega & St Brandon:Af:53:39:3B7
3B8:Mauritius:Af:53:39
3B9:Rodriguez Is:Af:53:39
3C:Equatorial Guinea:Af:47:36
3C0:Annobon:Af:52:36
3D2:Fiji Is:Oc:56:32
3D6:Swaziland:Af:57:38
3V:Tunisia:Af:37:33
3X:Guinea:Af:46:35
3Y:Bouvet:Af:67:38
4S:Sri Lanka:As:41:22
4U:ITU Geneva:Eu:28:14
4U:UN HQ:NA:08:05
4W:Yemen:As:39:21
4X:Israel:As:39:20:4Z
5A:Libya:Af:38:34
5B:Cyprus:As:39:20
5H:Tanzania:Af:53:37
5N:Nigeria:Af:46:35
5R:Malagasy Rep:Af:53:39
5T:Mauritania:Af:46:35
5U:Niger:Af:46:35
5V:Togo:Af:46:35
5W:Western Samoa:Oc:62:32
5X:Uganda:Af:48:37
5Z:Kenya:Af:48:37
6O:Somali:Af:48:37:T5?
6W:Senegal:Af:46:35:6V
6Y:Jamaica:NA:11:08
7O:PDR Yemen:As:39:21
7P:Lesotho:Af:57:38
7Q:Malawi:Af:53:37
7X:Algeria:Af:37:33
8P:Barbados:NA:11:08
8Q:Maldive Is:As:41:22
8R:Guyana:SA:12:09
9G:Ghana:Af:46:35
9H:Malta:Eu:28:15
9J:Zambia:Af:53:36
9K:Kuwait:As:30:21
9L:Sierra Leone:Af:46:35
9M2:W Malaysia:As:54:28
9M6:E Malaysia:As:54:28:9M8
9N:Nepal:As:42:22

9Q:Zaire:Af:52:36
9U:Burundi:Af:52:36
9V:Singapore:As:54:28
9X:Rwanda:Af:52:36
9Y:Trinidad & Tobago:SA:11:09
~~:Abu Ail, Jabal at Tair:As:39:21

From -7375595459945199895
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,523bf6a6d0358a06,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-16 15:44:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 30
Message-ID: <8511@mgweed.UUCP>
Date: Mon, 16-Apr-84 18:44:41 EST
Article-I.D.: mgweed.8511
Posted: Mon Apr 16 18:44:41 1984
Date-Received: Tue, 17-Apr-84 07:52:08 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 16

qst de k9eui
hr arrl bulletin nr 30 from arrl headquarters
newington ct april 13, 1984
to all radio amateurs bt

the arrl petition for rulemaking filed on march 28, which requested that the new internationally allocated bands at 24.890 to 24.990 mhz and 902 to 928 mhz be opened up for u.s. amateur use, has been assigned rm 4784. with regard to the 24 mhz band, the league requests that the lower 40 khz be reserved for a1 and f1 emissions, with the upper 60 khz available for a1, a3, a4, a5, f3, f4 and f5 emissions. comments are due at fcc on or before may 14. reply comments are due on or before may 29. see happenings in may qst for details ar

From 426993829261818709
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4cabc6f8fb201dcd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-16 15:45:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)

Newsgroups: net.ham-radio
Subject: arrl bulletin nr 28
Message-ID: <8512@mgweed.UUCP>
Date: Mon, 16-Apr-84 18:45:26 EST
Article-I.D.: mgweed.8512
Posted: Mon Apr 16 18:45:26 1984
Date-Received: Tue, 17-Apr-84 07:52:36 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

qst de k9eui
hr arrl bulletin nr 28 from arrl headquarters
newington ct april 10, 1984
to all radio amateurs bt

the bill to insure the retention of the communications tower on mt. greylock, massachusetts senate bill 1625, has been reported favorably in committee and will now go to the state senate and house of representatives for further action. the northern berkshire amateur radio club is asking all massachusetts amateurs to contact their state senators and representatives, and all amateurs to contact governor dukakis, to urge their support for the final passage of this bill ar

From -4764586063247698221
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,90b06f6566e2fbf5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-16 15:45:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: crrl bulletin nr 14
Message-ID: <8513@mgweed.UUCP>
Date: Mon, 16-Apr-84 18:45:43 EST
Article-I.D.: mgweed.8513
Posted: Mon Apr 16 18:45:43 1984
Date-Received: Tue, 17-Apr-84 07:53:00 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

qst de k9eui
hr crrl bulletin nr 14 from crrl headquarters
london ont april 16, 1984
to all radio amateurs bt

crrl and carf have received identical letters from doc, thanking the organizations for their joint input on the new

trc24 and for their work in reviewing the doc questions bank. doc is now asking the organizations to improve the questions bank by supplying additional questions. if you have suggestions for good questions, please send them to crrl or carf ar

From 8579272981049984506
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,246281ba3d9c33e4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-16 15:46:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 16
Message-ID: <8514@mgweed.UUCP>
Date: Mon, 16-Apr-84 18:46:16 EST
Article-I.D.: mgweed.8514
Posted: Mon Apr 16 18:46:16 1984
Date-Received: Tue, 17-Apr-84 07:53:25 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 33

qst de k9eui
hr propagation forecast bulletin nr 16 from arrl headquarters newington ct april 16, 1984
to all radio amateurs bt

the solar flux was down to 94 on april 9, its lowest level since early january. the curve turned downward on the 11th, and the flux was back to 119 on the 15th. the curve was leveling off at that point and another gradual decline is expected by the middle of the forecast week. the earths magnetic field was less active, so propagation actually improved overall despite the flux decline.

propagation is expected to be fair to good through the 16th. thereafter, there will be frequent periods of high geomagnetic activity, with possible auroral effeqts in the northern states and canada. high latitude paths will be poor, especially on 21 and 28 mhz, but low latitude circuits will be only mildly affected. transequatorial dx activity on 50 mhz will taper off from its high level of april but it will not disappear entirely this month.

sporadic e layer ionization is increasing but the major season for this mode is still several weeks away. its principal effeqt is short skip, occasionally with very high signal levels, on 28 and 50 mhz. later in the spring the number and

extent of openings will increase, and e skip on 144 mhz will become more likely.

american sunspot numbers for april 5 through 11 were between 1 and 60 with a mean of 28.9 ar

From 8617528855971428282
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e153ba1bd3010e1c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-17 05:38:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: corrected arrl dx bulletin nr 15
Message-ID: <8523@mgweed.UUCP>
Date: Tue, 17-Apr-84 08:38:06 EST
Article-I.D.: mgweed.8523
Posted: Tue Apr 17 08:38:06 1984
Date-Received: Wed, 18-Apr-84 07:11:01 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 57

qst de k9eui
dx bulletin nr 15 from arrl headquarters newington ct
april 12 1984 to all radio amateurs

thanks to w1trc, k1mm, k1xm and the southern new england dx association for the following dx information.

taiwan. pa0gam, sm0gmg and oh2bh have been granted permission to operate from taipei for seven days, beginning april 17. the authorization includes 80 and 40 meters for the first time ever. two stations will be operating simultaneously, and the callsign will be announced at the beginning of the operation. qsl to oh2bh. there is a possibility of a side trip to cr9, macao.

aland islands. oh1cn, oh1eb and oh1eh wpll operate oh0am on 10 through 80 meter ssb and cw april 19 to 23. they will go out of their way to meet your band and mode requests. qsl to oh2bh.

africa. w4lzz will be traveling in africa and hopes to get permission to operate from angola, d2, and mozambique, c9.

comoros. d68am should be on tomorrow night at 2345z on 14235 khz.

franz josef land. uw3sy/1 was on last night on 14025 khz at 0115z.

seychelles. rudy, 5n3rtf, is going to the seychelles and hopes to operate s79mc or s79whw, beginning april 27.

ascension island. zd8rc is on 21345 khz around 2230 to 2300z.

ivory coast. special calls tu71, tu72 and tu73 will be operating through april and may. all three have been worked around 14225 khz at 2315z. qsls for tu71 and tu73 go via ak3f.

brunei. vs5hg has been on 14198 khz at 1400z.

swaziland. 3d6al has been on regularly on 14205 khz at 1300z, long path.

the gambia. c53al can sometimes be found on 7230 khz at 0800z.

corsica. look for special call tk5el on 14235 khz at 2330z.

senegal. another new call, 6v1a, appears on 14192 khz at 2045z.

san marino. t77c has been on 14220 khz around 2200z.

indonesia. john, yb5aso, has been worked on 7005 khz at 0000z.

american samoa. watch for wh8aaj on 14280 khz at 1250z.

From 510849551748090844
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31bc507cbea61d8f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-17 06:16:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2f.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hou2f!4391aas
From: 4391aas@hou2f.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: Question on Cooks and DXCC
Message-ID: <195@hou2f.UUCP>
Date: Tue, 17-Apr-84 09:16:39 EST
Article-I.D.: hou2f.195
Posted: Tue Apr 17 09:16:39 1984
Date-Received: Wed, 18-Apr-84 07:08:58 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 10

I have cards from the Cooks but don't

know if it's North or South; for the purpose of DXCC. I think Manihiki is North and Raratonga is South, but am not sure. Can anybody set me straight on this??

Al Schwarz ND2K
(201) 949-3337

From -8652077196589094511
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,54c381a176a7de26,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-17 12:26:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Keplerian element sets
Message-ID: <2419@allegra.UUCP>
Date: Tue, 17-Apr-84 15:26:47 EST
Article-I.D.: allegra.2419
Posted: Tue Apr 17 15:26:47 1984
Date-Received: Wed, 18-Apr-84 08:08:25 EST
Organization: Bell Communications Research, Inc
Lines: 203

Satellite: oscar-9
Catalog number: 12888
Epoch time: 84099.40458635
Sun Apr 8 09:42:36.260 1984 UTC
Element set: 613
Inclination: 97.5844 deg
RA of node: 72.9486 deg
Eccentricity: 0.0003141
Arg of perigee: 30.1444 deg
Mean anomaly: 329.9951 deg
Mean motion: 15.25230384 rev/day
Decay rate: 9.573e-05 rev/day^2
Epoch rev: 13890
Semi major axis: 6865.197 km
Anom period: 94.411967 min
Apogee: 494.507 km
Perigee: 490.195 km
Beacon: 145.8250 mhz

Satellite: oscar-10
Catalog number: 14129
Epoch time: 84097.34280771
Fri Apr 6 08:13:38.586 1984 UTC
Element set: 97
Inclination: 25.7059 deg

```
RA of node:       206.1228 deg
Eccentricity:    0.6092647
Arg of perigee:   260.5025 deg
Mean anomaly:      30.1701 deg
Mean motion:    2.05857411 rev/day
Decay rate:      -1.42e-06 rev/day^2
Epoch rev:             613
Semi major axis: 26105.470 km
Anom period:    699.513315 min
Apogee:          35636.380 km
Perigee:          3826.098 km
Beacon:           145.8100 mhz

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84096.35772883
   Thu Apr  5 08:35:07.770 1984 UTC
Element set:     19
Inclination:       98.2505 deg
RA of node:       158.7507 deg
Eccentricity:    0.0013759
Arg of perigee:   149.7713 deg
Mean anomaly:     210.4279 deg
Mean motion:   14.61838353 rev/day
Decay rate:        4.1e-06 rev/day^2
Epoch rev:             506
Semi major axis:  7062.462 km
Anom period:     98.506103 min
Apogee:            699.343 km
Perigee:           679.909 km
Beacon:           145.8250 mhz

Satellite: rs-3
Catalog number: 12997
Epoch time:      84099.24199752
   Sun Apr  8 05:48:28.585 1984 UTC
Element set:     92
Inclination:       82.9639 deg
RA of node:       171.8678 deg
Eccentricity:    0.0059947
Arg of perigee:   133.6447 deg
Mean anomaly:     226.9611 deg
Mean motion:   12.15585697 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10242
Semi major axis:  7987.336 km
Anom period:    118.461414 min
Apogee:           1668.103 km
Perigee:          1572.340 km

Satellite: rs-4
Catalog number: 13000
Epoch time:      84099.24840350
```

```
   Sun Apr  8 05:57:42.62  1984 UTC
Element set:     189
Inclination:       82.9731 deg
RA of node:       179.9580 deg
Eccentricity:    0.0018045
Arg of perigee:   213.7194 deg
Mean anomaly:     146.2756 deg
Mean motion:   12.06668484 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10165
Semi major axis:  8026.664 km
Anom period:    119.336837 min
Apogee:           1669.495 km
Perigee:          1640.526 km

Satellite: rs-5
Catalog number: 12999
Epoch time:      84077.71442008
   Sat Mar 17 17:08:45.894 1984 UTC
Element set:     157
Inclination:       82.9665 deg
RA of node:       192.9694 deg
Eccentricity:    0.0009723
Arg of perigee:   286.5975 deg
Mean anomaly:      73.4019 deg
Mean motion:   12.05055416 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:            9892
Semi major axis:  8033.831 km
Anom period:    119.496579 min
Apogee:           1682.843 km
Perigee:          1667.221 km

Satellite: rs-6
Catalog number: 13002
Epoch time:      84099.16409433
   Sun Apr  8 03:56:17.750 1984 UTC
Element set:     78
Inclination:       82.9639 deg
RA of node:       173.7396 deg
Eccentricity:    0.0051191
Arg of perigee:   151.3682 deg
Mean anomaly:     209.0216 deg
Mean motion:   12.13560844 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10222
Semi major axis:  7996.225 km
Anom period:    118.659069 min
Apogee:           1663.850 km
Perigee:          1581.983 km

Satellite: rs-7
Catalog number: 13001
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```
Epoch time:      84087.25143621
   Tue Mar 27 06:02:04.88  1984 UTC
Element set:     149
Inclination:       82.9623 deg
RA of node:       184.5500 deg
Eccentricity:    0.0022310
Arg of perigee:   196.0384 deg
Mean anomaly:     163.9972 deg
Mean motion:   12.08678508 rev/day
Decay rate:          3e-08 rev/day^2
Epoch rev:           10037
Semi major axis:  8017.758 km
Anom period:    119.138381 min
Apogee:           1659.108 km
Perigee:          1623.333 km

Satellite: rs-8
Catalog number: 12998
Epoch time:      84099.28060989
   Sun Apr  8 06:44:04.694 1984 UTC
Element set:     268
Inclination:       82.9624 deg
RA of node:       183.0384 deg
Eccentricity:    0.0017902
Arg of perigee:   295.5254 deg
Mean anomaly:      64.3978 deg
Mean motion:   12.02941799 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:           10134
Semi major axis:  8043.245 km
Anom period:    119.706540 min
Apogee:           1696.652 km
Perigee:          1667.854 km

Satellite: noaa-7
Catalog number: 12553
Epoch time:      84095.66292292
   Wed Apr  4 15:54:36.540 1984 UTC
Element set:     254
Inclination:       99.0392 deg
RA of node:        66.2824 deg
Eccentricity:    0.0012340
Arg of perigee:   306.9749 deg
Mean anomaly:      53.0292 deg
Mean motion:   14.13012135 rev/day
Decay rate:        3.7e-06 rev/day^2
Epoch rev:           14348
Semi major axis:  7224.403 km
Anom period:    101.909953 min
Apogee:            868.485 km
Perigee:           850.655 km
Beacon:           137.6200 mhz
```

```
Satellite: noaa-8
Catalog number: 13923
Epoch time:      84091.04064252
   Sat Mar 31 00:58:31.513 1984 UTC
Element set:     75
Inclination:       98.7146 deg
RA of node:       122.9812 deg
Eccentricity:    0.0015586
Arg of perigee:   280.2889 deg
Mean anomaly:      79.6544 deg
Mean motion:   14.22392845 rev/day
Decay rate:       2.27e-06 rev/day^2
Epoch rev:            5236
Semi major axis:  7192.564 km
Anom period:    101.237855 min
Apogee:            845.857 km
Perigee:           823.436 km
Beacon:           137.5000 mhz


From -1409043790696845106
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47e83643080f4398,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-17 23:09:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!philabs!cubsvax!rocky2!rna!cmcl2!floyd!harpo!
seismo!hao!hplabs!tektronix!lfarr
From: lfarr@tektronix.UUCP
Newsgroups: net.ham-radio
Subject: phone use question
Message-ID: <2319@tektroni.UUCP>
Date: Wed, 18-Apr-84 02:09:40 EST
Article-I.D.: tektroni.2319
Posted: Wed Apr 18 02:09:40 1984
Date-Received: Mon, 23-Apr-84 07:22:27 EST
Lines: 8

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As a beginner in the phone spectrum I would appreciate any help (or pointer
to help) regarding phone etiquette - particularly in the area of
"gentlemans" frequency allocations ... slo scan, nets, etc. I'm a general
class ham and operate 20/40 only. Thanks much.

Larry Farr N7EYM   ...{allegra,ihnp4,decvax}!tektronix!lfarr


From 1172550737614645067
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,19acd317958a63d4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-19 14:42:46 PST
```

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site fisher.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!fisher!djl
From: djl@fisher.UUCP (Dan Levin N6BZA)
Newsgroups: net.ham-radio
Subject: Re: phone use question
Message-ID: <122@fisher.UUCP>
Date: Thu, 19-Apr-84 17:42:46 EST
Article-I.D.: fisher.122
Posted: Thu Apr 19 17:42:46 1984
Date-Received: Fri, 20-Apr-84 02:33:12 EST
References: <2319@tektronix.UUCP>
Organization: Princeton Univ. Statistics
Lines: 21

Having been basically off the air for the last two years, this may
be a bit dated, but here are my two big suggestions for 20.

1] The portion from 14.175 to 14.250 is DX. Avoid rag-chewing
    down there.

2] Watch out for the Maritime Mobile net at 14.303 (?? help on
    freq. anyone). They are a bit over protective and tend to
    have delusions of grandeur, but they do serve a VERY usefull
    and important purpose.

Hope this helps, I think it is worth posting for all to see, since
this sourt of question should get asked much more frequently than
it does.

--
              ***dan

{ihnp4 | decvax | ucbvax}!allegra!fisher!djl
The misplaced (you call *that* a mountain ?!?!?) Californian

From 3264791974082061776
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b6cde72f4139feb8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-20 02:58:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!sdcsvax!sdcrdcf!hplabs!sri-unix!W8SDZ@SIMTEL20
From: W8SDZ%SIMTEL20@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: Info-Hams and net.ham-radio
Message-ID: <12553@sri-arpa.UUCP>
Date: Fri, 20-Apr-84 06:58:00 EDT
Article-I.D.: sri-arpa.12553
Posted: Fri Apr 20 06:58:00 1984
Date-Received: Fri, 11-May-84 08:25:10 EDT

Lines: 8

From: Keith Petersen < W8SDZ@SIMTEL20>

To all Arpa/Milnet readers:

INFO-HAMS@SIMTEL20 is gatewayed to Usenet's net.ham-radio. The
gateway works in BOTH directions. Some subscribers has asked if it
was two-way. The gateway works the same as INFO-CPM and INFO-MICRO.
--73, Keith - W8SDZ

From 6481928447341013109
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,19acd317958a63d4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-20 05:01:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site burl.UUCP
Path: utzoo!watmath!clyde!burl!ars
From: ars@burl.UUCP (Shuff Allen R.)
Newsgroups: net.ham-radio
Subject: Re: phone use question
Message-ID: <441@burl.UUCP>
Date: Fri, 20-Apr-84 08:01:30 EST
Article-I.D.: burl.441
Posted: Fri Apr 20 08:01:30 1984
Date-Received: Sat, 21-Apr-84 01:06:30 EST
References: <2319@tektronix.UUCP>, <122@fisher.UUCP>
Organization: AT&T Technologies; Burlington, NC
Lines: 4

The maritime mobile net is 14.313Mhz.
--
Allen R. Shuff -- 919-697-4339 (Cornet 292)
...![floyd clyde ihnp4 mhuxv]!burl!ars

From 7704352925413538493
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2407a9d9fbc3bb36,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-23 07:48:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: nyu notesfiles V1.1 4/1/84; site acf4.UUCP
Path: utzoo!linus!philabs!cmcl2!acf4!sullivan
From: sullivan@acf4.UUCP
Newsgroups: net.ham-radio
Subject: BCB Dxers and Icom R71A
Message-ID: <16400001@acf4.UUCP>
Date: Mon, 23-Apr-84 10:48:00 EST
Article-I.D.: acf4.16400001
Posted: Mon Apr 23 10:48:00 1984

Date-Received: Tue, 24-Apr-84 07:31:01 EST
Organization: New York University
Lines: 11
Nf-ID: #N:acf4:16400001:000:510
Nf-From: acf4!sullivan   Apr 23 10:48:00 1984

Are there any other BCB DX'ers on the net? (For those who don't know what it is, BCB DXing is listening for distant AM Broadcast Band stations.) I'd be interested in exchanging mail about all aspects of the hobby, and trade tips etc.

As another issue, does anyone have an Icom R70 or R71-A? I am probably going to get the R71-A soon (and an amateur transmitter when I get to a better QTH).

David Sullivan, WA1TNS   UUCP: ...!floyd!cmcl2!sullivan
(212) 460-7287   ARPA: SULLIVAN@NYU
New York University

From -2638202850818220660
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,adc98318d9912a94,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-23 20:34:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!sri-unix!ED@MIT-MC
From: ED%MIT-MC@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: ICOM IC-R71A
Message-ID: <12623@sri-arpa.UUCP>
Date: Mon, 23-Apr-84 23:34:00 EST
Article-I.D.: sri-arpa.12623
Posted: Mon Apr 23 23:34:00 1984
Date-Received: Sat, 28-Apr-84 10:45:50 EST
Lines: 9

From: Ed Schwalenberg <ED @ MIT-MC>

I have been seeing ads and brochures for this general-coverage digital receiver for a while now. It seems to be exactly what I want: something that my computer can turn on, tune, and record RTTY broadcasts with. However, all the dealers I have called say that they will get them a week from now- exactly what they said last week, and the week before that.... Has anyone out there seen one? Played with one? Know anything at all about it that isn't printed on the single-sheet handout? Thanks!

From 6079511784032434128
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,adc98318d9912a94
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-23 23:01:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!sri-unix!
HOWES.WBST@XEROX.ARPA
From: HOWES.WBST@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: ICOM IC-R71A
Message-ID: <12634@sri-arpa.UUCP>
Date: Tue, 24-Apr-84 03:01:18 EDT
Article-I.D.: sri-arpa.12634
Posted: Tue Apr 24 03:01:18 1984
Date-Received: Mon, 30-Apr-84 05:17:04 EDT
Lines: 7

ED,I PURCHASED ONE IN LATE MARCH. UNFORTUNATELY IT HAD A PROBLEM RIGHT FROM
THE START. AFTER 20 MINUTES OPERATION THE PLL CIRCUITS QUIT AND IT WILL NO
LOMGER STAY ON FREQUENCY. IN FACT IT WAS SO BAD ONE HAS NO IDEA WHERE IT
COULD BE (AT LEASRT NOT WITHOUT TEST INSTRUMENTATION). I HAD TO SENT IT
BACK FOR WARRANTY REPAIR AND HAVE NOT SEEN IT BACK YET, SO CAN NOT REPORT
FURTHER ON IT. PERHAPS I SHOULD HAVE PAID MORE ATTENTION TO THE COMMENTS
ON THE R70 IN THE WORLD RADIO HANDBOOK !

From 2848488788119670582
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,19acd317958a63d4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-23 23:09:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site tektronix.UUCP
Path: utzoo!watmath!clyde!burl!we13!ihnp4!zehntel!hplabs!tektronix!lfarr
From: lfarr@tektronix.UUCP (Larry Farr)
Newsgroups: net.ham-radio
Subject: phone use question
Message-ID: <2319@tektronix.UUCP>
Date: Tue, 24-Apr-84 02:09:40 EST
Article-I.D.: tektroni.2319
Posted: Tue Apr 24 02:09:40 1984
Date-Received: Thu, 19-Apr-84 03:58:55 EST
Organization: Tektronix, Beaverton OR
Lines: 9

As a beginner in the phone spectrum I would appreciate any help (or pointer
to help) regarding phone etiquette - particularly in the area of
"gentlemans" frequency allocations ... slo scan, nets, etc. I'm a general
class ham and operate 20/40 only. Thanks much.

Larry Farr N7EYM ...{allegra,ihnp4,decvax}!tektronix!lfarr

From 7272934881217963943
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,19acd317958a63d4

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-24 00:25:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!sri-unix!
Hallidy.dlos@XEROX.ARPA
From: Hallidy.dlos@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: phone use question
Message-ID: <12640@sri-arpa.UUCP>
Date: Tue, 24-Apr-84 04:25:00 EDT
Article-I.D.: sri-arpa.12640
Posted: Tue Apr 24 04:25:00 1984
Date-Received: Mon, 30-Apr-84 05:17:45 EDT
Lines: 43

Larry,
 "WELCOME" to the phone bands. There are very few gentlemen on the phone sub-bands as you will soon (perhaps already) discover. Anyway, here's a breakdown of some of the frequencies on 20 fone (can't help much on 40 since I only operate 40 cw for DX).

14.227 Mhz- W7PHO Family Hour DX Net- Daily from 1500z to 1700z.

14.230 International Slow Scan TV calling frequency- might as well avoid this for a couple of Khz either side, because these guys will hassle you to death for "tearing up" their sync.

14.236 International DX Association- Daily from 2330z to 0100z.

14.243 International Amateur Radio Society- Daily DX net from about 2300z till...

14.309 Brown Sugar Net- Daily from 0300z till about 0500z. This net passes some traffic, handles some DX, and does some BSing (hence the name Brown Sugar). A good bunch.

14.313 Maritime Mobile Net- Daily net (all day) to service amateurs on the high seas- however anyone may check in, particularly those with traffic or willingness to handle traffic.

14.322 YL International SSB Net- also known as the YL System. Daily traffic and DX net. Anyone is welcome.

14.335 SEANet- Daily from 1000z to about 1500z. This net is the SouthEast Asia Net and checkins from all over the far east appear for the purpose of providing new countries to DXers.

Basically, the rest of the band (14.225 on up) is available for ragchewing, DX or whatever. The truth is, these nets and "special" frequencies which I mentioned are not the possession of any one person or group. It's just that if you are there and their net starts, they will do their best to stomp you. Legally, they have no right and must not interfere with QSO's already in progress. But in reality, it doesn't work that way and the little guy loses, so it's best to not mess with them unless you run lots of power and are willing to put up with nasty remarks, carriers, belches, and many other things that make 20 meter fone so much fun.

I suspect that forty is probably no better.

Anyway, good luck and see you on the bands.

73's Dave Hallidy KD5RO

From -5197668462503462238
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,19acd317958a63d4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-24 01:43:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!sri-unix!
tnguyen.es@XEROX.ARPA
From: tnguyen.es@XEROX.ARPA
Newsgroups: net.ham-radio
Subject: Re: phone use question
Message-ID: <12650@sri-arpa.UUCP>
Date: Tue, 24-Apr-84 05:43:35 EDT
Article-I.D.: sri-arpa.12650
Posted: Tue Apr 24 05:43:35 1984
Date-Received: Mon, 30-Apr-84 05:42:40 EDT
Lines: 9

Add to the list:

14.336Mhz County hunter net- Mobiler and fixed station work 3076
counties in United States.

Does anyone know what frequency is the Century DX net in? and DX nets in
other bands (40m, 80m, 10m and 15m) .TNX

Trung Nguyen NO6Q

From 5627960687280761882
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cdf39c5b8821da06,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-26 19:24:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site rdin.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hogpc!houti!ariel!vax135!floyd!
cmcl2!philabs!rdin!abs
From: abs@rdin.UUCP
Newsgroups: net.ham-radio
Subject: Beam and rotor for sale (Pick-up in NYC Area)
Message-ID: <386@rdin.UUCP>
Date: Thu, 26-Apr-84 23:24:02 EDT
Article-I.D.: rdin.386
Posted: Thu Apr 26 23:24:02 1984
Date-Received: Tue, 1-May-84 07:11:05 EDT

Organization: Resource Dynamics Inc., New York
Lines: 14

[]

I'm posting this for a friend not on the net:

For Sale:
     Moseley TR-32 2-element triband beam, with AR-22 rotor.
     Mint condition, with mast and rotor cable. Pick-up only.
     $125, negotiable.

     Rich Grover, WA2MNR
     310 W. 77 Street, Apt. 4-B
     New York, NY 10024
     work: (212)586-3100
     home: (212)595-5802

From 7175223281058570101
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6669161974e8c36b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-27 14:00:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: Notesfiles $Revision: 1.6.2.13 $; site iuvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!inuxc!iuvax!lwm
From: lwm@iuvax.UUCP
Newsgroups: net.ham-radio
Subject: Club Stations
Message-ID: <8500002@iuvax.UUCP>
Date: Fri, 27-Apr-84 18:00:00 EDT
Article-I.D.: iuvax.8500002
Posted: Fri Apr 27 18:00:00 1984
Date-Received: Sun, 29-Apr-84 07:07:52 EDT
Lines: 11
Nf-ID: #N:iuvax:8500002:000:486
Nf-From: iuvax!lwm   Apr 27 18:00:00 1984

K9IU, the club station at Indiana University would like to establish
some kind of dialog with other university club stations. Possibilities
include setting up voice and digital networks. At any rate, it might
be worthwhile to exchange information and experiences by whatever means,
whether it be on the air or via this forum (or by electronic mail).
If anyone out there has any interest, please send mail to:

              Larry Meehan
              ihnp4!inuxc!iuvax!lwm   (uucp)
              lwm@indiana   (csnet)

From 1199535913382786268

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,adc98318d9912a94
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-29 11:41:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: ICOM IC-R71A
Message-ID: <2169@ihuxf.UUCP>
Date: Sun, 29-Apr-84 14:41:20 EDT
Article-I.D.: ihuxf.2169
Posted: Sun Apr 29 14:41:20 1984
Date-Received: Mon, 30-Apr-84 00:59:19 EDT
References: <12623@sri-arpa.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 10

Erickson Communications, in Chicago, had a USED R-71A for sale
on April 7. I understand that the original owner goes through
radios like a teenager through drugs.

My ICOM R-70 works well, but is not the easiest rig to operate.
The R-71A looks like a winner.

--
==
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From 1854789708794942816
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,19acd317958a63d4
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-30 12:47:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site fisher.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!princeton!astrovax!fisher!djl
From: djl@fisher.UUCP (Dan Levin N6BZA)
Newsgroups: net.ham-radio
Subject: Re: phone use question
Message-ID: <133@fisher.UUCP>
Date: Mon, 30-Apr-84 15:47:41 EDT
Article-I.D.: fisher.133
Posted: Mon Apr 30 15:47:41 1984
Date-Received: Tue, 1-May-84 07:44:11 EDT
References: <12650@sri-arpa.UUCP>
Organization: Princeton Univ. Statistics
Lines: 9

As for 10M the W7PHO DX family hour used to hang out somewhere around
28.576. I think QST publishes a list of their freqs. now and then in

the DX section.

--
***dan

{ihnp4 | decvax | ucbvax}!allegra!fisher!djl
The misplaced (you call *that* a mountain ?!?!?) Californian

From 6933109352700472828
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d1b548692d4595c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-30 15:30:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 33
Message-ID: <8892@mgweed.UUCP>
Date: Mon, 30-Apr-84 18:30:54 EDT
Article-I.D.: mgweed.8892
Posted: Mon Apr 30 18:30:54 1984
Date-Received: Tue, 1-May-84 08:03:04 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

qst de k9eui
hr arrl bulletin nr 33 from arrl headquarters
newington ct april 30, 1984
to all radio amateurs bt

armed forces day, may 19 and 20, marks the 35th anniversary of these communications tests between amateurs and the military communications system. amateurs may make crossband contacts with specified army, air force, navy and coast guard stations between 1300z may 19 and 0245z may 20. the cw receiving test will begin at 0300z may 20, with the rtty receiving test beginning at 0335z. complete details may be found on page 104 of may qst ar

From 3836820363653777401
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,377c92c39105d893,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-30 15:31:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)

Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 18
Message-ID: <8893@mgweed.UUCP>
Date: Mon, 30-Apr-84 18:31:18 EDT
Article-I.D.: mgweed.8893
Posted: Mon Apr 30 18:31:18 1984
Date-Received: Tue, 1-May-84 08:03:30 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 39

qst de k9eui
hr propagation forecast bulletin nr 18 from arrl headquarters
newington ct april 30, 1984
to all radio amateurs bt

the last full week of april was an exciting one for solar observers. there were many major solar flares, causing numerous ionospheric fadeouts. the solar flux reached 183 on april 29, its highest level in 17 months. this was a poor time for high latitude communication on any dx frequency, but transequatorial propagation was quite good most of the time. this is the same area of the sun that produced fireworks at the end of march, but the level of activity was considerably higher this time around. the active areas are near the center of the sun as this bulletin is being prepared. there is nothing of significance east of these sunspot concentrations, so it seems almost certain that the flux will be dropping rapidly during the forecast week. propagation will continue unstable most of the time through about may 7, but good spring conditions will prevail for a week or more thereafter. solar flux values should be between 130 and 100 during the first week of may.

several sporadic e openings have been observed on 28 and 50 mhz. there will be more and better times for this mode later in may, but the best and most widespread e skip is still a few weeks away.

much is heard on 28 mhz these days about the expected demise of dx on that band. the decline in high latitude dx on 28 mhz is seasonal, and it would have occurred even with still higher solar flux levels than we have had in recent days. this band is still good for work into south africa, south america and the south pacific islands, but paths like that to northern europe will not be working regularly again until autumn.

american sunspot numbers for april 19 through 25 were between 38 and 102 with a mean of 64.1 ar

From 1375942814582751956
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,126df3699c7a93e6,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-30 15:32:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin
Message-ID: <8895@mgweed.UUCP>
Date: Mon, 30-Apr-84 18:32:46 EDT
Article-I.D.: mgweed.8895
Posted: Mon Apr 30 18:32:46 1984
Date-Received: Tue, 1-May-84 19:00:55 EDT
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 3

There was no arrl DX bulletin this past week.

From 2449509134388915687
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4723a1493cc88719,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,4723a1493cc88719,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 119e09,4723a1493cc88719,start
X-Google-Attributes: gid119e09,public
X-Google-ArrivalTime: 1984-05-02 06:11:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!we13!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio,net.columbia,net.astro
Subject: listen to 150 MHz Russian satellites on your scanner
Message-ID: <2173@ihuxf.UUCP>
Date: Wed, 2-May-84 09:11:28 EDT
Article-I.D.: ihuxf.2173
Posted: Wed May 2 09:11:28 1984
Date-Received: Thu, 3-May-84 08:36:06 EDT
Organization: AT&T Bell Labs, Naperville, IL
Lines: 21

x

According to Monitoring Times magazine (May 1984, pg 11), Russian NAVSAT satellites operate on 150.000 MHz. It is claimed that they "are quite audible on most any scanner even with indoor antennas."

Here in northern Illinois, I can hear these satellites for

about 10 minutes every 2 hours on my scanner with a ground plane antenna at 17 feet! I even heard one faintly using a 19" piece of wire on the back of a different scanner!

The telemetry sounds something like AFSK superimposed on a time standard signal.

Has anyone else out heard these signals?

--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5414

From -8628310608453265927
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c8675901e32bb22f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-02 20:45:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 SMI; site sun.uucp
Path: utzoo!watmath!clyde!burl!ulysses!harpo!decvax!decwrl!sun!gnu
From: gnu@sun.uucp (John Gilmore)
Newsgroups: net.ham-radio
Subject: Summer job in Packet Radio at Stanford
Message-ID: <1007@sun.uucp>
Date: Wed, 2-May-84 23:45:54 EDT
Article-I.D.: sun.1007
Posted: Wed May 2 23:45:54 1984
Date-Received: Fri, 4-May-84 03:45:31 EDT
Organization: Sun Microsystems, Inc.
Lines: 20

From: M@SU-SIERRA.ARPA (Dr. Michael Flynn)
Subject: SUMMER POSITION AVAILABLE
Date: Wed, 2-May-84 13:00:05 PDT
Organization: Stanford University

SUMMER POSITION AVAILABLE

The Packet Radio Research Group is looking for talented, highly-motivated students to work on the design of a high-speed digital QAM modem for medium-range packet radio transmission. This will be a full-time summer position. Applicants will be expected to have some knowledge of microprocessors and a good background in algorithms for digital signal processing. For more information, please contact

Dr. Michael Flynn
ERL 452
(415) 497-1450

or send mail to M@SIERRA.

From 4525875696828469194
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a093d8adf9879bac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-05-03 08:20:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ucbvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!harpo!decvax!ucbvax!daemon
From: rrh@ucbernie
Newsgroups: net.ham-radio
Subject: free for the taking
Message-ID: <558@ucbvax.UUCP>
Date: Thu, 3-May-84 11:20:11 EDT
Article-I.D.: ucbvax.558
Posted: Thu May 3 11:20:11 1984
Date-Received: Fri, 4-May-84 05:32:49 EDT
Sender: daemon@ucbvax.UUCP
Organization: U.C. Berkeley
Lines: 12

From: rrh@ucbernie (Robert R. Henry)
I have a ~1960 Motorola UHF Base station anchoring down one corner of
my room. It supposedly works, has no rocks, is aligned for ~440 Mhz,
has a manual, has a self check meter to analyze all the test points,
and has enough steel and iron to make it weigh 70#.

Its free for the taking. All you have to do is come to Berkeley and
pick it up.

Robert R. Henry, WA6BEV
ucbvax!rrh
(415) 849-4991

From -509871364910951357
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,89b144d91295c3d5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-27 19:08:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin #63
Message-ID: <2313@allegra.UUCP>
Date: Mon, 27-Feb-84 22:08:48 EST
Article-I.D.: allegra.2313
Posted: Mon Feb 27 22:08:48 1984
Date-Received: Tue, 28-Feb-84 14:30:12 EST

Organization: Bell Communications Research, Inc
Lines: 309

**** UoSAT Bulletin-63 00:00 28th February 1984 ****

** UoSAT-Oscar-9 Status **

Following major breakdowns in the Oscar-9 ground station at the University of Surrey shortly before the team left for the UoSAT-B launch campaign, it was impossible for any remaining members of the department to activate the spacecraft during our absence. We apologise for the disruption at this crucial time.

Until the launch of UoSAT-B on March 1st, daily bulletins will be used to describe the basic telemetry and modulation formats and give launch information. Following launch, Oscar-9 will be used for bulletins and information and to answer queries received to the largest possible audience. Eventually, it is anticipated that UoSAT-1 will continue to carry mostly bulletin material while UoSAT-B will generate housekeeping and experimental data, combined with Digitalker and other formats.

** Oscar-9 Schedule **

Tuesday 28th February	03:00	load bulletin-63
Wednesday 29th February	14:00	load bulletin-64
Friday 2nd March	14:00	load bulletin-65

The above schedule will allow users to receive one afternoon and one night pass of each bulletin up to launch.

** UoSAT-B Spacecraft status **

The UoSAT-B spacecraft was shipped to the Goddard Space Flight Centre on Thursday 9th February for two days of magnetometer and magnetorquer tests and calibration. These tests were performed most successfully and the spacecraft left for Vandenburg Air Force Base, California, on Saturday, 11th February, arriving there late Sunday. After installation in the clean room, 10 days were spent on final tests and calibration, rectifying a few interface problems and generally getting to know the complete system. Two days were spent in this period shipping UoSAT-B to MacDonnell Douglas at Huntingdon Beach for a brief period of thermal vacuum testing following inconclusive tests which indicated an unacceptably high level of contamination following thermal vacuum in the U.K. These indications were proved unfounded and the spacecraft returned to Vandenburg with a clean bill of health. (Sorry!) Pre-mate on Thursday 23rd February and final mating with the Delta launcher on Friday were both long, worrying affairs with a number of problems which were eventually all overcome. The UoSAT team returned, less all our freight, on

Saturday and Sunday 25th & 26th February, to finalise the groundstation organisation. The lack of all microcomputers and calibrated modulators and demodulators is likely to cause problems, however we are confident that all will be ready in time for launch on 1st March at 18:00 GMT.

** UoSAT-B Telemetry **

Below is a list of telemetry equations and modulation details - more will follow in our next bulletin when we have unpacked the rest of our documentation. Thanks are due to Harold Price, NK6K, who used his computer systems at Vandenburg to help generate the initial versions of these lists.

Checksummed TLM format. Channel format is:

nnvvvc

nn - channel number
vvv - value
c - To compute checksum, convert each ascii character into the binary, e.g. 'A', which comes in as 41H becomes 0AH. Exclusive OR all 5 values. Convert the lower four bits of the XOR answer to an ascii hex digit, e.g. 0BH becomes 42H, this character is the checksum.

A 1Eh cursor home character preceeds UOSAT-2 in each frame The number after UOSAT-2 on the header line is the date in YYMMDDWHHMMSS, W is day of week, 0-6. The date below is bogus, it wasn't initialized after the s/c was powered up. The s/c was in the Bldg 836 clean room when this frame was taken. Some of the data is thus nonsensical, although the format is correct.

UOSAT-2 0000010040621

00515101039B020112030102040235050 28F06025107031508032909026D
10515011000012005613010314000515000416000717736418736B19736A
20515321032222667723000124001725000726077427736728736829736 9
30515231016532284F330000340007350305360005377366383 53E39353F
40763641000542688043000744000045056246000247736148353949346C
50561751017252661653263154111055852F56000357306758736F593539
602105617BC762800C630041641003651C0E66140567340668000E69000F

Non-checksummed frame. Everything is the same as above expect that the checksum character becomes a space. This format is more pleasing to the human eye.

UOSAT-2 0000010040630

00515 01035 02010 03010 04023 05028 06025 07031 08032 09026
10515 11000 12004 13010 14000 15000 16000 17736 18736 19736
20515 21032 22667 23000 24001 25000 26077 27736 28736 29736
30515 31016 32284 33000 34000 35028 36000 37736 38353 39353
40763 41000 42688 43000 44000 45055 46000 47736 48353 49346
50561 51017 52661 53256 54111 55852 56000 57306 58736 59353
60210 617BC 62800 63004 64100 651C0 66140 67340 68000 69000

A dwell format is also available, in which only selected channels are displayed. The channels can come out in any order, in checksummed or non-checksummed format. The UOSAT-2 and time stamp may or may not be included.

The blank columns will be completed when our freight catches up with us.

Chan #	Name	Equation
00	Solar array current -Y	I=1.9(516-N) ma
01	Nav mag X axis	H=(0.1485N-68) uT
02	Nav Mag Z axis	H=(0.1523N-69.3) uT
03	Nav mag Y axis	H=(0.1507N-69) uT
04	Sun sensor #1	
05	Sun sensor #2	
06	Sun sensor #3	
07	Sun sensor #4	
08	Sun sensor #5	
09	Sun sensor #6	
10	Solar array current +Y	I=1.9(516-N) mA
11	Nav mag (Wing) temp	T=(330-N)/3.45 C
12	Horizon sensor	
13	Spare (tbd)	
14	DCE RAMUNIT current	
15	DCE CPU current	
16	DCE GMEM current	
17	Facet temp +X	T=(480-N)/5 C
18	Facet temp +Y	T=(480-N)/5 C
19	Facet temp +Z	T=(480-N)/5 C
20	Solar array current -X	I=1.9(516-N) mA
21	+10V line current	I=0.97N mA
22	PCM voltage +10V	V=0.015N V
23	P/W logic current (+5V)	I=0.14 (N<=500)
24	P/W Geiger current (+14V)	I=0.21N mA
25	P/W Elec sp.curr (+10V)	I=0.096N mA
26	P/W Elec sp.curr (-10V)	I=0.093 mA
27	Facet temp -X	T=(480-N)/5 C
28	Facet temp -Y	T=(480-N)/5 C
29	Facet temp -Z	T=(480-N)/5 C
30	Solar array current +X	I=1.9(516-N) mA
31	-10V line current	I=0.48N mA

32	PCM voltage -10V	V=0.036N V
33	1802 comp curr (+10V)	I=0.21N mA
34	Digitalker current (+5V)	I=0.13N mA (N<=500)
35	145MHz beacon power O/P	P=(2.5N - 275) mW (valid when N>200)
36	145MHz beacon current	I=0.22N mA
37	145MHz beacon temp	T=(480-N)/5 C
38	Command decoder temp (+Y)	T=(480-N)/5 C
39	Telemetry temp (+X)	T=(480-N)/5 C
40	Solar array voltage (+30V)	V=(0.1N-51.6) V
41	+5V line current	I=0.97N mA
42	PCM voltage +5V	V=0.0084N V
43	DSR current (+5V)	I=0.21N mA (n<=500)
44	Command RX current	I=0.92N mA
45	435MHz beacon power O/P	P=(2.5N-200) mW N>175
46	435MHz beacon current	I=0.44N mA
47	435MHz beacon temp	T=(480-N)/5 C
48	P/W temp (-X)	T=(480-N)/5 C
49	BCR temp (-Y)	T=(480-N)/5 C
50	Battery charge/dischg curr	I=8.8(N-513) mA
51	+14V line current	I-5N mA
52	Battery voltage (+14V)	V=0.21N V
53	Battery cell volts (MUX)	See below
54	Telemetry current (+10V)	I=0.02N mA
55	2.4GHz beacon power O/P	P=((N+50)**2)/480 mW
56	2.4GHz beacon current	I=0.45N mA
57	Battery temp	T=(480-N)/5 C
58	2.4GHz beacon temp	T=(480-N)/5 C
59	CCD imager temp	T=(480-N)/5 C
60-67	Status points 1-96	

The status points will be listed on the next bulletin. They have been encoded so that the two-digit channel number is still used as with channels 0 to 59, followed by three hexadecimal digits giving 12 individual status indications.

Multiplexed Battery Scheme (channel 53)

Six consecutive TLM frames will carry the total volts, the following ten frames will be individual cells, starting with cell #10. Each cell has its own equation.

Cell	Equation
ALL	
10	
9	
8	
7	
6	(To be announced later)
5	
4	
3	

The DCE currents will have small counts even when the DCE is off. We think this is due to the +10 coming in from the Nav Mag lines. If the Nav Mag is off (unlikely), the DCE currents will be zero when both it and the Nav Mag are off.

By the way, beacons are:

145.825 MHz

435.025 MHz

2401.1 MHz

The tones are the same as for Oscar-9, but the sense of mark and space have been reversed, to ensure more general compatibility with many microprocessors, i.e. 1200Hz = logic 0 and 2400Hz = logic 1. Serial data uses logic 1 as the idle level.

The deviation of the transmissions on 145.825MHz is greater than that on UoSAT-1, which should be beneficial to the majority of users. Special receivers optimised to receive the UoSAT-1 low-deviation signals may require wider filters for best effect on UoSAT-B.

** UoSAT-B Events **

The following events and keplerian orbital elements have been supplied by Phil Karn, KA9Q. The circular period / precession figures are from Jim Miller, G3RUH. The data is derived from different sources and is not directly comparable.

The liftoff time assumed is 17:59:00 GMT on 1st March, 1984.

Event	hh:mm:ss (relative to liftoff)	
1st stage main engine cutoff:	00:03:47	
Vernier engine cutoff:	00:03:53	
Stage 1 separation:	00:03:55	
Stage 2 ignition #1:	00:04:00	
Stage 2 cutoff #1:	00:10:50	
Stage 2 ignition #2:	00:54:04	
Stage 2 cutoff #2:	00:54:17	
Landsat separation:	00:59:10	
Stage 2 maneuver start:	00:59:15	
Stage 2 maneuver stop:	00:59:52	
Uosat-B separation:	01:11:40	
Stage 2 ignition #3:	01:30:53	distancing maneuver
Stage 2 cutoff #3:	01:30:58	
Stage 2 ignition #4:	01:36:43	depletion burn

```
Stage 2 cutoff #4:              01:37:05

Satellite: uosat-b
Epoch time:      84061.79768519 (separation)
   Thu Mar  1 19:08:40.000 1984 UTC
Element set:     prelaunch
Inclination:       98.2596 deg
RA of node:       124.2426 deg
Eccentricity:    0.0004100
Arg of perigee:   174.4207 deg
Mean anomaly:     226.7604 deg
Mean motion:   14.61025794 rev/day
Decay rate:              0 rev/day^2 (none given)
Epoch rev:               0
Semi major axis:  7065.080 km
Anom period:     98.560888 min
Apogee:            690.030 km
Perigee:           684.236 km


Orbit No    : 0
Eqx date    : Mar 1st 1984
Eqx time    : 18:59:25  GMT
Eqx long    : 320.38    deg.w
Mean hgt    : 687       km
Period      : 98.5045   mins
P-drag      : 8.3E-6    *N-ref
Long inc    : 24.6251   degs
L-drag      : 2.1E-6    *N-ref
Inclination : 98.26     degs




** Spacecraft orbital data **

Orbits for 27th February

            UoSAT          OSCAR-8        NOAA-7
Orbit no :  13266          30488          13825
Eqx time :  14:07:41       14:31:42       14:55:52       GMT
Eqx long :  337.7          293.9          352.2          deg.w
Mean hgt :   496.0          904.0          850.0         km
Period   :   94.5234694    103.1632109    101.9582375    mins
P-drag   :  2.477E-05      8.277E-07      7.500E-06      *N-ref
Long inc :  23.6297526     25.7899720     25.4896650     degs
L-drag   :  6.233E-06       .000E+00      2.000E-07      *N-ref


From -1507589043532645452
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d7ddbdb9d2032cf,start
X-Google-Attributes: gid151e61,public
```

X-Google-ArrivalTime: 1984-02-27 19:09:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: AO-10 Packet Activity
Message-ID: <2314@allegra.UUCP>
Date: Mon, 27-Feb-84 22:09:54 EST
Article-I.D.: allegra.2314
Posted: Mon Feb 27 22:09:54 1984
Date-Received: Tue, 28-Feb-84 14:32:23 EST
Organization: Bell Communications Research, Inc
Lines: 22

Posted: Mon Feb 27, 1984   2:02 AM EST   Msg: BGIE-1726-2537
From: TCLARK
To: amsat
Subj: Packet Radio Activity Report

The following reports on some interesting packet radio experiments on AO-10 this weekend. WH6AMX showed up for his baptism under fire and showed that, despite being 2500 miles from the nearest other packet radio station, he could get his act together. Rick has now QSO'd ZL1AOX, KA6M and W3IWI. On Sunday, W3IWI sent WH6AMX a file of about 1.2 kbytes length with good thruput in addition to a long rtty-style ragchew. Also on Sunday, W3IWI sent KA6M a total of about 9 kbytes of data plus several kbytes of rag-chewing. Packet SWLing this weekend were ZL1AOX, KA9Q (NJ), WB9MJN (IL), N5AHD (TX) and W4KDP (AL) plus perhaps others. It would seem that the biggest challenge we have now is to come up with some rcvr/modem hdwe that improves on the link performance achieved with FSK, and which is AFC controlled to minimize tuning touchiness. Also, we now need to get some stations set up with gateway capability so that local area networks in metropolitan areas (DC, LA & SFO will probably be first) can use the satellite to for inter-net ties. Any volunteers to work on these projects?

From -7384206502032596776
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69f5bc23428731c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-28 04:33:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!dual!onyx!amd70!
fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Packet Radio tests on Amsat Oscar 10
Message-ID: <264@dsd.UUCP>
Date: Tue, 28-Feb-84 07:33:34 EST
Article-I.D.: dsd.264

Posted: Tue Feb 28 07:33:34 1984
Date-Received: Sun, 4-Mar-84 02:51:59 EST
Lines: 23

  TO: HM
FROM: TC
SENT: 28 FEB 84 03:18:47
READ: 28 FEB 84 05:52:31

The following reports on some interesting packet radio experiments on AO-10 this weekend. WH6AMX showed up for his baptism under fire and showed that, despite being 2500 miles from the nearest other packet radio station, he could get his act together. Rick has now QSO'd ZL1AOX, KA6M and W3IWI. On Sunday, W3IWI sent WH6AMX a file of about 1.2 kbytes length with good thruput in addition to a long rtty-style ragchew. Also on Sunday, W3IWI sent KA6M a total of about 9 kbytes of data plus several kbytes of rag-chewing. Packet SWLing this weekend were ZL1AOX, KA9Q (NJ), WB9MJN (IL), N5AHD (TX) and W4KDP (AL) plus perhaps others. It would seem that the biggest challenge we have now is to come up with some rcvr/modem hdwe that improves on the link performance achieved with FSK, and which is AFC controlled to minimize tuning touchiness. Also, we now need to get some stations set up with gateway capability so that local area networks in metropolitan areas (DC, LA & SFO will probably be first) can use the satellite to for inter-net ties. Any volunteers to work on these projects?

From -6070853615597548737
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c43b617e772c1fff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-28 04:37:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!dual!onyx!amd70!
fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: AX.25 P/F bit again!
Message-ID: <265@dsd.UUCP>
Date: Tue, 28-Feb-84 07:37:33 EST
Article-I.D.: dsd.265
Posted: Tue Feb 28 07:37:33 1984
Date-Received: Sun, 4-Mar-84 02:52:42 EST
Lines: 143

To: All Packet Stations
From: Phil Karn, KA9Q
Subject: P/F bit (again!)

With the Trenton Packet Radio conference
coming up again soon, I think we are going to be forced to settle the

issue of proper poll/final bit usage in AX.25 once and for all.

For those of you unfamiliar with the problem, here's a short primer. The P/F ("Poll/Final") bit in the control field of each X.25 level 2 frame is provided for asking the status of the other end of a link, particularly after a timeout. Since the Poll (inquiry) and Final (response to inquiry) functions share the same bit, resulting in identical control fields, the distinction is made in X.25 LAPB point-to-point links by looking at which address (yours or his) is present in the address field. If it contains your address, the frame is a poll command to which you must respond; if it contains the other station's address, it is a response to your poll. The distinction is necessary because both stations might poll each other simultaneously, a very likely possibility if a momentary link failure or QRM affects both transmission directions.

Unfortunately, when we invented the addressing scheme for AX.25, we lost this information. The address fields are always the same - they contain both callsigns. Therefore you cannot reliably determine if a frame you receive with the P/F bit set is a command or a response. While X.25 LAPB does provide for an alternate way to recover after a timeout (by sending ONLY the oldest unacknowledged I-frame in hopes of generating an S-frame response with an indication of what the receiver expects) there are other situations which require a better solution.

1. The current TAPR implementations appear to send ALL unacknowledged I-frames after a timeout, which is forbidden under LAPB. This can result in inefficient use of the channel, particularly if the timeout was due to the receiver's acknowledgement being lost.

2. When the remote end becomes busy (say, due to a slow printer), it sends a RNR (receiver not ready) to flow control the sender. LAPB requires the sender to wait for a RR (receiver ready) before sending more information. It is SPECIFICALLY FORBIDDEN for the sender to send any more I-frames before getting explicit permission from the receiver in the form of the RR frame. Since this RR frame could get lost, the sender could wait forever; therefore it is strongly recommended that the sender take the responsibility of periodically polling the other end to see if the busy condition still exists. Polling with the P/F bit takes much less channel bandwidth than sending unwanted I-frames in the hopes that the receiver might be ready for them.

Unfortunately, in the TAPR implementation, it appears that the sender periodically resends all the I-frames which the receiver could not accept, over and over again, until the receiver can finally take them. Besides being in violation of the protocol, this uses the channel inefficiently. Right now, this isn't too much of a problem because our links are generally slower than our computers or terminals. However, when our link speeds surpass our computer or terminal rates and flow control becomes common, we'll find ourselves wasting a lot of the extra channel capacity on retransmitted I-frames. Clearly the problem must be solved.

Therefore, I would like to formally propose the following modifications to the standard. Basically, I am proposing that we use some reserved bits in the SSID byte of the source and destination address fields to contain the information formerly provided by the address field of X.25 LAPB. This can be done in an upward compatible way, preserving compatibility with existing implementations of AX.25.

For the purposes of this section, bits within octets (bytes) of the address field are numbered from 1 to 7, with bit 1 being the least significant bit (the address extension bit.) Currently, the AX.25 standard calls for bits 6 & 7 to be reserved and set to 1. I would now define a use for bit 7 of the source and destination SSID bytes; bit 6 in all address SSID bytes would remain reserved and set to one, while both bits 6 & 7 in repeater SSID bytes (if any) would remain reserved and set to one.

An upward-compatible AX.25 station would determine if the station it is in communication with also has the "new" standard by comparing bit 7 in the source address SSID with bit 7 in the destination address SSID of received frames. Since the present standard calls for these bits to be set to 1, equality would indicate that the other station is an "old" implementation and the "new" station would act accordingly (i.e., according to present procedures).

However if the bits differ, it can then determine if a given frame is a command or response by whether the source or destination SSID field has bit 7 set, using rules analogous to LAPB. In other words, if LAPB would call for a given frame to be sent as a "command", i.e., with the other station's address in the address field, bit 7 in the destination SSID byte is set to one and bit 7 in the source SSID is set to zero. If LAPB would call for the frame to be send as a "response", bit 7 in the source SSID would be set to one and to zero in the destination SSID.

Summarizing in tabular form:

X.25 LAPB addressing rules:

Direction	Command	Response
A->B	B	A
B->A	A	B

AX.25 (revised):

	Command (either direction)	
dest SSID bit 7		src SSID bit 7
1		0

	Response (either direction)	
dest SSID bit 7		src SSID bit 7
0		1

Note that the same callsign (that of the commanded station) would have bit 7 of its SSID set in both the command frame and its response. This is because the commanded station's callsign occupies the destination

field of the command, while it occupies the source field of the response. On the other hand, bit 7 of the commanding station's SSID byte would be zero in both the command and response frames.

Since all X.25 frames are classed as either "commands" or "responses", even when there is no ambiguity (e.g., I-frames are always commands), all AX.25 frames should also be marked as such.

This proposal has the following advantages:

1. Upward compatibility with existing implementations of AX.25 which comply with the "old" requirements concerning the reserved SSID bits.

2. Conceptual conformance to LAPB with respect to "commands" and "responses" when communicating with other stations also following this "new" protocol. The AX.25 address which is "marked" by bit 7 in its SSID byte corresponds to the choice of address "A" or "B" which would normally be used in LAPB. This allows much closer adherence to well-established LAPB procedures for link recovery and flow control, and much better channel utilization under these conditions.

3. Minimization to the greatest possible extent of the procedural differences between AX.25 and CCITT X.25 caused by the former's specialized addressing scheme. This would allow cleaner implementations that draw upon existing procedures developed in non-amateur X.25 networks.

Comments, constructive flames, etc, are invited.

73, Phil

From -1027917784093745600
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cc7568929cca758b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-28 04:42:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!dual!onyx!amd70!
fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Packet Radio Activity in NJ
Message-ID: <266@dsd.UUCP>
Date: Tue, 28-Feb-84 07:42:08 EST
Article-I.D.: dsd.266
Posted: Tue Feb 28 07:42:08 1984
Date-Received: Sun, 4-Mar-84 02:53:34 EST
Lines: 53

Posted: Mon Feb 20, 1984   6:14 PM PST   Msg: HGIE-1721-7543
From: PKARN

To: rzwirko
CC: pacsat
Subj: Packet radio

Wow! I knew packet radio was popular down there, but I wasn't aware just how many there really were. Here's a status report on activities in NJ:

Rip and I have been on 145.01 more or less continuously for the past 2 weeks. The only problems that have surfaced are a RTTY bulletin board and ragchew frequency on 145.02, and occasional simplex FM operation on 145.00. Neither are particularly troublesome, but to be candid, both the RTTY folks and we are eyeing each other cautiously. They are considering a move up 15 khz, which will help matters. I am working on getting them interested in packet, but they certainly are reluctant. I can't understand how somebody who advocates going right out and spending $300+ on a flashy RTTY TU can balk at buying a TAPR board. I think some education is in order here, and am in the process of preparing a packet radio roadshow I can combine with my existing AMSAT pitch. I have already gotten requests from several north NJ and NYC radio clubs to give talks on both topics, so I think this is a fertile but very undeveloped area. It would also help if we could establish 145.01 as a "recommended" 2 meter packet radio frequency, perhaps with the help of W4RI and ARRL. The local repeater council has decided to stay out of the business of "regulating" simplex operations, so they are of no help.

I have purchased a old TR-22C transceiver and 30 watt amplifier. As soon as I get crystals, I can dedicate it to packet along with one of my TNC boards (although I haven't had to preempt the TR-9000 very often lately.) I also have a disused CP/M system which I may be able to set up as an RBBS, once I do the necessary work to add flow control.

I live on the side of a hill, near the top, in Warren Township, NJ (40.658N, 74.444W, ~625'). While my elevation is good and my coverage of NYC is excellent, the top of my tower is barely level with the top of the hill to the west. However, my landlord also owns a partially completed house on the very top of the hill which is home to a 220 repeater and 2m contest site; I haven't asked him yet, but I can probably get permission to move the repeater up there. That would also put a little distance between it and my 2m satellite antenna...

>From my home QTH (using the satellite array) the path to WA2LQQ is absolutely solid, although he is currently plagued by occasional local QRM which wipes out the band. He is typically full scale over about 40-50 miles. Steve Robinson asked me to listen for a 2m repeater east of Philadelphia which he is considering as a site for his digipeater; I can hear it, but it isn't terribly strong. However, moving to the top of the hill will probably help. I suspect that WB4APR's station will have no trouble getting into that site (Mt. Holly, NJ). Once we do that, we'll have it made!

Phil

From -6437360626807014013
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1c87c1bbbd6126d7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-28 04:46:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!zehntel!dual!onyx!amd70!fortune!dsd!
dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: GRIDX Program in Basic
Message-ID: <267@dsd.UUCP>
Date: Tue, 28-Feb-84 07:46:36 EST
Article-I.D.: dsd.267
Posted: Tue Feb 28 07:46:36 1984
Date-Received: Sun, 4-Mar-84 03:19:40 EST
Lines: 234

Posted: Mon Feb 20, 1984   6:11 PM PST   Msg: RGIE-1721-7533
From: TCLARK
To: docs
Subj: GRIDX program notes

The program GRIDX.BAS is intended to provide a simple way for AMSAT members to calculate the "Maidenhead" grid square designators on their home computers. This program allows input in either Longitude/Latitude or Grid Square formats and will calculate the other format.

If a grid square is given to less than 6 character precision on input, the center of the square defined by the characters is assumed. For example, W3IWI at 76.936 degrees west and 39.185 degrees north yields grid square FM19ME. If the grid location FM19 is specified, then the center of FM19, which is at FM19LL is assumed. From my location, this is about 30 km away.

Another feature of this program is that it gives you the range (along the surface of the earth) and azimuth from the first station entered (called 'home') to the target stations.

The GRIDX program was adapted from an earlier W3IWI program called GRID (which was rather machine specific). It was written and tested in North-Star (N*) disk basic (running under CP/M) and runs in N*, SoHo or BAZIC as is. I wrote the program with transportability in mind. The major N* "quirk" that you should have to adapt to other dialects is in the area of string notation. N* explicitly calls out string members. For example, if G$="ABCDEFGHI", then G$(3,5)="CDE". Microsoft uses the MID$ function to accomplish this and would get the same sub-string with MID$(G$,3,3). Similarly, G$(1,1) in N* is "A"; to get this in Microsoft, you would use either LEFT$(G$,1) or MID$(G$,1,1). Another minor change that is necessary (line 1830) is to change N*'s SQRT to SQR in most other dialects.

When any of you get versions of this or other "grid" programs running,

please make them available thru the AMSAT Software Exchange.

73, Tom

Posted: Mon Feb 20, 1984   6:13 PM PST   Msg: DGIE-1721-7539
From: TCLARK
To: DOCS
Subj: GRIDX Program in BASIC

```
10 DIM G$(10),T$(5),U$(5)
20 DIM X0$(60),X1$(60),X2$(60),X3$(60),X4$(60),X5$(60),X6$(60),X7$(60)
30 E9=1E-6 : T=50 : REM -- Small number & Tab location for responses
40 P1=3.1415926535 : P2=P1/180 : REM -- PI, Deg =>= Radians
50 I=0 : REM -- Pass counter ( for DO WHILE .not. Quit loop )

60  REM
70  REM -- Sign-on message and initialization
80  X0$="------------------------------------------------------------"
90  X1$="I                                                          I"
100 X2$="I   Maidenhead Grid Square Utility Program = GRIDX     I"
110 X3$="I   (C) 1984   Dr. Thomas A. Clark, W3IWI              I"
120 X4$="I              6388 Guilford Road                      I"
130 X5$="I              Clarksville, MD 21029                   I"
140 X6$="I   Permission is granted for non-profit, amateur      I"
150 X7$="I   usage providing credit is given to the author.     I"
160 REM  ----------------------------------- TAC  20 Feb 84 ---

170 PRINT X0$ : PRINT X1$ : PRINT X2$ : PRINT X1$
180  PRINT X3$ : PRINT X4$ : PRINT X5$ : PRINT X1$
190   PRINT X6$ : PRINT X7$ : PRINT X1$ : PRINT X0$
200    PRINT

210 REM
220 REM -- Loop to get station info
230  PRINT "In the following, enter West Longitude and Latitude in"
240   PRINT "units of degrees and decimals" : PRINT

250 I=I+1 : PRINT : REM -- Start of loop
260  IF I > 1 THEN 300
270   PRINT "Coordinates of 'home' station:" : GOTO 500

280 REM
290  REM -- Get target station info
300   PRINT "Target:  C=Coordinates, G=Grid, Q=Quit",TAB(T), : INPUT T$
310    T$=T$(1,1) : IF T$="C" THEN 490
320     IF T$="c" THEN 490
330      IF T$="G" THEN 400
340       IF T$="g" THEN 400
350        IF T$="Q" THEN STOP
360         IF T$="q" THEN STOP
370          PRINT "INVALID ENTRY -- TRY AGAIN" : GOTO 300
```

```
380 REM
390 REM--Grid Square entry for target station
400 PRINT "Enter Grid Square",TAB(T), : INPUT G$
410  GOSUB 1220 : IF L3=6 THEN 430
420   PRINT "Grid square was padded to middle of cell = ",TAB(T),G$
430    GOSUB 1450 : GOSUB 1500
440     PRINT "Coordinates: W.Longitude = ",TAB(T),W," Deg.W"
450      PRINT "                Latitude = ",TAB(T),L," Deg."
460       GOTO 560

470 REM
480 REM -- Coordinate entry for either home or target station
490 PRINT "Coordinates of station # ",I," :"
500  PRINT "West Longitude =", TAB(T), : INPUT W
510   PRINT "     Latitude  =", TAB(T), : INPUT L
520    GOSUB 1090 : PRINT "   Grid Square = ",TAB(T),G$
530     IF I = 1 THEN 620 : REM -- Exit to initialize "home" station

540 REM
550 REM -- Calculate Azimuth and bearing to target station
560 GOSUB 1770
570  PRINT "Azimuth to target station = ",TAB(T),A," Deg."
580   PRINT "                     Range = ",TAB(T),R,U$
590    GOTO 250

600 REM
610 REM--Initialization for "home" station
620 W5=W*P2 : L5=L*P2 : S5=SIN(L5) : C5=COS(L5) : REM -- Trigonometry
630  PRINT
640   PRINT "Do you want Ranges in Km, Miles or Nautical Miles ?"
650    PRINT "     Enter K, M or N", TAB(T), : INPUT U$ : U$=U$(1,1)

660 REM
670 REM--Constants defined as U are the mean radius of the earth
680 IF U$="K" THEN 710
690  IF U$="k" THEN 710
700   GOTO 720
710    U$=" Km. " : U=6366.20 : GOTO 250

720 IF U$="M" THEN 750
730  IF U$="m" THEN 750
740   GOTO 760
750    U$=" Miles" : U=3956.09 : GOTO 250

760 IF U$="N" THEN 790
770  IF U$="n" THEN 790
780   PRINT "INVALID ENTRY -- TRY AGAIN" : GOTO 640
790    U$=" N.Mi." : U= 60/P2 : GOTO 250

1000 REM ---------------------
1010 REM -- Subroutine to convert Longitude and Latitude to Grid Square
1020 REM    Call with W=West Longitude (e.g. Chicago = +88 degrees)
```

```
1030 REM    and L=Latitude (+ for Northern Hemisphere).
1040 REM    The units for both W and L are degrees.
1050 REM
1060 REM    On Completion, the string G$ contains the "Maidenhead"
1070 REM    Grid Square as a 6-character string.
1080 REM
1090 W3=180-W : IF W3<0 THEN W3=W3+360
1100  W1=INT(W3/20+E9)
1110   W2=INT((W3-20*W1)/2+E9)+48 : W1=W1+65
1120    W3=INT(24*(W3/2-INT(W3/2)+E9))+65
1130     L1=INT((L+90)/10+E9) : L2=INT(L+90+E9-10*L1)
1140      L3=INT((L+90-10*L1-L2)*24+E9) : L1=L1+65 : L2=L2+48 : L3=L3+65
1150       G$=CHR$(W1)+CHR$(L1)+CHR$(W2)+CHR$(L2)+CHR$(W3)+CHR$(L3)
1160        RETURN

1170 REM ---------------------
1180 REM -- Subroutine to Pad Grid Square to middle of a cell if
1190 REM    all 6 characters are not given. This routine also checks
1200 REM    the validity of the square and kills program if not correct.
1210 REM
1220 L3=LEN(G$) : IF L3>6 THEN 1400
1230  IF L3=6 THEN 1270
1240   IF L3 < 4 THEN 1260 ELSE G$=G$(1,4)+"LL"
1250    GOTO 1270
1260     IF L3 < 2 THEN 1400 ELSE G$=G$(1,2)+"55LL"
1270 IF G$(1,1) < "A" THEN 1400
1280  IF G$(1,1) > "R" THEN 1400
1290   IF G$(2,2) < "A" THEN 1400
1300    IF G$(2,2) > "S" THEN 1400
1310     IF G$(3,3) < "0" THEN 1400
1320      IF G$(3,3) > "9" THEN 1400
1330       IF G$(4,4) < "0" THEN 1400
1340        IF G$(4,4) > "9" THEN 1400
1350         IF G$(5,5) < "A" THEN 1400
1360          IF G$(5,5) > "X" THEN 1400
1370           IF G$(6,6) < "A" THEN 1400
1380            IF G$(6,6) > "X" THEN 1400
1390             RETURN
1400 PRINT " ***** INVALID GRID SQUARE = ",G$," ***** ABORTED *****"
1410 STOP

1420 REM ---------------------
1430 REM -- Subroutine to convert Grid Square=G$ to West Longitude=W
1440 REM    with W returned in degrees and fractions
1450 W1=ASC(G$(1,1))-65 : W2=ASC(G$(3,3))-48 : W3=ASC(G$(5,5))-65
1460  W=180 -20*W1 -2*W2 -W3/12 -1/24 : IF W<0 THEN W=360+W
1470   RETURN

1480 REM ---------------------
1490 REM -- Subroutine to convert Grid Square=G$ to Latitude=L
1500 L1=ASC(G$(2,2))-65 : L2=ASC(G$(4,4))-48 : L3=ASC(G$(6,6))-65
1510  L=-90 +10*L1 +L2 +L3/24 +1/48
1520   RETURN
```

```
1530 REM ---------------------
1540 REM -- Subroutine to calculate distance and azimuth between stations
1550 REM
1560 REM    On entry, W and L are the second stations west longitude
1570 REM    and Latitude. The first ("home") station should already have
1580 REM    its coordinates available as
1590 REM         S5=Sin(Latitude), C5=Cos(Latitude), W5=W.Long (radians)
1600 REM
1610 REM    In the following, P2 has the value PI/180 to convert degrees
1620 REM    to radians. U is the units conversion constant of Km, miles,
1630 REM    or N.Miles per mean earth radius (see note below).
1640 REM
1650 REM    On exit, R is the range along a great circle from the "home"
1660 REM    station to the remote station in the units defined by U.
1670 REM    A is the azimuth (bearing) from the "home" station to the
1680 REM    second station along the great circle connecting them.
1690 REM
1700 REM    This routine makes a simplifying approximation that the earth
1710 REM    is a sphere of radius U. Actually, the earth is an oblate
1720 REM    Sphereoid with the polar radius 1 part in 300 less than the
1730 REM    equatorial radius. This approximation leads to errors up to
1740 REM    about 30 km and a fraction of a degree on ranges and azimuths
1750 REM    to very distant stations.
1760 REM
1770 W6=W*P2 : L6=L*P2 : S6=SIN(L6) : C6=COS(L6)
1780  C=S5*S6 + C5*C6*COS(W6-W5) : IF ABS(C)>1 THEN C=SGN(C)
1790   S=SQRT(1-C*C) : X=ATN(S/C) : IF C<0 THEN X=X+P1
1800    R=U*X : IF S<>0 THEN 1820 ELSE A=0
1810     RETURN
1820 C1=(S6-S5*C)/(S*C5) : IF ABS(C1)>1 THEN C1=SGN(C1)
1830  S1=SQRT(1-C1*C1) : A=ATN(S1/ABS(C1))/P2 : S3 = SIN(W5-W6)
1840   IF S3<0 THEN A=-A
1850    IF C1<0 THEN A=180-A
1860     IF A<0 THEN A=A+360
1870      IF A>360 THEN A=A-360
1880       RETURN

1890 REM ---------------------
9999 END
```

```
From -4919023498319122464
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a70b44f0eecb98a3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-28 04:51:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!zehntel!dual!onyx!amd70!fortune!dsd!
dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Uosat B Launch Activities
```

Message-ID: <268@dsd.UUCP>
Date: Tue, 28-Feb-84 07:51:01 EST
Article-I.D.: dsd.268
Posted: Tue Feb 28 07:51:01 1984
Date-Received: Sun, 4-Mar-84 03:20:43 EST
Lines: 153

Posted: Thu Feb 23, 1984   1:34 AM PST   Msg: CGIE-1723-8934
From: MSWEETING
To: AMSAT
Subj: More Uosat-B Predicts

   Just to add confusion, here are some more predictions
for Uosat-B, calculated by G3RUH here in England, from
Harolds original data.

'OLD TYPE'

Orbit No   : 0

Eqx date   : Mar 1st 1984
Eqx time   : 18:59:25 GMT
Eqx long   : 320.38   deg.w
Mean hgt   : 687   km
Period   : 98.5045   mins
P-drag   : 8.3E-6   *N-ref
Long inc   : 24.6251   degs
L-drag   : 2.1E-6   *N-ref
Inclination : 98.26   degs

'KEPLERIAN TYPE'

Afiliation Set   : UOS-G3RUH/1(pre launch)
Epoch time   : 61.7990741
   19:10:40 GMT March 1st 1984
Inclination   : 98.25967   deg
RA of node   : 124.24   deg
Eccentricity   : 0.0004139783
Arg of perigee   : 174.17   deg
Mean anomaly   : 227.01   deg
Mean motion   : 14.61862   rev/day
Decay rate   : 1.8E-5   rev/day^2
Epoch rev   : 0
Semi Major Axis : 7065.31   km

If launch time changes.

For 'OLD TYPE' : add/subtract correction to Eqx time.

For 'Keplerian' : add/subtract correction to epoch time AND
                  add/subtract 4.178E-3 deg/sec to RAAN

 These, by the way, are similar to PKARN's numbers (but not exactly the same !)

Posted: Thu Feb 23, 1984   8:21 AM PST   Msg: FGIE-1724-2525
From: MSWEETING
To: hprice,lkayser
CC: amsat
Subj: Uosat-1 is ON !
Anyone interested :

  Uosat-1 is now on, and will stay on for most of the w/e.
  It is sending telemetry.

                   Mac

Posted: Thu Feb 23, 1984 11:27 AM PST   Msg: HGIE-1724-4487
From: LKAYSER
To: AMSAT
Subj: STATUS UOS-B THUR PM
AUTOLINK OTTAWA
TO EVERYONE
GANG,

1.5 man months were expended yesterday during the premate (32 people * 12 hours). The problems were too numerous to go into here, I've got several minutes of video tape you can all look at some time. There where no problems attributable to uosat-B. We called it quits at 4:00am and got it again at 10:00 this morning. We should be ready to go to the pad shortly after noon today, if nothing came up.

Larry, pls forward to TM, thanks.

END, REGARDS LARRY

Posted: Thu Feb 23, 1984   9:01 PM PST   Msg: CGIE-1724-8162
From: HPRICE
To: amsat
CC: msweeting
Subj: Uosat-B status, thursday evening.
Gang,

Just got back from the mate. The 1 hour procedure lasted from 14:00 to 20:00 and still isn't done. Some of the things that were done last nite got disaproved overnite and had to be redone. Some new problems cropped up at the pad. The caps on the pyros still need to be put on, and one of them looks like it will hit the 1.2 Ghz antenna support which may require milling of something somewhere. Two 2m/70cm antennas need to be put on and the array covers removed. We had to clear the pad for the Landsat guys so Martin will finish up tomorrow. Although all the over time business seems dire, there should be no problem getting launched. The NASA and MDAC crews have been great, as has everyone else. It was a real experience, hopfully the hour + of video will give you some of the feel of the goings on. Most of the Surrey crew leaves for LA tomorrow morning, Martin stays till the weekend and

Ian stays for the launch. The Surrey crew going to LA leaves for the UK at 20:00 Friday.   Collin is staying with me thru launch.

That's it from here, back to packing.
(Colin points out that there is only one L in Collin, but what can you expect from a bloke who spells color wrong?)

Harold.

Posted: Fri Feb 24, 1984   1:42 PM PST   Msg: KGIE-1725-6358
From: LKAYSER
To: ddaniels
CC: amsat
Subj: re urgent msg and uos-b stat
Dick, your urgent msg has been delivered to Martin and is being worked.

Status as of 4PM EST today is all mounted with only a plastic bag to remove and some minor taping to do. Farings are next, main crew leaving Sat for UK unable to leave today due to strike action on airline. things are looking good

regards to all, Larry

Posted: Sat Feb 25, 1984   2:00 AM PST   Msg: TGIE-1725-8627
From: HPRICE
To: amsat
CC: msweeting
Subj: Uosat-B status, friday nite
We (Colin, Roger, Dave, Mike, and Nevil) arrived in LA around 19:00 this evening. Part of british airways is on strick, so they won't be going out today. This has also made shipping the bits of the ground station to Surrey in time for launch somewhat of a trickey proposition as well. Perhaps more trouble on the ground means less trouble on orbit. Martin just called after getting back from the (22:00 local) to say that the fairing had been installed and there was 1/8" to spare. After final positioning, we have one inch clearance, even more than called for. All is well, we got past the two last hurdles, the fairing installation and the F-3 review. The F-3 review is the last major planned time when UOSAT-B could have been disapproved and de-mated. We passed. The only open item before launch can be approved is checking for correlation between the solids on the delta and the failed solids on the PAMs on the last shuttle mission. The has to be looked at but is not viewed as a highly probable item.

Anything can happen between now and 17:59 utc Mar 1, but all is go at this time.

The 1.5 hour of video tape came out well. Many pics were taken.
Details on availability when available.

Harold.

The only thing left is removal of the safe plugs and
installation of the arm plugs,

shortly before launch.

From -3315701194995551816
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,be3a512a5a19d65c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-28 04:55:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!zehntel!dual!onyx!amd70!fortune!dsd!
dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: TAPR Modem Mods Summary
Message-ID: <269@dsd.UUCP>
Date: Tue, 28-Feb-84 07:55:25 EST
Article-I.D.: dsd.269
Posted: Tue Feb 28 07:55:25 1984
Date-Received: Sun, 4-Mar-84 03:21:31 EST
Lines: 132

Posted: Fri Feb 17, 1984   7:55 PM PST   Msg: HGIE-1720-9015
From: TCLARK
To: pacsat
Subj: TAPR TNC Modem Mods de KV7B

Tom,

     For some reason my as-the-news-is-unfolding style confused a number of people, you among them, I guess. The last item I sent, which is repeated below in case it went thataway, is the canonical document. One possible item not mentioned in it is that increasing the value of the cap. hanging off pin 8 of the 2211 will probably improve your ber at low s/n, at the expense of any operation at 1800 baud. (I realize that 1800 baud operation was not what we were trying to optimize, but it was refreshing to have something go so right that we were getting more than 90 percent on average length packets at 1800 baud. The increase in value of the cap. on pin 8 should be by about a factor of 4/3, which cuts the detection bandwidth and hence ups the berper-formance.)

NEW MODEM DETAILS

Over the last couple days I've been keeping you up to date with
our discoveries about the TAPR modem. We've completed our tests, and
this note will describe in detail exactly what to do to convert
your modem. We've tested out the new design and it is MUCH better than
the old one. Whereas before FM noise at the level of light popcorn was
enough to kill communication, this is not true with the new modem. I have
no doubt the modifications below will make the modem operate properly on
OSCAR 10, and will probably improve matters vastly on HF too.

In addition to the modifications improving the 1200 baud design, we have also come up with an optimized 300 baud design centered at 1700 Hz designed for HF/OSCAR use. It should exhibit the same good noise immunity that the 1200 Hz design shows.

On to the mods.

For Kit Boards

1. Change C20 to .0047 microfarad (on U34)
2. Change R46 to 47K (also on U34)
3. Look carefully at the trace just below U21, just above C18 and R39. This trace connects U18, pin 7 to J5, pin 18. On the top of the board, attach a 4.7K resistor between the plate-through hole at the right end of this trace and the trace leading to pin 1 of U18. This will be the new +12 volt pullup on U18, pin 7.
4. Notice this trace passes under R76, R77, R79, and R78 on its way to J5. Just to the right of these resistors AND THE PLATE-THROUGH HOLE ADJACENT TO R78
   break this trace carefully, exposing about 1/16 in. of bare board.
5. Attach a VN10KM (available at Radio Shack, etc.) as follows: The drain should go through the plate-through hole. The source should go to the ground strip at the bottom of R78. The gate should be soldered to the trace coming from U18, pin 7, which was just cut.
6. Recalibrate the modulator center frequency to 1685 Hz by typing
   cal:3/1094
   while in calibrate mode.

This completes the modifications.

For Beta Boards

1. Change R25 to .0047 microfarad.
2. Change R14 to 47K.
3. Carefully lift the left end of R11 and re-attach it to the nearby +12 volt power bus on the wire-wrap area.
4. Add a 4.7K pullup on the bottom of the board between U17, pin 27 and the nearby +5 volt trace attached to the .1 microfarad cap. between U17 and U25.
5. On the top of the board, locate the trace coming from JP3 which goes to a plate-through hole near the left end of J3. Turn the board over and follow this trace until it ends at a plate-through hole under U17. This is the trace connecting JP3 and pin 27 of U17. Cut the trace near the plate-through hole under U17.
6. Attach a VN10KM under the board as follows: Attach the drain to the plate-through hole. Attach the gate to the trace leading back to JP3. Attach the source to pin 28 of U17 (the nearest ground).
7. Recalibrate the demodulator freq. to 1685, as above. You're finished.

300 Baud Modem Modification

For Kit Board

1. Change C21 from .0022 to .01 microfarad
2. Change R46 to 220K.
3. Set high tone to 1800 Hz (cal:2/1024)
4. Set low tone to 1600 Hz (cal:1/1152)
5. Set center frequency on the 2211 to 1700 Hz (cal:3).
6. Go for it.

For Beta Board

1. Change C11 from .0022 to .01 microfarad
2. Change R14 to 220K.
   (Note: this can easily be done by making up a jumper plug
   to fit over JP2 with 227K - 47K = 180K)
3. make modification to modulator to allow low tone to be set to
   1600 Hz: change R28 to 24K.
4. As above.

Note: Due to differences between the kit and beta boards, the calibration
lights will not operate properly on the beta board. At the correct
frequency one light will probably be out or dim, and the other will
be on.

Performance: You should notice the modem requires much less
audio than before, perhaps to the bottom of your volume control range.
You should also find you're decoding weak signals much more reliably.
Finally, you may find you can operate at hbaud greater than 1200. (Check
for legality first!)

Credits:
This modification is primarily due to the diligence of Eric
Gustaffson, who made extensive measurements, and carefully analyzed his
results. We take our hat off to him!
73
Dan
MODEM NOTES

I've received several requests for alternative part numbers for the
replacement cap, resistor and mosfet. The cap can be a garden
variety ceramic, the resistor can be a 5 percent 1/4 w, and the mosfet can
be either the originally specified VN10KM (available in places from RS) or
an IRFDZ13 mosfet, which is RS part number 276-2073, and which
should be in stock everywhere.

Again, I'd like people to let me know how this modification
works out when they've put it in. Thanks
73
Dan

From -3209244238456902751
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,935b4857d03cb4cb,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-02-29 08:07:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mordor.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!ut-sally!mordor!wct
From: wct@mordor.UUCP
Newsgroups: net.ham-radio
Subject: cubic quad spreaders
Message-ID: <1429@mordor.UUCP>
Date: Wed, 29-Feb-84 11:07:50 EST
Article-I.D.: mordor.1429
Posted: Wed Feb 29 11:07:50 1984
Date-Received: Fri, 2-Mar-84 08:41:17 EST
Organization: S-1 Project, LLNL
Lines: 12

My father-in-law in New Mexico is preparing to replace the
bamboo spreaders in his Cubic Quad antenna. Does anyone have
a source for Fiberglass spreaders--or reject pole vaulting
equipment suitable for this purpose? I once had an address
in L.A. but can not locate the firm.   Thanks for any
assistance you are able to provide.

--
     William C. Thompson III (S-1 Project, Lawrence Livermore National Laboratory)
        U.S. Mail: LLNL, S-1 Project, P.O. Box 5503, L-276, Livermore, Ca., 94550
        Phone: (415) 422-0758
     MILNET: wct@s1-c or s1-a   UUCP: ...!decvax!decwrl!mordor!wct

From -532968687836841131
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a239078925330e49,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,a239078925330e49,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1984-02-29 09:32:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio,net.space
Subject: UoSAT-B Guide
Message-ID: <2316@allegra.UUCP>
Date: Wed, 29-Feb-84 12:32:50 EST
Article-I.D.: allegra.2316
Posted: Wed Feb 29 12:32:50 1984
Date-Received: Fri, 2-Mar-84 07:32:45 EST
Organization: Bell Communications Research, Inc
Lines: 278

A Guide to the Architecture of UoSAT-B

The following attempts to provide a guide to the sub-systems on the UoSAT-B spacecraft, due for launch on 1st March, 1984. Expanded specifications of individual modules will be made available for those experiments which supply data to the downlink directly or via the telemetry system.

Mechanical Framework

The spacecraft is constructed in a similar way to Oscar-9, that is with a square-section central core supporting rigid top and bottom plates. Solar cells are mounted on all four sides of these plates, enclosing a basic cuboid of dimension 35.5 * 35.5 * 58.5 cm. Two stacks, each of two module boxes of dimension 23.5 * 17.6 * 3.1 cm, are mounted on the outside of each face of the central core. A 'wing' extends the base of the spacecraft symmetrically by 16 cm on each side in one axis to permit the mounting of two SHF helical antennas, one on each side of the launcher attach fitting which is itself mounted in the centre of the bottom plate. The Navigation Magnetometer and Space Dust experiments are mounted above this wing, one on each side.

Solar Cells

Four solar arrays of dimension 49.5 * 29.5 cm are attached to the four sides of the spacecraft. These are capable of supplying up to about 0.9A at 28v when fully illuminated. The cells were manufactured by Solarex.

Battery

A solid octagonal block of aluminium, 14.9 * 14.9 * 10.2 cm, is fitted into the centre core of the spacecraft and is drilled to accept ten 'F'-sized Nickel-Cadmium cells, each 3.2 cm in diameter and 9 cm long. These cells, in series, form a 12v battery of 6.4Ah nominal capacity and are charged when the spacecraft is in sunlight in order to provide sufficient power to run the craft during peak load demands and its eclipse periods.

Battery Charge Regulator

Two redundant BCRs are responsible for accepting the 28v supplies from the solar cells (and a similar supply from the umbilical connector) and charging the battery as required depending on the current drain, the battery voltage and the battery temperature.

Power Conditioning Module

The PCM regulates the 12-14v battery bus supply to provide 10v, 5v and

-10v supplies for powering the spacecraft systems and experiments.

Power Distribution Module (PDM)

The PDM switches the various regulated and unregulated rails to all the s/c systems and experiments, dependent on the commands which it receives from the Telecommand system. Each switch has an individual current foldback facility so that a faulty module is allowed to draw up to a pre-determined current before it is latched off, necessitating a power-down under positive command before resetting.

Telecommand system

The telecommand system comprises three uplink receivers, three data demodulators, a command detector and sets of command latches which hold the status of the command specified. The receivers are located in the 144MHz, 438MHz and 1268MHz amateur bands and the demodulators are robust devices which do not depend on phase-locked loops or other potentially unstable techniques. A command detector scans the three receivers according to a priority system and detects a valid set of command instructions, passing the data contained therein to the relevant latch. Some latches drive a set of multiplexer address inputs directly so that uplink and downlink path selection may be performed immediately on the command latch board.

The 112 command latches drive the Power Distribution System, the remaining spacecraft systems and experiment functions. There is a parallel i/o port to the spacecraft 1802 computer for autonomous control of spacecraft operations in addition to serial data links with the 1802 computer and the DCE for backup operations.

145.825 MHz Beacon

The 145 MHz beacon on UoSAT-B is nearly identical to the one flown most successfully on UoSAT-1. The modulation index has been increased in order to ensure more optimum reception on most radio amateur receivers. Modulation is by frequency-shift keying, as on UoSAT-1.

435.025 MHz Beacon

This beacon is a completely new design which generates its frequency standard from a phase-locked synthesiser system. As a result, the DC to RF efficiency is much improved. In addition to frequency-shift modulation, phase-shift modulation is a switchable option.

2401.5 MHz Beacon

When the original supplier of the 2.4GHz beacon was unable to meet his

commitment, Colin Smithers, G4CWH, at the University of Surrey stepped in and designed and built the transmitter and power supply in under four weeks. The DC to RF efficiency has been improved by some 5 times over the UoSAT-1 implementation. Both AFSK and PSK modulation methods are possible.

Telemetry System

The basic output of the UoSAT-B telemetry system is very similar to that of UoSAT-1. However, 60 analogue channels, digitised to 3 decimal digits, and 96 status points encoded into hexadecimal digits are available together with a real-time clock for frame identification and the satellite identifier, 'UOSAT-2'. A checksum digit can also be added to each channel. A dwell facility has been added so that up to 128 channels can be output in rotation, combined with clock times and line feeds or frame ends in any combination.

1802 Computer & Digitalker

The 1802 computer has been designed to support all the modules on the spacecraft, as well as to control the overall scheduling and be usable for specific communications experiments. To satisfy these requirements, the computer has access to many modules via parallel interfaces, and to some of the others and the receivers and transmitters via serial connections. In addition, there is a real-time clock and a total of 48kb of RAM for data storage. The Digitalker speech synthesiser is housed with the 1802 and has ROMs containing over 550 words. These will be used initially for 'speaking' telemetry.

Navigation Magnetometer

The Navigation Magnetometer is a three-axis flux gate device, much upgraded from the one flown on UoSAT-1. Indeed, the 14-bit resolution is very similar to that obtained from the much more complicated scientific magnetometer on the previous craft. The Nav. Mag. will be used for determining the attitude of the spacecraft during initial manoeuvres, as well as for experimental measurement of magnetic field disturbances once the attitude is stable.

Magnetorquers & Boom Assembly

Magnetorquers - coils of wire energised to act as electromagnets - are built into all 6 faces of the spacecraft, wound around the edges of the honeycomb panels supporting the solar cells and the top and bottom plates. The fields created interact with the earth's magnetic field to produce a torque which tends to rotate the spacecraft.

When the spacecraft has been positioned so that the CCD camera end is pointing towards the earth - a long and complex process - a boom can be

extended from the top of the craft. The boom looks similar to a steel tape measure, although nearly circular once it has been unrolled, and some 12 metres long. The boom carries a 2.5kg mass on the far end and this, in conjunction with the spacecraft body at the other end, creates a 'dumb-bell' configuration which naturally lines up with the earth's gravitational field so that one end points downwards, rather like a pendulum - it is, however, bi-stable! Any residual swinging motion can be damped with further controlled applications of the magnetorquers.

Sun Sensors

The sun sensors are made with specially fabricated solar cell substrates which are masked by grey-code stripes and illuminated by light passing through a slit in a metal foil in front. The mask coding on the cells can be used to derive the angle at which the incident light is falling on the slit. 6 such sensors are mounted around the top plate to provide complete 360 degree coverage.

Horizon Sensors

Built by a first year student at the University of Surrey, the Horizon Sensor is able to detect when only one of two photodetectors is illuminated. The detectors are housed in two narrow tubes of 4mm diameter and mounted at a small angle to each other so that the whole sensor thus detects the 'edge' of an illuminated object. This will be the earth, the moon or the sun and a fix can then be made on the object's position.

Digital Communication Experiment

The Digital Communications Experiment (DCE) was designed and built by AMSAT and VITA groups in the USA and Canada. It has two serial ports which can receive and transmit to the RF system and the 1802, as well as an NSC-800 CPU and nearly 128kb of CMOS RAM. The DCE will be used to investigate various packet radio protocols for use with a future digital 'store-and-forward' satellite being planned by AMSAT. In addition, the DCE has interfaces with the navigation magnetometer and the telemetry system for long-term data storage.

Space Dust Experiment

The Space Dust experiment was built by a group of students at the University of Kent, England. It has a dielectric diaphragm which, when punctured by a large particle, discharges the capacitance associated with it, therby indicating the impact. In conjunction with a piezo crystal microphone which detects particles of smaller size, correlation techniques can yield a measurement of the momentum of the incident particle.

CCD Camera

The CCD camera is a re-designed version of the device flown on UoSAT-1. Indeed, the CCD array at the centre of the camera is the same type as used before, although the later batches of this part are substantially improved over the early one used 2 years ago. This time the analogue electronics surrounding the array are also greatly improved. The active area of 384 pixels by 256 pixels is stored with seven bits of grey-level, in 96kb of RAM in the DSR experiment. The DSR is then responsible for the picture downlink, adding addresses and error correction and detection information as required. The DSR downlink is organised in packets of 128 bytes each, three across each imager line, so that two may be selected for display (using an extra digital filter) on existing UoSAT-1 CCD displays. The variable video amp gain and integration period of the CCD imager have been set up to provide the latitude required to photograph both land images and also auroral features, the latter being of interest in conjunction with the particle detector experiments.

DSR Experiment

The DSR stores data from the CCD imager, particle counter experiment or computer UART and outputs it in a checksummed format. The unit has 2 banks of 96k x 8 CMOS memory which can be used as two seperate banks or as one 192kb bank. The output frame consists of a three byte sync code, a two byte frame address, 128 bytes of data and 5 bytes of error detection/correction code. The data is sent in serial form with start bit, 8 data bits and selectable 1 or 3 stop bits. The data can be output at 1200, 2400, 4800 and 9600 BPS.

Particle Detectors and Wave Correlator Experiment

Three Geiger counters, each with different electron energy thresholds, similar to those flown on UOSAT-1, and a multi-channel electron spectrometer are mounted on the spacecraft to serve as a near-earth reference for magnetospheric studies to be carried out concurrently with the AMPTE & VIKING spacecraft missions due for launch later in 1984, and for ground-based studies of the ionospheric D, E and F regions being pursued with riometers and EISCAT. Data will be available in either real-time or, for more detailed analysis, from stored measurements over both polar auroral regions to professional scientists and radio amateurs. A data-base of the measurements acquired over the life of the spacecraft will be established at Surrey in conjunction with the SERC and will be available to approved experimenters.

The modulations imparted on particles, as a result of wave-particle interactions in the magnetophere on auroral field lines, will be observed by a Particle Correlator Experiment designed around an NSC-800 microprocessor at the University of Sussex, England. The measurements

will identify wave-modes responsible for accelerating electrons into the auroral beam and will also identify wave-modes which limit the further growth of the auroral beam.

Roger M. A. Peel, G8NEF,
University of Surrey, England.

From 5240219038282670564
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5304271991ac4cfb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-29 10:41:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: UoSAT-B Launch coverage
Message-ID: <2317@allegra.UUCP>
Date: Wed, 29-Feb-84 13:41:37 EST
Article-I.D.: allegra.2317
Posted: Wed Feb 29 13:41:37 1984
Date-Received: Fri, 2-Mar-84 07:40:41 EST
Organization: Bell Communications Research, Inc
Lines: 9

Everything appears to be on schedule for the launch of UoSAT-B aboard the Delta that will also carry Landsat-D'.

Liftoff is scheduled for 1 March 1984 (tomorrow) at 17:59 UTC from Vandenburg Air Force Base in California. The Goddard Amateur Radio Club, WA3NAN, will carry audio feeds on 14.280, 21.280 and 147.45 mhz. There are no plans for full-scale net and W1AW coverage.

Phil Karn

From 6395864167815215263
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fd3986d0cb64a9a8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-01 00:21:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Landsat-D/UoSAT-B on schedule
Message-ID: <2318@allegra.UUCP>

Date: Thu, 1-Mar-84 03:21:30 EST
Article-I.D.: allegra.2318
Posted: Thu Mar 1 03:21:30 1984
Date-Received: Fri, 2-Mar-84 06:36:35 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 13

All remains "GO" for the launch of Landsat-D' and UoSAT-B
from Vandenburg Air Force Base in California. The arm plugs
have been inserted in UoSAT and the launch tower rolled back.
Launch is scheduled for a 6 minute window starting at 17:59 UTC;
WA3NAN will carry audio coverage starting 1/2 hour before launch
on 14.280 and 21.280 mhz.

Assuming a nominal orbit, the first pass visible to the eastern
US will occur just after 7pm local time. Frequencies are
the same as UoSAT-Oscar-9: 145.825 on 2 meters, and 435.025
on 70 cm.

Phil Karn, KA9Q

From 4933721865575391540
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f8d5ba6ef8e716b6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-01 11:33:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: UoSAT-Oscar-11 is in orbit!
Message-ID: <2319@allegra.UUCP>
Date: Thu, 1-Mar-84 14:33:46 EST
Article-I.D.: allegra.2319
Posted: Thu Mar 1 14:33:46 1984
Date-Received: Sat, 3-Mar-84 07:23:08 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 10

UoSAT-Oscar-11 was successfully launched from Vandenburg Air Force Base,
California today at 17:59:00.8 UTC. After a coast period and second
burn of the Delta launcher's second stage, the Landsat-D' separation
took place. Separation of UoSAT-Oscar-11 took place several minutes
later while the launcher and satellite were in view of the command
station at the University of Surrey, England. First telemetry signals
were heard by G3IOR on 145.825 mhz several minutes after separation
when the command station turned the beacon on.

Phil Karn, KA9Q

From -910554342034146463
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ca9fb1057ae8592,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-01 12:22:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: UO-11 Initial elements
Message-ID: <2320@allegra.UUCP>
Date: Thu, 1-Mar-84 15:22:06 EST
Article-I.D.: allegra.2320
Posted: Thu Mar 1 15:22:06 1984
Date-Received: Sat, 3-Mar-84 07:24:31 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 25

The following is an element set derived from first-orbit radar tracking
in Turkey. As usual, this is courtesy of our friends at Millsone Hill.
A comparison of these numbers agains the pre-launch nominal set explains
why G3IOR had late LOS.

Phil

Satellite: oscar-11
Catalog number: 0
Epoch time: 84061.80270600
   Thu Mar 1 19:15:53.798 1984 UTC
Element set: MH
Inclination: 98.2466 deg
RA of node: 124.2419 deg
Eccentricity: 0.0008400
Arg of perigee: 222.2234 deg
Mean anomaly: 197.7258 deg
Mean motion: 14.62579250 rev/day
Decay rate: 0 rev/day^2
Epoch rev: 0
Semi major axis: 7060.074 km
Anom period: 98.456203 min
Apogee: 697.319 km
Perigee: 685.458 km
Beacon: 145.8250 mhz

From 6403346781329485494
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4e5be189ec007659,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-01 13:49:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP

Path: utzoo!watmath!clyde!floyd!harpo!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: UO-11 Release from W3IWI
Message-ID: <2321@allegra.UUCP>
Date: Thu, 1-Mar-84 16:49:16 EST
Article-I.D.: allegra.2321
Posted: Thu Mar 1 16:49:16 1984
Date-Received: Sat, 3-Mar-84 07:38:07 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 44

The UoSAT-B spacecraft riding as a piggyback with the Landsat-D Prime satellite was successfully orbited today (March 1,1984) from Spacecraft Launch Complex 2W (SLC-2W) at Vandenberg AFB. Launch was aboard a Delta 3920 vehicle, the 174th member of the highly successful Delta series. This marked Delta's 163 success -- an enviable 93.7% track record. NASA is now phasing out the expendable Delta series and replacing it with the reusable Shuttle.

Liftoff went like clockwork, within one second of the nominal 19:59 UT. Following the deployment of Landsat, the UoSAT spacecraft separated from the second stage of the launcher at about 21:11 UT. The telecommand station at the University of Surrey sent commands to initialize the spacecraft software and activate the 145.825 MHz beacon for a few seconds. The few seconds of telemetery showed that the spacecraft was in good health, so an additional command was sent to acquire about 5 minutes of data. We are informed that on the second orbit, at about 22:30 UT, the spacecraft will be commanded on for a 5 hour period. Thus the first passes visible in the US will be on March 2 at about 00:05 UT on the east coast, at about 01:40 UT for the eastern half of the US and about 03:20 on the west coast.

The spacecraft is in a nominal orbit with inclination 98 degrees, period 98.6 minutes and altitude 690 km. Improved orbital data should be available later today after the radars can separate UoSAT from Landsat and the launcher. The international designator for UoSAT-OSCAR-11 is 1984 021B; the NASA/NORAD catalog number will be know when we get the first Keplerian elements.

I talked with Dr. Martin Sweeting, G3YJO (the Surrey project manager) as the first signals were being received at Surrey and heard them over the phone. Martin was elated at the success and I conveyed our congratulations on his success for all of AMSAT. AMSAT is proud to have played a small role in making this newest amateur satellite come to life.

The ALINS broadcasts were carried on 14.280, 21.280, & 147.45 MHz from WA3NAN. Good reports were received from Europe on 15. After it was determined that 20 was not doing very well, that transmitter QSY'd to 7.180. W3IWI played the role of "mouth of AMSAT" and KA1TB manned the WA3NAN facility. Also present in the control center at Goddard were Bill Lazzaro and Dick Daniels of AMSAT and Gary Garriott of VITA.

73, Tom

From -1057428604238329706
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3bad9097852832ac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-02 03:59:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!zehntel!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Oscar 11 in orbit!
Message-ID: <270@dsd.UUCP>
Date: Fri, 2-Mar-84 06:59:37 EST
Article-I.D.: dsd.270
Posted: Fri Mar 2 06:59:37 1984
Date-Received: Sun, 4-Mar-84 04:27:33 EST
Lines: 298

Posted: Thu Mar 1, 1984 10:15 AM PST   Msg: PGIE-1729-6275
From: MSWEETING
To: AMSAT
Subj: UOB Launch
So far, so good!

Posted: Thu Mar 1, 1984 11:53 AM PST   Msg: OGIE-1729-7474
From: LKAYSER
To: amsat
Subj: UOSAT2 deployed
I just received a call from HPrice in WTR that UOSAT2 deployed
a few minutes ago...now OSCAR11

Posted: Thu Mar 1, 1984 12:15 PM PST   Msg: PGIE-1729-7735
From: PKARN
To: amsat
Subj: UO-11 Elements
The following is an element set derived from first-orbit radar tracking
in Turkey. As usual, this is courtesy of our friends at Millsone Hill.
A comparison of these numbers agains the pre-launch z//K+1set explains
why G3IOR had late LOS.

Phil

Satellite: oscar-11
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Epoch time: 84061.80270600
   Thu Mar 1 19:15:53.798 1984 UTC
Element set: MH
Inclination: 98.2466 deg

RA of node: 124.2419 deg
Eccentricity: 0.0008400
Arg of 0_igee: 222.2234 deg
Mean anomaly: 197.7258 deg
Mean motion: 14.62579250 rev/day
Decay rate: 0 rev/day^2
Epoch rev: 0
Semi major axis: 7060.074 km
Anom period: 98.456203 min
Apogee: 697.319 km
Perigee: 685.458 km
Beacon: 145.8250 mhz

Posted: Thu Mar 1, 1984 12:24 PM PST   Msg: OGIE-1729-7854
From: LKAYSER
To: AMSAT
Subj: AO11
PRNTET.BR

13:35 CST (UoSat Oscar 11 separation + 25 minutes)

     I just received a phone call from Harold, who had just phoned Surrey. He reports:

ALL ABOARD OSCAR 11 IS NOMINAL. Immediately following separation, the two meter beacon was commanded on for a single block of telemetry. All telemetry appears nominal. The beacon was again turned on for a five minute interval. That was all that could be accomplished before LOS at Surrey. The current plan is for Surrey to turn on the beacon continuously next pass.

Congratulations to all. It looks like a real healthy bird.
(Landsat-D prime is healty too.)

Bill Reed WD0ETZ

Posted: Thu Mar 1, 1984 12:41 PM PST   Msg: SGIE-1729-8078
From: TCLARK
To: amsat
Subj: UoSAT-OSCAR-11 in orbit
The UoSAT-B spacecraft riding as a piggyback with the Landsat-D Prime satellite was successfully orbited today (March 1,1984) from Spacecraft Launch Complex 2W (SLC-2W) at Vandenberg AFB. Launch was aboard a Delta 3920 vehicle, the 174th member of the highly successful Delta series. This marked Delta's 163 success -- an enviable 93.7% track record. NASA is now phasing out the expendable Delta series and replacing it with the reusable Shuttle.

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for a few seconds. The few seconds of telemetery showed that the spacecraft was in good health, so an additional command was sent to acquire about 5 minutes of data. We are informed that on the second orbit, at about 22:30 UT, the spacecraft will be commanded on for a 5 hour period. Thus the first passes visible in the US will be on March 2 at about 00:05 UT on the east coast, at about 01:40 UT for the eastern half of the US and about 03:20 on the west coast.

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73, Tom

Posted: Thu Mar 1, 1984 3:52 PM PST Msg: DGIE-1730-1671
From: MNAKAYAMA
To: msweeting
CC: amsat
Subj: UO-11 : 1st. AOS in JA
Martin,

*** CONGRATULATIONS UPON SUCCESSFUL LAUNCH OF UoSAT-OSCAR-11 ***

Quite a few JAMSAT boys (including JR1SWB) received 2m beacon nicely on #3, around 2250 UTC.

Since I could not get a good frame because of QRM, I called up JH7CKF and got following frame. It was received around 2253 UTC. (Sorry for possible typo, in advance!)

UOSAT-2 0000410034213

00312001629C025700035622040477050353060204070447080 34F090292
10502611322312000313088214000515002616000717523218527919 5296

20519F21187D22662223000124000625000726098527525728486029483 4
30475531041732284F335984340007353656364364373986384528394592
40749E41000542668E43000744175345003246000247453148462C494382
50486F51092F52673553678F54817F55000056000357446458452E59457A
60826A615BC562800C6302436404066501026 6A00A6700016800026900 F

If you'd like to get more frames, don't hesitate to tell me so
via this media. I'll ring JH7CKF again to ask for more data.

73's   Miki

Posted: Thu Mar 1, 1984   4:15 PM PST   Msg: TGIE-1730-1807
From: PKARN
To: amsat
Subj: Nothing heard
Nothing heard from UO-11 on the first pass at KA9Q on either 145.825 or
435.025.

Phil

Posted: Thu Mar 1, 1984   4:19 PM PST   Msg: IGIE-1730-1836
From: MSWEETING
To: AMSAT
Subj: ** OSCAR-11 / UOSAT-2 LAUNCHED & OPERATIONAL **
  Thanks to all who have helped in any way towards the
successful launch of the OSCAR-11 spacecraft. Detailed
bulletins o on t/m and UOSAT-1.
  Martin Sweeting   UOSAT Program Manager

Posted: Thu Mar 1, 1984   4:20 PM PST   Msg: CGIE-1730-1850
From: MSWEETING
To: AMSAT
Subj: Oscar-11
Hi, There!

Oscar-11 has been successfully commanded on during the first
three passes over Surrey this evening. All the first
indications are that the spacecraft is in very good shape and
that the initial checkout will proceed faster than expected.

On the first pass over Guildford (during which,
coincidentally, Oscar-11 was ejected from the launcher) all
the primary systems were powered up (receivers, battery charge
by separation switches, telemetry, computer, navigation
magnetometer by telecommand). The computer was then
bootstrapped and generated about 10 seconds of telemetry.
During the rest of the pass, another 2 bursts of telemetry of
about 4 minutes duration were generated by command through the
computer loader.

On the second orbit, a short and long burst of telemetry were
again generated. During the second burst, a beacon multiplex

command was issued on the 144MHz uplink and this was correctly received - full duplex 144/145 MHz operation! The second half was occupied loading a short 1802 program which transmitted for 80 minutes, the beacon multiplexers again being set to telemetry.

The third and last pass at Surrey for this evening was spent loading a similar program to the last one which will transmit for 10 hours, i.e. until just before AOS at Surrey tomorrow morning. All temperatures on Oscar-11 are still settling and reports throughout the night on Telemail would be welcome.

Activities tomorrow include the testing of various other 1802 computer I/O ports before running other programs to record whole-orbit telemetry and other housekeeping functions as battery charge and temperatures dictate.

We would welcome reports, both telemetry and AOS/LOS times, and will issue a further bulletin via Telemail and Oscar-9 later tomorrow.

Roger Peel G8NEF & UoSAT Team University of Surrey.

P.S. Jim Miller, G3RUH, and Phil Howarth, G3YAC, report that the original orbital predictions are very accurate. Their only refinement after doppler measurement of the initial 3 incomplete passes indicates that the time of equator crossing should have 8 seconds added. More measurement tomorrow.

Posted: Thu Mar 1, 1984 5:42 PM PST Msg: NGIE-1730-2221
From: LKAYSER
To: AMSAT
Subj: 0140 PASS UOSAT2
IF ANYONE IS HEARING THIS PASS NOW PSE
REPLY QUICK, WE HAVE A TELEVISION CREW
SITTING HERE!!!

Posted: Thu Mar 1, 1984 6:17 PM PST Msg: IGIE-1730-2316
From: PKARN
To: amsat
Subj: Nothing heard
I've listened to the first two east-coast USA passes and have heard nothinW O"*r*z435.025. Rip joined me for the second pass and heard nothing either.

Phil

Posted: Thu Mar 1, 1984 6:23 PM PST Msg: RGIE-1730-2345
From: PKARN
To: amsat
Subj: Ahem..nothing heard
Sorry for the line hit in the previous message - it may LOOK like a

deleted expletive, and I might feel like using one right now, but that wasn't what I sent!

What I meant to say is that Rip and I have heard nothing on either the 2m or 70cm beacon.

Phil

Posted: Thu Mar 1, 1984 7:28 PM PST Msg: OGIE-1730-2562
From: PKARN
To: amsat
Subj: Nothin' heard #3
Nothing heard on pass #3 at KA9Q.

Phil

Posted: Thu Mar 1, 1984 7:52 PM PST Msg: DGIE-1730-2631
From: HPRICE
To: AMSAT
Subj: Post launch report
Colin and I are back in LA after an eventfull trip to WTR today. Video tapes of the launch came out well. Ian got good coverage from about 6 seconds away, I got some stuff from 26 seconds away (sound seconds), the two go together nicely. After launch we went to the UOSAT lab at south Vandenberg to listen in on the NASA links. There were several requests for info about UOSAT seperation and health, since uosat seperation came out of sight of NASA, no one knew the status. Interest was high, it was obvious that everyone wanted 100% out of this flight. Colin rang up Surrey and got the good news. I pushed some buttons on the console, came up on the link that had last asked for uosat info and said "UOSAT WTR, Surrey ground station reports seperation and good telemetry on UOSAT-2", or some such offical sounding words. To my surprise, the info was almost instantly relayed to another NASA feed by someone, and was announced over the PA system by someone else. Just another indication that everyone viewed UOSAT-2 as an important part of the overall project. We were treated well by all involved.

The beacons were not heard here at the 03:20 Mar 2 pass. We are assuming that the 10 hour beacon program did not get loaded and that Surrey went to bed before updating TM. We will call them again at midnite local time here to get some new status.

I have close to two hours of raw VHS footage, s/c final prep, premate, mate, and launch. I plan to edit it down to 15 min or so at a local facility here to use for VITA PR. Some of you may want a copy of the whole thing. Anyone have any suggestions about how to best do it? $25 ought to cover the cost of a tape and the duping fee, I'll get it done at a place down the street that dubs though high grade 1/2" editting equipment. I'm open to other suggestions. Larry, did you capture the news tonite on tape? Have you heard from CBC about getting copies of their stuff?

Lets hope for beacons tomorrow.

Harold.

From 4765582460325078585
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a5dc60162bfc7ed9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-02 06:07:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: UO-11 Silent
Message-ID: <2325@allegra.UUCP>
Date: Fri, 2-Mar-84 09:07:41 EST
Article-I.D.: allegra.2325
Posted: Fri Mar 2 09:07:41 1984
Date-Received: Sat, 3-Mar-84 10:36:57 EST
Organization: Bell Communications Research, Inc
Lines: 20

UoSAT-2 was commanded to send telemetry from shortly before
LOS at Surrey on Thursday at 22:32:20. We have reception
reports from Japan at 22:53, however the 145.825 MHz beacon
was not heard later in the USA.

Attempts on the first two passes this morning at Surrey to
re-boot the computer and turn on the beacon - or, indeed to
turn it on manually - have failed.

We would be very interested in data and reception reports for
the 145MHz beacon from 22:50 onwards yesterday in order to
attempt to find a cause for this potential problem.

  Roger Peel G8NEF
  Martin Sweeting G3YJO
  UoS

[ANYONE receiving telemetry after the 22:53 UTC Japan pass is urged to
let me know, even if you were unable to decode it - even a simple reception
report is crucial. Please forward to allegra!karn. Thanks - KA9Q]

From -5689200186142067092
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6aeeda3c2a243a2c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-03 03:37:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP

Newsgroups: net.ham-radio
Subject: Uosat B continued
Message-ID: <271@dsd.UUCP>
Date: Sat, 3-Mar-84 06:37:49 EST
Article-I.D.: dsd.271
Posted: Sat Mar 3 06:37:49 1984
Date-Received: Tue, 6-Mar-84 04:00:25 EST
Lines: 198

Posted: Fri Mar 2, 1984   1:34 AM PST   Msg: TGIE-1730-3067
From: HPRICE
To: AMSAT
Subj: UOSAT-2 LATE NIGHT REPORT
Surrey was as surprized as we were that the beacon was off. The could not
get an answer from the s/c on their first pass this morning. Current
belief is that the watchdog timer came up in a random count and shut
the beacon off. They will try to reset this during their 10:13utc pass.

Posted: Fri Mar 2, 1984   3:43 AM PST   Msg: DGIE-1730-3191
From: MSWEETING
To: AMSAT
Subj: Oscar-11
UoSAT-2 was commanded to send telemetry from shortly before
LOS at Surrey on Thursday at 22:32:20. We have reception
reports from Japan at 22:53, however the 145.825 MHz beacon
was not heard later in the USA.

Attempts on the first two passes this morning at Surrey to
re-boot the computer and turn on the beacon - or, indeed to
turn it on manually - have failed.

We would be very interested in data and reception reports for
the 145MHz beacon from 22:50 onwards yesterday in order to
attempt to find a cause for this potential problem.

  Roger Peel G8NEF
  Martin Sweeting G3YJO
  UoS

Posted: Fri Mar 2, 1984   4:22 AM PST   Msg: SGIE-1730-3246
From: MNAKAYAMA
To: msweeting
CC: amsat
Subj: Another frame
Martin,

I called up JH7CKF again and received another frame which he
got around 2300 UTC shortly before LOS.

He has sent me hardcopy of all the frames he got this morning.
So, if you want, I'd QSP all of them via this media, perhaps
tomorrow evening.

Most of my coleagues told me that they heard signals up to LOS,
2301 UTC or so. Thus, in terms of output of the beacon, there
wasn't drastic change while UO-11 was within our range.

Miki

---- * * * ----

UOSAT-2 0000410034438

00492F01480D022 800340070404770503530602040704470803 4F090292
1051501132231200031308821400051500261600161751571852 2C19525A
2022642118822266222300012400062500072609 6B2751892847 4D294816
30520431037632284F33598434000 35369A364414173986384539394608
40849141000542668E43000744175345003246000247453148462C494382
50572551091C52682B533371548238550000560003574475584 53F594585
60826A615BC562800C6302436404066501026 6A00 67000168000E690 0F

Note: This frame was garbled a bit. Apparently garbled letters
are expressed as " " (blank).

Posted: Fri Mar 2, 1984 5:54 AM PST Msg: GGIE-1730-3674
From: PKARN
To: amsat
Subj: Nothing heard - morning pass
Nothing heard on the East Coast morning (13:30 UTC) pass from UO-11.
Needless to say, my concern level is extremely high.

Phil

Posted: Fri Mar 2, 1984 7:11 AM PST Msg: OGIE-1730-4422
From: HPRICE
To: AMSAT
Subj: FRIDAY MORING STATUS
Friday morning report.

Oscar-11 was last head at 23:01 in JA. It was not heard during a US pass 1/2
hour later. Surrey has been unable to command the s/c in its first three
passes today. Analysis in Surrey of the tlm shows the s/c was cooling.
Condition of the s/c is unknown at this time. Any TLM blocks received
should be forwarded to Surrey. Keep listening.

Harold.

Posted: Fri Mar 2, 1984 7:15 AM PST Msg: CGIE-1730-4470
From: PKARN
To: amsat
Subj: Sleuthing UO-11
I've been doing some calculations to try to pinpoint the time at which
UO-11 went off the air.

Miki reports signals during the entire Japan pass ending at 23:00; I

heard nothing only an hour later. In the meantime, the satellite went through a descending node over the Pacific and an ascending node over the Atlantic. Locations between Japan and east coast USA (me) included New Zealand, eastern Australia, South America and Ascension Island. In particular, ZL1AOX should have had a ~9 min pass starting at 23:11.

Try to canvass anyone you know who might have listened for the spacecraft from these locations and report any results, positive or negative, on this medium. I'm particularly interested in knowing if anything happened at the start of the half-hour eclipse at 23:40:21.

With fingers crossed,
Phil

Posted: Fri Mar 2, 1984   8:08 AM PST Msg: IGIE-1730-5096
From: LKAYSER
To: pkarn
CC: amsat
Subj: telem old uo11
I have just printed 200K or so of telem
from UoS, and I am trying to get
them to break it up into 30K byte pieces so I can work on my cpm system
here in the office to relay on prnet.

what do you want from the paper telem
I have here?
relay on tm for today

Posted: Fri Mar 2, 1984 11:09 AM PST Msg: BGIE-1730-6689
From: LKAYSER
To: pkarn
CC: amsat
Subj: AO11 DATA is available
Phil, and anyone else interested, this is the data from UoS passes 1,2,3 from yesterday. Note U2X2.DAT is a slightly cleaned up version of U2X2ORIG.DAT that has a lot of garbage in it. I will start to send after close of business on the west coast tonight. Have you any comments?

U2X1   .DAT   1k | U2X2   .DAT 14k | U2X2ORIG.DAT 16k | U2X3   .DAT 16k
U2X4   .DAT 16k | U2X5   .DAT 16k | U2X6   .DAT 17k | U2X7   .DAT 18k
U2X8   .DAT 18k
    Drive B, user 0 contains 132K in 9 files with 109K free

We will be using this data to prove in our systems and to see if anything can be learned about the battery performance during this period.

Regards, Larry

Posted: Fri Mar 2, 1984   6:07 PM PST Msg: KGIE-1731-1406
From: TCLARK
To: amsat
Subj: U-O-11 Keplerian set #3

Here is a 3rd set of elements phoned to me late tonite:

Object: 1984-021B = NASA # 14781
NASA El.Set: # 3
Epoch: 84062.68180598
Incl: 98.2533
RAAN: 125.1350
Eccr: 0.0012482
Arg.Perg: 257.2198
Mean Anom: 106.2567 at epoch
Mean Motion: 14.61810824
Drag: -0.00000024

73, Tom

Posted: Fri Mar 2, 1984   7:24 PM PST   Msg: CGIE-1731-1578
From: MNAKAYAMA
To: msweeting,pkarn
CC: amsat
Subj: 30 more frames
Martin and Phil,

Just received a letter from JH7CKF which contained 30 frames
of data he received at 2250 - 2300 UTC on 2nd. March.

I'll send a copy of them to both of you for analysis.

Miki

Posted: Fri Mar 2, 1984   8:55 PM PST   Msg: OGIE-1731-1770
From: PKARN
To: amsat
Subj: Mystery narrowing
Thanks to GRATCLIFF, we now have telemetry from 23:10-23:15 UTC, only
about 45 minutes before the non-LOS at KA9Q. I have decoded his frames
and can't find a clue - everything looks reasonably nominal.

Now the next area we need to put out a call for help to is the South
Atlantic region - suitable locations include eastern South America
(e.g, PY, LU, FY7) and Ascension Island. Just a definite positive or
negative reception report would be extremely helpful. Particularly
welcome would be a report from the Falkland Islands - the spacecraft
entered eclipse halfway through a 4 minute pass there.

Phil

From -6228417222781974842
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a7175749f3ad132,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-03 03:40:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Revision to AX25 P/F Proposal
Message-ID: <272@dsd.UUCP>
Date: Sat, 3-Mar-84 06:40:45 EST
Article-I.D.: dsd.272
Posted: Sat Mar 3 06:40:45 1984
Date-Received: Tue, 6-Mar-84 04:01:08 EST
Lines: 28

  TO: HM
FROM: PK
SENT: 29 FEB 84 06:45:07
READ: 29 FEB 84 20:02:19

After thinking about my poll/final addressing proposal some more and talking to some others about it, I think it might be better to use the high order bit (8) of the SSID bytes in the source and destination address subfields for the command/response designation, rather than the next-to-high order bit (7). Bit 8 is used for the H ("has been repeated") indication in repeater addresses, but it currently serves no function in the source and destination fields. Therefore, simply substitute "bit 8" in place of "bit 7" in my proposal. Bits 6 and 7 of all SSID bytes would remain reserved and set to one, thereby keeping open the possibility of using these two bits to extend the SSID field at a later time.

Compatibility with existing implementations of AX.25 should still be maintained, as bit 8 of the SSID byte in source and destination addresses is currently unused and set to zero. The test for whether the remote station follows this new recommendation remains the same - nonequality between the two bit 8's of the source and destination SSIDs. I *AM* assuming, of course, that current implementations mask off the reserved SSID bits and ignore them in address comparisons - I have no way to verify this.

Phil

From 5903667328072571163
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bfeed076adec65fc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-04 02:43:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio

Subject: A clue in the Uosat 11 mystery!
Message-ID: <273@dsd.UUCP>
Date: Sun, 4-Mar-84 05:43:58 EST
Article-I.D.: dsd.273
Posted: Sun Mar 4 05:43:58 1984
Date-Received: Tue, 6-Mar-84 04:04:01 EST
Lines: 337

  TO: HM
FROM: PK
SENT: 03 MAR 84 06:13:34
READ: 03 MAR 84 14:46:42

I've been posting comments on UO-11 on the telemail AMSAT bb.
Rather than repeat the whole thing here, I'll summarize the situation as
I know it.

The last reported UO-11 frames are from Graham Radcliff in Australia.
The last frame he sent me on Telemail was at about 23:15 UTC; this is
about 45 minutes before the no-show at KA9Q. The path of the satellite
between these two times took it over Antarctica and up the Atlantic
Ocean. There was visibility in most of eastern South America, Falkland
and Ascension Islands. In particular, Falkland's pass included the start
of the half-hour eclipse which occurs on each orbit. Anybody know
anyone down there?

I've written a telemetry decoding program in "C" for anyone who wants
it. Harold has a copy and he's bringing it up on his system. From my
examination of Graham's frames, nothing really looks suspicious.
Rather than post it here (the decoded version of his frames is 116K!),
I'll give a summary.

Temperatures were running cool, but not exceptionally so for a
spacecraft, but remember it had been in sunlight for a while and was
about to enter eclipse in about 20 minutes.

The battery was sitting at a stable +6 C, the battery voltage at a
little over +14 with little fluctuations, and all the solar arrays were
producing power (but not at the same time, of course).
The battery charge/discharge current was fluctuating rapidly,
sometimes going slightly negative but usually running at a few hundred
mA positive. The spacecraft was obviously spinning fairly fast as
indicated by the rapidly changing solar array and battery currents.

Regulated voltages looked reasonable. From a phone conversation with
Harold, none of the various currents seemed out of line. The warmest
temperature reading was, of course, the 2m beacon: +16.6C. It was putting
out about 650 mw of RF.

Facet temperatures were cool, ranging from -5C to 0C, except the -Y facet
with a consistent warm reading of +12.8C.

The mode bits were as expected, 1802 computer, nav mag and 2m beacon about the only things turned on. The navigation magnetometer seemed to be producing numbers. No activity was seen on any of the command receivers (but they were drawing supply current). The computer was on, but not commanding the spacecraft. The command watchdog timer was enabled; according to Harold, this timer runs for about 20 days and turns off the beacons if no command is heard from the ground in this time.

I'm stumped.

Phil

TO: HM
FROM: PK
SENT: 03 MAR 84 13:48:41
READ: 03 MAR 84 14:48:18

Tom (with copy to everyone),
Here's the predicted AOS times for my next pass as derived from all of the UO-11 element sets on hand:

prelim: 14:13:21.7
MH: 14:12:45.1
Nasa 1: 14:15:52.5
Nasa 2: 14:15:53.6
Nasa 3: 14:14:02.5

In particular, that last one (Nasa set #3) looks suspicious. Without a beacon to track, we could very easily be looking at the wrong object.

Phil

TO: HM
FROM: PK
SENT: 03 MAR 84 13:52:00
READ: 03 MAR 84 14:48:40

Larry,
I'm having pretty good luck in decoding those frames you sent me. So far, I can't find a clue - except I'm wondering about the state of the battery charge/discharge line. I can't figure out if it's functioning properly or not, as I see wild excursions. I tend to discount these because the battery voltage is reasonably stable, varying as you would expect due to eclipses and s/c loading. Can you tell me from which parts of orbits these frames are from?

Phil

P.S. If you want any decoded frames, just yell. They're large, though.

TO: HM

FROM: TC
SENT: 03 MAR 84 16:13:58
READ: 03 MAR 84 21:31:05

In addition to Phil's analysis of Graham's data, I asked Bob Diersing
to try decoding it. Bob has sent me a LARGE text file of the decoded
data which agrees with Phil's analysis. If anybody want to see all or
part, I have it captured here on disk.
Tom

  TO: HM
FROM: HP
SENT: 03 MAR 84 17:17:14
READ: 03 MAR 84 21:31:26

Saturday morning news

Just got off the phone with Roger Peal. Last nite they found an error in the
software which was loaded into the 1802 computer that caused the beacon
to stay on only 1/10 the time they thought, thus the second pass had
an 8 minute beacon instead of 80, and the third pass had an hour beacon
instead of 10 hours. Thus there is now a good reason for hearing it
in VK but not in the US. It would have gone off in the south Atlantic.

(Phil, can you compute where it would have gone off? Assume the program
was loaded 2/3 of the way thru the last UK pass.)

This doesn't explain why the beacon won't come back on. A possible
explaination follows. The was a problem with the two meter beacon that
caused it to be intermittent. One of the osc. stages would occasionally
not lock up fast, and the beacon would draw more power than the power
module would allow it to. This limited the current it could get and it
never locked up. The fixed at VAFB was to increase the current limit for
the beacon. The problem never re-occurred. One theory says that when
the s/c got colder, it drew more current during the start up time, and
has locked up again. By the way, all tlm reviewed shows a healthy s/c
that is not too cold for normal operation.

Assuming the 2 meter beacon is locked up, it may be putting out enuff
hash to block the two and 70 cm receivers. It may be possible to hear
this hash with enuff gain on the ground. Can someone with a big
array point it the right place with a spectrum analyiser and look
for dopplering noise?

Roger promises to put a more complete status summary on TM soon, there
TM link in the UK has been down for several hours.

Keep listening.

Harold.

Posted: Sat Mar 3, 1984   7:24 PM GMT   Msg: AGIE-1731-2616
From: MSWEETING

To: AMSAT
Subj: Oscar-11 status

Sorry for the ominous silence from UoS - our Telemail PSS link has been down for the past day or so. Thanks for the telemetry and phone calls received since launch.

We have discovered a problem in the program which was run on the Oscar-11 computer on orbits 2 & 3, causing them both to turn the 2m beacon off in an eighth of the time intended. No-one commented that the previous report from us saying that the 2m beacon was on for 80 minutes on orbit 2 was incorrect. So on orbit 2, telemetry was transmitted for 10 minutes from shortly before LOS at Surrey, and on orbit 3 for 75 minutes from 22:30:20 until 23:45:20 - just short of the east coast of the USA.

Since we have now a positive reason why the beacon went off late Thursday evening (GMT), our worst fears of a catastrophic failure look less likely. Discussions at Surrey and very recently with Harold, NK6K, suggest that a more plausible explanation is that the 2m beacon, when cold after being off for 7 hours, failed to oscillate properly on power-on. An effect similar to this was seen during the first cold cycle of Thermal Vacuum testing, however the problem was later tracked down and rectified. The cause was a large current surge on power-up causing the power distribution to foldback sufficiently to prevent full power-up.

Discussion of the remedy for this scenario is still in progress, so any suggestions would be gratefully received. Use of the 1.2GHz uplink is a possibility, since the 70cm uplink shares an antenna with 2m. Harold is already looking at whether the non-nominal signals can be received from the 2m beacon using large antenna arrays in the L.A. area.

Roger

Posted: Sat Mar 3, 1984   8:04 PM GMT Msg: QGIE-1731-2652
From: VRIP
To: HPRICE,MSWEETING
CC: AMSAT
Subj: UO-11 Report of W4DAQ

I have just debriefed W4DAQ on his observation of this morning. Here are the salient facts as he reported them to me a few moments ago.

His QTH is Demoplis, Alabama.
Using NASA element set #2 he had predicted AOS of 3 Mar 1418 UTC; actual AOS 1423 @ 120 az. Actual LOS at 180 az at 1436 UTC.

Signals heard on 145.825 characterized as very weak; <S1 over S0 floor.

Station comprises KLM 16C, Lunar GaAsFET at antenna, 15 meters foam coax,
 FT-221R rcvr.

Signals had "slight" Doppler. Mack noted sense shift too. At AOS RHCP=LHCP.
 At (approaching) LOS, RHCP predominated.

Mack's telephone number is 205-289-1225.

73 to all, Rip.

Posted: Sat Mar 3, 1984   8:19 PM GMT   Msg: RGIE-1731-2673
From: VRIP
To: HPRICE, MSWEETING
CC: AMSAT
Subj: UO-11 Report of W4DAQ, Rev 1
Further discussion with Mack has revealed the following.

First, a correction. His "predicted" AOS and LOS times were based
on the prelaunch, repeat, prelaunch element set from PKARN rather than
the NASA set #2 which I indiacted a few moments ago.
He said that the times predicted by the prelaunch set and the NASA #2
differed by about two minutes.

Second, Mack also had AOS last night. Details as follows.
 1.Predicted AOS (prelaunch elements): 0352 UTC 3 Mar
 2. Actual AOS 0358 UTC 3 Mar at 300 deg az.   LOS @ 0412 UTC 3 Mar.
 3. He added another 15dB of active gain to the circuit with an
    additional preamp in the shack.
 4. He emphasized his certainty that what he was hearing was of space origin.
 5. He further asserted he could detect no modulation whatsoever on the
    "good sine wave" audio he was hearing. It could not be heard in FM
    detection mode. Only SSB.

  TO: HM
FROM: TC
SENT: 03 MAR 84 22:16:46
READ: 04 MAR 84 00:56:51

Here is a 4th set of Keplerian elements. The Goddard switchboard
called me at 4AM (!!!!!) to read them to me. That's above and
beyond the call of duty -- Tom

Object: 1984-021B = NASA # 14781
NASA El.Set: # 4
Epoch: 84063.16028249
Incl: 98.2530
RAAN: 125.6123
Eccr: 0.0012258
Arg.Perg: 255.4198
Mean Anom: 104.4947
Mean Motion: 14.61820641
Drag: +0.00000476

Posted: Sat Mar 3, 1984   1:51 AM PST   Msg: HGIE-1731-1983
From: RZWIRKO
To: AMSAT
Subj: UOS MYSTERY-CLUE?
JUST A BIT OF INFO WHICH I SHOULD HAVE PUT ON EARLIER:
ON THURSDAY NIGHT EST AROUND 7pm EST THERE WAS A MAGNETIC
STORM IN PROGRESS. SIGNALS WERE NOTED ON 144MHZ COMING
IN WITH TYPICAL AURORAL NOTE. BEST DX HEARD WAS FROM THE
CHICAGO,IL AREA. SIGNALS WERE S9 FROM THAT DISTANCE HR IN
MD, INDICATING A PRETTY HEAVY BIT OF IONIZATION. ANY
CHANCE THAT THIS SOLAR/MAGNETIC ACTIVITY HAD ANY EFFECT ON
UOSAT-OSCAR-11??
73, RICH K1HTV

Posted: Sat Mar 3, 1984   4:01 AM PST   Msg: AGIE-1731-2036
From: RZWIRKO
To: MSWEETING
CC: AMSAT
Subj: CLUE??
Martin & UOS team,
I didn't think much of it thursday night, but now that I've
heard that there is a problem, I thought that I'd relay the
info that on Thursday evening EST,(around 00 UTC 2 March)
there was a pretty good aurora going on here in the States.
I was checking out my modem on my weak signal source at 144.1
MHz and heard the LOUD cw QRM from signals out of the Chicago
Illinois area with the very familiar auroral buzz sound.

The last report of signal reception of U-O-11 was around 23:15
UTC in Australia. I wonder if the magnetic activity had any
effect on the bird. Phil mentioned that the navigation magnetometer seemed to be
producing numbers. Might there be a clue in that data?

73,   Rich K1HTV

Posted: Sat Mar 3, 1984 10:24 AM PST   Msg: RGIE-1731-2513
From: RDIERSING
To: VRIP,DLOUGHMILLER
CC: AMSAT
Subj: IBM PC program bug
There is an error in the W3IWI orbit prediction program when computing
the day number after Feb. 29.

```
     900 IF M > 2 THEN D8 = D8 + F9

         ****** SHOULD BE ******

     900 IF MONTH > 2 THEN D8 = D8 + F9
```

This one will surely appear on the nets and the fix is simple enough
that it can be communicated. I will check to see if this problem
exists in other versions of the program and advise.

73, Bob

Posted: Sat Mar 3, 1984   1:23 PM PST   Msg: BGIE-1731-2757
From: VRIP
To: MSWEETING,HPRICE
CC: AMSAT
Subj: Big Ears To the Rescue
Dave Olean, K1WHS, will be listening for UO-11 on its expected passes
tonite beginning abt 23:xx UTC. Will advise.

Posted: Sat Mar 3, 1984   1:25 PM PST   Msg: EGIE-1731-2760
From: VRIP
To: MSWEETING,HPRICE
CC: AMSAT
Subj: K1WHS
It occurs that a few may not recall that K1WHS's EME array is one of the
most sensitive in amateur hands. I thought I'd mention it. 73.

Posted: Sat Mar 3, 1984   5:54 PM PST   Msg: IGIE-1731-2964
From: VRIP
To: AMSAT
Subj: UO-11 (Non) Reception Report
K1WHS, KA9Q and WA2LQQ negative report for 23:40 (3 Mar) and 01:20 (4 Mar)
orbits. If K1WHS's 26dBd array couldn't pick it up, chances are very
slim there was anything going on with any spectral density at all! Dave
can hear the static from a crickets legs rubbing tohgether at 10,000 km
(it is alleged!)   Sri but nothing stirring here. 73 de Dave, Phil, Rip

From -7811381960819413994
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,46008c7397eba942,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-04 08:58:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: UoSAT-Oscar-11 Status
Message-ID: <2329@allegra.UUCP>
Date: Sun, 4-Mar-84 11:58:42 EST
Article-I.D.: allegra.2329
Posted: Sun Mar 4 11:58:42 1984
Date-Received: Mon, 5-Mar-84 00:42:37 EST
Organization: Bell Communications Research, Inc
Lines: 98

Posted: Sun Mar 4, 1984   1:57 PM GMT   Msg: AGIE-1731-3276
From: MSWEETING
To: AMSAT
Subj: UoSAT-2 Status report

** UOSAT-2 SPACECRAFT OPERATIONAL STATUS **

4th March 1984 0800 gmt

Following a flawless launch on DELTA 174 from Vandenberg Air Force Base, Ca., UOSAT-2 separated from the launcher at approx 19:11 gmt over Turkey and in range of the Command Station at Surrey. A lengthy series of instructions was transmitted to the spacecraft to establish the initial operating conditions and then the s/c computer was instructed to switch the 145.825 MHz downlink on for 10 secs to check housekeeping data and ensure that outgassing of the beacon did not give rise to corona. The spacecraft responded perfectly first time and good data was received & decoded at Surrey. The 145 MHz beacon was then activated for several minutes, under computer control, and further data gathered which confirmed that the spacecraft was in very good shape. Just prior to LOS at Surrey, the computer was instructed to activate the beacon once more for a further 4 minutes and good data was received as the spacecraft disappeared over the horizon.

On orbit #2 the 145 MHz beacon was re-activated by abreviated computer instructions and the short and long bursts of telemetry repeated - data indicated everything on the spacecraft to be entirely nominal and so the computer was instructed to keep the 145 MHz beacon active in check-summed telemetry at 1200 bps for the next 80 minutes.

The spacecraft arrived at UoS silent (as expected) at AOS on orbit #3 and the short and long bursts of telemetry data process was repeated - data again indicated the spacecraft to be entirely nominal and so the computer was instructed to activate the 145 MHz beacon for the next 10 hrs whilst the spacecraft was out of range of the Surrey station.

With all having proceeded perfectly to plan thus far, the UoS team relaxed (collapsed?) and waited for telemetry reports from around the world!

The first indications that all was not well came from the printer when Larry Kayser wanted to know why he could not hear UO-11 followed by t/m from Phil Karn etc. The UoS Command Team were 'revived' and awaited the first pass of the day, orbit #8. The spacecraft was silent (again as expected) at AOS, however repeated attempts to re-activate the 145 MHz beacon using the s/c computer failed as did direct command. Heated analysis of the situation resulted in the preliminary theory that the 'Watch-Dog' timer (a device that de-activates the 145 & 435 MHz beacons after 21 days if no commands have been detected from the ground - remember UO-9!) may have been incorrectly initialised and thus may have terminated transmissions prematurely. The 'Watch-Dog' can be reset by command and this, and re-activation of the 145 MHz beacon, were attempted on orbit #9 - however with no success. Continued attempts on orbit #10 yielded nothing and things began to look rather grim. At that time no reason could be found for the premature shut-down of the beacon and the

prevailing theories tended towards cataclysm. Additionally, t/m 'went down' and we had to resort to phoning around to gather more pieces of the picture! Data from G.Ratcliffe via phone from Australia confirmed that the spacecraft systems were functioning nominally when he tracked UO-11 just before termination of transmissions. The spacecraft was in very good shape!

Detailed examination of the s/c computer software used during the first few passes shewed that the timing had been in error - the timing clock selected had been running at 8 times that required - resulting in premature shut-down of the beacon on both orbit #2 and #3 entirely in agreement with observations! This now veered the theories away from the 'Big Bang' and towards some sort of spacecraft systems problem.

Lack of feedback from the spacecraft keeps us effectively blind and all we can do is postulate the most likely theories based on pre-launch experience. The current theory is that there may be a problem with the 145 MHz beacon causing it to fail to operate correctly and generate wide-band noise and block the command receivers. This theory is based on observations of the performance of the beacon during test where some problems of this nature were encountered but were later believed to have been fixed. The Surrey Command Station are continuing to attempt to command the 145 MHz beacon OFF and the 435 MHz beacon ON - so far without success. If the 145 MHz beacon is ON but not operating correctly, it should be possible to observe it with high gain antennas and spectrum analysers etc. Should this prove to be the case, then it may be most profitable to attempt to command the spacecraft using the 1.2 GHzcommand uplink as this uplink is the most independant of the VHF/UHF systems.

All we can do is try out various theories - we tend not to favour total system failure or spontaneous detonation at present rather some more limited scenario. We shall keep you posted as to our thoughts and progress. Needless to say, everyone here is somewhat disappointed after the efforts of the last months and such a flawless start to UO-11's life!

We still have faith, though!

Martin Sweeting UoSAT Programme Manager

+ UoS Team

From 6311495788556987624
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a219d27ef271a951,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-05 12:16:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!ecsvax!hes
From: hes@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: vacuum tubes - sources
Message-ID: <2107@ecsvax.UUCP>

Date: Mon, 5-Mar-84 15:16:00 EST
Article-I.D.: ecsvax.2107
Posted: Mon Mar 5 15:16:00 1984
Date-Received: Tue, 6-Mar-84 03:50:55 EST
Lines: 12

<> I've seen a few requests lately for sources of vacuum (receiving) tubes. I did a reasonably extensive search last fall for sources for audio uses, and found one company I'm quite happy with. They have low prices, fast delivery, a large stock list, and low prices. They have Sylvania/Phillips tubes, and probably others, and also semiconductors. This company is Transleteronic Inc., 1365 39th St., Brooklyn, NY, 11218. Two typical prices are 6L6GC $5.25; 12AX7A $2.64.
    Another company (which I haven't bought tubes from) is ETCO Electronics, North Country Shopping Center, Plattsburgh, NY, 12901. They say they have a very large tube inventory, and publish a large list.
--henry schaffer   ncsu genetics

From -9166527238970117358
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fe166b9d7d89c920,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-06 02:12:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Uosat B ... Nothing heard
Message-ID: <274@dsd.UUCP>
Date: Tue, 6-Mar-84 05:12:49 EST
Article-I.D.: dsd.274
Posted: Tue Mar 6 05:12:49 1984
Date-Received: Wed, 7-Mar-84 08:34:42 EST
Lines: 254

Posted: Sat Mar 3, 1984   9:42 PM PST   Msg: MGIE-1731-3168
From: TCLARK
To: AMSAT
Subj: U-O-11 nil report
Rip's report is confirmed here by another EMEer, W4DFK. Dana and I will both be listening tomorrow AM.

Posted: Sat Mar 3, 1984 10:07 PM PST   Msg: GGIE-1731-3182
From: JHOLLADAY
To: AMSAT
Subj: BIG EARS IN THE WEST
Harold Price contacted me this afternoon (Saturday) and requested help with getting one or more well-equipped moonbounce stations on the west coast to look for signals from UO-11. I started with Lance Collister, WA1JXN, in Frenchtown, Montana, and he put me in touch with K6MYC and W5UN. We were fortunate to have all

three stations operational and available to help with the search tonight. That's the good news.

The bad news is that none of them heard any signals from UO-11. Thse are three of the best-equipped moonbounce stations in the West, and if none of them could hear a signal, there was probably no signal to be heard. Their antenna setups and locations are:

WA1JXN, Frenchtown, MT   12 X 19-element Boomers

W5UN, Midland, TX   16 modified Quagis with 26 ft booms

K6MYC, San Martin, CA   8 long yagis with 28 ft booms

All stations are using good GASFET preamps located at the antenna. Predicts were run by W6PAJ using UO-11 element set No. 4, and W5UN also ran predicts using the same element set. The following shows the times of the passes that were checked and predicted maximum elevations (4 March UTC date):

WA1JXN 0300-0311Z (14 deg)   0436-0449Z (79 deg)

W5UN 0255-0306Z (17 deg)   0431-0444Z (38 deg)

K6MYC 0434-0446Z (33 deg)

So, we gave it a good shot and the results are not encouraging. Each station agreed to try one good pass tomorrow morning in hopes that being in sunlight will coax some signal out of the satellite.   They will call me if any signals are heard, and I will notify Harold right away.

We owe each of these operators a big "thank you" for responding quickly and well to our request for help. It was a pleasure to work with them.

Here's hoping contact can be re-established with UO-11. 73.

Jay Holladay, W6EJJ

Posted: Sun Mar 4, 1984   5:57 AM PST   Msg: AGIE-1731-3276
From: MSWEETING
To: AMSAT
Subj: UoSAT-2 Status report
  ** UOSAT-2 SPACECRAFT OPERATIONAL STATUS **

4th March 1984 0800 gmt

  Following a flawless launch on DELTA 174 from Vandenberg Air Force Base, Ca., UOSAT-2 separated from the launcher at approx 19:11 gmt over Turkey and in range of the Command Station at Surrey. A lengthy series of instructions was transmitted to the spacecraft to establish the initial operating conditions

and then the s/c computer was instructed to switch the 145.825 MHz downlink on for 10 secs to check housekeeping data and ensure that outgassing of the beacon did not give rise to corona. The spacecraft responded perfectly first time and good data was received & decoded at Surrey. The 145 MHz beacon was then activated for several minutes, under computer control, and further data gathered which confirmed that the spacecraft was in very good shape. Just prior to LOS at Surrey, the computer was instructed to activate the beacon once more for a further 4 minutes and good data was received as the spacecraft disappeared over the horizon.

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The first indications that all was not well came from the printer when Larry Kayser wanted to know why he could not hear UO-11 followed by t/m from Phil Karn etc. The UoS Command Team were 'revived' and awaited the first pass of the day, orbit #8. The spacecraft was silent (again as expected) at AOS, however repeated attempts to re-activate the 145 MHz beacon using the s/c computer failed as did direct command. Heated analysis of the situation resulted in the preliminary theory that the 'Watch-Dog' timer (a device that de-activates the 145 & 435 MHz beacons after 21 days if no commands have been detected from the ground - remember UO-9!) may have been incorrectly initialised and thus may have terminated transmissions prematurely. The 'Watch-Dog' can be reset by command and this, and re-activation of the 145 MHz beacon, were attempted on orbit #9 - however with no success. Continued attempts on orbit #10 yielded nothing and things began to look rather grim. At that time no reason could be found for the premature shut-down of the beacon and the prevailing theories tended towards cataclysm. Additionally, t/m 'went down' and we had to resort to phoning around to gather more pieces of the picture! Data from G.Ratcliffe via phone from Australia confirmed that the spacecraft systems were functioning nominally when he tracked UO-11 just before termination of transmissions. The spacecraft was in very good shape!

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We still have faith, though!

Martin Sweeting UoSAT Programme Manager

+ UoS Team

Posted: Sun Mar 4, 1984 4:32 PM PST Msg: PGIE-1731-3751
From: JHOLLADAY
To: amsat
Subj: NOTHING HEARD

I have had no reports of signals heard from any of the morning passes which were monitored by WA1JXN, W5UN, or K6MYC. No further requests will be made for those stations to do more monitoring unless I get an input to do so from those working on the UO-11 problem.
Good luck!

Posted: Sun Mar 4, 1984 8:24 PM PST Msg: EGIE-1731-4120
From: TCLARK
To: amsat
Subj: 'IWI Program Questions

Several people have been asking questions and as a result creating rumors about errors in my prediction program. To dispel some comments/rumors that have been heard in the last day or two:

(1) The program code as it appeared in ORBIT is correct for handling satellites with inclinations > 90 degrees. Any stories to the contrary are wrong.

(2) Two versions of the program ended up with minor typographical errors involving the same line of code. The K0RZ version for APPLE II has an error in about line 330 where the code reads "IF M > 1 THEN ...." ----- the correct code should read "IF M > 2 THEN ...."

(3) N5AHD has reported a bug similar to (2) for the IBM-PC. It is documented on the AMSAT BB but involves a line which reads "IF M > 2 THEN ...." which should read "IF MONTH > 2 THEN ....".

To my knowledge there are no other errors in the code distributed. The code WILL work for UoSAT as it stands. The problems in finding UoSAT are not due to the prediction software. Predictions made here using my "master" copy on North Star agree with KA9Q's predictions made with independently developed software running on a VAX.

73, Tom

- - - - - - - - - -

Attempts to hear using stations with "big" ears (K1WHS, W4DFK), on the east coast have proven negative thru Sat. Nite. Sun. AM attempts at W3IWI (within abt 2 dB of EME capability) have also proven negative. 73, Tom

- - - - - - - - - - -

Posted: Mon Mar 5, 1984 7:02 AM PST Msg: IGIE-1731-5684
From: TCLARK
To: amsat
Subj: U-O-11 and Landsat D' Element Set #5
Here follows another new set of UoSAT-Oscar-11 Keplerian elements:

Object: 1984-021B = NASA # 14781
NASA El.Set: # 5
Epoch: 84064.46078527
Incl: 98.2551
RAAN: 126.9087
Eccr: 0.0012928
Arg.Perg: 253.6204
Mean Anom: 106.2574
Mean Motion: 14.61847144
Drag: +0.00034629

By popular request, here are elements for Landsat-D':

Object: 1984-021A = NASA # 14780
NASA El.Set: # 5
Epoch: 84064.46281564
Incl: 98.2545
RAAN: 126.9100
Eccr: 0.0010697
Arg.Perg: 274.5334

Mean Anom: 085.4451
Mean Motion: 14.60712266
Drag: +0.00010338

73, Tom

Posted: Mon Mar 5, 1984   8:47 AM PST   Msg: CGIE-1731-6758
From: HPRICE
To: AMSAT
Subj: To the Big Ears crew.
Please compute the minimum strength signal you would expect to be able to hear from the uo-11 orbit at your station. We would like to try to hear the local rx oscillators on uo-11. Exact frequencies later, but they will be around 134 MHz.

- - - - - - - - -

My comments on Harold's msg: Most of the EME arrays are quite narrow band. They are probably already down 1-3 dB at 145.8 MHz. I hold little hope that they will hear anything 12 MHz = 8% away from their design freq. If this is important, it would be best to try to find some station with a big (e.g. > 30') dish and throw together a special feed. We should also arrange for either Lunar or ARR or ??? to get a GaAsFET preamp done for us quickly. To mount this test will be a fairly big deal. Is it really worth it?

73, Tom

From -2772330700667039706
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1ccc76246bed5415,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-06 09:02:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 10
Message-ID: <7497@mgweed.UUCP>
Date: Tue, 6-Mar-84 12:02:38 EST
Article-I.D.: mgweed.7497
Posted: Tue Mar 6 12:02:38 1984
Date-Received: Wed, 7-Mar-84 07:37:26 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 11

BULLETIN NR 10   FROM ARRL HEADQUARTERS   NEWINGTON CT
MARCH 2 1984   TO ALL RADIO AMATEURS

THE FCC FIELD OPERATIONS BUREAU IN WASHINGTON D.C. HAS ISSUED A CORRECTION TO ITS FIELD OFFICE EXAMINATION SCHEDULE THAT WAS RELEASED LATE LAST YEAR. THERE WAS AN ERROR IN THE AUGUST

DATES. THE CORRECT DATE FOR THE FCC ADMINISTERED EXAMS IS THE WEEK OF AUGUST 6 THROUGH 10. THE MAY AND NOVEMBER EXAMINATION SCHEDULE IS OTHERWISE ACCURATE AS PRINTED IN MARCH 1984 QST, PAGE 49 AND JANUARY 1984 QST, PAGE 59.

From -2270038752251391107
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ebc15e6aad8aa9de,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-06 09:03:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 11
Message-ID: <7498@mgweed.UUCP>
Date: Tue, 6-Mar-84 12:03:10 EST
Article-I.D.: mgweed.7498
Posted: Tue Mar 6 12:03:10 1984
Date-Received: Wed, 7-Mar-84 07:37:39 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 10

BULLETIN NR 11 FROM ARRL HEADQUARTERS NEWINGTON CT
MARCH 2 1984 TO ALL RADIO AMATEURS

ARRL BULLETIN NR 6, DATED FEBRUARY 28, NAMED THE FIRST FIVE VOLUNTEER EXAMINER COORDINATORS, VEC. THE FCC PRIVATE RADIO BUREAU IS ON RECORD AS STATING THAT AN FCC CALL REGION MAY BE SERVED BY MORE THAN ONE VEC. OTHER ENTITIES, INCLUDING THE ARRL, CONTINUE TO MAKE PLANS TO APPLY FOR VEC STATUS.

From 2829486773790301915
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6cb4a5656fc5b4ab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-06 09:03:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL PROPAGATION BULLETIN NR 10
Message-ID: <7499@mgweed.UUCP>
Date: Tue, 6-Mar-84 12:03:36 EST
Article-I.D.: mgweed.7499
Posted: Tue Mar 6 12:03:36 1984
Date-Received: Wed, 7-Mar-84 07:37:53 EST
Organization: AT&T Consumer Products - Montgomery Illinois

Lines: 33

PROPAGATION BULLETIN NR 10 FROM ARRL HEADQUARTERS NEWINGTON CT MARCH 5 1984 TO ALL RADIO AMATEURS

THE SOLAR FLUX DROPPED FROM 174 ON FEB 25 TO 120 ON MARCH 4, AS SEVERAL LARGE SUNSPOT GROUPS MOVED OUT OF SIGHT AROUND THE SUN'S WEST LIMB ON THE 4TH. LEAD SPOTS OF THE ACTIVE AREAS RESPONSIBLE FOR THE FLUX RISE OF FEB 7 THROUGH 10 CAME AROUND THE EAST LIMB AND THE RATE OF FLUX DECLINE SLOWED. VALUES ARE EXPECTED TO TURN UPWARD IN THE NEXT FEW DAYS, BUT READINGS ABOVE 140 SEEM UNLIKELY, AND ANOTHER DIP IS DUE AT THE MIDDLE OF THE MONTH.

LOW GEOMAGNETIC ACTIVITY AND GENERALLY GOOD PROPAGATION ON ALL DX BANDS ARE EXPECTED BETWEEN MAR 5 AND 9, ALTHOUGH LOWER SOLAR FLUX VALUES WILL REDUCE DX ACTIVITY ON 28 MHZ TO SOME EXTENT. THE IMPROVING POSITION OF THE SUN WILL MINIMIZE THE EFFECT OF LOWER SOLAR FLUX, AND THE /MUF/ WILL BE MOSTLY HIGHER THAN PREDICTED IN THE PROPAGATION CHARTS IN QST FOR FEBRUARY. THE SAME SHOULD APPLY FOR MOST OF THE LATTER HALF OF MARCH, THOUGH MORE DETAILED INFORMATION FOR THAT PERIOD WILL BE GIVEN IN LATER BULLETINS.

INCREASED GEOMAGNETIC ACTIVITY AND DEGRADED PROPAGATION IN THE HIGHER LATITUDES ARE EXPECTED AROUND MARCH 10 AND 13 TO 15. RELATIVELY CALM MAGNETIC FIELD CONDITIONS AND GENERALLY GOOD PROPAGATION ARE DUE MAR 169 THROUGH 25 AND 27 TO 29, THOUGH CONDITIONS IN THE NORTHERN HEMISPHERE WILL BEGIN TO SHOW A SEASONAL DECLINE IN LATE MARCH.

AMERICAN SUNSPOT NUMBERS FOR FEBRUARY 23 THROUGH 29 WERE BETWEEN 57 AND 124 WITH A MEAN OF 87.9.

From 3982806512947692222
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,62df0f3b02034161,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-06 09:19:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxu.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!houxu!jhv
From: jhv@houxu.UUCP (James Van Ornum)
Newsgroups: net.ham-radio
Subject: Holmdel Scanner Frequencies
Message-ID: <334@houxu.UUCP>
Date: Tue, 6-Mar-84 12:19:29 EST
Article-I.D.: houxu.334
Posted: Tue Mar 6 12:19:29 1984
Date-Received: Wed, 7-Mar-84 07:55:04 EST
Organization: AT&T Bell Labs, Holmdel NJ

Lines: 10

I like the frequency charts that Robert Parness has been posting
for the Naperville, Illinois area - but would like to see a similar
file for the Holmdel, New Jersey area. To help that happen,
I am willing to collect, format, verify (as best I can) and post
sporadically such a file if others on the net will send me
their lists of active frequencies in this area.

Thanks.

     James Van Ornum, AT&T Bell Laboratories, inhp4!houxu!jhv

From -927084124618274718
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,8d685c5bd2a2d3cf,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,8d685c5bd2a2d3cf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-07 04:54:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hou2h!atttl
From: atttl@hou2h.UUCP (R.ARDIS)
Newsgroups: net.audio,net.ham-radio
Subject: Surplus Vacuum Tubes
Message-ID: <331@hou2h.UUCP>
Date: Wed, 7-Mar-84 07:54:59 EST
Article-I.D.: hou2h.331
Posted: Wed Mar 7 07:54:59 1984
Date-Received: Thu, 8-Mar-84 07:28:02 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 113

<>
In response to requests for a summary of answers regarding
Vacuum Tube Suppliers, here it is:

This sounds stupid but let us not overlook the obvious:
Radio Shack advertises that they can supply any of several 000
types. They don't carry them in their stores but they say they
can order them and get them fast. I recommend the Radio Shack in downtown
Red Bank if you deal with the manager. He is an allright guy.
Dick Grantges hound!rfg

I, along with many others I'm sure, have a stock of vacuum tubes (new and
otherwisw#e) residing in the basement. If you send me a list of your needs
I'll check the stock and see if### what I might have.
                  Regards,
                  Len Kastner
                  aW##Wh X2828
                  clyde!lgk

For a good selection of any tubes, new and old, try here:

Steinmetz Electronics
7519 Maplewood
Hammond, Ind. 46320
(219) 931-9316

Bruce Sabalaskey
ihuxu!kma8080

I have a catalog from "United Page". Judging from the types, quantities, and prices of tubes they carry, it appears they're a surplus dealer.

You can write them at:

United Page
481 Getty Ave.
Paterson, NJ 07503
(201)279-7500 or (212)736-9351

Good luck!
-Tom Kloos, Tektronix, Inc. tektronix!orca!tomk

Sources of vacuum tubes are:

Atkinson & Smith
Lewis Avenue
Eatontown, NJ
(In their upstairs surplus room)

ETCO Electronics Corp.
North Country Shopping Center
Route 9
Plattsburgh, NY 12901
518-561-8700
(I have a copy of their summer 1983 catalog.)

T. W. Thatcher
HO 3D-510
949-4241

I am interested in any replies you get to your inquiry, and unfortunately cannot help you out.
But please post any results you get,

Thanks in advance,
Bob Switzer

I bought a Tek RM45 (like a 545 but rack mount) a while back, and it lost it's CRT during shipping, but I got to keep it. I'd be glad to sell you any of the tubes in it for an incredible price, as I don't really need them.

Several of the tubes (especially in the amplifiers) should be "Tektronix checked". This isn't just a ploy to sell tubes, the tubes have to be matched for grid leak and such factors. If you don't have a curve tracer, or even a dynamic transconductance checker, you can't do this yourself easily. I'll sell you the checked tubes, and as many spares as you want. (I used to deal in Tek 'scopes, and I still have ~400 6CB6 tubes from the *507* series!)

Thought: I'll sell you the whole chassis from the '45, if you want it. It has most of the switches, resistors, etc., that were originally on it, but no CRT. It is rather weathered, though.

--John ("Spam") Rehwinkel
uucp: ..!seismo!rlgvax!umcp-cs!eneevax!spam
snail mail: 12304 Tilbury lane
Bowie, MD 20715
voice: (301) 262-7893

<> I've seen a few requests lately for sources of vacuum (receiving) tubes. I did a reasonably extensive search last fall for sources for audio uses, and found one company I'm quite happy with. They have low prices, fast delivery, a large stock list, and low prices. They have Sylvania/Phillips tubes, and probably others, and also semiconductors. This company is Transleteronic Inc., 1365 39th St., Brooklyn, NY, 11218. Two typical prices are 6L6GC $5.25; 12AX7A $2.64.

Another company (which I haven't bought tubes from) is ETCO Electronics, North Country Shopping Center, Plattsburgh, NY, 12901. They say they have a very large tube inventory, and publish a large list.

--henry schaffer ncsu genetics

MANY, MANY THANKS TO THE RESPONDENTS. WE'RE CHECKING OUT THE TEK-551 CRT ON A BENCH-CHECK AND THEN WILL USE THIS INFORMATION.
"SPAM" CAN EXPECT A CALL FROM PHIL NAHSER, W4WUB, SHORTLY.

NOTE: I received a header WITHOUT TEXT from inuxd!rcf dated 24 Feb 84 13:21:27 CST.

Ed Baldwin, Greensboro, N.C. hou2h!atttl K4FHB (Baldy)

From 8828069931561690004
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8fdb1db25243c4a7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-08 03:34:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio

Subject: Uosat 2 heard ?
Message-ID: <276@dsd.UUCP>
Date: Thu, 8-Mar-84 06:34:12 EST
Article-I.D.: dsd.276
Posted: Thu Mar 8 06:34:12 1984
Date-Received: Sat, 10-Mar-84 10:22:46 EST
Lines: 150

Posted: Tue Mar 6, 1984   1:54 PM PST   Msg: IGIE-1733-3060
From: GRATCLIFF
To: MSWEETING
CC: AMSAT
Subj: Uosat-2 Heard ?
Martin,
Last night I had a report from Darryl VK1DF who works at
the Orroral Valley Tracking Station near Canberra.
Two operators believe they have copied signals from UO-B
on a number of occasions.
1. 4.3.84 approx 1235 UTC or time of closest approach
   no carrier but RFI detected and a questionable signal
   on 145.7317 Mhz ???
2. 4.3.84 approx 2300 UTC a clean carrier on 145.825 Mhz
   for about the first half of pass, locked on to and
   measured carrier using 26M dish at -120dBM, then it
   went raspy and RFI sounding and could only be heard
   for a few seconds at a time.
3. 5.3.84 approx 1130 UTC raspy carrier but only for
   3-4 seconds at a time and was -135dBM at point of
   closest approach.
The times are somewhat approximate because the operators
primary task at the time was their work in tracking
Landsat D1. If you want to contact Darryl VK1DF his
home phone number is (062)824380 at home for the next
two days phone number at work is (062)357200
Graham VK5AGR

Posted: Tue Mar 6, 1984 10:02 PM PST   Msg: IGIE-1733-5260
From: PKARN
To: amsat
Subj: Orroral Valley observations
A few calculations on the Australian observations:

According to my handy-dandy Satellite Service Calculator (won as a door
prize at the annual general meeting a couple of years ago), the 26M dish
would have a gain of 29 dbi and a beamwidth of 6 degrees on 2 meters,
assuming a feed efficiency of 50%.

Working the reported signal strengths back to the spacecraft, the
received level of -120 dbm corresponds to an EIRP at the spacecraft of
-13 dbm over 1000 km. (That's 1/20 of a milliwatt). -135 dbw
corresponds to -28 dbm over 1000 km, or just over a MICROwatt!

The cosmic noise background behind the spacecraft varied over the course of the pass. At the 4 March 12:35 observation, the apparent position of the spacecraft was 6 hours 30 minutes RA, +23 deg declination; according to a 136 mhz radio sky map, the cosmos has approximately a 450 K effective noise temperature in this direction. This corresponds to a noise floor of -137.3 dbm, or a signal-to-noise ratio of 2 to 17 db in a 3 khz SSB bandwidth. The other passes apparently went in front of much noiser areas of the galaxy (1000-3000K) which would knock the S/N ratio down by 3-7 db. All this assumes that the galactic noise swamps the preamp noise, which is reasonable since a good GaAsFET has a noise temperature of 50-200 K.

The message here is that the hearing conditions appear to be very highly variable, and while the chances for someone with a smaller antenna are obviously worse than with a 26M dish (!), there's still a chance that a well-equipped EME station (20 dbi gain) and good GaAsFET preamp should be able to hear the satellite on some passes. Conventional satellite stations are most likely not enough.

Phil

Posted: Wed Mar 7, 1984 11:42 AM PST Msg: PGIE-1734-1595
From: PKARN
To: amsat
CC: msweeting
Subj: More elements

I just called up Millstone Hill and asked if radar cross-sections were available for each of the pieces of 1984-021B. Unfortunately, they can only supply that information for deep space satellites, since they specialize in deep space tracking; for low earth orbits, they can only relay standard NORA element sets. In any event, I got a recent update on UO-11, and just to add to the fun, a set on the Delta 2nd stage.

Satellite: oscar-11
Catalog number: 14781
Epoch time: 84067.06184980
Wed Mar 7 01:29:03.823 1984 UTC
Element set: MH 3-7-84
Inclination: 98.2820 deg
RA of node: 129.4940 deg
Eccentricity: 0.0007918
Arg of perigee: 246.0900 deg
Mean anomaly: 113.9370 deg
Mean motion: 14.61892068 rev/day
Decay rate: 0.00034636 rev/day^2 (this seems very high, don't trust it)
Epoch rev: 78
Semi major axis: 7062.290 km
Anom period: 98.502484 min
Apogee: 707.238 km
Perigee: 696.055 km
Beacon: 145.8250 mhz

Satellite: Landsat/UoSAT launcher

```
Catalog number: 14782
Epoch time:      84067.08738720
   Wed Mar  7 02:05:50.254 1984 UTC
Element set:     MH 3-7-84
Inclination:      100.0610 deg (this jumped up 2 deg over the weekend)
RA of node:       129.6680 deg
Eccentricity:    0.0144264
Arg of perigee:   294.6460 deg
Mean anomaly:      63.9920 deg
Mean motion:   14.92641153 rev/day
Decay rate:      1.209e-05 rev/day^2
Epoch rev:               0
Semi major axis:  6964.974 km
Anom period:     96.473288 min
Apogee:            704.436 km
Perigee:           503.477 km


Posted: Wed  Mar  7, 1984   9:44 PM PST              Msg: KGIE-1734-5270
From:   HPRICE
To:     amsat
Subj:   listening reports
To: ALL
FM: Harold
Re: UOSAT-2 signal reports.

We have received several more reports from people who hear various kinds
of trash on 145.825.  This is encouraging.  What we need now is accurate
aos/los times.  We also need some indication of the amount of doppler you
are seeing.  It's ok if you didn't think you heard the whole pass, or if
the signal fades so bad you can't be sure of when aos/los was.  Just
give us what ever you've got, and we'll add gains of salt as appropriate.
We desperately need to make an informed choice from the several element
sets available to us as to which one is uo-11.  We are either too small,
too close, or too silent to be sure.

Give us what ever you've got.  Even doppler (amount of frequency change)
for a short period of the whole pass will help, since no change or too
much of a change will tell us it isn't uo-11.  Spotty aos/los times, if far
enuff out of the expected range, can also tell us we're listening to the
wrong thing.

If you've already sent in a report, please go over your times and resubmit
the report.  If you haven't heard it yet, you may be missing one of the
all time great T hunts.  When we get the beacons turned on again later
this week it will be too late, anyone with a wet noodle will be able to
copy uo-11.

If you're too embarrassed about the poor quality of your data, send it
to just me or Phil.  We won't tell.

Harold.
```

From -9170033843504699007
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,8d685c5bd2a2d3cf
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,8d685c5bd2a2d3cf
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-08 06:30:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cubsvax.UUCP
Path: utzoo!watmath!clyde!floyd!cmcl2!rocky2!cubsvax!peters
From: peters@cubsvax.UUCP
Newsgroups: net.audio,net.ham-radio
Subject: Re: Surplus Vacuum Tubes
Message-ID: <177@cubsvax.UUCP>
Date: Thu, 8-Mar-84 09:30:58 EST
Article-I.D.: cubsvax.177
Posted: Thu Mar 8 09:30:58 1984
Date-Received: Sat, 10-Mar-84 09:17:02 EST
References: <331@hou2h.UUCP>
Organization: Columbia Univ Biology, New York City
Lines: 14

Guitar Player magazine always contains ads for vacuum tubes --
especially those likely to be found in guitar amps, even
old and obscure ones. The companies usually claim to either
sell matched sets that they have rigorously checked out, and
to weed out less-than-optimal performers. I believe at least
one of the companies claims to have their tubes custom-manufactured
to their own specs. Some of the tubes have extra features, such
as gold-plated pins. The companies that come to mind are
"Groove Tubes," "Mesa Engineering" and "Peavey Electronics."
See an issue of the mag for addresses & details. (Available
at any music store or good newsstand).

{philabs,cmcl2!rocky2}!cubsvax!peters   Peter S. Shenkin
Dept of Biol. Sci.; Columbia Univ.; New York, N. Y. 10027; 212-280-5517

From 6354156649851850066
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,74277fcc807ea1cb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-08 07:40:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: USA-wide scanner freq
Message-ID: <2067@ihuxf.UUCP>
Date: Thu, 8-Mar-84 10:40:07 EST
Article-I.D.: ihuxf.2067

Posted: Thu Mar 8 10:40:07 1984
Date-Received: Fri, 9-Mar-84 01:59:53 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 16

These stations are licensed for "itinerant" use and could be found
operating anywhere in the USA:

```
h  151.625  WXL653   Arthur Anderson & Co, real estate
h  151.625  KDM210   Burns International Security Svcs
o  151.625  ?        Goodyear Blimp
h  151.625  ?        Motorola, Inc.
p  151.625  KJ3404   Pinkerton
f  151.625  KH8971   Sports Car Club of America (USA-wide)
f  151.625  KU2361   United Network Bureau, detectives
f  151.625  KJ9237   US Auto Club - Speedway, IN (USA-wide)
```

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==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5760

From 3341919595647934281
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7c2b0dedc4fddec6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-09 16:53:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL DX BULLETIN NR 10
Message-ID: <7622@mgweed.UUCP>
Date: Fri, 9-Mar-84 19:53:38 EST
Article-I.D.: mgweed.7622
Posted: Fri Mar 9 19:53:38 1984
Date-Received: Sat, 10-Mar-84 13:26:34 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 68

QST DE K9EUI
HR DX BULLETIN NR 10 FROM ARRL HEADQUARTERS
NEWINGTON CT MARCH 9, 1984
TO ALL RADIO AMATEURS BT

THANKS TO K1MM, WITRC AND K1XM OF THE SOUTHERN NEW ENGLAND DX
ASSOCIATION FOR THE FOLLOWING DX INFORMATION.

KERMADEC. THE NEW ZEALAND GROUP NOW PLANS TO DEPART THIS
SUNDAY FOR RAOUL ISLAND IN THE KERMADEC GROUP. AFTER A FOUR

DAY OCEAN TRIP, THEY SHOULD BEGIN APPROXIMATELY MARCH 15 OR 16. THE OPERATING CREW CONSISTS OF THREE ZLS AND ONE U.S. OPERATOR AND AT LEAST TWO STATIONS WILL BE USED. A TEN DAY OPERATION IS PLANNED. MEANWHILE, WARWICK, ZL8AFH, IS BECOMING A LITTLE EASIER TO FIND, WITH ALMOST WEEKLY VISITS TO THE VK9NS NET. QSL ALL ZL8 CALLS TO THE CORRESPONDING ZL1 EXCEPT ZL0AJW/8, WHICH GOES TO ZL1BQD. BEFORE AND AFTER THE KERMADEC TRIP, ZL0AJW QSLS GO TO W6REC.

SOUTH SHETLAND. 4K1F HAS BEEN REPORTED EVERY DAY THIS WEEK ON 20 METER SSB. WATCH 14210 TO 220 KHZ AT 0400 TO 0500Z. QSL OPERATOR SANDY TO UQ2OC.

SOVEREIGN MILITARY ORDER OF MALTA. A SIX BAND SSB/CW OPERATION WILL TAKE PLACE THIS WEEKEND FROM SMOM. THE OFFICIAL STATION, 1A0KM, WILL BE OPERATED BY I0JX, I0IJ, I0MGM AND OTHERS. THE OPERATION IS EXPECTED TO BEGIN EARLY ON SATURDAY AND LAST THROUGH LATE SUNDAY. QSL AS USUAL TO I0MGM.

160 METERS / WARC. ON FEB. 22, ITALIAN OPERATORS RECEIVED PERMANENT PERMISSION TO OPERATE ON 160 METERS AS WELL AS ON THE 18 AND 24 MHZ WARC BANDS. THE 160 METER ALLOCATION IS 1830 TO 1850 KHZ, BOTH CW AND SSB.

THE TOKELAUS. DL1VU IS STILL ACTIVE FROM THE TOKELAU GROUP AS ZM7VU. KARL HAS A VERY STRONG SIGNAL ON ALL BANDS BUT PREFERS 80 AND 40 METER CW.

MALAWI. LES, 7Q7LW, PLANS TO REPLACE HIS 80 METER ANTENNA SHORTLY. WATCH FOR HIM AROUND HIS SUNRISE ON CW. MEANWHILE, LES CAN BE FOUND ON TUESDAY EVENINGS AT 21292 KHZ. QSL TO BOX 24, MTAKATAKA.

EASTER ISLAND. THE YASME EXPEDITION IS PRESENTLY AT EASTER ISLAND SIGNING W6KG/CE0. LLOYD AND IRIS WILL STAY UNTIL MARCH 16, AFTER WHICH THEY WILL RETURN TO SANTIAGO. THEIR PLANS ARE TO IMMEDIATELY DEPART FOR JUAN FERNANDEZ FROM SANTIAGO SO WATCH FOR THEM FROM /CE0Z ABOUT MARCH 18. QSL AS USUAL TO YASME FOUNDATION.

CLIPPERTON. AS OF INFORMATION RECEIVED TODAY, THE FRENCH/AMERICAN GROUP PLANS TO DEPART FROM MEXICO TOMORROW, WITH ARRIVAL AT CLIPPERTON SLATED FOR MARCH 15 OR 16. A SIX DAY SIX BAND OPERATION IS EXPECTED, USING CALLSIGNS FO0XU THROUGH FO0XZ, A DIFFERENT CALL FOR EACH BAND.

LEBANON. DESPITE GROWING POLITICAL TENSIONS, TED, OD5LX, REMAINS ON THE AIR. WATCH FOR HIM JUST AFTER HIS SUNRISE, 0300 TO 0500Z, ON 20/40/80 METER CW ONLY. QSL TO SM0GMG.

SPRATLY ISLANDS. CONFIRMATIONS RECEIVED FROM 1S1CK WILL BE CREDITED FOR DXCC BEGINNING WITH THOSE DXCC APPLICATIONS RECEIVED ON AND AFTER FEBRUARY 1, 1984.

DXCC. A REMINDER THAT MARCH 30 IS THE DEADLINE FOR DXCC HONOR ROLL SUBMISSIONS AR

From 306734847367943146
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d70b9263fa700c2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-12 06:25:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-vgr.ARPA
Path: utzoo!watmath!clyde!floyd!harpo!seismo!brl-vgr!wmartin
From: wmartin@brl-vgr.ARPA (Will Martin)
Newsgroups: net.ham-radio
Subject: Cheap RF Signal Generators?
Message-ID: <2413@brl-vgr.ARPA>
Date: Mon, 12-Mar-84 09:25:54 EST
Article-I.D.: brl-vgr.2413
Posted: Mon Mar 12 09:25:54 1984
Date-Received: Tue, 13-Mar-84 08:16:06 EST
Organization: Ballistics Research Lab
Lines: 30

Just in case there are people on the net who do electronic repairs, testing, or just fiddling around on something other than digital circuitry...

I have been perusing the mail-order electronics equipment catalogs and have noticed a curious discrepancy. You can buy cheap audio signal generators, cheap frequency counters, cheap multimeters, and various other low-cost gear, but it seems there is difficulty in buying a reasonably-priced RF signal generator! Does anybody know why this is so?

It seems to me that it should be little more difficult to build an RF signal generator than an AM radio; the circuits have much in common, as the oscillators in a superhet essentially do the same thing. Accurate dial calibration and linearity should be the main cost factors, but, with cheap counters being sold by every electronics outlet, who needs such accuracy in the generator dial any more? I have a decent counter, and I need an RF generator to do occasional alignments on shortwave and FM radios. Heath makes the only low-cost (kit) RF generator I have found; the IG-5280, at $47.95 less the ubiquitous 10%-off coupon. It runs on batteries, or requires a separate power supply (which powers a set of 5 different instruments in this series). Does anybody have any comments on this device? Are there any other low-cost, solid-state RF signal generators available out there, either kit or assembled?

I know I really would do best to frequent hamfests and probably would find one there, but circumstances make that impracticable. I have tried to read the QST classifieds, but haven't seen anything like this advertised. Advice and comments solicited.

Will Martin

(...!brl-vgr!wmartin or WMartin@Office-3)

From 6422587224513520294
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,c989d94cf9440039,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,c989d94cf9440039,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-12 06:33:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-vgr.ARPA
Path: utzoo!watmath!clyde!floyd!harpo!seismo!brl-vgr!wmartin
From: wmartin@brl-vgr.ARPA (Will Martin)
Newsgroups: net.ham-radio,net.audio
Subject: Cheap Vacuum Tubes
Message-ID: <2414@brl-vgr.ARPA>
Date: Mon, 12-Mar-84 09:33:01 EST
Article-I.D.: brl-vgr.2414
Posted: Mon Mar 12 09:33:01 1984
Date-Received: Tue, 13-Mar-84 08:16:21 EST
Organization: Ballistics Research Lab
Lines: 17

I tried posting this answer to the inquiry about sources of vacuum tubes
when the question first came out on net.ham-radio, but the postnews
software on this host was not working, unbeknownst to me -- items were
posted locally but not transmitted.

So here it is, late but still applicable...

The best and cheapest source of surplus and hard-to-find tubes that I've dealt
with has been Fair Radio Sales, in Lima, Ohio -- look for their tiny little
display ads in CQ and other ham & electronic magazines. Their catalog lists
a lot of older tubes, and they can supply some not in the catalog -- write
your wants. Prices are very cheap, especailly for used/tested tubes, and
they have a lot of neat stuff in addition.

Will Martin

From 5636241393747555715
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bb68d0eaa21129d6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-13 02:26:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!hpda!fortune!dsd!
dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Possible Uosat 11 sighting in ZL
Message-ID: <278@dsd.UUCP>

Date: Tue, 13-Mar-84 05:26:47 EST
Article-I.D.: dsd.278
Posted: Tue Mar 13 05:26:47 1984
Date-Received: Thu, 15-Mar-84 07:28:08 EST
Lines: 57

Posted: Mon Mar 12, 1984 12:37 PM GMT Msg: AGIE-1736-8676
From: IASHLEY
To: msweeting
CC: amsat
Subj: Possible UO-11 sighting in ZL.
Hi Martin,
I have a report from ZL1TKL in Tokoroa via ZL1MO of possible UO-11 sightings. Times agree with NASA set #5.

6th March: 0849 UTC strong noise heard on 145.8227 brg 140 dg T.
0853 brg 120 dg
0856 brg 115 dg - a burst of high speed cw or tlm heard, but very weak. Lasted about 10 secs over 50 sec. period.
1026 some noise detected, 1031 noise heard, 1035 noise & 1037 much weaker.

8th March: Freq. 145.8231 at 1148 UTC - short period of about 1 minute, heard weird cw or tlm.
ZL1TKL station: Rx is IC260A with B108 preamp. Ant is 23 elements horizontal with est. 16db gain.
I have asked that he monitor and record any further sightings.
If any uplinking required from S. Hemisphere, I can make arrangements for an EME station to help, especially on 435 MHz.
Vy 73 de ZL1AOX.

Posted: Mon Mar 12, 1984 8:40 PM GMT Msg: KGIE-1737-5774
From: MSWEETING
To: AMSAT
Subj: Oscar-11
News from Surrey this week re Oscar-11 is still mainly disappointing. No further commands have been accepted from the Guildford command station and commands from Los Angeles on 1.2GHz have not been successful either.

A major source of hope has, however, been reported from Australia, where a NASA tracking station has reported hearing signals on 145.825 MHz at the times when UoSAT-2 was expected. These signals appear to centre around the correct frequency and exhibit the correct doppler shift, although we would expect modulation other than the steady carrier or rasping sounds reported.

We would appreciate other well-equipped stations listening on the Oscar-11 downlink frequency for any possible signals. A record of doppler and frequency measurements, together with

times of signal, from another station outside Australia would
be especially conclusive. Attempts are being made to organise
a large listening session at an installation in the U.K.,
however this is unlikely to take place for up to a fortnight.

  Since any concrete signal reports from around the world will
be positive evidence that Oscar-11 is still alive - if silent
- we are still eagerly awaiting your efforts.

  Roger   University of Surrey.

From 7752366228067345602
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d505555de960e049,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-13 02:29:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!hpda!fortune!dsd!
dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Packet Radio Gateway Experiments
Message-ID: <279@dsd.UUCP>
Date: Tue, 13-Mar-84 05:29:56 EST
Article-I.D.: dsd.279
Posted: Tue Mar 13 05:29:56 1984
Date-Received: Thu, 15-Mar-84 07:28:22 EST
Lines: 74

Posted: Mon Mar 12, 1984   8:36 PM PST   Msg: SGIE-1737-9022
From: TCLARK
To: amsat
Subj: Sucessful Packet Radio Gateway Activity Last Weekend
It gives me great pleasure to QSP the following msg -- you can't know
how exciting it was to be involved in the first Packet Radio Gateway
test (especially since AO-10 was at 1 degree elevation for me when we
did it!). -- Tom

                  - - - - - -

To: All packet radio stations
From: Hank Magnuski, KA6M
Subject: Oscar-10 Packet Gateway (Teleport) Experiments

On Sunday, March 11th, on orbit 560 of AMSAT/Oscar 10, KA6M in conjunction
with the following stations, successfully demonstrated the interconnection
of two packet radio stations with intermediate links using a terrestrial
packet repeater and two AO-10 groundstations. This is probably the first
all digital interlink experiment performed on the AMICON channel.
Those involved were

    Tom Clark, W3IWI, Clarksville, MD   (Washington, DC area)

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    Hank Magnuski, KA6M, Menlo Park, CA    (San Francisco area)
    Harold Price, NK6K, Redondo Beach, CA  (Los Angeles area)
    Jim Tittsler, AI8A/6, Los Gatos, CA    (San Francisco area)
    Ron McMurdy,WA0OJS/6, Monterey, CA     (San Francisco area)
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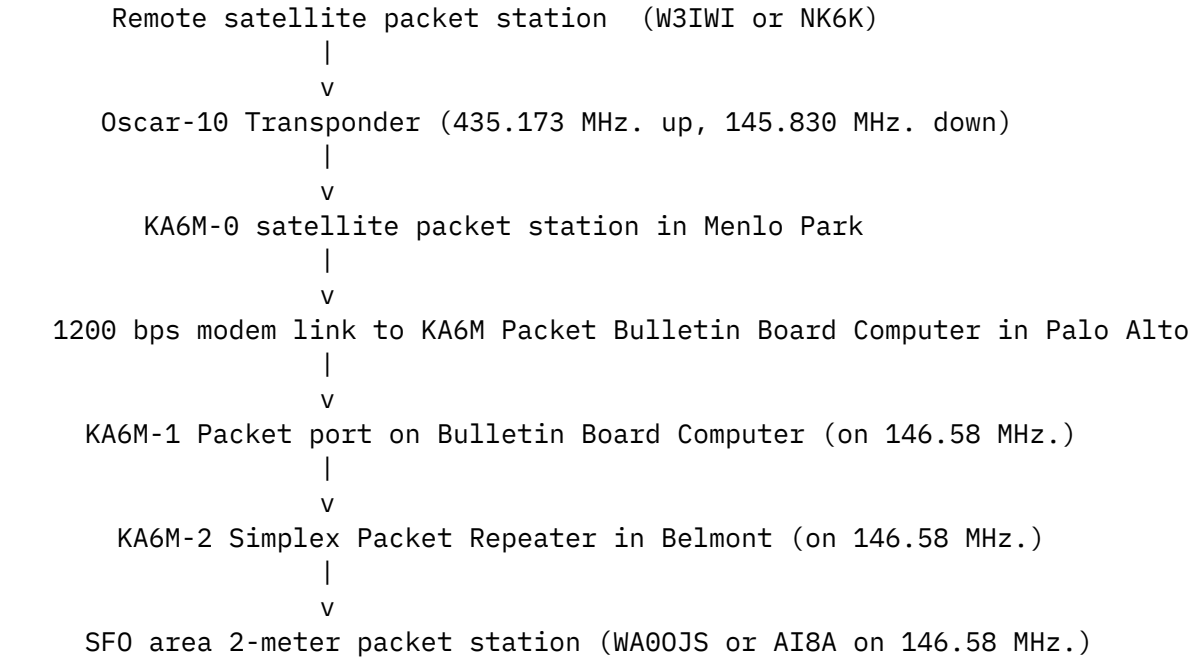
The first contact at 19:00 UTC was between W3IWI and WA0OJS. Tom was working with a very low-on-the-horizon pass, had limited time, and so only a short fragment of text made it in both directions. About an hour later, at 20:05, NK6K successful chatted with AI8A for about ten to fifteen minutes, in what almost seemed like a local QSO. In both connections the intermediate links looked like this:


Remote satellite packet station (W3IWI or NK6K)
Oscar-10 Transponder (435.173 MHz. up, 145.830 MHz. down)
KA6M-0 satellite packet station in Menlo Park
1200 bps modem link to KA6M Packet Bulletin Board Computer in Palo Alto
KA6M-1 Packet port on Bulletin Board Computer (on 146.58 MHz.)
KA6M-2 Simplex Packet Repeater in Belmont (on 146.58 MHz.)
SFO area 2-meter packet station (WA0OJS or AI8A on 146.58 MHz.)

On both contacts text was transmitted in both directions. Error-checked AX.25 connections were maintained between the two satellite stations and between the computer's packet port and the outlying users. However, over the modem link only text was transmitted, and no packet protocol was employed. Equipment included a mixture of TAPR and VADCG terminal node controllers. A total of five TNCs had to be properly connected for all this to work.

Not suspecting that anything special was going on, Ron and Jim connected to the computer system expecting to pick up their mail. Instead, they found that they were connected directly to stations in remote geographic areas, and the packets they were getting were coming from outer space. No one was more surprised than I was when the first text started to come through.

Hopefully, it won't be too long before this kind of operation becomes routine.

73, Hank

From -4640704970894325792
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d70b9263fa700c2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-13 06:30:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!eagle!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: Cheap RF Signal Generators?
Message-ID: <2082@ihuxf.UUCP>
Date: Tue, 13-Mar-84 09:30:48 EST
Article-I.D.: ihuxf.2082
Posted: Tue Mar 13 09:30:48 1984
Date-Received: Wed, 14-Mar-84 07:16:17 EST
References: <2413@brl-vgr.ARPA>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 35

I've had a few tube type Heath RF signal generators. They drifted and tuned very coarsely. For fine tuning, I varied the distance between the generator and my hand (ala "hand capacitance").

I too am curious about the newer solid state Heath generator, although I am not curious enough to buy one.

The AN/URM25 and 26 series of military sig jennies are decent. Although they have AM/CW/PULSE output only, the output is much closer to sinusoidal. Cheapies have perverted output waveforms so the harmonics can be used on the higher frequencies. I have a 26 made by Boonton. It was a hamfest special at $15. I rewound some coils and installed a tube (the last owner didn't realize that the oscillator tube was missing!). Unfortunately, the bolometer assembly is defective, so the output calibration circuit is inoperative.

The Precision Apparatus (forerunner of B&K Precision) E200-C is often found at hamfests. It's an old model, with tubes. My $15 was well invested. It's much better than its Heath and Eico counterparts. It was made for real (?) techs, and has a good amount of shielding in its inner construction.

The E-200D is B&K's solid state replacement. I've heard second hand that this unit drifts a lot for a solid state generator. It's always priced over $100 at

the local
fests, usually much more.

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Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5760

From 8780084569879307508
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,21c3186ec3dafc7e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-13 09:44:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 13
Message-ID: <7719@mgweed.UUCP>
Date: Tue, 13-Mar-84 12:44:19 EST
Article-I.D.: mgweed.7719
Posted: Tue Mar 13 12:44:19 1984
Date-Received: Wed, 14-Mar-84 08:17:15 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

BULLETIN NR 13 FROM ARRL HEADQUARTERS NEWINGTON CT
MARCH 7 1984 TO ALL RABIO AMATEURS

THE ARRL FILED TWO REQUESTS FOR RULEMAKING CONCERNING 160 METERS ON FEBRUARY 2. THE FIRST ASKS THAT POWER RESTRICTIONS ON 1900 TO 2000 KHZ BE ELIMINATED. THE SECOND REQUESTS THAT THE COMMISSION ALLOW F1 EMISSIONS ON 1800 TO 2000 KHZ. DETAILS WILL BE IN QST HAPPENINGS FOR APRIL.

ON MARCH 5, THE FCC DESIGNATED THE F1 REQUEST AS RM 4774. THE THIRTY DAY COMMENT DEADLINE ENDS APRIL 4. NO RULEMAKING NUMBER HAS BEEN ASSIGNED TO THE ELIMINATION OF POWER RESTRICTIONS PETITION YET.

From 8551239536751571178
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b7bd7c37b7bb784c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-13 09:44:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)

Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 14
Message-ID: <7720@mgweed.UUCP>
Date: Tue, 13-Mar-84 12:44:40 EST
Article-I.D.: mgweed.7720
Posted: Tue Mar 13 12:44:40 1984
Date-Received: Wed, 14-Mar-84 08:17:34 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

BULLETIN NR 14 FROM ARRL HEADQUARTERS NEWINGTON CT
MARCH 7 1984 TO ALL RADIO AMATEURS

FOLLOWS A MATTER OF PARTICULAR CONCERN TO RADIO AMATEURS IN MASSACHUSETTS. TO INSURE THE RETENTION OF THE COMMUNICATIONS TOWER ON MT. GREYLOCK, AMATEURS MAY WISH TO CONTACT THEIR MASSACHUSETTS STATE SENATORS AND REPRESENTATIVES IMMEDIATELY TO URGE PASSAGE OF MASSACHUSETTS SENATE BILL 1625. THE BILL IS NOW BEFORE THE JOINT HOUSE SENATE COMMITTEE ON STATE ADMINISTRATION. AMATEURS SHOULD MAKE THEIR VIEWS ON SENATE BILL 1625 KNOWN TO THEIR STATE SENATORS AND REPRESENTATIVES SUCH THAT THE BILL WILL RECEIVE FAVORABLE ACTION BY THE COMMITTEE.

From 16754761154757359 51
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cc61a777d472836b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-13 09:45:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 15
Message-ID: <7721@mgweed.UUCP>
Date: Tue, 13-Mar-84 12:45:29 EST
Article-I.D.: mgweed.7721
Posted: Tue Mar 13 12:45:29 1984
Date-Received: Wed, 14-Mar-84 08:17:53 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 14

BULLETIN NR 15 FROM ARRL HEADQUARTERS NEWINGTON CT
MARCH 7 1984 TO ALL RADIO AMATEURS

WE MAY HEAR THE US XQ BEACON IN A FEW WEEKS. THE 145 MHZ BEACON IS ACTUALLY ON BUT IS VERY WEAK AND ONLY MOONBOUNCE RECEIVING EQUIPMENT CAN HEAR IT.

THE SATELLITE WILL BE COMMANDED FROM CALIFORNIA AS SOON AS A
COMMAND DECODER IS SHIPPED FROM ENGLAND. WE HAVE TWO THINGS IN
OUR FAVOR. FIRST, IT DOES NOT TAKE A LOT OF POWER TO COMMAND
THE SATELLITE AND SECOND, THE SATELLITE IS PROGRAMMED TO SHUT
OFF THE BEACONS IF IT HAS NOT BEEN COMMANDED IN 21 DAYS.

From 3064490996880592727
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2efa14fbd79887dc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-13 19:17:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!hpda!fortune!dsd!
dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Uosat 11 tracking info
Message-ID: <280@dsd.UUCP>
Date: Tue, 13-Mar-84 22:17:58 EST
Article-I.D.: dsd.280
Posted: Tue Mar 13 22:17:58 1984
Date-Received: Thu, 15-Mar-84 07:40:09 EST
Lines: 105

Posted: Tue Mar 13, 1984 10:18 AM GMT Msg: FGIE-1738-1297
From: GRATCLIFF
To: MSWEETING
CC: AMSAT
Subj: Martin,
Summary of data from Daryl VK1DK
Signals:-
Day 68 2259-2301
Intermittent raspy carrier on 145.822 with associated broad-
band RFI, 3 bursts of signals for 2-3secs on each occasion,
maximum level -120dBM
Day 69 0029-0036
Clean carrier
0029:31 0031:19
0031:40 0032:55 approx 145.806 -108dBM
0033:27 0034:07
0034:21 0034:44
0035:47 0035:55
0036:07 0036:16
Day 71 0018-0019
Clean carrier 145.827(6) -101dBM
0018:27 clean carrier appeared for 2-3secs on approx 145.823
0018-0019 spurious with intermittent line spectra and broad-
band (sawtooth shape) RFI on 145.82+/-0.25. Ragged carrier
with jagged sidebands (?telemetry) for about 3secs on 145.82

Angle data:-
Orroral valley coordinates -35.631 S 211.044 W

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Day Time   Actual          Predicted
        AZ     EL      AZ     EL
68 2259:20 162.7 34.3     165    30
   2300:20 173.4 23.3     175    20
   2301:2: 199.0 15.4     181    13

71 0009:10 336.0  3.5     342     0
   0010:10 336.0  3.5     338     1
   0018:10 241.8 16.5     236    15
   0019:10 230.4 12.4     226    10
Predicted data form W3IWI program using NASA set with epoch
day 62.13.....etc

Doppler data:-
Day 68    2301     -3Khz  Landsat -3254 Uosat -2498
    71    0008:15  +2.6   Landsat >3200 Uosat >3000
    71    0018:27  -2     Landsat -2003 Uosat -1806
The doppler figures for Landsat and Uosat are predicted only
(i.e. Landsat by NASA  Uosat by W3IWI program)

Hope the above data maybe of some use. Is there any like-
lihood of you letting the Watch-Dog timer time out then
trying for a fresh start ???? Anyway everyone in VK has
everything crossed for you to successfully regain control
of Uosat-2
Cheers from 'Down-Under'
Graham VK5AGR

To: Satellite trackers
From: Phil Karn

Here's a recent set:

Satellite: oscar-11
Catalog number: 14781
Epoch time:      84073.70137990
   Tue Mar 13 16:49:59.223 1984 UTC
Element set:     MH 3-13-84
Inclination:       98.2610 deg
RA of node:       136.1480 deg
Eccentricity:    0.0012076
Arg of perigee:   233.9610 deg
Mean anomaly:     126.0480 deg
Mean motion:   14.61818731 rev/day
Decay rate:       1.59e-06 rev/day^2
Epoch rev:             175
Semi major axis:  7062.526 km
Anom period:     98.507426 min
Apogee:     706.604 km
Perigee:    689.547 km
Beacon:    145.8250 mhz

Following is a comparison of AOS times for KA9Q on 14 March 84 as
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predicted by a couple of sets. I am highly suspicious of all sets between NASA #5 and MH 3-11-84mod, since #4 and MH 3-13-84 match so closely.

NASA #4: 01:08:23
NASA #5: 01:05:11
MH 3-7-84: 01:06:22
MH 3-11-84mod: 01:07:54
MH 3-13-84: 01:08:27

73, Phil

I may have spoken too soon on the subject of UO-11 element set accuracy. Recent reports from the Orroral Valley tracking station in Australia for days 68 and 71 do not correlate well at all with all of the recent element sets, but they are much closer to NASA sets #1 and 2.

Whatever object is being tracked in element sets #3, 4, 5, MH 3-7-84, MH 3-11-84, MH 3-11-84mod and MH 3-13-84 is running about 12-13 minutes earlier than what was tracked for sets #1 and 2. This confusion might very well be responsible for the unsuccessful NK6K/N6CA command attempts, and I'm trying to track this problem down.

Phil

From 5859026625095677740
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c557a24177a8ca8b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-14 05:47:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: RF GENERATORS
Message-ID: <7743@mgweed.UUCP>
Date: Wed, 14-Mar-84 08:47:16 EST
Article-I.D.: mgweed.7743
Posted: Wed Mar 14 08:47:16 1984
Date-Received: Thu, 15-Mar-84 00:31:10 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 35

Regarding the inquiry about signal generators:

The problem with RF generators is stability, dial accuracy, and output level calibration. All three are expensive. I am not familiar with the Heath RF generators, but I know of one of their solid state audio generators that drifts badly.

I picked up a used Boonton 202C. I usually see at least one at a hamfest in the $50 to $75 range. They originally were about #1500. They cover 50 to 220 Mhz, have the output calibrated in microvolts (50 ohms) and have both AM & FM modulation. To use on 2 meters or anything requiring precise frequency accuracy, I use a counter on it but after 15 minutes it is quite stable. There is a matching mixer unit that provides 100 Khz to 50 Mhz output.

The most cost effective RF generator is the old surplus BC-221 hetrodyne frequency meter. I always have mine on the bench. They can be had for as little as $10 (without the calibration book, which is not really needed if you have a counter). The Navy LM meter is practically the same. Dial accuracy and drift are excellent but the output is high impedance uncalibrated level. It covers 200 kHz to 20 MHz on fundamentals and higher on harmonics. Fair Radio usually handles these. You may have to come up with a power supply (6.3 volts and 150 volts dc regulated). There is a higher frequency version of this unit that goes from 20 MHz up, but I am not familiar with it.

Another good one is the Gertsch FM-3 type frequency meter. It is really a commercial version of the BC-221 and does not need a calibration chart but has direct dial readout. THey operate from 20 MHz up. Hetrodyne freq meters both generate and detect signals so they can be quite handy.

Bob K9EUI

From 1085725298669855692
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b63db452f5021df0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-14 05:53:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!burl!we13!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Ron Kukuk's RR freqs reformatted
Message-ID: <2089@ihuxf.UUCP>
Date: Wed, 14-Mar-84 08:53:15 EST
Article-I.D.: ihuxf.2089
Posted: Wed Mar 14 08:53:15 1984
Date-Received: Thu, 15-Mar-84 01:34:05 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 295

Ron Kukuk sent me this list of RR freqs a long time ago.
I've reformatted it. We don't claim verification for these
freqs.

Railroad Scanner Frequencies

compiled by Ron Kukuk
edited by Bob Parnass, AJ9S
AT&T Bell Laboratories Indian Hill ARC

legend:
f = listed in FCC microfiche/not heard yet
h = heard by Bob Parnass
o = reported as heard by other listeners
p = as listed in print media (PopCom, RCMA, etc.)

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o	164.6250	?	Alaska Railroad, RR, Road & disp. to train
o	160.3550	?	Alton & Southern, RR, Channel #2, Yard
o	160.7700	?	Alton & Southern, RR, Road chan #1 & disp.
o	160.8000	?	AMTRAK , RR, N. E. Corridor
o	160.4100	?	AMTRAK , RR, On C&O
o	160.7400	?	AMTRAK , RR, On CONRAIL
o	452.9000	?	AMTRAK , RR, Terminal Services
o	161.1150	?	Atch Top & Santa Fe, RR, Argentine Yard
o	160.5600	?	Atch Top & Santa Fe, RR, Chicago mobile phone
o	160.3050	?	Atch Top & Santa Fe, RR, Corwith Hump
o	160.4250	?	Atch Top & Santa Fe, RR, Mobile to Co. phone
o	161.2950	?	Atch Top & Santa Fe, RR, Mobile to Co. phone
o	161.0100	?	Atch Top & Santa Fe, RR, MofW systemwide
o	161.3700	?	Atch Top & Santa Fe, RR, Saginaw, Tx., Yard
o	160.6500	?	Atch Top & Santa Fe, RR, Systemwide road channel
o	160.6800	?	Bangor & Aroostoock, RR, Chan #4, Yard
o	160.9200	?	Bangor & Aroostoock, RR, Dispatcher to train
o	160.4400	?	Bangor & Aroostoock, RR, Road
o	160.5300	?	Bangor & Aroostoock, RR, Yard
o	160.5000	?	Belt Railway of Chicago, RR, Dispatcher
o	160.6950	?	Belt Railway of Chicago, RR, MofW
o	161.4450	?	Belt Railway of Chicago, RR, Police
o	160.3800	?	Belt Railway of Chicago, RR, Yard
o	161.1600	?	Boston & Maine, RR, Dispatcher to train
o	161.3700	?	Boston & Maine, RR, MofW
o	161.5200	?	Boston & Maine, RR, Road (to dispatcher)
o	161.4000	?	Boston & Maine, RR, Yard
o	160.3350	?	Burlington Northern, RR, Colo. & Southern rptr?
o	161.0100	?	Burlington Northern, RR, Road channel #2
o	161.1000	?	Burlington Northern, RR, Systemwide road channel
o	161.1600	?	Burlington Northern, RR, Yard chan #1; Frisco rd
o	161.2500	?	Burlington Northern, RR, Yard channel #2
o	161.4150	?	Canadian Nat'l/Pacific, RR, CN channel #1
o	161.2050	?	Canadian Nat'l/Pacific, RR, CN channel #2
o	160.9350	?	Canadian Nat'l/Pacific, RR, CN Dispatcher to train
o	161.4750	?	Canadian Nat'l/Pacific, RR, CP channel #1
o	161.5350	?	Canadian Nat'l/Pacific, RR, CP channel #2
o	161.1150	?	Canadian Nat'l/Pacific, RR, CP Yard, other
o	161.2050	?	Central Vermont, RR, Dispatcher
o	160.9350	?	Central Vermont, RR, MofW
o	161.4150	?	Central Vermont, RR, Road
o	160.7700	?	Central Vermont, RR, Yard

o 160.4100 ?   Chessie System, RR, AMTRAK; New Buffalo yd
o 160.2300 ?   Chessie System, RR, B&O dispatcher
o 160.4700 ?   Chessie System, RR, C&O yard
o 160.2750 ?   Chessie System, RR, Chicago piggyback ramp
o 161.1600 ?   Chessie System, RR, Michigan trains
o 160.8750 ?   Chessie System, RR, Police
o 161.3100 ?   Chessie System, RR, Road channel #1
o 161.2700 ?   Chessie System, RR, Road channel #3
o 160.3200 ?   Chessie System, RR, Road channel #4
o 160.2900 ?   Chessie System, RR, Road channel, C&O
o 160.5300 ?   Chessie System, RR, Yard #2
o 160.7400 ?   Chessie System, RR, Yard clerk
o 160.5900 ?   Chicago & Eastern Il, RR, Pool trains
o 160.4100 ?   Chicago & Eastern Il, RR, Road (see MP, LN)
o 161.1450 ?   Chicago & Eastern Il, RR, Yard
o 160.9150 ?   Chicago & Ill Midland, RR, Road
o 160.2900 ?   Chicago & Ill Midland, RR, Yard
o 161.2800 ?   Chicago & Ill Western, RR, Switching
o 161.1750 ?   Chicago & Northwestern, RR, Chicago piggyback ramp
o 160.5750 ?   Chicago & Northwestern, RR, Proviso Hump
o 160.8900 ?   Chicago & Northwestern, RR, Road #1
o 161.0400 ?   Chicago & Northwestern, RR, Suburban trains
o 160.4550 ?   Chicago & Northwestern, RR, Yard #1
o 161.2800 ?   Chicago & West Ind, RR, MofW, Police
o 161.1000 ?   Chicago RTA, RR, BN road
o 161.0400 ?   Chicago RTA, RR, C&NW
o 160.7700 ?   Chicago RTA, RR, CMSP&P
o 160.8000 ?   Chicago RTA, RR, CONRAIL
o 161.6100 ?   Chicago RTA, RR, CRI&P road
o 161.3550 ?   Chicago RTA, RR, CSS&SB road
o   44.5400 ?   Chicago RTA, RR, CTA
o   44.6000 ?   Chicago RTA, RR, CTA
o 161.0250 ?   Chicago RTA, RR, ICG (repeater?)
o 160.4400 ?   Chicago RTA, RR, N&W
o   44.5400 ?   Chicago Transit Author, RR,
o   44.6000 ?   Chicago Transit Author, RR,
o 160.2150 ?   Chicago W Pullman & So, RR,
o 161.4000 ?   CONRAIL, RR,   (ex Erie?)
o 160.8300 ?   CONRAIL, RR, 63rd St. Hump
o 161.3400 ?   CONRAIL, RR, Elkhart Car dept
o 161.0550 ?   CONRAIL, RR, Elkhart Hump #1
o 160.8600 ?   CONRAIL, RR, Elkhart Hump #2
o 160.3050 ?   CONRAIL, RR, Elkhart pullback #1
o 160.3650 ?   CONRAIL, RR, Elkhart pullback #2
o 160.4250 ?   CONRAIL, RR, Elkhart pullback #3
o 160.5000 ?   CONRAIL, RR, Elkhart pullback #4
o 160.6500 ?   CONRAIL, RR, Indianapolis car dept
o 160.5600 ?   CONRAIL, RR, Police
o 161.6400 ?   CONRAIL, RR, Police
o 160.8000 ?   CONRAIL, RR, Road #1 (ex PRR)
o 161.0700 ?   CONRAIL, RR, Road #2 (ex NYC)
o 161.1300 ?   CONRAIL, RR, Road #3, MofW
o 160.7100 ?   CONRAIL, RR, Toledo MofW

o 160.8600 ? CONRAIL, RR, Yard
o 161.5050 ? Cumbres & Toltec, RR,
o 160.5300 ? Delaware & Hudson, RR, Chan #2, trains to disp.
o 160.5900 ? Delaware & Hudson, RR, Channel #1
o 161.4000 ? Delaware & Hudson, RR, Yard
o 161.3100 ? Denver & Rio Grande, RR, Car dept
o 160.9800 ? Denver & Rio Grande, RR, Piggyback
o 160.9200 ? Denver & Rio Grande, RR, Road
o 457.9000 ? Denver & Rio Grande, RR, Rptr Dotsero to G. Junc.
o 452.8750 ? Denver & Rio Grande, RR, Rptr E of div, N of C S
o 452.9000 ? Denver & Rio Grande, RR, Rptr E of div, S of C S
o 161.4900 ? Denver & Rio Grande, RR, Yard
o 160.5300 ? Det & Tol Shore Line, RR, Channel #1
o 160.9200 ? Det & Tol Shore Line, RR, Channel #2, rptr.
o 161.3100 ? Detriot & Mackinac, RR, General Operatons
o 161.2200 ? Detroit Toledo & Ironton, RR,
o 161.4300 ? Detroit Toledo & Ironton, RR,
o 160.3500 ? Duluth Missabe & Iron R, RR,
o 160.8000 ? Duluth Missabe & Iron R, RR,
o 161.4150 ? Duluth Winnepeg & Pac, RR, (CN channel #1)
o 161.2050 ? Duluth Winnepeg & Pac, RR, (CN channel #2)
o 161.5500 ? Elgin Joliet & Eastern, RR, MofW
o 160.3500 ? Elgin Joliet & Eastern, RR, Road
o 160.2600 ? Elgin Joliet & Eastern, RR, Yard
o 161.4000 ? Frisco, RR, Carmen
o 161.4300 ? Frisco, RR, MofW
o 160.9200 ? Frisco, RR, Off. & Police car-to-car
o 161.1600 ? Frisco, RR, PBX; Road after BN merger
o 161.1300 ? Frisco, RR, Systemwide road
o 161.3100 ? Georgia RR, RR, Road
o 161.4300 ? Georgia RR, RR, Yard
o 161.3100 ? Georgia West Pt Route, RR,
o 161.4300 ? Georgia West Pt Route, RR,
o 160.2600 ? Grand Trunk Western, RR, Battle Creek Tower
o 160.8450 ? Grand Trunk Western, RR, Blue Island Tower
o 160.7550 ? Grand Trunk Western, RR, Chicago Police
o 160.9500 ? Grand Trunk Western, RR, MofW
o 160.5900 ? Grand Trunk Western, RR, Road #1
o 160.5300 ? Grand Trunk Western, RR, Road #2
o 160.0700 ? Grand Trunk Western, RR, Yard, other
o 160.8600 ? Great Southwest, RR, (Grand Prairie, Tx.)
o 160.6800 ? Green Bay Western, RR, Green Bay engine house
o 161.2500 ? Green Bay Western, RR, Road
o 161.0700 ? Green Bay Western, RR, Yard
o 160.3500 ? Houston Belt & Terminal, RR, Police
o 160.4550 ? Houston Belt & Terminal, RR, Police
o 160.7700 ? Houston Belt & Terminal, RR, Road & Rptr output
o 160.5300 ? Houston Belt & Terminal, RR, Rptr input
o 154.5150 ? Ill Rwy Museum, RR, Tourist Operations
o 161.0250 ? Illinois Central Gulf, RR, Chicago commuters
o 161.5050 ? Illinois Central Gulf, RR, Chicago Hump
o 161.2050 ? Illinois Central Gulf, RR, Chicago Police
o 161.1900 ? Illinois Central Gulf, RR, Road #1 (ex IC)

o 160.9200 ? Illinois Central Gulf, RR, Road #2 (ex GM&O)
o 160.8150 ? Illinois Central Gulf, RR, Woodcrest engine house
o 161.2950 ? Illinois Central Gulf, RR, Yard
o 161.4600 ? Illinois Central Gulf, RR, Yard
o 160.8600 ? Illinois Northern, RR, Switching
o 160.3500 ? Illinois Terminal, RR,
o 160.4850 ? Indiana Harbor Belt, RR, Car dept
o 160.6650 ? Indiana Harbor Belt, RR, Gibson Yard
o 161.1300 ? Indiana Harbor Belt, RR, MofW
o 160.9800 ? Indiana Harbor Belt, RR, Road #1
o 161.0700 ? Indiana Harbor Belt, RR, Road #2
o 161.5650 ? Indiana Harbor Belt, RR, Yard
o 161.2500 ? Ka City So / La & Ak, RR, Dispatcher to station
o 160.3500 ? Ka City So / La & Ak, RR, Road #2
o 160.2600 ? Ka City So / La & Ak, RR, Systemwide road #1
o 160.5300 ? Ka City So / La & Ak, RR, Yard
o 161.5500 ? Kansas City Terminal, RR, Chan #2 Engeneering Dept.
o 161.0100 ? Kansas City Terminal, RR, Chan #3 Dispatcher
o 161.3100 ? Kansas City Terminal, RR, Road chan #1 & Yard
o 160.9500 ? Lake Superior & Ishpeming, RR,
o 161.4900 ? Lake Superior & Ishpeming, RR, Cent. Control Eagle Mills
o 160.2300 ? Lake Superior & Ishpeming, RR, Secondary
o 161.4450 ? Long Island, RR, Chan #2 Dispatcher
o 161.2650 ? Long Island, RR, Chan #3 Yard
o 160.4550 ? Long Island, RR, Police: Base to car
o 160.6050 ? Long Island, RR, Police: Car to car
o 160.3800 ? Long Island, RR, Road chan #1, towers
o 160.8600 ? Louisville & Nashville, RR, Clinchfield RR
o 160.3800 ? Louisville & Nashville, RR, PBX
o 161.3700 ? Louisville & Nashville, RR, Road #1
o 161.5200 ? Louisville & Nashville, RR, Road #2
o 160.4700 ? Louisville & Nashville, RR, Yard (ex MONON)
o 160.3800 ? Maine Central, RR, Road
o 160.6200 ? Maine Central, RR, Yard
o 161.2500 ? Maine Central, RR, Yard, other
o 161.4300 ? Milwaukee Road, RR, Police; MofW
o 160.7700 ? Milwaukee Road, RR, Road
o 160.3950 ? Milwaukee Road, RR, Yard
o 160.4700 ? Minneap Northfield & Sou, RR, Channel #1
o 161.4000 ? Minneap Northfield & Sou, RR, Repeater
o 160.9800 ? Minneap Northfield & Sou, RR, Yard, other
o 160.3200 ? Mississippian, RR, Police & Supervisory
o 160.6350 ? Mississippian, RR, Police: Mobile to mobile
o 160.5900 ? Mississippian, RR, Road
o 160.4700 ? Missouri Pacific, RR, Centennial Yd., Ft. Worth
o 160.8300 ? Missouri Pacific, RR, Centennial Yd., Ft. Worth
o 160.4100 ? Missouri Pacific, RR, Systemwide road
o 161.5500 ? Missouri Pacific, RR, Yard
o 160.3200 ? Mo Kansas & Texas, RR, Off. & Police car-to-car
o 160.6350 ? Mo Kansas & Texas, RR, Police car-to-car
o 160.5900 ? Mo Kansas & Texas, RR, Systemwide road
o 161.2050 ? Norfolk & Western, RR, Chicago piggyback ramp
o 160.4850 ? Norfolk & Western, RR, MofW

o 160.3500 ? Norfolk & Western, RR, Old Ill. Terminal
o 161.1900 ? Norfolk & Western, RR, Road #1 (ex N&W)
o 161.2500 ? Norfolk & Western, RR, Road #2 (ex NKP)
o 160.4400 ? Norfolk & Western, RR, Road #3 (ex WAB)
o 161.0700 ? Norfolk & Western, RR, Yard #1
o 161.4900 ? Norfolk & Western, RR, Yard #2
o 161.4150 ? Norfolk & Western, RR, Yard, other
o 160.5000 ? Peoria & Pekin Union, RR, Chan #2
o 160.5300 ? Peoria & Pekin Union, RR, Chan #3, MofW
o 160.5450 ? Peoria & Pekin Union, RR, Chan #4
o 161.2350 ? Peoria & Pekin Union, RR, Chan #5
o 160.4700 ? Peoria & Pekin Union, RR, Road chan #1, Dispatcher
o 161.1300 ? Pittsburgh & Lake Erie, RR, Channel #1
o 161.0700 ? Pittsburgh & Lake Erie, RR, Channel #2
o 160.8900 ? Pittsburgh & Lake Erie, RR, Yard, other
o 161.2900 ? Providence & Worchester, RR, Channel #1
o 161.1000 ? Providence & Worchester, RR, Channel #2
o 161.5500 ? Richmond Fred'berg & Pot, RR, Channel #1
o 161.4900 ? Richmond Fred'berg & Pot, RR, Channel #2
o 161.4900 ? Richmond Fred'berg & Pot, RR, Train to dispatcher
o 161.3400 ? Rock Island, RR, Mobile phone
o 160.9350 ? Rock Island, RR, Police
o 161.6100 ? Rock Island, RR, Systemwide road and yard
o 160.3200 ? Seaboard Coast Line, RR,
o 160.5900 ? Seaboard Coast Line, RR, Road #1 (ex ACL)
o 161.1000 ? Seaboard Coast Line, RR, Road #2 (ex SAL)
o 160.2900 ? Seaboard Coast Line, RR, Yard, other
o 161.4000 ? Seaboard Coast Line, RR, Yard, other
o 160.8900 ? So Pacific / Cotton Belt, RR, PBX
o 160.9500 ? So Pacific / Cotton Belt, RR, PBX
o 160.8600 ? So Pacific / Cotton Belt, RR, Police car-to-car
o 159.9300 ? So Pacific / Cotton Belt, RR, SP Transport Trucking
o 161.5500 ? So Pacific / Cotton Belt, RR, Systemwide road
o 161.0850 ? Soo Line, RR, Chan #1 so. Stevens Pt.
o 160.2600 ? Soo Line, RR, Police
o 161.5200 ? Soo Line, RR, Yard & transfers
o 161.3550 ? South Shore Line, RR, All (rptr possible)
o 161.0250 ? South Shore Line, RR, Commuter
o 161.0100 ? South Shore Line, RR, Yard
o 160.9500 ? Southern Railway, RR, Channel #1
o 160.2450 ? Southern Railway, RR, Dispatcher to train
o 160.8300 ? Southern Railway, RR, Train to dispatcher
o 161.4500 ? Southern Railway, RR, Yard, other
o 160.6800 ? St Louis & Southwestern, RR, Chan #2, PBX
o 161.5500 ? St Louis & Southwestern, RR, Road
o 160.5000 ? Term RR Asc (St Louis), RR, Channel #1
o 160.2900 ? Term RR Asc (St Louis), RR, Channel #2
o 161.1300 ? Texas Mexico, RR,
o 161.4000 ? Toledo Peoria & Western, RR, Road #1
o 160.6500 ? Toledo Peoria & Western, RR, Road #2
o 161.3100 ? Toledo Peoria & Western, RR, Yard, other
o 161.0250 ? Union Pacific, RR, (?)
o 161.1750 ? Union Pacific, RR, Cheyenne Dispatcher (?)

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o  160.3500 ?        Union Pacific, RR, Ft. Collins rptr
o  160.0700 ?        Union Pacific, RR, No. Platte car man rptr
o  160.6500 ?        Union Pacific, RR, No. Platte Dispatcher
o  160.6800 ?        Union Pacific, RR, No. Platte yard
o  160.5150 ?        Union Pacific, RR, Omaha
o  160.7400 ?        Union Pacific, RR, Road
o  160.2300 ?        Union Pacific, RR, Yard
o  160.2900 ?        Union Pacific, RR, Yard & PBX
o  160.2600 ?        Union RR, RR, Channel #1
o  160.5000 ?        Union RR, RR, Channel #2
o  160.6200 ?        Union RR, RR, Yard, other
h  460.725  KRR469   United Air Lines (Chicago, O'Hare Airport)
o  160.2600 ?        Western Pacific, RR, Chan #1, train to disp.
o  160.3800 ?        Western Pacific, RR, Channel #2, road, d to t
o  161.4600 ?        Western Pacific, RR, Rptr, Lower 3rd & 2nd SD
o  161.4750 ?        Western Pacific, RR, Rptr, Upper 3rd & 4th SD
o  160.1700 ?        White Pass & Yukon, RR, Dispatcher
o  160.3050 ?        White Pass & Yukon, RR, Road
o  160.4250 ?        White Pass & Yukon, RR, Yard
o  161.1450 ?        Wisconsin Southern, RR, MofW
o  160.5750 ?        Wisconsin Southern, RR, Road
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==========================================================================
Bob Parnass,  AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5760


From -1476280377356955222
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b2b60fc0482187a2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-14 06:31:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: signal generator substitutes
Message-ID: <2090@ihuxf.UUCP>
Date: Wed, 14-Mar-84 09:31:56 EST
Article-I.D.: ihuxf.2090
Posted: Wed Mar 14 09:31:56 1984
Date-Received: Thu, 15-Mar-84 01:35:14 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 12



       The local oscillator of a programmable scanner, or using
     the
       output  of  a general coverage transmitter (TR7), have served
       as signal generator substitutes for me.

       These sources are usually more stable and tuneable than most
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signal generators.

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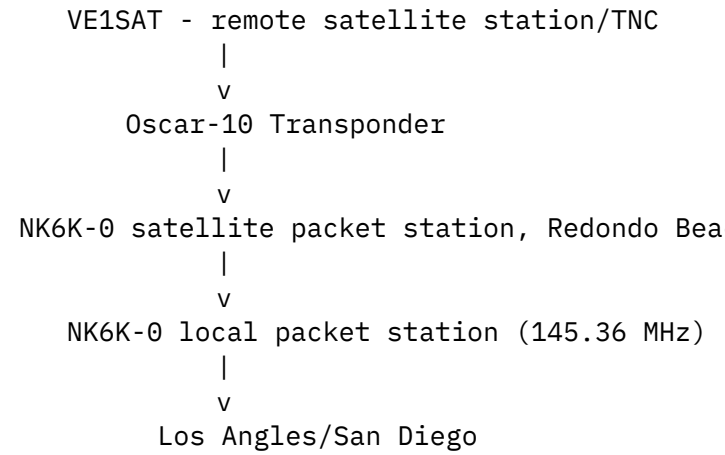
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5760

From -8904085420769378676
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d4fe0623724db12,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-15 02:48:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!dual!amd70!fortune!dsd!
dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Second AO10 Digital Gateway Experiment
Message-ID: <282@dsd.UUCP>
Date: Thu, 15-Mar-84 05:48:37 EST
Article-I.D.: dsd.282
Posted: Thu Mar 15 05:48:37 1984
Date-Received: Sat, 17-Mar-84 04:03:11 EST
Lines: 36

Posted: Wed Mar 14, 1984   1:39 PM PST   Msg: RGIE-1739-8137
From: HPRICE
To: amsat
Subj: More on gateays
This morning, around 19:00 UTC, 14 MAR 84, Randy VE1SAT/VE6(VE1PAC) and
I did some more gateway experiments. Randy was able to remotely command a
local LA two meter TNC. I had two TAPR TNCs placed back to back on
their serial ports, with one TNC connected to the ao-10 gear, and the other
connected to a 2 meter handheld on 145.36MHz.

The oscar TNC was in transparent mode, the local TNC was just attached,
initially it was in command mode. The setup was


VE1SAT - remote satellite station/TNC
Oscar-10 Transponder
NK6K-0 satellite packet station, Redondo Beach
NK6K-0 local packet station (145.36 MHz)
Los Angles/San Diego

Once VE1SAT was connected to the serial input of a local LA TNC, he could

connect to anyone. The endpoint selected was WB6YMH-2, a TNC with a CPM ($50 820 board) system. Once connected to WB6YMH-2, Randy ran a version of the W3IWI orbit program.

The test ended when the temporary cable between TNCs fell apart, but it was enough to show the idea.

Harold.

From 7439172498714296031
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,80a293c54498ef68,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-15 02:56:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!zehntel!dual!amd70!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Uosat 2 commanding and elements update
Message-ID: <283@dsd.UUCP>
Date: Thu, 15-Mar-84 05:56:06 EST
Article-I.D.: dsd.283
Posted: Thu Mar 15 05:56:06 1984
Date-Received: Sat, 17-Mar-84 04:03:26 EST
Lines: 95

Posted: Wed Mar 14, 1984   1:38 PM PST   Msg: FGIE-1739-8125
From: HPRICE
To: amsat
Subj: UO-11 commanding
I wanted to mention the folks involved in the LA UO-11 command effort.

We have been attempting to command on the 1.2 GHz uplink, unfortunately without success. Phil Karn has been feeding us orbital predictions with frequencies corrected for doppler (there is a lot of doppler at 1.2GHz). Phil has some new data that shows that the element set he has been predicting from may have been off far enough that we wouldn't have stood a chance of getting in, even with our blast at the sky method. On some of the passes, we picked a spot in the sky through which the s/c should pass and didn't move the antenna array, assuming that even if we were wrong on the time, the s/c ground track should have been close.

We have been using the station of N6CA, Chip Angle. He's been running 160 watts into a 340 element array, for about 60kw eirp. Wally, WA6JPR and Skip, WB6YMH have provided other equipment and support. Henry Radio Inc., thru Jack, WA6VGS loaned us equipment, including an FM source for 27-30 MHz.

LA attempts will resume, after the element set problem is sorted out. We haven't given up hope.

Keep listening,

Harold, NK6K.

Posted: Wed Mar 14, 1984   4:14 PM PST   Msg: EGIE-1740-1232
From: PKARN
To: msweeting
CC: amsat
Subj: Re: UOB Elements
Roger, Neville,
John Browning, W6SP, has agreed to check a few contacts back at the USAF command center in Sunnyvale and see what he can find. Yesterday, after coming to the realization that the elements were suspect, I spent quite a bit of time on the phone trying to resolve the issue without much luck, probably because I don't know the right questions to ask. I'm sure John can help.

My primary contact for elements, the MIT Lincoln Labs Millstone Hill (MH) radar site in central Massachusetts, does only deep space tracking (period > 225 minutes) with their 1295 mhz radar. While I developed good contacts there when they helped us immeasurably after the AO-10 launch, they aren't much help for UO-B; all they can do is repeat other (i.e., NORAD) elements if they've come in on the teletype machine.

I also called "direct to the source", i.e., NORAD at Cheyenne Mountain in Colorado, and asked for recent elements; I got the same set I had previously gotten from MH. I then asked for all known objects associated with the same launch, and there were only three (Landsat, UoSAT, launcher). Of these, the launcher is clearly identifiable, since it is in a 500 x 700 elliptical orbit due to the post-separation depletion burns.

Here's some predicted AOS times for KA9Q from a collection of element sets. As I mentioned before, the big jump in time for UO-11 occurred between NASA sets #2 & #3, while Landsat predictions have changed less than 2 minutes in 9 days.

UO-11, set 2 (epoch on day 62): 00:24:58
UO-11, set 13 (epoch on day 73): 00:11:49

Landsat, set 5 (epoch on day 64): 00:24:03
Landsat, set MH 3-14-84 (epoch on day 73): 00:25:48.5

I don't know what they could be tracking as "UoSAT". Is there a possibility that the clamp band or other debris (a bolt cutter, say) broke off the launcher at separation? If they are tracking something associated with the launch, it would most likely be a lightweight object with relatively high drag/mass ratio to have moved ahead in time by so much.

FYI, here's the Landsat set I received yesterday. Until we get something more reliable for UO-11, maybe you're just as well off trying these?

Satellite: landsat-dp
Catalog number: 14780

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Epoch time:      84073.64226640
   Tue Mar 13 15:24:51.817 1984 UTC
Element set:     MH 3-13-84
Inclination:       98.2540 deg
RA of node:       136.0650 deg
Eccentricity:    0.0011736
Arg of perigee:   240.0130 deg
Mean anomaly:     120.0140 deg
Mean motion:   14.60568742 rev/day
Decay rate:         0 rev/day^2 (none given)
Epoch rev:             134
Semi major axis:  7066.558 km
Anom period:     98.591731 min
Apogee:      712.419 km
Perigee:     695.832 km

Good luck & 73, Phil


From -8616367301875234 93
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b012d40804d03384,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-17 02:28:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Packet Activity in LA area
Message-ID: <284@dsd.UUCP>
Date: Sat, 17-Mar-84 05:28:43 EST
Article-I.D.: dsd.284
Posted: Sat Mar 17 05:28:43 1984
Date-Received: Sun, 18-Mar-84 08:41:16 EST
Lines: 73

In our ever continuing effort to show up the rest of the northern
hemisphere, here is the current list of active users in the LA/SD
area.  Of the 36 Bulletin Board users below, 23 have logged in at
least one in the past seven days.  The area now has 2 CPM host systems,
one gets most of the general stuff from this net and AMSAT TMAIL. Also
one mailbox system, and one experimental digital duplex repeater with
back to back 202 modems for bit regen.  We also have a oscar-10
teleport.  VE1SAT logged thru it to UUT yesterday and pulled 9k
bytes thru in about 15 minutes.  Enough TNCs are on the air to
ensure multiple digipeat paths linking Santa Barbara to San Diego and
most points in between.  Some users are so far out in the boonies that
they need a multi-digipeat hop to talk to anyone else.  N6DPU must go
WA4EJR->WA6OZJ->WB6UUT.  There are other examples.  Even a mountain
top repeater wouldn't help this guy.  I throw this in just to bug
the "protocol experts" and "purists".  Sure, multihopping looks ugly
in the header, and sure, it boggles the mind when thinking about efficiency.
But it enabled us on the west coast to get 50+ boards over 15,000 square
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miles linked into a common knowledge and interest pool without spending $ on a multi-port link box or waiting for a level three protocol. And that's what ham radio is all about. Using what you've got to get the job done.

We'll move to level three PDQ when one is available, but until then we'll keep moving data. I guess this was all started by something I got in the mail about one of the newer packet board producers to hit the scene. The one that says something like "Our board is pure and good, and we didn't implelement any of the tack on warts, like multihopping." I had a neat line here, but it may have been considered libelous so I took it out, I'm basically a nice guy.

Anyway, here is the user list. Not everyone in the area is a BB user, and if you don't check in for three weeks or so, Lynn throws your ID out.

WB6UUT BB.

Call, Name	Location	Mail	Last Access
KA6AIO, Dave	Mission Viejo		10:39 PM 12 Mar 84
WA2AMB, Bill	Hermosa Beach	<1424>	1:06 AM 18 Feb 84
WD6AWP, Tim	Seal Beach	<1567>	8:08 PM 13 Mar 84
K6AWT, JACK	SANTA ANA		2:37 PM 15 Mar 84
KB6BBL, JIM	COSTA MESA		9:19 PM 8 Mar 84
WA6BJY, Gray	Capistrano Beach	<1441>	4:33 PM 23 Feb 84
WA5BNH, leon	san diego		12:21 PM 3 Mar 84
WA6CFM, RICH	POINT LOMA		6:53 AM 15 Mar 84
WA6CGR, Dave	Diamond Bar	<1533>	4:06 PM 28 Feb 84
N6CXB, bob	glendale		1:59 AM 15 Mar 84
WB6CYT, brian	San Diego		4:12 PM 3 Mar 84
N6DPU, Howard	Mission Viejo		9:09 PM 27 Feb 84
NN6E, Bob	Encinitas Ca.		3:23 PM 14 Mar 84
WA4EJR, JACK	LAGUNA HILLS		11:18 PM 29 Feb 84
WB5EKU, Don	Sepulveda		5:26 AM 15 Mar 84
WD6FPY, BILL	SAN DIEGO (EAST)		2:12 PM 15 Mar 84
WB6HHV, Mike	Mira Mesa		7:59 PM 14 Mar 84
KD6HR, Pete	Woodland Hills		11:28 AM 9 Mar 84
WB6HRD, Roland	Altadena		7:20 PM 6 Mar 84
NK6K, Harold	North Redondo Beach		8:57 AM 15 Mar 84
W6KAG, Marion	Rancho Palos Verdes		9:41 PM 11 Mar 84
W6LLE, hoppy	point loma		6:51 PM 10 Mar 84
W6MNO, Chuck	San Diego		3:23 PM 15 Mar 84
WA6OVY, Rich	Long Beach		12:57 AM 15 Mar 84
WA6OZJ, JIM	PALOS VERDES		9:09 PM 2 Mar 84
NG6P, Roger	Glendale	<1573>	5:22 PM 12 Mar 84
K6RYA, Howard	LA MESA	<1516>	8:26 PM 29 Feb 84
W6SE, JOHN	ENCINITAS		12:40 PM 15 Mar 84
N6TD, /rpt	Mt. Bill-Verdugos		3:21 AM 11 Mar 84
N6TE, Harry	La Jolla		9:05 PM 13 Mar 84
WA2TMP, Al	Santa Ana, CA		9:39 PM 13 Mar 84
WA6TUB, STEVEN	HAWTHORNE		7:10 PM 28 Feb 84
WB6UUT, Lynn	Laguna Beach	<1576>	7:20 PM 14 Mar 84

WA6VRC, ROBERT EL TORO 1:26 PM 10 Mar 84
WB6YMH, Skip Palos Verdes 9:26 PM 13 Mar 84
WA6ZMR, JIM SAN DIEGO 6:40 PM 29 Feb 84

From 8768056619749124004
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63204a6f2423e532,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-17 02:31:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Uosat recovery mission
Message-ID: <285@dsd.UUCP>
Date: Sat, 17-Mar-84 05:31:38 EST
Article-I.D.: dsd.285
Posted: Sat Mar 17 05:31:38 1984
Date-Received: Sun, 18-Mar-84 08:41:30 EST
Lines: 22

Posted: Fri Mar 16, 1984   3:50 PM GMT Msg: EGIE-1741-4940
From: MSWEETING
To: AMSAT
Subj: UOSAT-2 ORBIT DATA?
  ** UOSAT-2 RECOVERY MISSION **
  It has become now very urgent that we resolve the
uncertainty in the UOSAT-2 orbit data. I have just been
talking to the Canberra tracking station and it appears that
they will no be so involved with LANDSAT-5 from now on and
also the operator who has been following UOSAT-2 has changed
shift and so observations will be much less frequent. A more
detailed discussion of the observations they made on UO-2 does
seem to lend support to the theory that the 145 MHz beacon is
on and misbehaving in some way.
   I have negotiated with Jodrell Bank (UK) to have access to
thier antenna soon to listen for UO-2 but we MUST have
reliable orbit data to make this effort and those of Harold
Price et al worthwhile. I am sure that everyone realises how
essential this is but any ideas for help or means whereby we
can expedite these data would be invaluable.
   Thanks to all who are helping,
  Martin Sweeting UOSAT Programme Manager

From 5993984655657158964
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,946437678e2a0b87,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-17 02:34:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!eagle!harpo!seismo!hao!hplabs!hpda!

fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Uosat is 14781
Message-ID: <286@dsd.UUCP>
Date: Sat, 17-Mar-84 05:34:31 EST
Article-I.D.: dsd.286
Posted: Sat Mar 17 05:34:31 1984
Date-Received: Sun, 18-Mar-84 08:39:08 EST
Lines: 49

Posted: Fri Mar 16, 1984 10:28 AM PST Msg: FGIE-1741-6681
From: JBROWNING
To: PKARN
CC: MSWEETING, HPRICE, VRIP, AMSAT
Subj: UOB ELEMENT STATUS

The following report has been received by telephone from the Air Force Satellite Control Facility in Sunnyvale CA:

1. Close correlation of independent NASA (beacon) and NORAD (radar) tracking data confirms that Object 14780 is LANDSAT.

2. The inclination of object 14782 is more than a degree different from the similar inclinations of 14780 and 14781. This change resulted from the two burns performed on the upper stage after separation of the two spacecraft. Therefore 14782 must be the upper stage.

3. No objects, other than the three catalogued, have been observed. Nothing in the way of launcher parts which might have been ejected were large enough to be detected.

4. By a process of elimination, object 14781 must be UOB. The latest data available is set # 13 which corresponds to that provided by PKARN in his telemail posted to the AMSAT bulletin board at 2016Z on 13 March (Epoch 84073.70137990).

For lack of any other ideas on what to do next, I have requested that NORAD recognize our spacecraft emergency situation, and give priority to obtaining updated elements as often as possible.

Good luck!

73, John, W6SP DT16MAR4

Posted: Fri Mar 16, 1984 11:53 AM PST Msg: BGIE-1741-7697
From: JBROWNING
To: PKARN
CC: MSWEETING, HPRICE, VRIP, AMSAT
Subj: UOB ELEMENT STATUS ADDENDUM

UOB priorty has been established. Our Sunnyvale contact will be visiting NORAD Monday and Tuesday. While there he will personally examine radar cross section information as well as the tracking data to verify the validity of UOB elements.

73, John, W6SP DT17MAR4

From -8217136149932595697
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,764024c657150f9c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-17 08:39:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site hou2f.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hou2f!rayalb
From: rayalb@hou2f.UUCP (R.ALBERS)
Newsgroups: net.ham-radio
Subject: junk available
Message-ID: <170@hou2f.UUCP>
Date: Sat, 17-Mar-84 11:39:07 EST
Article-I.D.: hou2f.170
Posted: Sat Mar 17 11:39:07 1984
Date-Received: Sun, 18-Mar-84 08:00:11 EST
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 19

I'm moving in a couple of months and have some stuff
I've hung on to through two other moves. I guess I gotta
admit I don't need it so out it goes. If you're a confirmed
junk collector like me, or know some kid who wants the stuff to
tinker with (kids in their forties, like me, also eligible)
come and get it. Included are:

50 feet of 50 ohm hard coax (1/2 inch)

Working GE old tube type mobile receiver (low band) w/ PS
Working old GE 50 watt VHF base sta/repeater converted to 2meters
Old heath scope good only for showing what a distorted sine wave is
130 volt power supply good for a coupla amps
other misc. junk maybe good for parts.

The stuff is in Middletown NJ. Call me (or my wife) on 671-8558.
If not gone soon, trash collector gets it.

Ray Albers K2HYD Bellcore

From 5234419475431664969
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,35719cd0a4d283b6,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-03-19 07:51:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!inuxc!inuxd!gls
From: gls@inuxd.UUCP
Newsgroups: net.ham-radio
Subject: HELP NCX-5 schematic
Message-ID: <488@inuxd.UUCP>
Date: Mon, 19-Mar-84 10:51:16 EST
Article-I.D.: inuxd.488
Posted: Mon Mar 19 10:51:16 1984
Date-Received: Tue, 20-Mar-84 01:09:09 EST
Sender: gls@inuxd.UUCP
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 13

HELP!!! I'm working on an old National NCX-5 transceiver for a new ham.
He just picked it up at a local hamfest. It came with a partial manual, but
no schematic. Unfortunately, it had been "CBed" and someone had done a bit
of "work" on it. So far, I have found that the coils have been "diddle-sticked"
and a 100K resistor in the transmit driver cathode. I still can't get
sufficient drive and the receiver sensitivity should be better. Any help
will be appreciated. I understand that the NCX-3, a three band version,
might be similar. Please help me get this new ham on the air.

TNX de Gary KA9MQI

ps - the twisted pair is 317-845-6999

From 687626002271002775
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,679c0bc0cd189610,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-19 09:18:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hogpc!houxb!3435ras
From: 3435ras@houxb.UUCP (R.SCHREIBMAIER)
Newsgroups: net.ham-radio
Subject: RSGB MUF for TI99
Message-ID: <267@houxb.UUCP>
Date: Mon, 19-Mar-84 12:18:47 EST
Article-I.D.: houxb.267
Posted: Mon Mar 19 12:18:47 1984
Date-Received: Tue, 20-Mar-84 01:26:05 EST
Lines: 14

Help! I'm looking for anyone who got the RSGB MUF
program working on a TI99/4A. I've worked on it
for a few weeks and have found numerous typing errors
(on my part), but now think I have it input correctly.
But it still bombs at line 1490, where it tries to

raise a negative number to the -.4 power (only for
certain paths, fluxes, etc.). Sure wish I knew what
I'm doing wrong!

Any help would be greatly appreciated.

73,
Bob Schreibmaier K2PH
...!houxb!3435ras

From 6193921477106361014
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,676ed14aee4c51f7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-19 12:12:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!inuxc!inuxd!gls
From: gls@inuxd.UUCP (Gary Spahn)
Newsgroups: net.ham-radio
Subject: NCX-5 transceiver schematic
Message-ID: <489@inuxd.UUCP>
Date: Mon, 19-Mar-84 15:12:56 EST
Article-I.D.: inuxd.489
Posted: Mon Mar 19 15:12:56 1984
Date-Received: Tue, 20-Mar-84 01:59:29 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 23

I don't know if this got out so I'm posting again. If this is a duplicate,
I appologize.

From: Gary Spahn - KA9MQI - AT&Tcp - Indpls, IN

HELP!!! I'm working on an old National NCX-5 Transceiver for a new ham.
He just picked it up at a local hamfest. It came with a partial manual, but
no schematic. Unfortunately, it had been "CBed" and someone has done a bit
of "work" on it. So far I have found the coils have been "diddle-sticked"
and a 100K resistor in the transmit driver cathode. I still can't get
sufficient drive and the receiver sensitivity should be better. Any help
will be appreciated. I understand that the NCX-3, a three band version,
might be similar. Please help me get this new ham on the air.

TNX de GARY KA9MQI

ps - the twisted pair is 317-845-6999.
or CorNet 338-6999

From 3703805480104111604
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d242b51eb16b0aec,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-19 20:46:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!zehntel!dual!amd70!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Packet Gateway Activity on HF
Message-ID: <288@dsd.UUCP>
Date: Mon, 19-Mar-84 23:46:07 EST
Article-I.D.: dsd.288
Posted: Mon Mar 19 23:46:07 1984
Date-Received: Thu, 22-Mar-84 04:17:34 EST
Lines: 12

More gateway activity, this time on HF. Bob Bruninga, WB4APR, backed
two TNCs together, one pointed toward HF and the other toward the
AMRAD packet repeater. I connected with Bob on 10.147MHz LSB 200Hz
shift 300BPS last Sunday evening and had packet QSOs with Bill, WB4NFB,
of Burke, VA and Rod, WA3MEZ, of Randallstown, MD.

I plan on activating a similar arrangement here in the Des Moines area
this coming weekend. Hopefully we will have a gateway to gateway QSO
between stations connected via VHF links in our respective areas thru
the HF link.

Ralph, W0RPK - Des Moines

From 7170384821514615100
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,11cc728fc62451c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-20 06:25:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: CRRL BULLETIN NR 9
Message-ID: <7929@mgweed.UUCP>
Date: Tue, 20-Mar-84 09:25:35 EST
Article-I.D.: mgweed.7929
Posted: Tue Mar 20 09:25:35 1984
Date-Received: Wed, 21-Mar-84 01:45:25 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

CRRL BULLETIN NR 9   FROM CRRL HEADQUARTERS   LONDON ONT

MARCH 16 1984 TO ALL RADIO AMATEURS

DOC HAS GIVEN NOTICE THAT IT INTENDS TO AMEND THE RADIO OPERATORS CERTIFICATE REGULATIONS TO INCLUDE PUNCTUATION MARKS, Q SIGNALS AND EMERGENCY SIGNALS IN CODE RECEIVING TESTS, TO REVOKE REQUIREMENTS FOR ORAL AND PRACTICAL TESTS ON RADIO EQUIPMENT, AND THE REQUIREMENT TO DRAW SCHEMATIC DIAGRAMS ON WRITTEN TESTS. CRRL WILL RECOMMEND THAT DOC LIMIT PUNCTUATION MARKS AND Q SIGNALS TO THOSE IN COMMON USE.

DOC WILL HOLD AMATEUR EXAMS ACROSS CANADA ON APRIL 18. IF YOU PLAN TO WRITE, YOUR APPLICATION MUST BE SUBMITTED TO DOC BY MARCH 21. DOC EXAMS WILL ALSO BE HELD ON JUNE 20 AND OCTOBER 17.

From 1839024125418947534
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4bdea6d16380bfef,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-20 06:25:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 17
Message-ID: <7930@mgweed.UUCP>
Date: Tue, 20-Mar-84 09:25:52 EST
Article-I.D.: mgweed.7930
Posted: Tue Mar 20 09:25:52 1984
Date-Received: Wed, 21-Mar-84 01:52:57 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

BULLETIN NR 17 FROM ARRL HEADQUARTERS NEWINGTON CT
MARCH 12 1904 TO ALL RADIO AMATEURS

THE DETROIT FIELD OFFICE OF THE FCC IS NOW LOCATED AT 24897 HATHAWAY STREET, FARMINGTON HILLS, MI 48018 1398. THE PHONE NUMBER REMAINS 313-226-6078 WITH A NEW RECORDED TELEPHONE MESSAGE NUMBER OF 313- 471-0052. AMATEUR OPERATOR EXAMS WILL BE QUARTERLY, BY APPOINTMENT ONLY. THE NEXT EXAMS WILL BE MAY 7 THROUGH 11 WITH A CUTOFF DATE FOR APPLICATIONS OF APRIL 15.

From -581090207266731154
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,97ce487e8ecc092d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-20 06:26:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 19
Message-ID: <7931@mgweed.UUCP>
Date: Tue, 20-Mar-84 09:26:29 EST
Article-I.D.: mgweed.7931
Posted: Tue Mar 20 09:26:29 1984
Date-Received: Wed, 21-Mar-84 01:53:32 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

BULLETIN NR 19 FROM ARRL HEADQUARTERS NEWINGTON CT
MARCH 13 1984 TO ALL RADIO AMATEURS

NEWS FROM SURREY THIS WEEK REGARDING OSCAR 11 IS STILL MAINLY DISAPPOINTING. NO FURTHER COMMANDS HAVE BEEN ACCEPTED FROM THE GUILFORD COMMAND STATION AND COMMANDS FROM LOS ANGELES ON 1.2 GHZ HAVE ALSO BEEN UNSUCCESSFUL. AMSAT WOULD APPRECIATE OTHER WELL EQUIPPED STATIONS LISTENING TO THE OSCAR 11 DOWNLINK FOR POSSIBLE SIGNALS. SEND REPORTS TO THE UNIVERSITY OF SURREY VIA AMSAT OR ARRL.

ON SUNDAY MARCH 11, ON ORBIT 560 OF OSCAR 10, THE INTERCONNECTION OF TWO PACKET RADIO STATIONS WITH INTERMEDIATE LINKS USING A TERRESTRIAL PACKET REPEATER AND TWO OSCAR 10 GROUND STATIONS WAS SUCCESSFULLY DEMONSTRATED. STATIONS PARTICIPATING WERE W3IWI, KA6M, NK6K, AI8A/6 AND WA0OJS/6.

From 5340706121995857975
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5d10cf5186897a6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-20 06:26:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 20
Message-ID: <7932@mgweed.UUCP>
Date: Tue, 20-Mar-84 09:26:59 EST
Article-I.D.: mgweed.7932
Posted: Tue Mar 20 09:26:59 1984
Date-Received: Wed, 21-Mar-84 01:54:11 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 16

BULLETIN NR 20 FROM ARRL HEADQUARTERS NEWINGTON CT

MARCH 13 1984 TO ALL RADIO AMATEURS

THE FOLLOWING HAVE BEEN ELECTED WITHOUT BALLOTING AS SMS FOR THEIR RESPECTIVE SECTIONS,

ILLINOIS, WD9EBQ
INDIANA, W9UMH
MAINE, W1RWG
NORTHERN FLORIDA, WF4X
OREGON, W7QMU
WISCONSIN, K9GDF

THOSE ELECTED WILL BEGIN NEW TERMS JULY 1 1984.

From 4230165521555726534
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9243f5a12a6f9b8f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-20 06:27:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL DX BULLETIN NR 11
Message-ID: <7933@mgweed.UUCP>
Date: Tue, 20-Mar-84 09:27:45 EST
Article-I.D.: mgweed.7933
Posted: Tue Mar 20 09:27:45 1984
Date-Received: Wed, 21-Mar-84 01:54:54 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 70

DX BULLETIN NR 11 FROM ARRL HEADQUARTERS NEWINGTON CT
MARCH 16 1984 TO ALL RADIO AMATEURS

THANKS TO W1TRC, K1MM AND K1XM OF THE SOUTHERN NEW ENGLAND DX ASSOCIATION FOR THE FOLLOWING DX INFORMATION.

CLIPPERTON. THE FRENCH/AMERICAN GROUP SAILED LAST SUNDAY AND EXPECTS TO BEGIN OPERATIONS ON MARCH 15 OR 16. FOURTEEN OPERATORS WILL MAN SIX TRANSMITTERS FOR A SIX DAY OPERATION. THERE WILL BE A DIFFERENT CALL ON EACH BAND, FROM FO0XU ON 160 METERS TO FO0XZ ON 10 METERS.

KERMADEC. THE NEW ZEALAND GROUP PLANS TO BEGIN OPERATIONS TODAY FOR A TEN DAY STAY. FOUR OPERAZORS WITH FOUR TRANSMITTERS WILL OPERATE SSB AND CW ON 160 THROUGH 10 METERS. QSL ALL ZL8 CALLS TO THE CORRESPONDING ZL1 EXCEPT ZL0AJW/8, WHICH GOES TO ZL1BQD. BEFORE AND AFTER THE KERMADEC TRIP, ZL0AJW QSLS GO TO W6REC.

KAMPUCHEA. XU1SS HAS BEEN A REGULAR ON WEEKENDS ON 14335 KHZ FROM 1200Z ON, WITH HELP FROM VS6CT. QSL VIW JA1HQG.

TOKELAU. ZM7VU IS STILL ACTIVE AROUND 21026 KHZ AT 2300Z, 7005 KHZ AT 0600Z AND 3505 KHZ AT 0700Z. HE ALSO OPERATES ON 10101 KHZ AT 0800Z. QSL TO F6DYG.

MALAGASY REPUBLIC. 5R8AL HASSBEEN WORKED RECENTLY ON 21335 KHZ AT 1830Z.

MALAWI. STATIONS WERE HEARD WORKING LES, 7Q7LW, ON 3505 KHZ AT 0400Z, BUT HE WAS NOT HEARD IN NEW ENGLAND. HE ALSO OPERATES ON 7005 KHZ AT 0500Z.

TURKEY. TA2TAT WAS WORKED ON 21029 KHZ AT 1220Z. QSL TO BOX 95, SOKE, TURKEY.

SAN ANDRES. HK0HEU HAS BEEN WORKED ON 3794 KHZ AT 0415Z. HE SOMETIMES HAS A SKED WITH K2BU ON 1860 KHZ AT 0300Z. HK0FBF HANDLES HIS QSLS.

SENEGAL. DJ6SI IS SCHEDULED FOR A TRIP TO 6W5 STARTING MARCH 28. HE WILL OPERATE 160 THROUGH 10 METERS, CW ONLY. HE PLANS TO CONTINUE ON TO C5, THE GAMBIA, LATER.

WEST KIRIBATI. VICKY, T30CH, IS ON 14332 KHZ AT 1200Z.

COMOROS. D68AM CAN SOMETIMES BE FOUND ON 21285 KHZ AT 2000Z OR ON 14236 KHZ AFTER 1830Z.

CROZET. FB8WK OPERATES ON 7005 KHZ AT 0320Z.

160 METERS. ZS3E IS ON 1825 KHZ BETWEEN 0430 AND 0500Z, CP8HD ON 1817 KHZ AT 0645Z, AND 5B4EP ON 1848 KHZ BETWEEN 0230 AND 0400Z, SSB ONLY.

LEBANON. RAY, OD5AO, WAS WORKED LAST WEEKEND ON 14181 KHZ AT 2000Z. QSL TO F0DDA.

BAHRAIN. A92NH IS ON 14200 KHZ AT 2045Z AND 3795 KHZ AROUND 2300Z. QSLS GO TO W8LU.

REPUBLIC OF ZAIRE. ROGER, 9Q5RN, HAS BEEN ACTIVE ON 21308 KHZ AT 0000Z.

NIUE. ZK2RS HAS BEEN WORKED AT 0000Z ON 21307 KHZ.

NORTH COOK ISLANDS. AS OF WEDNESDAY, ZK1XL WAS STILL ACTIVE, BUT DEPARTURE IS IMMINENT.

From -524158077783118586

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3caf7e74d679210,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-20 06:28:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL PROPAGATION BULLETIN NR 12
Message-ID: <7934@mgweed.UUCP>
Date: Tue, 20-Mar-84 09:28:10 EST
Article-I.D.: mgweed.7934
Posted: Tue Mar 20 09:28:10 1984
Date-Received: Wed, 21-Mar-84 01:55:34 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 27

(Sorry but the end of this transmission was lost)

PROPAGATION BULLETIN NR 12 FROM ARRL HEADQUARTERS NEWINGTON CT
MARCH 12 1984   TO ALL RADIO AMATEURS

THE PARADE OF SUNSPOTS ACROSS THE VISIBLE SURFACE OF THE SUN THAT BROUGHT SOLAR FLUX PEAKS OF 180 ON JAN 29 AND 175 ON FEB 29 MADE ITS THIRD APPEARANCE LAST WEEK. STARTING FROM 100 ON MARCH 10 AND 11, THE SOLAR FLUX WAS UP TO 136 ON MARCH 15. THOUGH ACTIVITY APPEARS LOWER THIS TIME AROUND, FAIRLY HIGH FLUX NUMBERS SHOULD BE WITH US UNTIL THE LAST FEW DAYS OF MARCH. THIS WILL HELP TO OFFSET THE NORMAL SEASONAL DECLINE IN OVERALL DX PROPAGATION EXPECTED IN EARLY SPRING.

A GOOD IDEA OF THE EFFECTS OF HIGHER SOLAR FLUX VALUES CAM BE OBTAINED FROM THE PROPAGATION CHARTS IN QST FOR MARCH, PAGE 65. TAKE A HIGH LATITUDE PATH SUCH AS EASTERN USA TO EUROPE. NOTE THAT THE PREDICTED MUF FOR LATE MARCH IS UNDER 26 MHZ. FOR OPTIMUM CONDITIONS AND A SOLAR FLUX OF 108. EVEN ON THE BEST DAYS, THE NORTH ATLANTIC PATH WOULD BE BARELY USEABLE ON 28 MHZ, YET MANY CONTRIES OF EUROPE WERE COMING THROUGH WELL FOR SEVERAL HOURS ON MARCH 18 AS THIS BULLETIN WAS IN PREPARATION. DX CONDITIONS WERE MARKEDLY BETTER ON ALL LOWER DX FREQUENCIES AS WELL.

From 6349542737318728347
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5b3f3726156d002c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-20 06:29:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP

Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 13
Message-ID: <7935@mgweed.UUCP>
Date: Tue, 20-Mar-84 09:29:50 EST
Article-I.D.: mgweed.7935
Posted: Tue Mar 20 09:29:50 1984
Date-Received: Wed, 21-Mar-84 01:56:11 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

BULLETIN NR 13 FROM ARRL HEADQUARTERS NEWINGTON CT
MARCH 7 1984 TO ALL RABIO AMATEURS

THE ARRL FILED TWO REQUESTS FOR RULEMAKING CONCERNING 160 METERS ON FEBRUARY 2. THE FIRST ASKS THAT POWER RESTRICTIONS ON 1900 TO 2000 KHZ BE ELIMINATED. THE SECOND REQUESTS THAT THE COMMISSION ALLOW F1 EMISSIONS ON 1800 TO 2000 KHZ. DETAILS WILL BE IN QST HAPPENINGS FOR APRIL.

ON MARCH 5, THE FCC DESIGNATED THE F1 REQUEST AS RM 4774. THE THIRTY DAY COMMENT DEADLINE ENDS APRIL 4. NO RULEMAKING NUMBER HAS BEEN ASSIGNED TO THE ELIMINATION OF POWER RESTRICTIONS PETITION YET.

From 8482780346246785443
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,96723d7367eab11e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-20 06:30:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 14
Message-ID: <7936@mgweed.UUCP>
Date: Tue, 20-Mar-84 09:30:29 EST
Article-I.D.: mgweed.7936
Posted: Tue Mar 20 09:30:29 1984
Date-Received: Wed, 21-Mar-84 01:57:01 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 15

BULLETIN NR 14 FROM ARRL HEADQUARTERS NEWINGTON CT
MARCH 7 1984 TO ALL RADIO AMATEURS

FOLLOWS A MATTER OF PARTICULAR CONCERN TO RADIO AMATEURS IN MASSACHUSETTS. TO INSURE THE RETENTION OF THE COMMUNICATIONS

TOWER ON MT. GREYLOCK, AMATEURS MAY WISH TO CONTACT THEIR MASSACHUSETTS STATE SENATORS AND REPRESENTATIVES IMMEDIATELY TO URGE PASSAGE OF MASSACHUSETTS SENATE BILL 1625. THE BILL IS NOW BEFORE THE JOINT HOUSE SENATE COMMITTEE ON STATE ADMINISTRATION. AMATEURS SHOULD MAKE THEIR VIEWS ON SENATE BILL 1625 KNOWN TO THEIR STATE SENATORS AND REPRESENTATIVES SUCH THAT THE BILL WILL RECEIVE FAVORABLE ACTION BY THE COMMITTEE.

From 785790263459222666
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1f3f268a9fae5f65,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-20 06:30:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 16
Message-ID: <7937@mgweed.UUCP>
Date: Tue, 20-Mar-84 09:30:58 EST
Article-I.D.: mgweed.7937
Posted: Tue Mar 20 09:30:58 1984
Date-Received: Wed, 21-Mar-84 01:57:39 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 20

BULLETIN NR 16 FROM ARRL HEADQUARTERS NEWINGTON CT
MARCH 9 1984 TO ALL RADIO AMATEURS

THE FCC HAS RELEASED A NOTICE OF PROPOSED RULEMAKING ON THE SUBJECT OF REIMBURSEMENT OF OUT OF POCKET COSTS INCURRED BY VOLUNTEER EXAMINERS AND VOLUNTEER EXAMINER COORDINATORS IN CONNECTION WITH THE PREPARATION, PROCESSING OR ADMINISTRATION OF AMATEUR RADIO EXAMINATIONS.

FCC PROPOSES IN PR DOCKET 84-265 THAT VOLUNTEER EXAMINERS AND VOLUNTEER EXAMINER COORDINATORS MAY BE REIMBURSED FOR ACTUAL EXPENSES INCURRED, BUT TOTAL REIMBURSEMENT FOR AN EXAMINATION MAY NOT EXCEED FOUR DOLLARS. THE FOUR DOLLAR FIGURE MAY BE ADJUSTED ANNUALLY FOR INFLATION. FCC DOES NOT SPECIFY HOW THE REIMBURSEMENT FEE IS TO BE DIVIDED BETWEEN VEC AND VE. COMMENTS ARE DUE BY APRIL 16, REPLY COMMENTS BY MAY 1.

DETAILS WILL BE IN THE ARRL LETTER FOR MARCH 15 AND IN MAY QST.

From 8636642164435323127
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bffde544139334c0,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-20 15:56:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 21
Message-ID: <7948@mgweed.UUCP>
Date: Tue, 20-Mar-84 18:56:25 EST
Article-I.D.: mgweed.7948
Posted: Tue Mar 20 18:56:25 1984
Date-Received: Wed, 21-Mar-84 04:47:31 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 11

QST DE K9EUI
HR ARRL BULLETIN NR 21 FROM ARRL HEADQUARTERS
NEWINGTON CT MARCH 20, 1984
TO ALL RADIO AMATEURS

THE LATEST IN A SERIES OF EXERCISES SPONSORED BY THE NATIONAL
COMMUNICATIONS SYSTEM WILL BE CONDUCTED ON MARCH 22 AND 24.
THE TEST, DESIGNATED NIGHT TANGO 2, IS DESIGNED TO EVALUATE THE
USE OF AMATEUR RADIO TO SUPPORT NATIONAL LEVEL EMERGENCY
COMMUNICATIONS REQUIREMENTS.

From -4955761015080460635
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,986ee31be3888f81,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-20 15:57:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL PROPAGATION BULLETIN NR 12 (complete)
Message-ID: <7949@mgweed.UUCP>
Date: Tue, 20-Mar-84 18:57:06 EST
Article-I.D.: mgweed.7949
Posted: Tue Mar 20 18:57:06 1984
Date-Received: Wed, 21-Mar-84 04:47:48 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 39

QST DE K9EUI
HR PROPAGATION FORECAST BULLETIN NR 12 FROM ARRL HEADQUARTERS
NEWINGTON CT MARCH 19, 1984
TO ALL RADIO AMATEURS

THE PARADE OF SUNSPOTS ACROSS THE VISIBLE SURFACE OF THE SUN THAT BROUGHT SOLAR FLUX PEAKS OF 180 ON JAN 29 AND 175 ON FEB 29 MADE ITS THIRD APPEARANCE LAST WEEK. STARTING FROM 100 ON MARCH 10 AND 11, THE SOLAR FLUX WAS UP TO 136 ON MARCH 15. THOUGH ACTIVITY APPEARS LOWER THIS TIME AROUND, FAIRLY HIGH FLUX NUMBERS SHOULD BE WITH US UNTIL THE LAST FEW DAYS OF MARCH. THIS WILL HELP TO OFFSET THE NORMAL SEASONAL DECLINE IN OVERALL DX PROPAGATION EXPECTED IN EARLY SPRING.

A GOOD IDEA OF THE EFFECTS OF HIGHER SOLAR FLUX VALUES CAN BE OBTAINED FROM THE PROPAGATION CHARTS IN QST FOR MARCH, PAGE 65. TAKE A HIGH LATITUDE PATH SUCH AS EASTERN USA TO EUROPE. NOTE THAT THE PREDICTED MUF FOR LATE MARCH IS UNDER 26 MHZ, FOR OPTIMUM CONDITIONS AND A SOLAR FLUX OF 108. EVEN ON THE BEST DAYS, THE NORTH ATLANTIC PATH WOULD BE BARELY USEABLE ON 28 MHZ, YET MANY COUNTRIES OF EUROPE WERE COMING THROUGH WELL FOR SEVERAL HOURS ON MARCH 18 AS THIS BULLETIN WAS IN PREPARATION. DX CONDITIONS WERE MARKEDLY BETTER ON ALL LOWER DX FREQUENCIES AS WELL. ALSO OF INTEREST WAS A REAPPEARANCE OF 50 MHZ DX IN THE PAST WEEK, THOUGH THIS WAS OF THE NORTH SOUTH VARIETY LESS AFFECTED BY LOW FLUX VALUES THAN EAST WEST PATHS.

HIGH LATITUDE PROPAGATION WILL BE MOSTLY GOOD, WITH ONLY MINOR INTERRUPTIONS, MARCH 19 THROUGH 23. FROM MARCH 24 THROUGH 31, MORE FREQUENT AND SEVERE GEOMAGNETIC DISTURBANCES WILL DEGRADE HIGH LATITUDE COMMUNICATION, ESPECIALLY AROUND THE 25TH AND 30TH. TRANSEQUATORIAL PATHS WILL NOT BE GREATLY AFFECTED, AND AT 28 AND 50 MHZ THEY MAY BE IMPROVED AS THE DISTURBANCES CLEAR UP.

AMERICAN SUNSPOT NUMBERS FOR MARCH 8 THROUGH 14 WERE BETWEEN 45 AND 111 WITH A MEAN OF 68.6.

From 9001536918594197885
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d5de8010e351aba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-22 08:02:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83 based; site houxu.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ulysses!mhuxl!houxm!houxu!jhv
From: jhv@houxu.UUCP (James Van Ornum)
Newsgroups: net.ham-radio
Subject: Re: Cheap computer (Big Board)
Message-ID: <345@houxu.UUCP>
Date: Thu, 22-Mar-84 11:02:54 EST
Article-I.D.: houxu.345
Posted: Thu Mar 22 11:02:54 1984
Date-Received: Fri, 23-Mar-84 20:28:21 EST
References: <1993@mordor.UUCP>
Organization: AT&T Bell Labs, Holmdel NJ
Lines: 5

Several of us in Holmdel, NJ also purchased these boards.
We would appreciate any information people have, and will share
any information we uncover.

     James Van Ornum, AT&T Bell Laboratories, inhp4!houxu!jhv

From 5072245141173391638
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8723ca17ee0a8f12,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-22 22:00:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site tektronix.UUCP
Path: utzoo!watmath!clyde!floyd!vax135!cornell!uw-beaver!tektronix!johnbu
From: johnbu@tektronix.UUCP (John Burgess)
Newsgroups: net.ham-radio
Subject: Antenna query
Message-ID: <1933@tektronix.UUCP>
Date: Fri, 23-Mar-84 01:00:13 EST
Article-I.D.: tektroni.1933
Posted: Fri Mar 23 01:00:13 1984
Date-Received: Sun, 18-Mar-84 08:12:15 EST
Organization: Tektronix, Beaverton OR
Lines: 20

Does anyone have any experience with the Hy-Gain HF antennas? I'm
torn between getting the Explorer 14 (~ $300) or going whole-hog on
the TH7DX (~ $450).

I like the broad-bandedness of both of these, and like the idea of the
40m option on the Explorer 14. Is it simply a matter of "Ya gets what
ya pays fer" or is there a clear choice I'm not aware of yet?

At the moment, these two have been the most highly recommended. But I
am not opposed to considering other models (TH5), or other manufacturers.

I should have thought of asking the net earlier; I need (want) to decide
by 3-22 or 3-23 (a week).

Any information, pro or con, will be appreciated.

                    Thanks in advance,

                         John Burgess
                         Tektronix, Inc

From -5416067567942285442
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,86514d16ec0060b6,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-03-23 15:53:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 12
Message-ID: <8018@mgweed.UUCP>
Date: Fri, 23-Mar-84 18:53:31 EST
Article-I.D.: mgweed.8018
Posted: Fri Mar 23 18:53:31 1984
Date-Received: Sun, 25-Mar-84 09:37:56 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 84

qst de k9eui
hr dx bulletin nr 12 from arrl headquarters
newington ct march 23, 1984
to all radio amateurs

laccadives. many continue to receive vu7wcy cards mailed from two locations in the united states. the dxcc desk reports that both operations have been approved for dxcc credit and cards are being accepted.

china. by4aa was operated last weekend, apparently by visiting amateurs, and many north american stations were worked on 20 meter ssb. later this week, by1pk was heard with k7ja, his xyl wa7wtb, and ve7bc at the mike. signals were good but the competition was very keen. tom, ve7bc, was heard to say that the group would leave beijing on saturday and travel to by4aa for two or three days of operating. qsl all ssb contacts to ve7bc.

cambodia. xu1ss, cambodia. xu1ss, with yl operator kimsan, was worked in north america this week on 14175 khz at 1200 to 1300 utc. signals were better than ever reported before. qsl to ja1hqg. it is further reported that qsl cards for late december qsos are now being received by some.

kermadec. the new zealand/usa dxpedition to raoul island in the kermadec group began almost on schedule, sunday, march 18. callsigns are zl8amo, zl8aas, zl8bqd and zl0ajw/8. qsl as each operator instructs. look for good high speed cw from ron, zl8amo, usually 25 khz from the low edge on 10, 15 and 20 meters, or 5 khz up on 40 and 80 meters. also, zl0ajw/8 has been worked on both 30 meters and 160 meters cw. the original plan was to operate for ten days. the latest word is that the groups boat has been damaged by a tropical storm which hit the kermadecs this week, and departure may be delayed. they plan to operate as long as the fuel holds out, which could be another week or more. for north america, watch as follows, 10

meters 1900 to 2400z, 15 meters 2300 to 0400z, 20 meters 0400 to 1200z, and low bands 0600 to 1300z.

north cook. k6ozl is still at manihiki signing zk1xl. many have worked ron on seven bands, including qsos on rtty. due to transportation difficulty, he expects to stay at north cook at least another three weeks. qsl to zk1cg.

brunei. a new station in brunei is vs5ta, heard recently on 7004 khz at 1200 utc. no other information is available on this station.

yasme. lloyd and iris colvin wrapped up their easter island operation last week and returned to santiago for the weekend. they started yesterday from juan fernandez signing w6ql/ce0. they are expected to activate five bands, ssb and cw, over the next two weeks.

south shetland. a new operator, sandy, has been worked signing 4k1gag. this station has been active on 14225 khz at 0530z and 3646 khz at 1000z. qsl to uq2oc.

ethiopia. a surprise return of this rare country is et3ps, who has turned up sporadically on 15 and 20 meter ssb. he was last heard on thursday at 1300z on 14203 khz. the operator is tensay, and asks for qsls to box 6128, addis ababa. this is probably the same tensay who operated et3pg a few years ago.

dj6si expedition. baldur, dj6si, is departing march 28 for senegal and the gambia where he promises a six band cw effort. it is not known how long he will spend in each country, but the total trip is expected to be ten days. qsl to dj6si.

chad. f6bfn/tt went qrt on march 22, but says he will be replaced in two weeks by a new operator, fb8zq. watch for lots of cw.

heard and worked,

zl0ajw/8 10102 khz at 0545z
uk1pgo 14242 khz at 0745z
fk0ae 14228 khz at 0550z
ah9ab 14196 khz at 1200z
4u1un 21294 khz at 1245z

From -9081420957549307124
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15f443,c9f06a1bfc66c5bb,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 129c11,c9f06a1bfc66c5bb,start
X-Google-Attributes: gid129c11,public
X-Google-Thread: 151e61,c9f06a1bfc66c5bb,start

X-Google-Attributes: gid151e61,public
X-Google-Thread: 15e263,c9f06a1bfc66c5bb,start
X-Google-Attributes: gid15e263,public
X-Google-ArrivalTime: 1984-03-23 21:23:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ucf-cs.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!decvax!mcnc!duke!ucf-cs!jeff
From: jeff@ucf-cs.UUCP (Jeff C. Glover)
Newsgroups: net.micro,net.micro.cpm,net.wanted,net.ham-radio
Subject: Xerox 820 computer -- HELP NEEDED
Message-ID: <1209@ucf-cs.UUCP>
Date: Sat, 24-Mar-84 00:23:25 EST
Article-I.D.: ucf-cs.1209
Posted: Sat Mar 24 00:23:25 1984
Date-Received: Sun, 25-Mar-84 13:05:34 EST
Organization: University of Central Florida
Lines: 12

I have a PC board from a Xerox 820 computer and would like to obtain
schematics for it. Anyone out there have some I might borrow to figure
out this board? It is not the same as the Digital Research Computer
Big Board, thus the power connections are a mystery. Any assistance
at all in this endeavor would be appreciated.

Jeff C. Glover
(305) 275-4130
     ...decvax!ucf-cs!jeff or ...duke!ucf-cs!jeff   -- UUCP
     jeff.ucf-cs@rand-relay   -- ARPANET

P.S. Hi Phil

From 4682498186531434535
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d485c864378b3f2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-25 23:58:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!decvax!mcnc!ecsvax!bet
From: bet@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: WHY DO ALL THOSE POSTINGS SHOW UP IN UPPER CASE???
Message-ID: <2190@ecsvax.UUCP>
Date: Mon, 26-Mar-84 02:58:28 EST
Article-I.D.: ecsvax.2190
Posted: Mon Mar 26 02:58:28 1984
Date-Received: Tue, 27-Mar-84 01:09:01 EST
Lines: 8

Is there some kind of nostalgia here, or are we talking stone-age hardware?
Lower case is more readable. On any terminal that doesn't use proportional
spacing (i.e. all terminals not descended from the XEROX PARC effort) lower
case is much more readable, because it leaves more blank space. I am learning

to avoid net.ham-radio postings whose titles are in caps. What is the reason
for this barbaric practice?

Bennett Todd
...{decvax,ihnp4,akgua}!mcnc!ecsvax!bet

From -6807260557933655766
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e198ff5f3079eb9a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-26 10:37:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ncrcae.UUCP
Path: utzoo!watmath!clyde!floyd!cmcl2!philabs!mcnc!ncsu!ncrcae!flake
From: flake@ncrcae.UUCP (Joe Flake)
Newsgroups: net.ham-radio
Subject: 40M Rotatable Dipole
Message-ID: <2018@ncrcae.UUCP>
Date: Mon, 26-Mar-84 13:37:04 EST
Article-I.D.: ncrcae.2018
Posted: Mon Mar 26 13:37:04 1984
Date-Received: Thu, 29-Mar-84 05:28:12 EST
Organization: NCR, Columbia, SC
Lines: 21

I will be putting up a tower soon. I have a Hy-Gain TH3-Jr for 20-15-10
and am considering the addition of a 40M rotatable dipole (sort of like
a 1 element beam) above it.

I know of units made by KLM, Mosley, and Cushcraft but do not know
anyone with any experience with either one. From the literature I lean towards
the KLM right now but might easily be convinced in another direction.

Any thoughts on installation? 40M vs. 15M scares me! I have been advised
to keep at least 6ft of mast between the two antennas and to mount the 40M
dipole parallel to the boom of the tri-bander to reduce coupling. The
tri-bander should be lower on the mast since 40M needs the extra bit
of elevation more than the other bands.

PS. What's the best thing to put on hardware to prevent/reduce corrosion?
     (I known stainless steel HW is best. But what's second best?)

TNX for any replies.

Joe Flake, N4BGQ   NCR Corp., W. Columbia, SC
......mcnc!ncsu!ncrcae!flake

From -2409288408629664910
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c5cbc3f66d073ba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-26 16:08:20 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl bulletin nr 23
Message-ID: <8085@mgweed.UUCP>
Date: Mon, 26-Mar-84 19:08:20 EST
Article-I.D.: mgweed.8085
Posted: Mon Mar 26 19:08:20 1984
Date-Received: Tue, 27-Mar-84 02:54:21 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

qst de k9eui
hr arrl bulletin nr 23 from arrl headquarters
newington ct march 26, 1984
to all radio amateurs

at its annual meeting in hartford, connecticut, march 26, 1984, the arrl board of directors elected the following officers to serve until the 1986 annual meeting. president, larry e. price, w4ra, first vice president, leonard nathanson, w8rc, second vice president, gar anderson, k0ga, third vice president, jay holladay, w6ejj, vice president for international affairs, richard baldwin, w1ru, secretary, david sumner, k1zz, treasurer james mccobb, k1llu. the following directors were elected to serve on the executive committee, paul grauer, w0fir, hugh turnbull, w3abc, lys carey, k0pgm and gay milius, w4ug.

From 2321799348155378483
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ecb5a9671f4b78f4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-26 16:08:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl propagation forecast bulletin nr 13
Message-ID: <8086@mgweed.UUCP>
Date: Mon, 26-Mar-84 19:08:45 EST
Article-I.D.: mgweed.8086
Posted: Mon Mar 26 19:08:45 1984
Date-Received: Tue, 27-Mar-84 02:55:00 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 39

qst de k9eui
hr propagation forecast bulletin nr 13 from arrl headquarters
newington ct march 26, 1984
to all radio amateurs

the parade of sunspots across the solar disk mentioned last week appears to have run its course. the timing of their appearance indicates that active areas seen since early march are mostly new ones, not what was left of groups that caused the solar flux highs of january and february. the solar flux curve after about march 6 shows little resemblance to those for the two previous solar rotations. from 136 on mar 15, the solar flux dropped gradually to 112 on the 25th, and it appears likely to decline further during the forecast week.

despite this drop, flux numbers are still above the base figure used for the propagation charts in march qst, so the forecast week should see generally good activity on 21 and 28 mhz. a mild geomagnetic disturbance, in progress at bulletin time, should clear by march 27, bringing better propagation in the higher latitudes for the next two days. another disturbance is expected about march 31.

it is of interest to 50 mhz dx enthusiasts that their band has been open for transequatorial dx in the southern tier of states during at least six afternoons since march 5. the author of this bulletin worked tg9nx and several lus from his florida location sunday afternoon, march 25. watch for this condition during, or immediately after, periods of high k index, in the afternoon hours local time. high solar flux is not required. opportunities should continue through early april, at least. strong signals from southern 10 meter beacons is a good warning. look especially for vp8ade, in the british antarctic, on 28.283 mhz.

american sunspot numbers for march 15 through 21 were between 84 and 107 with a mean of 95.4.

From 855543461200407129
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c94104b3c4c07bc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-27 05:49:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: FCC allocates new freqs for cordless phones
Message-ID: <2120@ihuxf.UUCP>
Date: Tue, 27-Mar-84 08:49:49 EST
Article-I.D.: ihuxf.2120

Posted: Tue Mar 27 08:49:49 1984
Date-Received: Wed, 28-Mar-84 01:10:40 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 39

x
According to the April 1984 issue of "Monitoring Times" magazine, the FCC has released 10 new frequency pairs for cordless phones. The base / handset frequencies (MHz) are:

Ch	base	handset
1	46.61	/ 49.67
2	46.63	/ 49.845
3	46.67	/ 49.86
4	46.71	/ 49.77
5	46.73	/ 49.875
6	46.77	/ 49.83
7	46.83	/ 49.89
8	46.87	/ 49.93
9	46.93	/ 49.99
10	46.97	/ 49.97

This interim ruling will be in effect for 5 years. Future allocations will likely be made in other parts of the spectrum.

Cordless phone activity has been noted on these, and other frequencies:

Ch	Handset	Base
1A or 1	49.83	1.69
7A or 2	49.845	1.71
13A or 3	49.86	1.73
19A or 4	49.875	1.75
25A or 5	49.89	1.77

--
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5760

From -4655386247301670078
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f532e27600070ea,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-03-27 06:49:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ulysses!mhuxl!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: UPPER / lower case & other things
Message-ID: <8105@mgweed.UUCP>
Date: Tue, 27-Mar-84 09:49:19 EST
Article-I.D.: mgweed.8105
Posted: Tue Mar 27 09:49:19 1984
Date-Received: Wed, 28-Mar-84 01:39:48 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 46

The reason for the "barbaric practice" of posting bulletins in upper case is that's the way they are received off the air! Yes, I use antique hardware for several reasons. I punch paper tape as I receive the transmissions. I don't know of a better, more reliable "backup". I have a Baudot/ASCII converter and could send the input directly to the computer, but phone lines and data links have a habit of going down without notice. I don't use my own computer in the ham shack because of the rf garbage it generates. There are enough problems with qrm and local line noise. I also use the tape for retransmission on the air.

I have also found that on hf, the slower the data rate, the more reliable the copy. So I only use the amtor or ASCII transmissions for fills if something was missed or garbled on the initial Baudot transmission.

I appreciate the comments I have received regarding upper vs. lower case and from now on they will be posted in lower case. Had I realized this preference, I would have done it sooner, but I have been posting bulletins for quite a few months and have not received any comments regarding lower case until several days ago.

Perhaps I should inquire if anyone objects to my limiting the line length to 63 characters. There are quite a few terminals in this area that are limited to a 64 character line. Also this length should certainly be acceptable to any printer used.

Speaking of posting things to the net, I wish everyone would leave at least one blank line at the beginning of postings so the text is separated from the header junk.

Mentioning "stone-age hardware" reminds me of the fact that we have had an unusual number of "accidental" transmissions on our local 2 meter rtty channel. These transmissions are ALL caused by those that use computers for rtty rather than the old

clunker printers. I would caution anyone using a computer to be aware that when power is shut down on the interface and/or modem, the transmit line sometimes defaults in the "on-the-air" state! This has occured most often with stations using vic-20's or 64's with some of the Kantronics or similar interfacing.

Bob, K9EUI (k9eui)

From 8246916408843203475
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3e4c05f7bafd537,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-27 08:28:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 Fluke 1/4/84; site fluke.UUCP
Path: utzoo!watmath!clyde!floyd!vax135!cornell!uw-beaver!ssc-vax!fluke!limey
From: limey@fluke.UUCP (Paul Baldock)
Newsgroups: net.ham-radio
Subject: Info on IC2AT
Message-ID: <1201@vax3.fluke.UUCP>
Date: Tue, 27-Mar-84 11:28:51 EST
Article-I.D.: vax3.1201
Posted: Tue Mar 27 11:28:51 1984
Date-Received: Thu, 29-Mar-84 05:16:50 EST
Organization: John Fluke Mfg. Co., Everett, WA
Lines: 13

Does anybody have any ideas or information on adding a home-brew tone burst to the IC2AT. I shall be going to U.K. in summer, and they require a 900Hz tone to access repeaters.

Paul Baldock kw7y g3uid

John Fluke Mfg Co Inc
PO Box C9090
Everett
WA 98206

(206)3565546

From -3703277735899213539
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4c522f12e413c007,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-27 09:31:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!decvax!mcnc!ncsu!uvacs!mdg
From: mdg@uvacs.UUCP
Newsgroups: net.ham-radio
Subject: Portable VHF DF Antenna Needed
Message-ID: <1212@uvacs.UUCP>

Date: Tue, 27-Mar-84 12:31:17 EST
Article-I.D.: uvacs.1212
Posted: Tue Mar 27 12:31:17 1984
Date-Received: Fri, 30-Mar-84 03:12:43 EST
Lines: 36

Are there any VHF antenna gurus in NetLand?

I have a minor problem. I need to make a directional antenna which is tuned to 121.6 MHz. (I don't really need it to be broadband.)

Here's the rub. I have to be able to carry it through the woods *easily*. If someone knows of an article where I can find something like a foldable yagi design, I'd REALLY appreciate it. The design must also be forgiving enough that any idiot can unfold it, since I may not be the one who uses it.

I was thinking about using a wooden main boom that folds in half, with room for three or four yagi elements, and a handle that I would use to carry it with, but I can't think of any good way to fold the elements back that wouldn't begin to wear out after a few unfoldings. I also don't want to have ANY loose parts (free screws and such...), because if they get lost, I might be miles away from the replacement parts.

In fact, I'm not at all opposed to something other than a yagi. If you know of a quad design that is field portable, and suitable for VHF direction finding, I'd be happy to hear about it!

TNX in advance,

Mike Geipel
N4IXJ

P.S. - In case that was too easy a task, it would be cool if I could also receive (and transmit no more than 10 watts or so) reasonably well on 155.16 MHz. As I said before, 121.6 MHz is the frequency that the direction finding would be for. (But it'd be nice if perhaps a switch could add a tuning capacitor [?!?] to the elements, and the elements could be respaced [?@!?*!?], without requiring an owner's manual for guidance!)

P.P.S. If you're curious, this is for a group that does mountain rescue work.

From -7810905406129574349
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,92a7ed70cb800a19,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-27 14:13:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mordor.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!ut-sally!mordor!sjc
From: sjc@mordor.UUCP

Newsgroups: net.ham-radio
Subject: Xerox 820 (Big Board) documentation
Message-ID: <2065@mordor.UUCP>
Date: Tue, 27-Mar-84 17:13:07 EST
Article-I.D.: mordor.2065
Posted: Tue Mar 27 17:13:07 1984
Date-Received: Wed, 28-Mar-84 07:11:04 EST
Organization: S-1 Project, LLNL
Lines: 49

This is a response to recent pleas for documentation on the Xerox 820, a version of the Big Board CP/M system which the Xerox Outlet Store ((214) 960-3367) has been selling for $50 per board.

Digital Research Computers
PO Box 401565
Garland, TX 75040
(214) 271-3538
For $5 they will send you a nice packet of schematics plus theory of operation plus directions on using their EPROM monitor. However, the Xerox version differs from theirs in at least three ways: parts are positioned and numbered differently on the board, connector pinouts are rearranged, and the last stages of the CRT driver have been redesigned.

B.G. Micro
PO Box 280298
Dallas, TX 75228
(214) 271-5546
These people advertise in the March "Nuts and Volts" magazine that they will sell you a blank copy of the Xerox 820 board with EPROMS and "complete schematics" for $29.95 plus $2 shipping. Perhaps you could persuade them to sell you the schematics alone. I have not dealt with them.

Xerox
1341 Mockingbird Lane
Dallas, TX 75247
Attn: Bonnie Campbell
The "820 Information Processor Development Guide", part number 9R80368, is available for $40. It is not clear whether this contains software information, hardware information, both, or neither. We have one of these on order.

We also have schematics on order from a third source whose address I do not have with me at the moment. I will post information to the net as soon as I get it, so the best advice I can offer is to sit tight for a week or so.

Meanwhile, anyone who has already gotten CP/M to run on an 820 board could do us all a great service by posting pinouts, advice on the BIOS, etc.

Incidentally, I purchased a switching power supply for the 820 board from the

Xerox Outlet Store for $50. It offers all the voltages the board needs, but
lacks the +24V needed for 8" floppies.--Steve

     (S-1 Project, Lawrence Livermore National Laboratory)
     MILNET: sjc@s1-c   UUCP: ...!decvax!decwrl!mordor!sjc
                  (mailheader return address may not work)

From 3533470142776904367
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c94104b3c4c07bc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-27 14:35:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site brl-vgr.ARPA
Path: utzoo!watmath!clyde!floyd!harpo!seismo!brl-vgr!ron
From: ron@brl-vgr.ARPA (Ron Natalie <ron>)
Newsgroups: net.ham-radio
Subject: Re: FCC allocates new freqs for cordless phones
Message-ID: <2903@brl-vgr.ARPA>
Date: Tue, 27-Mar-84 17:35:58 EST
Article-I.D.: brl-vgr.2903
Posted: Tue Mar 27 17:35:58 1984
Date-Received: Wed, 28-Mar-84 07:11:33 EST
References: <2120@ihuxf.UUCP>
Organization: Ballistics Research Lab
Lines: 5

Oh great, these frequencies are in the Fire Department Public Service
band. I can see half the engines in the county being alerted when some
guy calls his girl friend from the back yard.

-Ron

From -4886418558168997843
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d485c864378b3f2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-27 18:43:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!inuxc!inuxg!wheatley
From: wheatley@inuxg.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: Re: WHY DO ALL THOSE POSTINGS SHOW UP IN UPPER CASE???
Message-ID: <279@inuxg.UUCP>
Date: Tue, 27-Mar-84 21:43:45 EST
Article-I.D.: inuxg.279
Posted: Tue Mar 27 21:43:45 1984
Date-Received: Wed, 28-Mar-84 07:24:00 EST
References: <2190@ecsvax.UUCP>
Organization: AT&T Consumer Products Div., Indianapolis

Lines: 6

I guess i would rather have access to the info provided in the upper case format,
rather than do without because of a trivial complaint of readability. Keep
those arrl bulletins coming, in upper case if need be, I can handle 'em!

Steve Wheatley KU9C
inuxg!wheatley

From 5687563432809243391
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e2094c352b81ba8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-27 22:32:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mprvaxa.UUCP
Path: utzoo!watmath!clyde!floyd!vax135!cornell!uw-beaver!ubc-vision!mprvaxa!
spraggs
From: spraggs@mprvaxa.UUCP (John Spraggs)
Newsgroups: net.ham-radio
Subject: Packet Radio Net
Message-ID: <499@mprvaxa.UUCP>
Date: Wed, 28-Mar-84 01:32:49 EST
Article-I.D.: mprvaxa.499
Posted: Wed Mar 28 01:32:49 1984
Date-Received: Sun, 25-Mar-84 07:23:19 EST
Organization: Microtel Pacific Research, Burnaby BC
Lines: 9

****
Can anyone shed any light on the difficulties VE7APU and I are
having with Osirus? We can't log in.

Please reply by mail. Thanks.

         John Spraggs ve7ade
         uw-beaver!ubc-visi!mprvaxa!spraggs

From -8442105432690201272
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d5de8010e351aba
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-27 23:47:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mordor.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!ut-sally!mordor!sjc
From: sjc@mordor.UUCP
Newsgroups: net.ham-radio
Subject: Cheap computer (Big Board)
Message-ID: <1993@mordor.UUCP>
Date: Wed, 28-Mar-84 02:47:28 EST

Article-I.D.: mordor.1993
Posted: Wed Mar 28 02:47:28 1984
Date-Received: Fri, 23-Mar-84 20:20:24 EST
Organization: S-1 Project, LLNL
Lines: 18

After a net announcement that Xerox surplus 820 boards (similar to the original Z-80 "Big Board") were available for $50 from Xerox surplus, about a dozen of us bought them. We have schematics for the original, but these are a bit different (nicer, in fact). We'd really appreciate it if the folks who posted the original message would share with us what they learned about connector pinouts, BIOS, etc, before we start tracing leads on the PC board (you're far ahead of us, since you have already gotten CP/M to run).

Our jury-rigged UUCP connection seems adequate for news, but is unreliable for mail, so I'll give a couple of addresses; or, if you don't mind posting a phone number, I'd be glad to call you.

MILNET: sjc@s1-c UUCP: ...!decvax!decwrl!mordor!sjc
Steve Correll
742C Hayes Ave
Livermore, CA 94550
(415) 423-0226 daytime

From -2654315730595209947
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c94104b3c4c07bc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-28 08:20:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!inuxc!inuxd!gls
From: gls@inuxd.UUCP (Gary Spahn)
Newsgroups: net.ham-radio
Subject: Re: RE: FCC allocates new cordless phone freqs.
Message-ID: <499@inuxd.UUCP>
Date: Wed, 28-Mar-84 11:20:34 EST
Article-I.D.: inuxd.499
Posted: Wed Mar 28 11:20:34 1984
Date-Received: Thu, 29-Mar-84 23:40:14 EST
References: <2120@ihuxf.UUCP>, <2903@brl-vgr.ARPA>
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 19

While the 30-50MHz band is usually called a "public service band", the frequencies of interest are in the 49MHz 'kiddie walkie-talkie' portion. The new frequency pairs will open up more channels for the cordless sets, improve the quality of the link, and get these things out of the navigation/160M ham bands. The base-to-phone link was around 1750KHz AM and used the house

wiring for an antenna. This accounts for the lousey speech quality. The new units will be FM on both channels and most probably will have some kind of security code built-in for access. It must be remembered that this allocation is only temparary and that ultimately the cordless phones will end up at 900MHz, where the range is inherently limited, but will not suffer the noise and shielding problems of the present allocation. (If you think these phones are limited to 700 feet, think again. I've heard conversations on my 6M receiver that were 300 miles away, when there is a band opening.)

Gary Spahn - KA9MQI
AT&T cp - Indianapolis, IN

From 7287444238422659233
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b43f4be4adc178eb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-28 08:33:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site sunybcs.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!rochester!rocksvax!sunybcs!coggs
From: coggs@sunybcs.UUCP (Robert Coggeshall)
Newsgroups: net.ham-radio
Subject: Big Board/Xerox 820 journal available
Message-ID: <1352@sunybcs.UUCP>
Date: Wed, 28-Mar-84 11:33:07 EST
Article-I.D.: sunybcs.1352
Posted: Wed Mar 28 11:33:07 1984
Date-Received: Fri, 30-Mar-84 02:30:35 EST
Organization: SUNY/Buffalo Computer Science
Lines: 22

An essential source of info for single board computer freex, is
"Micro Cornucopia".

Its published 6 times a year, and includes regular features on:

BB I & II	Xerox 820
Slicer	Kaypro
FORTH	C
Pascal	etc,etc,etc

It costs $16.00/year. Their address is:

Micro Cornucopia
POBOX 223
Bend, Or. 97709

Bob Coggeshall
{decvax!watmath}
{pur-ee!rocks34!rocksvax}

{{allegra, seismo}!rochester!rocksvax} !sunybcs!coggs

From -8238827942398632645
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 129c11,5ea033cba3663efb,start
X-Google-Attributes: gid129c11,public
X-Google-Thread: 15e263,5ea033cba3663efb,start
X-Google-Attributes: gid15e263,public
X-Google-Thread: 15f443,5ea033cba3663efb,start
X-Google-Attributes: gid15f443,public
X-Google-Thread: 151e61,5ea033cba3663efb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-28 09:09:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ucf-cs.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!decvax!mcnc!duke!ucf-cs!jeff
From: jeff@ucf-cs.UUCP (Jeff C. Glover)
Newsgroups: net.micro,net.micro.cpm,net.wanted,net.ham-radio
Subject: Re: Xerox 820 computer schematics
Message-ID: <1213@ucf-cs.UUCP>
Date: Wed, 28-Mar-84 12:09:09 EST
Article-I.D.: ucf-cs.1213
Posted: Wed Mar 28 12:09:09 1984
Date-Received: Fri, 30-Mar-84 01:23:20 EST
Organization: University of Central Florida
Lines: 19

Thanks for all the responses on the Xerox 820 computer. Here are two
addresses I got from various people:

     Schematics: (availability not verified -- jcg)
               Digital Research Computers
               PO Box 401565
               Garland, Texas 75040

     Other items: (magazine dedicated to the Digital Research Big Board
                and the Xerox 820)
               Micro Cornucopia
               P.O. Box 223
               Bend, Oregon 97709
               503-382-8048

Jeff C. Glover
{decvax | duke}!ucf-cs!jeff   UUCP
jeff.ucf-cs@rand-relay   CSNET

From 1679008597984267067
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3e4c05f7bafd537

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-28 09:38:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sask.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!alberta!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: Re: Info on IC2AT
Message-ID: <21@sask.UUCP>
Date: Wed, 28-Mar-84 12:38:34 EST
Article-I.D.: sask.21
Posted: Wed Mar 28 12:38:34 1984
Date-Received: Fri, 30-Mar-84 00:17:00 EST
References: <1201@vax3.fluke.UUCP>
Organization: U of Saskatchewan, Canada
Lines: 3

I need info on how to put a tone burst into the FT-208-RA as I am also
going to England this summer. However, the info I have (the RSGB handbook)
says that the tone frequency is 1750Hz NOT 900Hz.

From 6665185978468590788
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eb6013b4c6a1668f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-28 18:49:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ih1ap.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!ih1ap!lwr
From: lwr@ih1ap.UUCP (L. W. Retzner)
Newsgroups: net.ham-radio
Subject: WANTED: IC-4A(T)
Message-ID: <328@ih1ap.UUCP>
Date: Wed, 28-Mar-84 21:49:20 EST
Article-I.D.: ih1ap.328
Posted: Wed Mar 28 21:49:20 1984
Date-Received: Fri, 30-Mar-84 01:15:12 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 12

Does someone out there want to unload their IC-4A or IC-4AT
so that they can get an IC-04A or IC-04AT.

We are interested in obtaining a USED and functioning unit
that can be converted to be controlled remotely.

If you have such a unit and are willing to sell it at a
reasonable price please contact me.

Bill Retzner WB9QXJ
ihnp4!ih1ap!lwr
(312) 979-3374 (8:30 a.m. to 5 p.m. CST)

From 8157751759538980651
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15e263,5ea033cba3663efb
X-Google-Attributes: gid15e263,public
X-Google-Thread: 151e61,5ea033cba3663efb
X-Google-Attributes: gid151e61,public
X-Google-Thread: 129c11,5ea033cba3663efb
X-Google-Attributes: gid129c11,public
X-Google-Thread: 15f443,5ea033cba3663efb
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1984-03-29 07:46:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.08 10/3/83; site psuvax.UUCP
Path: utzoo!watmath!clyde!akgua!psuvax!sysred
From: sysred@psuvax.UUCP (Ralph Droms)
Newsgroups: net.micro,net.micro.cpm,net.wanted,net.ham-radio
Subject: Re: Xerox 820 computer schematics
Message-ID: <923@psuvax.UUCP>
Date: Thu, 29-Mar-84 10:46:52 EST
Article-I.D.: psuvax.923
Posted: Thu Mar 29 10:46:52 1984
Date-Received: Fri, 30-Mar-84 03:38:54 EST
References: <1213@ucf-cs.UUCP>
Organization: Pennsylvania State Univ.
Lines: 20

B.G. Micro, in Texas [(214) 271-5546] sells depopulated Xerox 820
boards for $30 (including documentation). They will sell a ~25
page document package for $5. However, they want a check for $5
mailed to them before they'll release just the documentation. I
sweet-talked the lady I spoke with (Tammy) into sending me the
documentation first, with the promise that I send her the check
in return.

There's also an ad for the Xerox outlet store (selling the used
820 boards for $50) in "Computer Shopper" magazine. They have lots
of other good stuff, like power supplies, etc.

Anybody have a good source of parallel encoded keyboards (I assume
that's what the 820 board needs)?

--
Ralph Droms
Computer Science Department   (814) 865-9505
312 Whitmore Lab   {allegra,ihnp4}!psuvax!sysred
The Pennsylvania State University   sysred@penn-state   (csnet)
University Park, PA 16802   sysred@psuvax1   (bitnet)

From 967384336918313332
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7f49d83f2b77d035,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-29 16:28:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 Fluke 1/4/84; site fluke.UUCP
Path: utzoo!watmath!clyde!floyd!vax135!cornell!uw-beaver!ssc-vax!fluke!limey
From: limey@fluke.UUCP (Paul Baldock)
Newsgroups: net.ham-radio
Subject: WANTED IC2AT and Transportable Mobile Antenna
Message-ID: <1203@vax3.fluke.UUCP>
Date: Thu, 29-Mar-84 19:28:01 EST
Article-I.D.: vax3.1203
Posted: Thu Mar 29 19:28:01 1984
Date-Received: Sat, 31-Mar-84 09:36:43 EST
Organization: John Fluke Mfg. Co., Everett, WA
Lines: 12

I would like to buy an IC2AT (maybe somebodies upgrading to the new IC02-AT).

I also need a mobile antenna that I can transport abroad in a suitcase.

Any offers?

Paul Baldock kw7y
tel: 206 356 5546

From -1819538988201033308
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 129c11,a01e052f4c714cdc,start
X-Google-Attributes: gid129c11,public
X-Google-Thread: 151e61,a01e052f4c714cdc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-30 05:44:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site bmcg.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!decvax!ittvax!dcdwest!sdcsvax!bmcg!terry
From: terry@bmcg.UUCP
Newsgroups: net.ham-radio,net.micro
Subject: XEROX Board PINOUTS
Message-ID: <865@bmcg.UUCP>
Date: Fri, 30-Mar-84 08:44:19 EST
Article-I.D.: bmcg.865
Posted: Fri Mar 30 08:44:19 1984
Date-Received: Sat, 31-Mar-84 08:31:41 EST
Organization: Burroughs Corporation, San Diego
Lines: 41

I have determined the pinouts of the connectors on the Xerox 820-1
board. I have the schematic on order but was anxious to see this
board work so I resorted to real hardware hacking. I hope further
communication on this board will continue.

```
POWER SUPPLY CONNECTOR J5
    PIN #        SIGNAL NAME
      1             -12v
      2             +12v
      3             +12v or +24v to Disk Drive Conn. Pin 18
             /* Xerox supplies the voltage to the
                drive from a single supply.    */
      4             GROUND
      5             GROUND
      6             GROUND
      7             /* Voltage supplied TO J6-2 for Monitor */
      8             +5v
      9             +5v /* This voltage also goes to the Disk Drive
                     Conn. Pin 19                        */
-----------------------------------------------------------------
MONITOR POWER CONNECTOR J6
    PIN #        SIGNAL NAME
      1             GROUND
      2             Supplied from J5-7
-----------------------------------------------------------------
MONITOR VIDEO CONNECTOR J7
    PIN #        SIGNAL NAME
      1              NC
      2              NC
      3              Vertical Sync.
      4              Horiz.  Sync.
      5              Video Out
      6              NC
      7              NC
      8              GROUND
      9              GROUND
      0              GROUND
-----------------------------------------------------------------

                          bmcg!terry


From 3161664921085377746
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1afbe86506afd854,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-30 15:48:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: arrl dx bulletin nr 13
Message-ID: <8168@mgweed.UUCP>
Date: Fri, 30-Mar-84 18:48:30 EST
Article-I.D.: mgweed.8168
Posted: Fri Mar 30 18:48:30 1984
```

Date-Received: Sat, 31-Mar-84 09:26:13 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 48

qst de k9eui
hr dx bulletin nr 13 from arrl headquarters
newington ct march 30, 1984
to all radio amateurs

thanks to k1xm, k1mm, w1trc and the southern new england dx association for the following dx information.

juan fernandez. lloyd and iris colvin are now operating from w6ql/ce0z. qsl via the yasme foundation.

kampuchea. xu1ss continues to be available on a list operation on sundays at 1100z on 14335 khz.

gabon. tr8dr has been active around 21020 khz at 1745z. qsls go to w2pd.

east malaysia. 9m6vw has been worked on 20 ssb around 1030z. others coming through at the same time include fb0yk, 4s7ea and 8q7av.

china. by4aa has been very active on 20 ssb at 1200z.

chatham islands. look for zl7oy on 14210 khz at 1430z.

korea. hl9ta has been active on 14030 khz at 1215z.

tokelaus. zm7vu has been on 28025 khz at 2230z, as well as on the other dx bands. qsl via f6dyg.

cameroons. tj1af has been active several days a week on 21335 khz between 1700 and 1800z.

turkoman. uh8hcs has been active on 7015 khz at 0100z. 4s7tpr has also been worked about the same time on 7010 khz.

cape verde. d44bs can be found on 21335 khz around 1900z.

tunisia. 3v8ps operates on 21292 khz at 1900z.

rtty. the bartg rtty contest produced activity from over 50 countries. some of the rarer ones were vu2, 5z4, ei2, ua0 and st2.

dxcc. tomorrow is the last day for submissions for the next honor roll listing to be received at arrl hq.

From 6500559000957457417
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d00564ee08ce1e2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-03-31 00:55:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!seismo!hao!hplabs!sri-unix!knutsen
From: knutsen@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: arpa gateway
Message-ID: <426@sri-unix.UUCP>
Date: Sat, 31-Mar-84 03:55:50 EST
Article-I.D.: sri-unix.426
Posted: Sat Mar 31 03:55:50 1984
Date-Received: Sun, 1-Apr-84 08:11:55 EST
Lines: 15

Are there any objections to having an arpa mailing list gatewayed to this group? This would be a new list, so there shouldnt be a sudden influx of traffic.

If I dont get five dissenting opinions in a week, Ill set it up. If I do (get those five messages), Ill probably ask again because more people may want it. Also, if you'd rather not have the stuff sent to the arpanet, please let me know, but it better be good...

(Actually stuff is already being sent to Xerox and SRI-TSC, but I havent seen any return traffic).

Andrew Knutsen
{sun,vortex,sri-unix}!parallel!andrew
knutsen@sri-unix

From -6232637633671960419
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,91ab2db34dad5b42,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-03 01:17:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mordor.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!harpo!seismo!ut-sally!mordor!sjc
From: sjc@mordor.UUCP
Newsgroups: net.ham-radio
Subject: Xerox 820 (Big Board) update
Message-ID: <2227@mordor.UUCP>
Date: Tue, 3-Apr-84 04:17:15 EST
Article-I.D.: mordor.2227
Posted: Tue Apr 3 04:17:15 1984
Date-Received: Thu, 5-Apr-84 01:06:15 EST
Organization: S-1 Project, LLNL
Lines: 206

Thanks to a good samaritan at SRI, I have a copy of some Xerox 820 documentation. For brevity, I will detail primarily the aspects that differ from the original "Big Board" from Digital Research Computers of Texas. Documentation for the original is still available from DRC (214) 271-3538. Xerox 820 documentation (which I haven't seen) is advertised by BG Micro (214) 271-5546.

Port Address Decoding: no differences

System PIO "A" side:

- Bit0 DVSEL 1
- Bit1 DVSEL 2
- Bit2 Side
- Bit3 Keyboard data available
- Bit4 8"/5.25" disk select
- Bit5 Assigned for future use
- Bit6 Display character set (?)
- Bit7 Bank switching (0=RAM, 1=ROM & CRT & RAM)

Interrupt structures:

Monitor uses mode 2 interrupts; I register is loaded with 0FF hex.
Priority chain is organized high to low as follows:

SIO CHANNEL A
SIO CHANNEL B
SYSTEM PIO PORT A
SYSTEM PIO PORT B
GP PIO PORT A
GP PIO PORT B
CTC CHANNEL 0
CTC CHANNEL 1
CTC CHANNEL 2
CTC CHANNEL 3

General purpose PIO strappings (J11) and pin assignments (J8):

J11:

odd numbered pins grounded

4	Port B READY polarity
6	Port B lower direction
8	Port A READY polarity
10	Port A upper direction
12	Port B upper direction
14	Port A STROBE polarity
16	Port B STROBE polarity
18	Port A lower direction

J8:

odd numbered pins are supposed to be grounded; they aren't, so you must ground at least one of them to the PIO chip so as to provide a signal ground to the peripheral device

```
          2    Port A STROBE
          4    Port A READY
          6    Port A bit 0
          ...
          20   Port A bit 7
          22   Port B STROBE
          24   Port B READY
          26   Port B bit 0
          ...
          40   Port B bit 7
```

CTC Strapping and I/O assignments (J10):

```
     System clock  2 1  Clock/trigger 0
     ZC-TO0        4 3  Clock/trigger 1
     ZC-TO1        6 5  Clock/trigger 2
     ZC-TO2        8 7  Clock/trigger 3
```

Video output connector pin assignments (J7):

```
     6-10 grounded
     3    Vertical sync
     4    Horizontal sync
     5    Video
```

Serial I/O connector pin assignments channel A (J4):

```
     1    Protective ground
     2    Transmit data
     3    Receive data
     4    Request to send
     5    Clear to send
     6    Data set ready
     7    Protective ground
     8    Carrier detect
     15   Xmit clock
     17   Receive clock
     20   Data terminal ready
```

Serial I/O strapping options for channel A (J9): No differences

Serial I/O connector pin assignments channel B (J3):

```
     1    Ground
     2    Receive data
     3    Transmit data
     4    Clear to send
     5    Request to send
     6    Data set ready
     7    Ground
     8    Terminal ready
     20   Data carrier detect
```

Keyboard connector pin assignments (J2):

14-25	grounded
1-7	bits 0-7
8	strobe
13	+5 volts via resistor

Disk drive connector pin assignments (J1):

20-37	grounded
1	not connected
2	8/5.25 select (grounded for 5.25)
3	not connected
4	index
5	select 1
6	select 2
7	side
8	HDLD
9	step in
10	step
11	write data
12	write
13	trk 00
14	write protect
15	read data
16	low current
17	ready
18	indep pin +12 or anything
19	+5

CRT RAM: 3000 hex through 3FFF hex.

I/O ports:

0-3	Channel A baud (writeonly)
4	SIO channel A data
5	SIO channel B data
6	SIO channel A control
7	SIO channel B control
8	GP PIO A data
9	GP PIO A control
A	GP PIO B data
B	GP PIO B control
C-F	Channel B baud (writeonly)
10	1771 status/command
11	1771 track
12	1771 sector
13	1771 data
14-17	CRT scroll register if 1, then loc 3000 is at bottom line; if 2, then loc 3000 is next to bottom line; if 17, then loc 3000 is top line, etc.
18	CTC 0
19	CTC 1

```
     1A   CTC 2
     1B   CTC 3
     1C   system data
     1D   system control
     1E   keyboard data
     1F   keyboard control

Power (J5):
     1    -12
     2    +12 CPU
     3    +12 disk
     4-6  ground
     7    +12
     8    +5
     9    +5

Power fed out to monitor (if needed) (J6):
     1    ground
     2    +12

Original Xerox 820 disk formats:

          8"   5.25"
Tracks         77   40
Sectors        26   18
Bytes/sector   128  128
Tracks reserved    2    3
for OS
Capacity  241K 81K

5.25" format is CROMEMCO format, 8" is IBM 3740 format

Monitor entry points are alleged to be the same as the DRC big board.o

Monitor commands are alleged to be the same, except:

     Test command is "X", not "T"
     Verify command is missing
     Boot command is "A", not "B"
     A "T" command connects the keyboard to the printer port like
     a "typewriter"

Setting MSB of displayed character gives blinking attribute.

     --Steven Correll
     (S-1 Project, Lawrence Livermore National Laboratory)
     MILNET: sjc@s1-c   UUCP: ...!decvax!decwrl!mordor!sjc
                   (mailheader return address may not work)


From -5222181787048407008
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9931694fdd04fa98,start
```

X-Google-Attributes: gid151e61,public
X-Google-Thread: 15e263,9931694fdd04fa98,start
X-Google-Attributes: gid15e263,public
X-Google-ArrivalTime: 1984-04-03 10:26:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.08 10/3/83; site psuvax.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!decvax!mcnc!akgua!psuvax!mancuso
From: mancuso@psuvax.UUCP (Pat Mancuso)
Newsgroups: net.ham-radio,net.micro.cpm
Subject: Xerox 820--REVEALED!
Message-ID: <941@psuvax.UUCP>
Date: Tue, 3-Apr-84 13:26:14 EST
Article-I.D.: psuvax.941
Posted: Tue Apr 3 13:26:14 1984
Date-Received: Thu, 5-Apr-84 01:49:55 EST
Organization: Pennsylvania State Univ.
Lines: 148

The schematics came from BG Micro today, and it was well worth the wait.
They contain pages xeroxed from the xerox manual (ch 10) along with
some information for kit builders and six 10" x 15" schematic sheets.
All the vital information is here, so the $5 is well spent. The address
once again is:

     BG Micro
     PO Bx 280298
     Dallas, TX 75228
     (214) 271-5546

They apparently will not accept credit cards for the schematics, as they
asked us to send a check.

For those of you who can't wait, here are the vital connections for the board:

Video Output (J7)

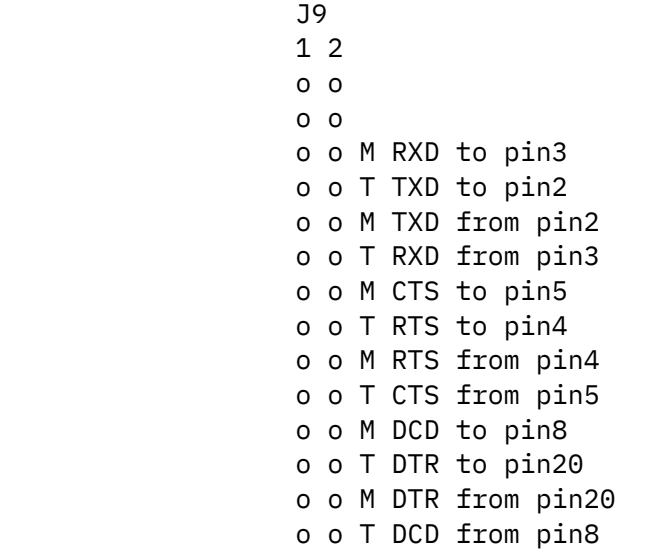
pin	name
1	NC
2	NC
3	Vertical Sync
4	Horizontal Sync
5	Video
6-10	GND

Serial IO (J4)

pin	name
1	GND
2	TX data
3	RX data
4	RTS
5	CTS
6	DSR
7	GND

8 Carrier Detect
9-14 NC
15 TX Clock
16 NC
17 RX Clock
18-19 NC
20 DTR

Serial IO Jumper options for Channel A (J9)


J9
1 2
o o
o o
o o M RXD to pin3
o o T TXD to pin2
o o M TXD from pin2
o o T RXD from pin3
o o M CTS to pin5
o o T RTS to pin4
o o M RTS from pin4
o o T CTS from pin5
o o M DCD to pin8
o o T DTR to pin20
o o M DTR from pin20
o o T DCD from pin8
RX Clock to modem o o
RX Clock to SIO o o
RX Clock from modem to SIO o o
Clock to SIO with TX clock o o
Modem supplies SIO w/TX Cl o o
Clock to Modem with TX Cl o o
39 40

All entries marked with 'T' should be jumpered for use with a modem
All entries marked with 'M' should be jumpered for use with a terminal

Serial IO Connector (J3)

Pin name
1 GND
2 RX data
3 TX data
4 CTS
5 RTS
6 DSR
7 GND
8 Terminal Ready
9-19 NC
20 DCD
21-25 NC

Keyboard Connector (J2)

Pin	name
1	B0
2	B1
3	B2
4	B4
5	B4
6	B5
7	B6
8	B7
9	Strobe
10-12	NC
13	+5
14-25	GND

Disk Drive Connector (J2)

Pin	name
1	NC
2	8/5.25 select (GND=5.25",open=8")
3	NC
4	Index
5	Select 1
6	Select 2
7	Side
8	HDLD
9	Step in
10	Step
11	Write Data
12	Write
13	TRK 00
14	Write Protect
15	Read Data
16	Low Current
17	Ready
18	NC (use for +12 suggested)
19	+5
20-37	GND

The Power connections I used to get the board up without a disk are:
(J5)

Pin	name
1	-12
2	+12
4	GND
8	+5

There is also a lot of information on the monitor that is supplied with the board, and the character set for the video. Since this is fairly long already, that will have to wait.

Overall there is a smell of fried onions. (fnord)

:+: Pat Mancuso
:+: Penn State University
Usenet: :+: ...!psuvax!mancuso
Bitnet: :+: mancuso@psuvax1

From 8840675569234779535
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a10ce9678daa6767,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-03 13:34:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: 3rd party traffic list
Message-ID: <8261@mgweed.UUCP>
Date: Tue, 3-Apr-84 16:34:52 EST
Article-I.D.: mgweed.8261
Posted: Tue Apr 3 16:34:52 1984
Date-Received: Thu, 5-Apr-84 01:43:51 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 18

3rd party traffic agreements countries list
from the april issue of qst magazine:

c5	the gambia	j6	st. lucia	xe	mexico
ce	chile	j8	st. vincent	yn	nicaragua
co	chile	jy	jordan	ys	el salvador
cp	bolivia	lu	argentina	yv	venezuela
cx	uruguay	oa	peru	zp	paraguay
el	liberia	py	brazil	3d6	swaziland
hc	ecuador	tg	guatemala	4u1	itu, geneva
hh	haiti	ti	costa rica	4x	israel
hi	dom. repub.	v2	antigua	6y	jamaica
hk	columbia	v2	barbuda	8r	guyana
hp	panama	ve	canada	9g	ghana
hr	honduras	vk	australia	9y	trinidad
j3	grenada	vr6	pitcairn	9y	tobago

From -1763112291863817922
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1d6eb55f64043056,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-04 04:34:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxg.UUCP

Path: utzoo!linus!philabs!mcnc!decvax!harpo!ihnp4!inuxc!inuxg!wheatley
From: wheatley@inuxg.UUCP (Steven Wheatley)
Newsgroups: net.ham-radio
Subject: SP (Polish) DX Contest
Message-ID: <281@inuxg.UUCP>
Date: Wed, 4-Apr-84 07:34:25 EST
Article-I.D.: inuxg.281
Posted: Wed Apr 4 07:34:25 1984
Date-Received: Fri, 6-Apr-84 00:42:18 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 6

This weekend is the SP DX Contest (phone) on 3.5 to 28 MHz.
Operating times from 1500Z April 7 till 2400Z April 8.
Exchange signal report and serial number.

Gud Luck, KU9C
Steve Wheatley, inuxg!wheatley

From 4064589341856049304
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,19d734d62c283f36,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-04 06:51:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site druxm.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!drutx!druxm!n2ic
From: n2ic@druxm.UUCP (LondonSM)
Newsgroups: net.ham-radio
Subject: re: Rotatable 40 meter dipole
Message-ID: <814@druxm.UUCP>
Date: Wed, 4-Apr-84 09:51:51 EST
Article-I.D.: druxm.814
Posted: Wed Apr 4 09:51:51 1984
Date-Received: Thu, 5-Apr-84 00:47:59 EST
Organization: AT&T Information Systems Laboratories, Denver
Lines: 31

I have had considerable experience with rotatable 40 meter dipoles and
their interactions with tri-banders.

Yes, you are right on target with the idea of getting the 40 meter
dipole as high as possible. I have tried it both ways - with the
tribander on top, and with the 40 meter dipole on top.
There was a considerable improvement on 40 meters with the 40 meter
dipole on top. However, I should point out that I had 15 feet of
separation between the tribander and the dipole (the dipole was at
80 feet, and the tribander was at 65 feet).

You are also correct in being leary of interactions between the 40
meter dipole and the tribander. Even with 15 feet of separation,
I effectively killed the performance of the tribander on 15 meters.

(The performance on 20 meters also left something to be desired.)
The solution I have chosen is probably not universally applicable -
Separate towers for the tribander and the 40 meter antenna (I am
replacing the rotatable dipole with a 3 element monster).

A better alternative may be to obtain the driven element from a
Wilson tribander, Mosley TA-33, or Cushcraft tribander.
All three of these antennas have the capability of adding an additional
trap for 40 meters. Use this driven element in place of your Hy-Gain
tribander driven element - or, better yet, sell your Hy-Gain tribander
and put up the Cushcraft quad-bander.

Let me (and the net) know how you make out.

Steve London , N2IC/0
druxm!n2ic

From 4534134035535507993
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c52db31b9287f913,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-04 07:12:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Bob Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: cordless phones & KS Supreme Court
Message-ID: <2137@ihuxf.UUCP>
Date: Wed, 4-Apr-84 10:12:34 EST
Article-I.D.: ihuxf.2137
Posted: Wed Apr 4 10:12:34 1984
Date-Received: Thu, 5-Apr-84 00:48:11 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 54

Lauren Weinstein posted this interesting item on the Arpanet:

> ---
> Date: Saturday, 24 Mar 1984 20:03-PST
> Subject: Cordless Telephone Conversations and the Law
> From: lauren@Rand-Unix (Lauren_Weinstein)
>
> a239 1443 24 Mar 84 AM-Phone Evidence,390 State Court Says Cordless
> Phone Conversations Not Private By BILL VOGRIN Associated Press Writer
>   TOPEKA, Kan. (AP) - Police can lawfully monitor and record
> cordless telephone conversations heard over an ordinary FM radio and
> use the recordings as evidence in court, the Kansas Supreme Court
> ruled Saturday.
>   In overturning a Reno County District Court judge, the high court
> decided that cordless telephone conversations are the equivalent of
> oral communications and not subject to wiretap laws.

Attorney General Robert Stephan hailed the ruling as ''a great decision for victims and for law enforcement.''

''The Supreme Court has obviously plowed new ground and, in my opinion, they plowed the furrows straight and true,'' Stephan added.

The state Supreme Court sent the case - involving charges of possession of cocaine and conspiracy to sell marijuana against Timothy and Rosemarie Howard of Hutchinson - back to court for a new trial.

Justice David Prager, in writing the decision for the court, said, ''Owners of a cordless telephone located in a private residence who had been fully advised by the owner's manual as to the nature of the equipment, which involves the transmission and reception of FM radio waves, had no reasonable expectation of privacy.''

In other words, the Howards had no valid expectation of privacy when they decided to use a cordless telephone which was advertised as having a range of 50 feet and is basically a radio unit.

Prosecutors alleged the Howards used their cordless telephone for drug dealing.

The conversations, which Judge William F. Lyle ruled were inadmissible as evidence, were recorded in 1982 after a neighbor of the Howards picked them up while he was randomly tuning a standard AM-FM radio.

The neighbor told police about the conversations and the Kansas Bureau of Investigation provided a tape recorder and tapes and asked the neighbor to record more communications.

A similar case is pending in Rhode Island, but is not expected to be resolved until later this year.

During oral arguments before the court last month, Herbert R. Hess Jr., attorney for the Howards, urged the court not to set an ''illogical precedent'' by allowing the use of the recorded conversations.

He contended that what occurs in the privacy of the home is protected constitutionally and statutorily and said a 1968 federal law governing wiretaps applies in this case.

ap-ny-03-24 1742EDT

--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5760

From 1122952160647565096
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eec87ff0147da5a3,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15e263,eec87ff0147da5a3,start
X-Google-Attributes: gid15e263,public
X-Google-ArrivalTime: 1984-04-04 09:18:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.08 10/3/83; site psuvax.UUCP
Path: utzoo!watmath!clyde!akgua!psuvax!mancuso
From: mancuso@psuvax.UUCP (Pat Mancuso)
Newsgroups: net.ham-radio,net.micro.cpm

Subject: Xerox 820 REVEALED#2--Monitor Jump Tables
Message-ID: <947@psuvax.UUCP>
Date: Wed, 4-Apr-84 12:18:31 EST
Article-I.D.: psuvax.947
Posted: Wed Apr 4 12:18:31 1984
Date-Received: Thu, 5-Apr-84 02:00:11 EST
Organization: Pennsylvania State Univ.
Lines: 138

This article contains information about the monitor supplied with the
Xerox 820 board. The Jump table has more entries in it than the manual
lets on. I have figured out what some of the 'undocumented' ones
do, but the explanations that I have given may not show *all* of the
features/ramifications of the functions. There are 2 major jump tables
in the monitor, one which contains the low-level operations (F000-F042)
and one that contains jumps to the higher level operations (F7FD-F805). The
manual (from BG Micro) only mentions the first 14 entries in the first
table.

Monitor Jump Table: Low-level Operations

ADDR Name Function
---- ---- --
F000 INIT   Cold start entry
         In : none
         Out: Does not return

F003 PROMPT   Warm start entry
         In : none
         Out: Does not return

F006 CONST   Console status test
         In : none
         Out: Status in A, FF if char avail, 00 otherwise

F009 CONIN   Console input
         In : none
         Out: Character in A (loop until char avail)

F00C CRTOUT   Memory-mapped CRT output
F00F CRTOUT   "   "   "   "
         In : Character in A
         Out: none

F012 SIOST   SIO Port B status test
         In : none
         Out: Status in A, FF if char avail, 00 otherwise

F015 SIOIN   SIO Port B input
         In : none
         Out: Character in A (loop until char avail)

F018 SIOOUT   SIO Port B output

```
          In : Character in A
          Out: none

F01B SELECT   Disk drive select
          In : Unit number in C (if drive not ready, keep present one)
          Out: Status in A

F01E HOME Restore to track 0
          In : none
          Out: Status in A

F021 SEEK Seek track
          In : Track number in C
          Out: Status in A

F024 READ Read sector into memory
          In : Sector number in C, Buffer pointer in HL
          Out: Status in A

F027 WRITE    Write sector from memory
          In : Sector number in C, Buffer pointer in HL
          Out: Status in A

(The following jumps are not listed in the manual--info may not be complete)

F02A DUMP Dump memory to screen
          In : ??
          Out: ??

F02D HOUTHL   Outputs 4 hex digits contained in HL to CRT
          In : Number to be printed in HL
          Out: ??

F030 HOUTA    Outputs 2 hex digits contained in A to CRT
          In : Number to be printed in A
          Out: ??

F033 ??   ??
          In : ??
          Out: ??

F036 COUTA    Outputs character in A to CRT
          In : Char to be printed in A
          Out: ??

F039 ??   Prints CRLF (does more, though)
          In : ??
          Out: ??

F03C CONIN2   Gets char like CONIN, but also echoes it to screen
          In : ??
          Out: Char in A (loops until char avail)
```

```
F03F ??   ??
          In : ??
          Out: ??

F042 PRSTR    Outputs string to CRT.  String immediately follows call,
          terminated by 04.  Returns to instruction following 04.
          In : ?? (uses return address for start of string)
          Out: ??

(The following are monitor high-level function calls)

F7F0 DUMP Dump memory routine
          In : ??
          Out: ??

F7F3 ??   ??
          In : ??
          Out: ??

F7F6 MEM  Memory examine/change
          In : ??
          Out: ??

F7F9
F7FC
F7FF
F802 ??   ??
          In : ??
          Out: ??

F805 TYPWR    Typewriter
          In : ??
          Out: ??

---
Overall there is a smell of fried onions.  (fnord)

                                  :+: Pat Mancuso
                                  :+: Penn State University
                          Usenet:  :+: ...!psuvax!mancuso
                          Bitnet:  :+: mancuso@psuvax1


From -1684372907514305833
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15e263,593e4e838f8e9bac,start
X-Google-Attributes: gid15e263,public
X-Google-Thread: 151e61,593e4e838f8e9bac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-04-04 10:17:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.08 10/3/83; site psuvax.UUCP
Path: utzoo!watmath!clyde!akgua!psuvax!mancuso
```

From: mancuso@psuvax.UUCP (Pat Mancuso)
Newsgroups: net.ham-radio,net.micro.cpm
Subject: Xerox 820 REVEALED#3--Monitor and CRT info
Message-ID: <948@psuvax.UUCP>
Date: Wed, 4-Apr-84 13:17:51 EST
Article-I.D.: psuvax.948
Posted: Wed Apr 4 13:17:51 1984
Date-Received: Thu, 5-Apr-84 02:00:40 EST
Organization: Pennsylvania State Univ.
Lines: 119

This article contains information about the monitor commands and the
character set for the video display.

This is a list of the functions provided by the monitor for the Xerox 820.
They are accessable on powerup from the keyboard.

Command	Use

Dump Dad1 ad2
     Dumps addresses ad1 through ad2. If ad1 is omitted, dumps
     0000 through ad2. Output can be held/restarted by hitting
     a key. 2 CR's will stop function and return to monitor if
     you don't want to see the whole dump.

Memory   Mad1
     Prints contents of location ad1, and accepts changes. To
     change, just type the new value (2 digits), to skip forward
     use CR, to skip backward use '-', any other to exit.

Xtest   Xad1 ad2
     Test for memory errors. Prints a '+' each time a cycle is
     completed, 256 cycles for every combination to be tested.
     Prints bad addresses if it finds any. Dumb name for command.

Fill Fad1 ad2 val
     Fills memory ad1 through ad2 with val. Reads block back to
     check for memory errors and reports any if found.

Copy Cad1 ad2 ad3
     Copies memory from ad1 through ad2 to memory starting at ad3.
     Compares copy with original and reports any differences to
     check for memory errors.

Goto Gad1
     Does a CALL to ad1. Control can be passed back to the monitor
     with a RET instruction.

Read Runit trk sect
     Reads a sector from disk and prints it in dump format. If an
     error occurs, it lets you know. 'disk error XX Uaa Tbb Scc'
     is the error where aa=unit number, bb=track number, cc=sector

number, and XX is the 1771 error code:

bit	R/W	Seek/Restore/Select
7	Drive not ready	Drive not ready
6	WR Protected	(not used)
5	WR Fault	(not used)
4	Not found	Seek error
3	CRC error	CRC error
2	Lost data	Cannot restore
1	(not used)	(not used)
0	=1	=0

Boot B (or A)
Loads bootstrap loader from disk and jumps to it. Reads tr0 sec1 into 0080 and then jumps to 0080. Loader cannot use bottom 256 bytes of memory.

Type T
Converts millions(?) of dollars in research into an electric typewriter. Reads from keyboard and outputs to printer port. Does not output to CRT.

Input Iport
Inputs byte from specified port and displays it. CR will do the same for the next port, '-' will do it for the previous port, any other exits.

Out Oport val
Outputs value to specified port and returns to monitor. Useful for initializing ports.

CRT information

Control characters

Hex	Use
00-07	None
08	Cursor left
09	Horizontal tab (tab stop every 8 postions)
0A	Linefeed
0B	Cursor up (wraps back to bottom of screen)
0C	Cursor right
0D	Carriage return
0E-10	None
11	Clear to end of screen
12-17	None
18	Clear to end of line
19	None
1A	Clear Screen

1B Escape
1C-1D None
1E Home cursor
1F Print char between 00 & 1F (special characters)

ESC is used for XY cursor positioning. ESC+'='+rowchar+colchar is the form where rowchar and colchar is the desired row/col with 32 added to it (20 hex).

The special characters are hidden in the control character section. To print a special character, prefix it with 1F. To print more than one, prefix each one with 1F.

The character set is standard ASCII from 20-7F. The character set is repeated in 80-FF with a blink attribute. If the cursor is on a blank spot, the standard block cursor will be displayed. If the cursor is on a character, the blinking version of the character will automatically be displayed.

Overall there is a smell of fried onions. (fnord)

:+: Pat Mancuso
:+: Penn State University
Usenet: :+: ...!psuvax!mancuso
Bitnet: :+: mancuso@psuvax1

From -3934850995208451053
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2439e479a535a38c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-21 14:49:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: TAPR modem fix
Message-ID: <2227@allegra.UUCP>
Date: Sat, 21-Jan-84 17:49:08 EST
Article-I.D.: allegra.2227
Posted: Sat Jan 21 17:49:08 1984
Date-Received: Sun, 22-Jan-84 07:51:56 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 32

Relayed from TAPR:

Anouncement, Announcement, . . .
We've found a modification to the TAPR modem which
will significantly improve performance under
ALL conditons. The change is extremely easy
to make, and involves one part change, and one small
re-calibration.

Part change on the Beta Board: change C25 from .01
to .0047 microfarads.
Part change on kit board: Change C20 to .0047
(it's the same cap. as in Beta mod.)
Finally, for both boards, change the 2211 center
frequency from 1700 to 1635 by using the calibration
routine for 1700Hz by entering the calibration
routines, and typing:
cal:3/1127
which will calibrate your normal 1700 freq. to
1635 Hz.

This mod should really improve things ina big way, and
we even think it will permit operation to 1800 baud!

This mod is entirely due to the efforts
of N7CL, who has been responsible for a number
of suggestions in the past, all of which
have improved our lot. (For those of you with an
interest in why this mod works: the cap. change takes
the 2211 from an underdampted condition to critical.)
73
Dan

From -6465705611518186513
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f3f9b1826d124396,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-22 12:06:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!harpo!eagle!
allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: Tapr mod, part 2
Message-ID: <2230@allegra.UUCP>
Date: Sun, 22-Jan-84 15:06:39 EST
Article-I.D.: allegra.2230
Posted: Sun Jan 22 15:06:39 1984
Date-Received: Fri, 27-Jan-84 04:48:05 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 33

Relayed from TAPR:

ANNOUNCELMENT, ANNOUNCEMENT, ... (CONTINUED)

Well, we were just a bit premature with the modification indicated on
our last installment. There's nothing wrong with the mod: it's exactly
what's needed. Unfortunately, after you make this simple mod the

demodulator will begin putting out garbage. This is due to another undocumented feature: pin 7 of the 2211 should be pulled to +12 volts instead of +5 volts, as is currently the case. The result of increasing the voltage is to increase the loop gain and the hysteresis in the data comparator. This in turn prevents the output data from containing double pulses, which is what you will see if you improve the loop filter design by replacing C20 (C25 on Beta boards).

The solution is simple, but now we're getting into a slightly more complicated modification: you need to route +12 volts to the pullup on pin 7 rather than +5. Next, you have to break the connection between the data out (pin 7) and the jumper connection leading to pin 27 of the HDLC chip. Using a VN10 (like the one used to switch the PTT on the kit board), use the modulator output to switch the state of the line leading to this jumper connection.
Attach the drain of this FET to the lead going to the jumper, attach the source to the nearby ground, and use the output coming from pin 7 of the 2211 to switch the gate. One final thing: you will need to pull up the drain end of the FET with about 5 k to +5 volts.

If you do all all these things, the demodulator works unbelievably:
We've been regularly running 1800 baud on good links here, and at
1200 baud the thing is just about unstoppable.
73
Dan

From -6127410126485049297
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e019d091275dd3a0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-23 08:01:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cmcl2.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!cmcl2!sullivan
From: sullivan@cmcl2.UUCP
Newsgroups: net.ham-radio
Subject: Re: jan. call book - (nf)
Message-ID: <1677@cmcl2.UUCP>
Date: Mon, 23-Jan-84 11:01:49 EST
Article-I.D.: cmcl2.1677
Posted: Mon Jan 23 11:01:49 1984
Date-Received: Fri, 27-Jan-84 06:25:39 EST
Sender: sullivan@cmcl2.UUCP
Organization: New York University
Lines: 22

#R:hou5h:-32100:cmcl2:8700006:000:483
cmcl2!sullivan   Jan 23 11:01:00 1984

I can't seem to get mail to you, but then you don't seem to find my call in my postings either! Please add me to the call list.

And, now for some ham stuff.....

I am looking to buy a low-band rig in the coming months. I would prefer one with a general coverage receiver built in (like the Icom 751 or 745). Any experience with rigs like this? Thanks in advance.

David Sullivan, WA1TNS   UUCP: ...!floyd!cmcl2!sullivan
(212) 460-7287   ARPA: SULLIVAN@NYU
New York University

--

David Sullivan, WA1TNS   UUCP: ...!floyd!cmcl2!sullivan
(212) 460-7287   ARPA: SULLIVAN@NYU
New York University

From -2484487102550659852
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d68215eaf1e6d2c0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-24 09:33:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!burl!hou3c!hocda!houxm!
ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: ARRL DX bulletin Nr.3
Message-ID: <6518@mgweed.UUCP>
Date: Tue, 24-Jan-84 12:33:07 EST
Article-I.D.: mgweed.6518
Posted: Tue Jan 24 12:33:07 1984
Date-Received: Fri, 27-Jan-84 07:54:24 EST
Organization: AT&T Technologies - Montgomery Illinois
Lines: 58

QST DE K9EUI
DX BULLETIN NR 3   FROM ARRL HEADQUARTERS   NEWINGTON CT
JANUARY 20 1984   TO ALL RADIO AMATEURS

LACCADIVES. THE PRESENT GROUP SIGNING VU7WCY EXPECTS TO REMAIN ACTIVE UNTIL JANUARY 24. THEY HAVE BEEN WORKED ON 14195 KHZ BETWEEN 1200 AND 1300Z LONG PATH AND BETWEEN 1300 AND 1600Z SHORT PATH. THEY HAVE ALSO BEEN ON 21270 KHZ BETWEEN 1500 AND 1600Z AND ON 3897 KHZ FROM 0100 TO 0200Z.

COCOS ISLANDS. THE DXPEDITION SIGNING TI9J IS EXPECTED TO START UP AROUND JANUARY 21 AND WILL OPERATE ON ALL BANDS.

BURUNDI. 9U5JB CAN USUALLY BE FOUND NEAR 21275 TO 21280 KHZ AT 1900 TO 2000Z ON SUNDAYS. HE EXPECTS TO BE THERE FOR THE NEXT TWO YEARS. QSL VIA ON5NT.

TROMELIN. FR7AI/T HAS BEEN ACTIVE RECENTLY ON THE LOW END OF 15 AROUND 21010 TO 21025 KHZ FROM 1000 TO 1500Z.

DXCC DESK. DOCUMENTATION FROM TN8EE HAS BEEN RECEIVED AND APPROVED. CREDIT FOR TN8EE WILL BEGIN WITH THOSE APPLICATIONS DATED JANUARY 2 1984. THOSE PREVIOUSLY REJECTED FOR CREDIT WILL HAVE TO RESUBMIT THEM WITH THEIR NEXT ENDORSEMENT.

INDIA. VU2GI HAS BEEN WORKED ON 75 SSB AND 80 CW RECENTLY. LOOK FOR HIM ON 3897 AND 3521 KHZ FROM 0030 TO 0130Z.

PARAGUAY. ZP5XDW HAS BEEN WORKED ON 14025 KHZ AT 0100Z. HE PLANS TO BE ON 160 METERS ON JANUARY 28 AND 29 DURING THE CQ WW CONTEST. QSLS GO TO N4DW.

INDONESIA. YB0WR HAS BEEN WORKED RECENTLY ON 3790 KHZ AT 2130Z.

NIGER. 5U4MX HAS BEEN ACTIVE ON 3505 KHZ AT 0400Z.

CENTRAL AFRICAN REPUBLIC. TL8DX HAS BEEN WORKED ON 14225 KHZ AT 2230Z.

PITCAIRN ISLAND. YL VR6KY HAS BEEN CONTACTED FROM THE EAST COAST ON 3806 KHZ AT 1115Z.

SOLOMON ISLANDS. LOOK FOR H44IA ON 3787 KHZ AT 1215Z.

TOGO. 5V7JJ CAN BE FOUND ON 21005 KHZ AROUND 1700Z.

LLOYD AND IRIS. OPERATION IS EXPECTED TO BEGIN ANY DAY FROM CP6... BOLIVIA.

TUNISIA. 3V8AL IS ACTIVE ON 3505 KHZ AT 0330Z.

SAUDI ARABIA. HZ1AB HAS BEEN OPERATING ON 7001 KHZ AT 0400Z.

ICELAND. W3TB/TF WAS FOUND ON 3790 KHZ AT 2145Z.

From 3966594417512479787
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,239184a89bcbf38c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-24 15:10:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site umcp-cs.UUCP

Path: utzoo!linus!philabs!seismo!rlgvax!cvl!umcp-cs!prophet
From: prophet@umcp-cs.UUCP
Newsgroups: net.ham-radio
Subject: Shortwave Listening--Advice Wanted
Message-ID: <4874@umcp-cs.UUCP>
Date: Tue, 24-Jan-84 18:10:38 EST
Article-I.D.: umcp-cs.4874
Posted: Tue Jan 24 18:10:38 1984
Date-Received: Fri, 27-Jan-84 08:15:23 EST
Organization: Univ. of Maryland, Computer Science Dept.
Lines: 39

I am interested in resuming a former very much enjoyed hobby, that of shortwave listening. Back in the middle 70's when I was last active in this hobby, the receiver that I used was a 50's vintage National HRO-60, and some 50's vintage Collins and Hallicrafter's equipment. I had rigged several long-wire antennas in the trees of my back yard, and had very successful results.

I have two problems:

1) I no longer have access to the equipment I mentioned above, and so I need to purchase a receiver. I would prefer to purchase some equipment similar to what I had before, but a local radio shop that carries used ham equipment says that the cheapest used 50's vintage receiver they carry (which is a Hallicrafter's) costs $400, which is more than I wanted to spend. I would prefer to spend in the neighborhood of $250-300 for a new or used receiver. Is this too little, or can I get a decent receiver (new or used) for that price range? Sensitivity and Selectivity are very important, the accuracy of the tuning dial I feel I am willing to skimp on, as long as the receiver has good sensitivity and selectivity.

2) What to do about an antenna--I am now living in a high-rise Condominium, and therefore cannot erect an outside antenna, nor can I dangle anything from my windows. I have heard that the metal finger stop on rotary dial telephones can make an excellent antenna for SWL purposes, is this true? Or can someone else suggest something better?

I hope I have not bored you hams too muchh with my SWL questions, but I don't know where else I can get this information. I would appreciate any comments, advice, or suggestions on where and how much I can purchase a General Coverage receiver for, plus what to do about an antenna, would be greatly appreciated.

Thanks,
Dennis

--
Call-Me: Dennis Gibbs, Univ. of Md. Comp. Sci. Center.
UUCP: {seismo,allegra,brl-bmd}!umcp-cs!prophet
CSNet: prophet@umcp-cs
ARPA: prophet.umcp-cs@CSNet-Relay

From 4028034582465405386
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8dc6a4e641615dce,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-25 15:42:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 5/3/83; site ukc.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ukc!amradio
From: amradio@ukc.UUCP (Amateur.Radio)
Newsgroups: net.ham-radio
Subject: Talk on Vhf dx operating - University of Kent radio club
Message-ID: <4064@ukc.UUCP>
Date: Wed, 25-Jan-84 18:42:20 EST
Article-I.D.: ukc.4064
Posted: Wed Jan 25 18:42:20 1984
Date-Received: Fri, 27-Jan-84 11:16:53 EST
Organization: Computing Lab. Kent University, England
Lines: 8

There is to be a talk on vhf propogation and dx operating
by Paul (G4DCV) at the University of Kent at Canterbury on the
6th. of March (Tuesday) probably in the Electronics labs. More details from
amradio or vai S15.

From 2271876451556616164
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,239184a89bcbf38c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-26 05:53:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!harpo!ihnp4!ihuxf!
parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: Re: Shortwave Listening--Advice Wanted
Message-ID: <1968@ihuxf.UUCP>
Date: Thu, 26-Jan-84 08:53:20 EST
Article-I.D.: ihuxf.1968
Posted: Thu Jan 26 08:53:20 1984
Date-Received: Fri, 27-Jan-84 12:26:37 EST
References: <4874@umcp-cs.UUCP>
Organization: AT&T Bell Labs, Naperville, IL
Lines: 70

x

Older Receivers for SWL'ing

If you pay $400 for a 50's vintage receiver, you are paying
too much! Hamfests are full of older receivers selling from

$50 to $300, depending on model and condition. If you aren't adept at repairing older equipment, you must be extra careful when you buy. In this case, a private deal, along with a demonstration, may be better.

SWL'ing has changed quite a bit in 25 years. Today, digital frequency readout is almost a must! This realization was driven home after using an older Hammarlund HQ-180A receiver for a few weeks. The HQ-180A was a super, top of the line radio in the 60's, but the lack of digital readout, and resolution to only about 10 KHz wasn't good enough for modern, serious SWL activity.

Today's bands are much more crowded, so selectivity does indeed count. Cheaper solid state receivers are more prone to overload. If you live in an urban environment, with a high density of transmitters, this will be important.

My ICOM R-70, which covers 100 KHz through 30 MHz continuously, has digital readout and good selectivity. R-70's may be had new for about $600.

Indoor SWL Antennas

MFJ, Sony, and Dymek make active indoor antennas. These consist of a 3 or 4 foot rod and a solid state amplifier. The MFJ 1020 indoor unit I use works much better than expected, although still not as good as an outdoor antenna. It lists for $80 new, but was purchased at a hamfest for $20, and needed only one minor repair (replace a fiber washer).

You could go the route of running antenna wire around the inside walls of your high-rise condo. This is unsightly. A friend used the metal window frame in his Chicago apartment with an antenna tuner and 5 watt low power ham transceiver (Ten Tec Argonaut) to make dozens of foreign contacts. Making a two way DX contact is more difficult than just being able to hear a foreign station.

Remember, indoor antennas are particularly prone to locally generated interference, such as harmonics of the sweep circuit in a TV, home computer signals, light dimmer (SCR variety) noise, etc. Apartment dwellers are especially likely to encounter problems in this area, but don't

be
discouraged. Living several stories above the ground
can
help offset some of these handicaps.

I've never tried connecting anything more than a diode
and
headphones to the telephone finger stop. I'm glad people
are finding more uses for telephones!

More Information

There are other SWLs that read this news group.
If you need
more information, pick up a copy of Popular Communications
magazine on your newsstand. Although not particularly good
in technical areas, the frequency information and other
articles are very interesting.

--
==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5760

From -8121840137815222930
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,866e24bf5ff023c7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-27 05:35:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site aluxz.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!aluxz!mrh
From: mrh@aluxz.UUCP (HUDOCK)
Newsgroups: net.ham-radio
Subject: FORSALE TR-22C
Message-ID: <1184@aluxz.UUCP>
Date: Fri, 27-Jan-84 08:35:25 EST
Article-I.D.: aluxz.1184
Posted: Fri Jan 27 08:35:25 1984
Date-Received: Sat, 28-Jan-84 02:43:02 EST
Distribution: att.ham-radio,btl.ham-radio,net.ham-radio FORSALE DRAKE TR22C
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 10

2 MRTS EXC. COND.

CONTACT M.R. HUDOCK
ATT BELL LABS
8624-2220

aluxz!mrh
(215)770-2220

From 3801574074338385522
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a07bf7d06fdbd35b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-28 15:22:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!whuxle!pyuxll!
abnjh!u1100a!pyuxn!pyuxww!mhuxm!mhuxl!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: TAPR modem mods
Message-ID: <2241@allegra.UUCP>
Date: Sat, 28-Jan-84 18:22:45 EST
Article-I.D.: allegra.2241
Posted: Sat Jan 28 18:22:45 1984
Date-Received: Wed, 1-Feb-84 01:19:40 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 16

More information on the TAPR modem upgrades, forwarded from Tucson:

MODEM NOTES

I've received several requests for alternative part numbers for the replacement cap, resistor and mosfet. The cap can be a garden variety ceramic, the resistor can be a 5 percent 1/4 w, and the mosfet can be either the originally specified VN10KM (available in places from RS) or an IRFDZ13 mosfet, which is RS part number 276-2073, and which should be in stock everywhere.

Again, I'd like people to let me know how this modification works out when they've put it in. Thanks
73
Dan

From 5583103665800344348
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7ee490ff92fa188e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-30 05:25:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!burl!hou3c!hocda!houxm!
ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio

Subject: Dentron Radio Co. reborn (again!)
Message-ID: <1977@ihuxf.UUCP>
Date: Mon, 30-Jan-84 08:25:03 EST
Article-I.D.: ihuxf.1977
Posted: Mon Jan 30 08:25:03 1984
Date-Received: Wed, 1-Feb-84 01:42:02 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 28

x
At the Wheaton Illinois hamfest on January 29, 1984, a fellow distributed the following pamphlets:

****

DENTRON
LIVES THROUGH
COILCO ELECTRONICS, INC.

Coilco has purchased the inventory of Dentron Radio Co., Inc. Coilco has excellent and fast repair service and parts available for most Dentron Equipment. Our factory will be
manufacturing similar equipment in the near future.

For further information on parts and service, contact:

Coilco Electronics, Inc.
223 North Michigan Avenue
Edgerton, Ohio 43517
(419)298-2346

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==========
Bob Parnass, AT&T Bell Laboratories - ihnp4!ihuxf!parnass - (312)979-5760

From -5137149809803395073
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93e0104a114db2c9,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,93e0104a114db2c9,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 12f221,93e0104a114db2c9,start
X-Google-Attributes: gid12f221,public
X-Google-ArrivalTime: 1984-01-30 08:47:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!decvax!ittvax!ittral!shacklet
From: shacklet@ittral.UUCP (Cliff Shackleton)
Newsgroups: net.audio,net.ham-radio,net.misc

Subject: AM Stereo
Message-ID: <356@ittral.UUCP>
Date: Mon, 30-Jan-84 11:47:37 EST
Article-I.D.: ittral.356
Posted: Mon Jan 30 11:47:37 1984
Date-Received: Wed, 8-Feb-84 04:46:39 EST
Lines: 31

I recently heard a demo of the motorola AM stereo system (CQUAM) at the winter CES show. It was impressive,however they had their own transmitter; I don't know if they were operating at legal bandwidth.

They were promoting the fact that they were the system chosen by DELCO and had an Olds Cutlass set up as a listening room.

The preferred bandwidth response of the receiver is 10 KHz but the demo units had a wide and narrow bandwidth switch on them to accommodate stations broadcasting a preemphasized signal.

The People at the display were very helpful and in fact gave me data sheets on their decoder IC (MC13020) and two samples of the part to boot!

I have not built up the circuit yet (I am trying to scrounge up a 3.64 mHz ceramic resonator) but do have two stations in the Raleigh area broadcasting the signal.(WCHL Chapel Hill and WSOC Charlotte). I am planning to contact them to find out what kind of response they have been getting.(For all of you in other areas,Motorola has a list available of stations broadcasting CQUAM).

From 1420052372334321479
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb2e4ea135d9272a,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 105955,cb2e4ea135d9272a,start
X-Google-Attributes: gid105955,public
X-Google-ArrivalTime: 1984-01-30 09:44:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site aluxz.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!burl!hou3c!hocda!houxm!mhuxl!aluxz!mrh
From: mrh@aluxz.UUCP

Newsgroups: net.ham-radio,att.ham-radio
Subject: FORSALE
Message-ID: <1191@aluxz.UUCP>
Date: Mon, 30-Jan-84 12:44:11 EST
Article-I.D.: aluxz.1191
Posted: Mon Jan 30 12:44:11 1984
Date-Received: Wed, 1-Feb-84 01:38:34 EST
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 21

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FORSALE FORSALE FORSALE

DRAKE TR-22C 2METER TRANSCVR

Contact M. Hudock
ATT BELL LABS
8624-2220
(215)770-2220

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From -6603708558077842505
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b7c9e9d32292f6dd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-30 11:23:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: MUF program problem
Message-ID: <6662@mgweed.UUCP>
Date: Mon, 30-Jan-84 14:23:43 EST
Article-I.D.: mgweed.6662
Posted: Mon Jan 30 14:23:43 1984
Date-Received: Sun, 5-Feb-84 11:04:26 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 12

Has anyone out there tried the "MINIMUF" program on page 38 of
Dec. 1982 QST??

A friend has the program running on his VIC-20 but I can't get the
same results on my Heath H-8.

If anyone has used this program and can offer help, I can give
more details as to the problem areas.

Tnx Bob, K9EUI

From 8452431694251574382
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1d3886044953284,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-31 02:23:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site qtlon.UUCP
Path: utzoo!watmath!clyde!floyd!vax135!ukc!qtlon!jr
From: jr@qtlon.UUCP (Jim R Oldroyd)
Newsgroups: net.ham-radio
Subject: vhf convention
Message-ID: <171@qtlon.UUCP>
Date: Tue, 31-Jan-84 05:23:41 EST
Article-I.D.: qtlon.171
Posted: Tue Jan 31 05:23:41 1984
Date-Received: Wed, 8-Feb-84 01:44:01 EST
Organization: Quantime Ltd., London, WC1
Lines: 21

A date for your diaries:

              Saturday, March 24, 1984

                RSGB National VHF Convention
         Sandown Park Racecourse, Esher, Surrey, England.

The Convention in an Annual Event coordinated by the RSGB. There are
various attractions including:
     - trade exhibition
     - private stalls
     - equipment test facilities
     - presentation of trophies
     - lecture programme

Lectures include topics such as "GaAs fets for all", G4SWX, "The 50MHz
Story", G3WSN and "Phase Locking of Gunn Diodes", G3BNL.

If you want more info, let me know...
Hope to cu there,
     de G6EZI.

From -8867316369449165884

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c8af3dcdaeeaaf3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-31 06:29:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: ARRL DX Bulletin Nr. 4
Message-ID: <6684@mgweed.UUCP>
Date: Tue, 31-Jan-84 09:29:32 EST
Article-I.D.: mgweed.6684
Posted: Tue Jan 31 09:29:32 1984
Date-Received: Thu, 2-Feb-84 01:09:53 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 70

DX BULLETIN NR 4 FROM ARRL HEADQUARTERS NEWINGTON CT
JANUARY 27 1984 TO ALL RADIO AMATEURS

LACCADIVES. THE VU7WCY EXPEDITION HEADED BY GOPAL, VU2GDG, SHOULD HAVE GONE QRT YESTERDAY, AFTER SIXTEEN DAYS ON THE AIR. SEVERAL THOUSAND CONTACTS WERE MADE ON 80 THROUGH 10 METERS WITH MOST ACTIVE DXERS HAVING GOOD OPPORTUNITIES TO WORK THEM. QSL TO VU2GDG. IT IS RUMORED, BUT NOT CONFIRMED, THAT THE SAME GROUP WILL TRY FOR THE ANDAMAN ISLANDS LATER THIS YEAR.

EASTER ISLAND. CE0ERY CONTINUES TO BE A REGULAR ON 20 METER SSB. WATCH AROUND 0100 TO 0200 UTC AT 14200 KHZ.

TROMELIN. YOLAND, FR7AI/T, CONCLUDES HIS ONE MONTH VISIT TO TROMELIN IN ABOUT TWO WEEKS. YOLAND WORKS FOR THE REUNION METEOROLOGY BUREAU AND MAKES REGULAR TRIPS THERE FOR HIS WORK. LOOK AROUND 5 TO 10 KHZ FROM THE BOTTOM END OF 10, 15 AND 20 METER CW. QSL TO HIS CALLBOOK ADDRESS BUT PUT FRANCE INSTEAD OF REUNION ON THE ENVELOPE.

AMERICAN SAMOA. KARL, DL1VU, CONTINUES HIS PACIFIC TOUR, PRESENTLY SIGNING AH8/DL1VU. HE WILL GO NEXT TO 5W1DC, THEN ZM7VU. QSL AS ANNOUNCED. KARL ESPECIALLY LIKES 80 AND 40 METER CW.

MACAO. PHIL, VS6CT, WILL SIGN CR9CT FROM FEBRUARY 1 THROUGH 5. QSL TO PHILIP WEAVER, BOX 10727, HONG KONG.

BOLIVIA. LLOYD AND IRIS COLVIN AND THE YASME EXPEDITION ARE NOW IN SANTA CRUZ, BOLIVIA, SIGNING W6KG/CP6. QSL AS USUAL TO THE YASME FOUNDATION.

BURUNDI. JIM BULLINGTON, 9U5JB, U.S. AMBASSADOR TO BURUNDI, HAS FINISHED THE INSTALLATION OF HIS TOWER AND TRIBAND QUAD.

HE IS ESPECIALLY ACTIVE ON SSB EACH WEEKEND. LOW BAND ANTENNAS WILL BE UP SHORTLY. QSL VIA ON5NT.

160 METERS. NEW STATIONS ON 160 METERS INCLUDE CT2DV, CT2BQ, T77V AND FC8TT. THIS WEEKEND, DON'T FORGET THE CQ 160 METER CONTEST. WATCH FOR A LOT OF UNUSUAL DX, AS LOW BAND CONDITIONS HAVE BEEN EXCELLENT DURING THE PAST FEW DAYS.

SABLE ISLAND. A ONE DAY OPERATION WILL TAKE PLACE LATE THURSDAY JANUARY 26 OR EARLY FRIDAY JANUARY 27 BY WAYNE, VE1CBK. HE WILL SIGN CY9CBK AND PLANS TO BE ONLY ON 160 METER SSB.

QSL CARDS. CARDS FROM BOTH KL7/P, PRIBILOF, AND XU1SS ARE NOW BEING RECEIVED BY MANY AROUND THE WORLD. BOTH ARE BEAUTIFUL PICTURE QSL CARDS WORTH WAITING FOR.

CHAGOS. VQ9WT IS AN AMERICAN STATIONED AT DIEGO GARCIA. WATCH FOR WALT ON 15 OR 20 METER SSB AROUND 1400 TO 1600 UTC.

SOVEREIGN MILITARY ORDER OF MALTA. THE JANUARY EXPEDITION IS OFF. THERE IS A SMALL POSSIBILITY OF A FEBRUARY 18 AND 19 OPERATION, BUT APRIL ACTIVITY IS MORE LIKELY.

HEARD AND WORKED,

CALLSIGN	FREQUENCY	TIME
4K0ABY	7002 KHZ	0735Z
FB8WK	3508 KHZ	0125Z
OY7ML	3507 KHZ	0830Z
TA2TAT	21027 KHZ	1400Z
KL7GKY	1860 KHZ	0650Z
UK1PGO	21028 KHZ	1845Z

From 3349106529571251148
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bca5a123bb1777ee,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-02 06:59:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site druxm.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!drutx!druxm!n2ic
From: n2ic@druxm.UUCP (LondonSM)
Newsgroups: net.ham-radio
Subject: Re: MUF Program Problems
Message-ID: <761@druxm.UUCP>
Date: Thu, 2-Feb-84 09:59:09 EST
Article-I.D.: druxm.761
Posted: Thu Feb 2 09:59:09 1984
Date-Received: Wed, 8-Feb-84 01:27:12 EST
Organization: AT&T Information Systems Laboratories, Denver

Lines: 23

I was able to get the MINIMUF program from Dec. 82 QST working "correctly"
on my C-64.
I put the word "correctly" in quotes because I feel some erroneous
assumptions have been made in the design of MINIMUF.
Specifically, the program consistently predicts ridiculously high
MUF's during the summer months on northern paths.
For example, try the North America - Europe path for a solar flux
of around 200 (near the peak of the sunspot cycle) during July.
Then think about your own experiences on 10 meters during July a few
years ago.

I have another program, obtained third hand. The person who gave it
to me says it was in one of the RSGB publications. This program
gives the LUF (based on assumptions I don't know), MUF and HPF (highest
possible frequency). The results this program gives are far more
believable than MINIMUF. If there is interest, I will post on the
net.

73,

Steve London, N2IC
dnews

From 3077236449080559314
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b63474166d583e61,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-02 15:07:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5a.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!exodus!mhtsa!mh3bs!eagle!hou5h!hou5a!
pbn
From: pbn@hou5a.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 3A: Shuttle rebroadcasts
Message-ID: <510@hou5a.UUCP>
Date: Thu, 2-Feb-84 18:07:49 EST
Article-I.D.: hou5a.510
Posted: Thu Feb 2 18:07:49 1984
Date-Received: Wed, 8-Feb-84 01:46:25 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 15

qst de ad7i
hr arrl bulletin nr 3a from arrl headquarters
newington ct february 1, 1984
to all radio amateurs bt

the goddard amateur radio club in maryland will retransmit space

shuttle audio from 41b. they will operate as much as possible,
beginning one hour before the 1300 utc launch on february 3.
coverage will center on the spacewalks tentatively scheduled at 1200
utc on the 7th and 1030 utc on the 9th, each lasting several hours,
and the landing on the 11th. they will transmit on ssb on several of
the following frequencies, 3860, 7185, 14295, 21390 and 28650 khz,
and on 2 meter fm in the washington dc area on 147.45 mhz simplex ar

From -6615350296532509241
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb2e4ea135d9272a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-06 11:25:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site aluxz.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ulysses!mhuxl!aluxz!mrh
From: mrh@aluxz.UUCP (HUDOCK)
Newsgroups: net.ham-radio
Subject: FORSALE
Message-ID: <1195@aluxz.UUCP>
Date: Mon, 6-Feb-84 14:25:06 EST
Article-I.D.: aluxz.1195
Posted: Mon Feb 6 14:25:06 1984
Date-Received: Thu, 9-Feb-84 07:19:32 EST
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 28

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FORSALE

DRAKE TR-22c 2METER XCVR

12 chn.
AC/DC,PORTABLE

M.R.Hudock
ATT BELL LABS
8-624-2220
215-770-2220

****

From 784684927262137858
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,77c5f32c2034477f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-07 06:09:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!mcnc!akgua!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN 3A
Message-ID: <6854@mgweed.UUCP>
Date: Tue, 7-Feb-84 09:09:30 EST
Article-I.D.: mgweed.6854
Posted: Tue Feb 7 09:09:30 1984
Date-Received: Thu, 9-Feb-84 23:11:27 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 17

QST DE K9EUI
BULLETIN NR 3A   FROM ARRL HEADQUARTERS   NEWINGTON CT
FEBRUARY 1 1984   TO ALL RADIO AMATEURS

THE GODDARD AMATEUR RADIO CLUB IN MARYLAND WILL RETRANSMIT SPACE SHUTTLE AUDIO FROM 41B. THEY WILL OPERATE AS MUCH AS POSSIBLE, BEGINNING ONE HOUR BEFORE THE 1300 UTC LAUNCH ON FEBRUARY 3.

COVERAGE WILL CENTER ON THE SPACEWALKS TENTATIVELY SCHEDULED AT 1200 UTC ON THE 7TH AND 1030 UTC ON THZ 9TH, EACH LASTING SEVERAL HOURS, AND THE LANDING ON THE 11TH. THEY WILL TRANSMIT ON SSB ON SEVERAL OF THE FOLLOWING FREQUENCIES, 3860, 7185, 14295, 21390 AND 28650 KHZ, AND ON 2 METER FM IN THE WASHINGTON DC AREA ON 147.45 MHZ SIMPLEX.

From -2298329295105598816
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,42acad529c7bab2f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-07 06:10:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!mcnc!akgua!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL PROPAGATION BULLETIN NR 6
Message-ID: <6855@mgweed.UUCP>
Date: Tue, 7-Feb-84 09:10:03 EST
Article-I.D.: mgweed.6855
Posted: Tue Feb 7 09:10:03 1984

Date-Received: Thu, 9-Feb-84 23:13:02 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 27

QST DE K9EUI
PROPAGATION BULLETIN NR 6 FROM ARRL HEADQUARTERS NEWINGTON CT
FEBRUARY 6 1984 TO ALL RADIO AMATEURS

LATE JANUARY PROVIDED A GOOD EXAMPLE OF THE SOMETIMES ERRATIC AND ALMOST UNPREDICTABLE NATURE OF SOLAR ACTIVITY. AFTER MORE THAN TEN WEEKS OF THE LOWEST FLUX AND SUNSPOT NUMBERS SEEN SINCE 1977, THE SUN CAME ALIVE SUDDENLY AROUND JANUARY 20. SEVERAL SUNSPOT GROUPS, LARGER THAN ANY SEEN IN A YEAR, APPEARED ON AREAS OF THE SUN THAT HAD BEEN ALMOST QUIET IN RECENT MONTHS. THE FLUX ROSE 80 POINTS TO 178, THEN ON TO 180 BY THE 29TH. THIS WAS HIGHER THAN AT ANY POINT IN THE PAST YEAR. A STEEP DOWNTURN BEGAN FEBRUARY 1, THE FLUX DROPPING TO 118 BY THE 5TH.

WE WERE HEADED INTO A QUIET INTERVAL AS THIS BULLETIN WAS ISSUED, AND PROPAGATION WILL BE MORE STABLE, BUT WITH LOWER MUF, THROUGH ABOUT THE 17TH. THE FLUX AND THE MUF WILL PEAK AGAIN LATE IN THE MONTH, THOUGH PROBABLY NOT TO THE EXTENT THAT THEY DID IN LATE JANUARY. DX CONDITIONS WILL BE MOSTLY BETTER, MAINLY BECAUSE OF THE SUN'S MORE FAVORABLE POSITION FOR THE NORTHERN HEMISPHERE.

AMERICAN SUNSPOT NUMBERS FOR JANUARY 26 THROUGH FEBRUARY 1 WERE BETWEEN 91 AND 127 WITH A MEAN OF 100.3.

From -9081327970515954908
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f50eafc8bf8fc255,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-07 06:10:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!mcnc!akgua!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL DX BULLETIN NR 5
Message-ID: <6856@mgweed.UUCP>
Date: Tue, 7-Feb-84 09:10:22 EST
Article-I.D.: mgweed.6856
Posted: Tue Feb 7 09:10:22 1984
Date-Received: Thu, 9-Feb-84 23:14:09 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 44

QST DE K9EUI

DX BULLETIN NR 5 FROM ARRL HEADQUARTERS NEWINGTON CT
FEBRUARY 3 1984 TO ALL RADIO AMATEURS

THE GAMBIA. C53AL, LAW, HAS BEEN ACTIVE REGULARLY ON 3795 KHZ AT ABOUT 0000Z. QSL VIA KA2CDE. C53EK HAS BEEN ON 21277 KHZ AT 2100Z. QSL TO BOX 2596, BANJUL, THE GAMBIA.

CROZET. HENRY, FB8WJ, IS FREQUENTLY ON 0300 TO 0430Z ON 14225 KHZ. FB8WK IS ACTIVE ON RTTY. LOOK FOR JAN AT 0300Z ON 14090 OR 7080 KHZ.

SUDAN. GUENTER, DF3NZ/ST2, OPERATES 75 METER SSB, LOOKING FOR THE U.S. AT 2300Z. HE LOOKS FOR EUROPE ON 7040 KHZ AT 2400Z.

TRISTAN DA CUNHA. ZD9BV, ANDY, IS LEAVING TRISTAN DA CUNHA FOR A FEW WEEKS AND IS EXPECTED BACK BY MID FEBRUARY.

CONGO. TN8AJ, JUERG, IS CURRENTLY IN CONGO AND WILL BE THERE ABOUT TEN MORE DAYS. LOOK FOR HIM AT 0300Z ON 7003 OR 7200 KHZ. QSL VIA Y25LO.

ANDORRA. C31OF, TONY, IS ACTIVE ON 3795 KHZ AND ON 160 METER CW FROM 0100 TO 0400Z.

TOGO. 5V7NG OPERATES ON 14026 KHZ AT 1600Z. QSL TO WB4LFM.

WAKE ISLAND. AH3AA/KH9 IS ACTIVE DAILY ON 21292 KHZ AT 2030Z. QSL TOM VIA W1ISD.

MALAYSIA. 9M2AX, ROSS, IS ACTIVE ON 7003 KHZ AT 2300Z. QSL VIA 9V1TK.

160 METER CONTEST. ACTIVE IN LAST WEEK'S CONTEST WERE T32AF, A22ME, KC4CD, TG9NX AND VP2KBZ.

COCOS ISLANDS. N1CWH/TI9, TRACY, WILL BE ACTIVE FOR ABOUT ONE YEAR. QSL TO TI2SLC.

PITCAIRN ISLAND. LOOK FOR VR6KY ON 3806 KHZ AT 1100Z ON FRIDAYS WITH HER QSL MANAGER NE5C. KERRY HAS A GOOD SIGNAL ON THE EAST COAST.

From -7867164621868622577
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,333c29fd2446526b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-07 06:11:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!mcnc!akgua!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio

Subject: CRRL BULLETIN NR 3/4
Message-ID: <6857@mgweed.UUCP>
Date: Tue, 7-Feb-84 09:11:19 EST
Article-I.D.: mgweed.6857
Posted: Tue Feb 7 09:11:19 1984
Date-Received: Thu, 9-Feb-84 23:15:31 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 23

QST DE K9EUI
CRRL BULLETIN NR 3/4   FROM CRRL HEADQUARTERS   LONDON ONT
FEBRUARY 6 1984   TO ALL RADIO AMATEURS

CRRL ASSISTANT DIRECTOR VE4ADS HAS 50 REEL TO REEL TAPES OF 15 TO 60 SECOND RADIO SPOTS TO PROMOTE AMATEUR RADIO FOR USE AT BROADCAST STATIONS. CONTACT VE4ADS FOR DETAILS.

DOC'S REGULATORY AGENDA, PUBLISHED IN A RECENT CANADA GAZETTE, INCLUDES AMENDMENTS THAT WOULD AFFECT THE DOC PRACTICE OF GIVING SPECIAL ASSISTANCE TO AMATEUR RADIO CANDIDATES WHO ARE HANDICAPPED, EXEMPTION FROM LICENSING FOR SCANNING RECEIVERS, NEW REGULATIONS FOR CORDLESS TELEPHONES, POSSIBLE DELICENSING OF THE GENERAL RADIO SERVICE, REPEATER OPERATION ON 29 MHZ, SSTV ON HF, 6 MHZ WIDE ATV ON UHF AND ABOVE, FULL USE OF 144 TO 148 MHZ BY FOREIGN AMATEURS VISITING CANADA AND DEREGULATION OF THE 160 METER BAND.

CRRL HAS LEARNED THAT DOC FEES FOR AMATEUR RADIO STATION LICENCES WILL BE GOING UP FROM 13 TO 13.50 DOLLARS ANNUALLY BEGINNING THIS YEAR.

From -2529713585652265055
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bc4d810a6750723f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-07 06:11:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!mcnc!akgua!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL SATELLITE BULLETIN NR 35
Message-ID: <6858@mgweed.UUCP>
Date: Tue, 7-Feb-84 09:11:46 EST
Article-I.D.: mgweed.6858
Posted: Tue Feb 7 09:11:46 1984
Date-Received: Thu, 9-Feb-84 23:16:16 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 22

QST DE K9EUI
SATELLITE BULLETIN NR 35 FROM ARRL HEADQUARTERS NEWINGTON CT
FEBRUARY 6 1984   TO ALL RADIO AMATEURS

OSCAR 10 APOGEE TIMES AND LONGITUDES... FEB 7 0645Z AT 320W
1825Z AT 135W FEB 8 0604Z AT 311W 1744Z AT 126W

OTHER AMATEUR SATELLITE REFERENCE ORBITS... FEB 7   RS5 0042Z
AT 292W RS6 0148Z AT 316W RS7 0001Z AT 285W RS8 0138Z AT 305W

FEB 8 RS5 0036Z AT 292W RS6 0132Z AT 314W RS7 0150Z AT 314W
RS8 0135Z AT 306W

NOAA 7 EQUATOR CROSSING TIMES AND LONGITUDES... FEB 7   1732Z
AT 31W   1914Z AT 57W 2056Z AT 82W FEB 8 1719Z AT 28W 1901Z
AT 54W 2043Z AT 79W

NOAA 8 EQUATOR CROSSING TIMES AND LONGITUDES... FEB 7   1009Z
AT 142E   1150Z AT 117E   1331Z AT 91E FEB 8 1128Z AT 122E
1310Z AT 97E 1451Z AT 72E

From 6274526643652098507
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f94e8be53d55cd34,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-07 14:43:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxq.UUCP
Path: utzoo!linus!decvax!genrad!grkermit!masscomp!clyde!burl!we13!ihnp4!ihuxq!
hanson
From: hanson@ihuxq.UUCP
Newsgroups: net.ham-radio
Subject: What is my VUAC grid location ?
Message-ID: <613@ihuxq.UUCP>
Date: Tue, 7-Feb-84 17:43:19 EST
Article-I.D.: ihuxq.613
Posted: Tue Feb 7 17:43:19 1984
Date-Received: Thu, 9-Feb-84 22:30:26 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 17

Where can I find out my ARRL VUAC grid location (those funny numbers
like EN-61) used for VHF and UHF co-ordinating? The maps I have seen are
too large a scale for me to figure out which of 4 squares I am in. I
don't have an official map - I've just seen pictures in QST, and from
all I can tell, I am very close to where 4 of the squares meet. I am on the
near southwest side of Naperville, about a half mile or so NE of the
intersection of 75th and Gartner, as the crow flies. Does anyone locally
know where those lines meet, and which side I am on, or at least how I
find out ?

Thanks,

--

R. J. Hanson N9DZZ ihnp4!ihuxq!hanson
AT&T Bell Labs Room IW 1A-407
1100 East Warrenville Road
Naperville, IL 60566   312-979-7663

From -1583573992267395500
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d6fa924e70602896,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-08 05:58:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site rocksvax.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!exodus!mhtsa!mh3bs!eagle!harpo!
seismo!rochester!rocksvax!sam
From: sam@rocksvax.UUCP
Newsgroups: net.ham-radio
Subject: Indoor SWL Antennas
Message-ID: <1640@rocksvax.UUCP>
Date: Wed, 8-Feb-84 08:58:40 EST
Article-I.D.: rocksvax.1640
Posted: Wed Feb 8 08:58:40 1984
Date-Received: Fri, 10-Feb-84 02:35:49 EST
Organization: Xerox, Rochester, N.Y.
Lines: 13

x

A previous article claimed that running indoor swl antennas
was unsightly. This is not necessarily so. Using #30 AWG
wire-wrap wire (kynar) of the appropriate color, at the
top edge of the wall is almost undetectable. Use small
pieces of Scotch transparent tape to secure the wire every
three feet or so. The wire need not be straight; length is
more important. This long wire (say 50 ft.) with an
antenna tuner is a fine performer on all bands.

          sam (for Karl) @ Xerox

From 832884566143872945
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,951cc8b7f63d3717,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-08 19:16:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site proper.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!intelca!proper!guy
From: guy@proper.UUCP (Guy Hillyer)
Newsgroups: net.ham-radio
Subject: Question

Message-ID: <996@proper.UUCP>
Date: Wed, 8-Feb-84 22:16:14 EST
Article-I.D.: proper.996
Posted: Wed Feb 8 22:16:14 1984
Date-Received: Sat, 11-Feb-84 09:19:45 EST
Organization: Proper UNIX, San Leandro, CA
Lines: 5

What is "cellular communications?"

-guy-
decvax!decwrl!amd70!proper!guy

From -7375588952271517230
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8f826072c6c63f4d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-09 10:58:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou2f.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!houxm!hou2f!4391aas
From: 4391aas@hou2f.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: For Sale
Message-ID: <149@hou2f.UUCP>
Date: Thu, 9-Feb-84 13:58:26 EST
Article-I.D.: hou2f.149
Posted: Thu Feb 9 13:58:26 1984
Date-Received: Fri, 10-Feb-84 04:44:50 EST
Organization: Bell Labs, Holmdel NJ
Lines: 16

****
****
HQ-1 Mini-Quad with W2AU balun.
20-15-10-6 m.
Up only 3 months.
Asking 95 bucks.
****
List price now $182.50
Feb 84 QST (pg.134)
(And that's with no balun)
****
Al Schwarz ND2K
(201) 949-3337
****
****

From -1671956736818967834

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bfa80d7ab4517198,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-10 00:33:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83 SMI; site sun.uucp
Path: utzoo!linus!decvax!decwrl!sun!gnu
From: gnu@sun.uucp (John Gilmore)
Newsgroups: net.ham-radio
Subject: Possible Ham use of Westar VI?
Message-ID: <446@sun.uucp>
Date: Fri, 10-Feb-84 03:33:40 EST
Article-I.D.: sun.446
Posted: Fri Feb 10 03:33:40 1984
Date-Received: Tue, 14-Feb-84 01:25:55 EST
Organization: Sun Microsystems, Inc.
Lines: 19

Is it possible for the Ham Radio fraternity to get some use out of the
un-commercially-usable Westar VI satellite? Hams are used to tracking
satellites in 200 mile high orbits, right? Just think of it -- a $50
million satellite to play with...and you thought Oscar was fun!

From: alb@alice.UUCP
Newsgroups: net.columbia
Subject: Westar VI Found in Perfect Health
Message-ID: <2575@alice.UUCP>
Date: Sun, 5-Feb-84 19:48:05 PST

A ground station in California today (Sunday) found the
Westar VI satellite and succeeded in changing its atiitude
so that it could recharge itself from the sun. Communications
were established with the satellite, and Western Union
reported it to be in perfect health. However, its elliptical
orbit of 195 to 205 miles renders it virtually useless, and with
no way to boost the orbit, Western Union is calling the satellite
a total loss.

From -8613013096373771031
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27f1fcf31424737d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-10 08:36:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site auvax.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!alberta!auvax!tech
From: tech@auvax.UUCP (Richard Loken)
Newsgroups: net.ham-radio
Subject: Canadian ham gear for sale
Message-ID: <316@auvax.UUCP>
Date: Fri, 10-Feb-84 11:36:40 EST
Article-I.D.: auvax.316

Posted: Fri Feb 10 11:36:40 1984
Date-Received: Sat, 11-Feb-84 09:40:05 EST
Organization: Athabasca U, Edmonton
Lines: 28

I have decided to take a shovel and clean out the shack. So....

FOR SALE

```
HEATHKIT  HR10B    80-10M reciever - this unit is on the thin
                   leading edge of crummy performance
     $50.00
       hHR1680  80-10M receiver - unassembled
             that's how inactive I am          200.00
       DX60B    80-10M CW-AM transmitter            50.00
       HG10B    VFO                              20.00
WILSON    1402SM   6ch 2m 2w handheld FM transceiver
            34-94  94-94  16-76  28-88  46-06  52-52
            nicads are getting old and lazy        150.00
```

The DX60B/HG10B is primitive by today's standard but works very well.

Any offers?

Richard Loken
Athabasca University
Edmonton, Alberta
ihnp4!alberta!auvax
ubc-vision!alberta!auvax

From -4221978004125570857
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c1b8ba57acfefe5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-10 11:45:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!eagle!hou5h!jak
From: jak@hou5h.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: feb. call book
Message-ID: <328@hou5h.UUCP>
Date: Fri, 10-Feb-84 14:45:44 EST
Article-I.D.: hou5h.328
Posted: Fri Feb 10 14:45:44 1984
Date-Received: Sat, 11-Feb-84 09:38:44 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 96

The following is a list of net.ham-radio readers/contributers:

call - name - mail address
wb0oew - elwood downey - kpno!fargovax!downey
wa0tzm - bob cherry - cherry.es@parc-maxc
ka1age - david kaufman - decvax!yale-comix!kaufman
k1dk - dan kahn - alice!danny
w1gd - gerry kersus - houxp!4421gjk
ka1gng - rob wood - decvax!genrad!rob
ka1hkn/6 - richard currier - mplvax!rec
wa1qos - jim mchale - wivax!cadmus!jim
wa1tns - david sullivan - floyd!cmcl2!sullivan
w1xr - jim - foxvax1!jtw
w1yu- the yale amateur radio club - decvax!yale-comix!w1yu
N2ARX - ? - fortune!wdl1!carol
K2DI - Bill Brelsford - mhuxv!wmb
N2FC - Rob Botwin - houxn!rb
KB2IB - Gerry Prins - hou2g!3123gcp
kb2bq- michel - denber.wbst@parc-maxc
ky2d - jim kutsch - hou5h!jak
wa2hpd - Jim McEowen - npoiv!jrm
wb2iau - bill mitchell - whuxk!wjm
n2ic - steve london - druxm!n2ic
wa2ilb - r. mark ziegler - solar!rmz or houti!rmze.
w2iol - ron mcconnell - harpo!whuxb!rcmcc
wa2jfm - bob moore - seismo!rochester!ritcv!tropix!rcm
kb2jg - joe massi - hogpc!4432jrm
kb2jn - jeff duntemann - duntemann.wbst@parc-maxc
ka2jqh - adam buchsbaum - research!alb
n2nd - dick maybach - hou2a!4373rlm
wb2nzl - robert i. block - eagle!pyuxdd!rib
k2ph - bob schreibmaier - houxb!3435ras
k2pzh - art kamlet - cbosgd!cbdkc1!ask
n2xs - joe stephany - stephany.wbst@parc-maxc
n2yk - bruce mcnair - houxq!bem2 or houti!bem
wb2zlf - kevin redden - hou5h!kfr
WA3YMH - Louis A. Mamakos - rlgvax!cvl!louie
n3bjk - Andrew Jay Schneider - {qubix amd70 hplabs}!cae780!ajs
w3eve - steve - foxvax1!scs
wa3mez - rod hart - burdvax!bpa!cp1!hart
wa3sbt/4 - bob fabrizio - rlgvax!bob
n4bgq - joe flake - mcnc!ncsu!ncrcae!flake
k4bgv - bob koch - bpa!cp1!koch
w4bzl - joe ragland - duke!mcnc!ecsvax!jrr
k4eo - larry - stewart.pa@parc-maxc
k4frs - jack buchanan - duke!mcnc!ecsvax!jwb
k4fum - jere sandidge - akgua!sb1!scbhq!jts
wb4fwl - ned danieley - duke!ndd
ai4g - allen r. shuff - burl!ars
wb4ioj - mike kersenbrock - teklabs!tekmdp!michaelk
w4izi - lindsay cleveland - ihnp4!akgua!glc
wa6azp - alan larson - sri-unix!larson or larson@sri-kl

wa6bev - robert r. henry - ucbvax!rrh
wb6bxw - lauren weinstein - decvax!vortex!lauren or lauren@rand-unix
kd6cq - scott c. gray - gray.es@parc-maxc.
ka6epi - dave ross - seismo!sytek!syteka!ross
wa6faa - jim gillogly - decvax!randvax!jim
n6fqr - bill danielson - danielson.pa@parc-maxc
ko6g - steven schoch - ucbvax!schoch@miro
kd6hr - pete - mcafee.es@parc-maxc
n6hrn - scott hinnrichs - sri-unix!smh or smh@sri-kl
n6hrn- scott m. hinnrichs - sri-unix!smh
n6icx - dan halbert - ucbvax!halbert, halbert.pa@parc-maxc
wa6igj - tony cardenas - cardenas.es
ka6klr - bob piety - seismo!hao!hplabs!piety
wa6lbv - gordon schlesinger - ucbvax!sdcsvax!sdchema!lbv
wb6ohf/7 - phil nelson - uw-june!phil
no6q - trung nguyen - tnguyen.es@parc-maxc
wb6qms - don - duncan.es@parc-maxc
n6zi - al - noscvax!agordon
KA7RFO - Peter Allan - seismo!hao!kpno!allan
n7ahz - Jim Rees - uw-beaver!apollo!rees
ad7i - paul newland - houxp!ad7i
wa7kgx - chuck forsberg - cdi!caf
wa7njk - tom kloos - tektronix!tekecs!tomk or decvax!orca!tomk
w8um - u. of mich amateur radio club - mb2c!uofm-cv!tom
wb8wwv - greg ordy - decvax!cwruecmp!ordy
wb9aax - phil gunsul - we13!prg
wb9bkr - al whaley - pur-ee!uiucdcs!whaley
ku9c - steve wheatley - inuxg!wheatley
w9cc - larry card - inuxc!lrcard
k9eui - bob roehrig - we13!rjr
kx9g - stephan v. bechtolsheim - purdue!svb
wb9jxn - daniel m. doyle - ihnp4!ihuxr!dmdoyle
kn9k - richard fitch - inuxd!rcf
ka9mqi - gary spahn - inuxd!gls
wn9nbt - dave chasey - pur-ee!wn9nbt
ka9q - phil karn - allegra!karn
ka9qbg - mike griffith - inuxe!in0095
wb9rky - bill malcolm - ihuxi!bmalc or ih1ap!bmalc
aj9s - robert s. parnass- ihnp4!ihuxf!parnass
kk9w - dave andersen - pur-ee!kk9w
(no call) - stan king - clyde!stan
(no call) - steven bellovin - ulysses!smb

Send additions/corrections to KY2D, Jim Kutsch -- hou5h!jak

From -8276303257392355821
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b838f2e2c08af128,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-13 09:18:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site druxm.UUCP

Path: utzoo!linus!decvax!harpo!ulysses!mhuxl!ihnp4!drutx!druxm!n2ic
From: n2ic@druxm.UUCP (LondonSM)
Newsgroups: net.ham-radio
Subject: RSGB MUF Prediction Program
Message-ID: <782@druxm.UUCP>
Date: Mon, 13-Feb-84 12:18:18 EST
Article-I.D.: druxm.782
Posted: Mon Feb 13 12:18:18 1984
Date-Received: Wed, 15-Feb-84 05:53:15 EST
Organization: AT&T Information Systems Laboratories, Denver
Lines: 145

Here is a program for MUF estimation which I have found to give
considerably better results than MINIMUF.
It is reputedly from one of the RSGB publications.
The version listed below runs on Commodore 64 BASIC.

I find the "Short Path" results to be rather accurate, but the
"Long Path" results somewhat questionable.

Any comments, questions, etc. would be welcome.

Steve London, N2IC/0

```
90 P1=3.141592654:J9=P1/180
100 INPUT "ROUTE";L$
110 REM North Latitude is positive, south latitude is negative
130 INPUT "LATITUDE";L6
135 REM West Longitude is negative, East Longitude is positive
140 INPUT "LONGITUDE";W6
160 W6=-W6
165 REM Input month as a number from 1 to 12
170 INPUT "MONTH";M0
180 INPUT "SOLAR FLUX";SF
185 S0=625*(SQR((0.73)^2-.0032*(65-SF))-.73)
190 REM L5 is hard-coded for the originating station latitude
200 L5=40
205 REM W5 is hard coded for the originating station longitude
210 W5=-105
220 P$="S"
230 IF ABS(W5-W6)<120 THEN 260
240 INPUT "LONG OR SHORT PATH";P$
260 D0=15
270 W1=-(W5-180*(1+SGN(W5-.001)))*J9
280 W2=-(W6-180*(1+SGN(W6-.001)))*J9
290 L1=L5*J9:L2=L6*J9
300 PRINT CHR$(147):PRINT "ROUTE:  ";L$;"    MONTH:";M0;"   S.S. NO:  ";S0
330 W3=W2-W1+.001
340 W3=P1*(1-SGN(W3))+W3
360 H1=SIN(L1)*SIN(L2)+COS(L1)*COS(L2)*COS(W3)
```

```
370 G1=ATN(SQR(1-H1*H1)/H1)+P1/2*(1-SGN(H1))
380 IF P$="L" THEN G1=P1+P1-G1
400 H0=INT(1.59*G1)+1
420 H9=(SIN(L2)-H1*SIN(L1))/SIN(G1)/COS(L1)
430 H9=ATN(SQR(1-H9*H9)/H9)+P1/2*(1-SGN(H9))
440 H9=H9*SGN(W3-P1)*SGN(P1-G1)
450 H9=H9+P1*(1-SGN(H9))
460 PRINT "LONG/SHORT:  ";P$;"    BEARING:  ";INT(H9/J9+.5):PRINT
480 PRINT"GMT        HPF       MUF       LUF":PRINT
500 Y6=ATN(1/TAN(G1/(H0+1))-.952/SIN(G1/(H0+1)))
510 IF Y6<.314 THEN Y6=.314
520 Y6=1/SQR(1-.965*COS(Y6)^2)
530 Y1=.0172*(10+(M0-1)*30.4+D0)
540 Y2=.409*COS(Y1)
550 Y1=.13*SIN(Y1)+.156*SIN(Y1+Y1)
570 H9=(SIN(L1)-COS(G1)*SIN(L2))/SIN(G1)/COS(L2)
590 M9=SIN(2.5*G1/H0)
600 M9=1+2.5*M9*SQR(M9)
610 K1=1-.5/H0
620 FOR N=0 TO 1
640 L9=COS(G1*K1)*SIN(L2)+SIN(G1*K1)*COS(L2)*H9
650 L0=P1/2-(ATN(SQR(1-L9*L9)/L9)+P1/2*(1-SGN(L9)))
660 W0=(COS(G1*K1)-SIN(L2)*L9)/COS(L2)/COS(L0)
670 W0=ATN(SQR(1-W0*W0)/W0)+P1/2*(1-SGN(W0))
680 W0=P1-SGN(P1-G1*K1)*(P1-W0)
690 W0=W3+W0*SGN(W3-P1)*SGN(P1-G1)+W1-.001
700 W0=W0-P1*(1-SGN(P1+P1-W0))
720 T0=3.82*W0+12+Y1
730 T0=T0-12*(1+SGN(T0-24))*SGN(ABS(T0-24))
740 IF COS(L0+Y2)>-.26 THEN 780
750 T1(N)=0
760 GOTO 900
780 T1(N)=(-.26+SIN(Y2)*L9)/(COS(Y2)*COS(L0)+.001)
790 T1(N)=12-ATN(T1(N)/SQR(ABS(1-T1(N))))*24/P1
810 T7=T0-T1(N)/2
820 T3(N)=T7+12*(1-SGN(T7))*SGN(ABS(T7))
840 T7=T0+T1(N)/2
850 T4(N)=T7-12*(1+SGN(T7-24))*SGN(ABS(T7-24))
860 C0(N)=ABS(COS(L0+Y2))
880 T9(N)=9.7*(C0(N)^8)
890 IF T9(N)<.1 THEN T9(N)=.1
900 K1=1-K1
920 M(N)=M9*.75*((12/T1(N)-1)*SGN(INT(12/T1(N)))+1)
930 M(N)=M(N)*(1+S0/100*(1-(T1(N)/12-1)*SGN(INT(T1(N)/12))))
940 L9=ABS(L0+.21*SIN(W0+.35))
950 G2=.5
960 IF L9<P1/4 THEN 990
970 M(N)=M(N)*(1-.1*(1+COS(L9*4)))
980 G2=.2
990 L(N)=SIN(L9*4)*G2
1010 G8(N)=P1*T9(N)/T1(N)
1020 T7=T1(N)/T9(N)
1030 IF T7>85 THEN T7=85
```

```
1040 G7(N)=C0(N)*G8(N)*(EXP(-T7)+1)
1050 G6(N)=G7(N)*EXP((T1(N)-24)/2)
1060 NEXT N
1070 FOR T5=0 TO 23
1080 J9=100
1090 K9=0
1100 FOR N=0 TO 1
1110 G0=0
1120 G3=P1/2
1130 IF T1(N)=0 THEN 1320
1140 IF T4(N)<T3(N) THEN 1190
1160 IF (T5-T3(N))*(T4(N)-T5)>0 THEN 1210
1170 GOTO 1370
1190 IF (T5-T4(N))*(T3(N)-T5)>0 THEN 1370
1210 T6=T5+12*(1+SGN(T3(N)-T5))*SGN(ABS(T3(N)-T5))
1220 G4=P1*(T6-T3(N))/T1(N)
1230 T8=(T3(N)-T6)/T9(N)
1240 IF ABS(T8)>85 THEN T8=85*SGN(T8)
1250 G0=C0(N)*(SIN(G4)+G8(N)*(EXP(T8)-COS(G4)))
1260 G3=P1/2
1270 IF T6-T3(N)>T1(N)/2+3 THEN 1290
1280 G3=(T6-T3(N))/(T1(N)/2+3)*G3
1290 G3=G3*(1+SGN(L(N)))
1300 IF G0<G6(N) THEN G0=G6(N)
1320 G2=SQR(7+45*SQR(G0/(1+G8(N)*G8(N))))
1340 G2=G2*M(N)*1.27*(1+SIN(G3)*L(N))
1350 GOTO 1430
1370 T6=T5+12*(1+SGN(T4(N)-T5))*SGN(ABS(T4(N)-T5))
1380 G4=P1*(T6-T4(N))/(24-T1(N))
1390 G0=G7(N)*EXP((T4(N)-T6)/2)
1400 G3=G4+(P1-G4)/4*(1+SGN(L(N)))
1410 G4=0
1420 GOTO 1320
1430 IF G2<J9 THEN J9=G2
1450 Y8=.2:IF T1(N)=0 THEN 1520
1460 IF T1(N)*G4=0 THEN 1520
1470 Y9=C0(N)*SIN(P1*(T6-T3(N))/T1(N))
1480 IF Y9>.174 THEN 1510
1490 Y8=(ATN(SQR(1-Y9*Y9)/Y9)*180/P1-76)^(-.4)
1500 GOTO 1520
1510 Y8=Y9^(.3)
1520 Y9=(3.4+.00544*S0)*Y8*Y6
1530 IF Y9>7 THEN 1560
1540 Y9=.91*Y9-.37
1550 GOTO 1570
1560 Y9=(1.33*Y9-3.31)^(2)/7
1570 IF K9<Y9 THEN K9=Y9
1580 NEXT N
1590 PRINT T5,INT(J9+.5),INT(J9/1.27+.5),INT(K9+.5)
1620 NEXT T5
1640 INPUT "ENTER TO CONTINUE";II$:GOTO 90
```

From 3490776431131245738
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,267915b82cb5e683,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-15 13:45:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!ulysses!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: comments on RSGBMUF program
Message-ID: <7081@mgweed.UUCP>
Date: Wed, 15-Feb-84 16:45:34 EST
Article-I.D.: mgweed.7081
Posted: Wed Feb 15 16:45:34 1984
Date-Received: Thu, 16-Feb-84 05:43:02 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 70

I loaded the "RSGB MUF" program into my computer last night and thought
I would submit the following comments:

After a few changes it at least ran. plugging in numbers from the
sample run shown in the minimuf article in Dec. 1982 QST, I do not
get anywhere near the same muf values. So there are still problems.

To get anything to happen I first had to remove the (N) contained
in various lines from 750 - 1470. (What is this (N) for anyway?)

The SF (for solar flux) in lines 180 and 185 had to be changed as
my system calls more than one letter a string, so I called it S1.

I then changed lines 190-210 so I could enter any "local" latitude
and longitude.

The result (other than the muf readings) was that the "BEARING"
printout was erroneous in some cases. I was a bit confused by
the positive or negative for North, South, East, West.
North and East should always be positive, and South and West
should always be negative. Removing line 160 corrected the
BEARING error.

I still do not know what "ROUTE" means. It does not enter into
any calculations so I removed line 100. Later I removed line 300
as being unnecesary.

Line 460 was changed to just print out the bearing.

Finally, the following changes/additions were made:

```
1640 INPUT "ENTER 1 TO CONTINUE, 0 TO END";Z1
1650 IF Z1=1 THEN 80
```

```
1660 IF Z1=0 THEN END
```

The following lines were redone (with 185, 220-290, 330-450 as is):

```
80 CLEAR
90 P1=3.141592654:J9=P1/180
100 INPUT "MONTH NO.= ";M0
110 INPUT "SOLAR FLUX NO.= ";S1
115 REM SOUTH LATITUDES & WEST LONGITUDES ARE ENTERED AS NEGATIVE NO'S
120 INPUT "YOUR LATITIDE= ";L5
130 INPUT "YOUR LONGITUDE= ";W5
140 INPUT "DX LATITUDE= ";L6
150 INPUT "DX LONGITUDE= ";W6
460 PRINT "BEARING IS "INT(H9/J9+.5)"DEGREES"
465 X1=-ATN(H1/SQR(-H1*H1+1))+1.5708
470 X2=X1*3956.1
475 PRINT "RANGE IS "X2"MILES":PRINT
```

Some of this was done in order to enter thing in a more orderly order.
Lines 460-475 are from the ARRL antenna handbook to print out
the distance to the DX station.

Final comments:

I believe there is something wrong with the "long or short path" lines.
I'm not sure what, but something does not look right. This is in lines
220, 230, 240, 260, 380, and 530. Any comments?????

Also, is it possible that in line 530, it should be .01745 instead of
.0172? (pi/180)???

Thanks again to N2IC for posting this program. I would be interested
in what luck others have with it too, as well as what computer you use.

73 Bob K9EUI


```
From -576972599581048593
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ec67564cb89c319,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15e263,9ec67564cb89c319,start
X-Google-Attributes: gid15e263,public
X-Google-ArrivalTime: 1984-02-17 06:23:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihlts.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!ihnp4!ihlts!w9skd
From: w9skd@ihlts.UUCP (F. R. "Dick" George)
Newsgroups: net.micro.cpm,net.ham-radio
Subject: RBBS Message Transfer
Message-ID: <366@ihlts.UUCP>
Date: Fri, 17-Feb-84 09:23:31 EST
Article-I.D.: ihlts.366
```

Posted: Fri Feb 17 09:23:31 1984
Date-Received: Sat, 18-Feb-84 02:11:24 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 21

I have heard rumors of CP/M RBBS late nite, automatic message exchange networks (like UUCP?). I am interested in using this technique to exchange mail between my Packet Radio RBBS and other packet LAN's. If anyone has any information on protocols, people doing this, please let me know.

If such systems don't exist, I have a draft for an inter-lan message protocol and would be interested in sharing my ideas.

Comment in passing. I have modified BYE.ASM into several versions. One allows access from a normal VHF-FM Amateur RTTY station, and the other from a Amateur Packet Radio station though my TNC. I am currently using RBBS.BAS for the bulletin board, but am in the process of writing a system that is specially tailored to Amateur Packet Radio (using ideas stolen from Frank Wancho's RBBS4.C).

--
+++++

F. R. "Dick" George
ihnp4!ihlts!w9skd
312/979-4390

From -450021851873522872
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f0053a45ec20b396,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-17 10:48:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxq.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!ihnp4!ihuxq!hanson
From: hanson@ihuxq.UUCP (R. J. Hanson)
Newsgroups: net.ham-radio
Subject: VUCC grid responses and program
Message-ID: <676@ihuxq.UUCP>
Date: Fri, 17-Feb-84 13:48:25 EST
Article-I.D.: ihuxq.676
Posted: Fri Feb 17 13:48:25 1984
Date-Received: Sat, 18-Feb-84 03:21:45 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 278

Thanks to everyone who called/mailed me responses. I now know my grid location is EN51ws, which will be printed up on my new (only) QSL cards.

I received two programs to do the calculation. One is in BASIC from Dave

Knight KA1DT. If I ever get my home system up and running, it will be resident for sure. The other came from Ron McConnell W2IOL, and is in F77 Fortran. He sent me a followup message giving me permission to post it to the net for him, since his new machine (whuxi) is having problems. So here goes. Only one note about data entry: a leading zero MUST be used where called for. For example, use "09.3" minutes, NOT " 9.3".

For anyone with UN*X 5.0, just "f77 vucc.f; a.out" and answer the prompts:

```
C      13 January 1983 and 18 October 1983
C
C                      Ronald C. McConnell, W2IOL
C
C       VUCC, VHF/UHF Century Club grid locator
C
C      "VUCC" determines the grid location in the "Maidenhead"
C         format as adopted by the IARU
C         given latitude and longitude of a QTH
C            in integer degrees ( no decimal ) and decimal minutes
C
C       The 1st and 2nd characters ( A to R ) define an area, "field,"
C          20 degrees in longitude by 10 degrees in latitude.
C
C       The 3rd and 4th characters ( 0 to 9 ) define an area, "square,"
C          2 degrees in longitude by 1 degree in latitude.
C
C       The 5th and 6th characters ( a to x ) define an area, "sub-square,"
C          5 minutes in longitude by 2.5 minutes in latitude.
C            ( not needed for VUCC award )
C
C                    dd mm.m    ddd mm.m
C        Examples:  40 46.9 N, 074 41.4 W   =  FN20ps
C                   40 46.9 S, 074 41.4 E   =  ME79if
C
C       Note that latitude and longitude define a point.
C                 Grid location defines an area.
C
C        Characters 1, 3 and 5 start at 180 longitude and
C           increase alphabetically or numerically to the east.
C           Points on grid boundaries round to the east.
C
C        Characters 2, 4 and 6 start at 90 south latitude and
C           increase alphabetically or numerically to the north.
C           Points on grid boundaries round to the north.
C
C      See QST, January 1983, p49, "VHF/UHF Century Club Awards"
C           &   October 1983, p52, "Grid Locators for South America"
C        by John F. Lindholm, W1XX, ARRL Com. Mgr.
C
C       VUCC is written in a subset of fortran 77.
C
      integer lad, lod
```

```
      real lam, lom
      character n, s, e, w, grid(6)
      character ncap, scap, ecap, wcap
      character lans, loew, ok, yes, no, ycap
C
      data yes, no, ycap/ 'y', 'n', 'Y' /
      data n, s, e, w / 'n', 's', 'e', 'w' /
      data ncap, scap, ecap, wcap/ 'N', 'S', 'E', 'W' /
C
      print 1000
 1000 format( ' VUCC Grid Location from Latitude and Longitude' /
     &          10( ' ' ), 'W2IOL  10/18/83 version' / )
C
   30 print 1300
 1300 format( ' Latitude? dd mm.m N/S' )
      read( 5, 1310 ) lad, lam, lans
 1310 format( i2, 1x, f4.1, 1x, a1 )
      if( ( lans .eq. s ) .or. ( lans .eq. scap ) )
     &   then
            lans = scap
         else
            lans = ncap
      end if
      print 1320, lad, lam, lans
 1320 format( i2, 1x, f4.1, 1x, a1, '    ok? y/n:' )
      read( 5, 1340 ) ok
 1340 format( a1 )
      if( ( ok .eq. no ) .or. ( ok .eq. ncap ) ) go to 30
C
   40 print 1400
 1400 format( ' Longitude? ddd mm.m W/E' )
      read( 5, 1420 ) lod, lom, loew
 1420 format( i3, 1x, f4.1, 1x, a1 )
      if( ( loew .eq. e ) .or. ( loew .eq. ecap ) )
     &   then
            loew = ecap
         else
            loew = wcap
      end if
      print 1450, lod, lom, loew
 1450 format( i3, 1x, f4.1, 1x, a1, '    ok? y/n:' )
      read( 5, 1340 ) ok
      if( ( ok .eq. no ) .or. ( ok .eq. ncap ) ) go to 40
C
      call mhgrid( lad, lam, lans, lod, lom, loew, grid )
      print 1900, grid
 1900 format( ' VUCC grid location = ', 6a1 )
C
      print 2000
 2000 format( / 30( '-' ) / ' more? y/n:' )
      read( 5, 1340 ) ok
      if( ( ok. eq. no ) .or. ( ok .eq. ncap ) )
     &   then
```

```
            stop
         else
            go to 30
       end if
C
       end
C
C
C
       subroutine mhgrid( lad, lam, lans, lod, lom, loew, grid )
C       07 January 1983,   18 October 1983
C        Ronald C. McConnell, W2IOL
C
       integer lad, lod, latdeg, lngdeg
       real lam, lom, latmin, lngmin
       character lans, north, south, loew, east, west
       character grid(6), ltrbig(26), ltrsml(26), nbrchr(10)
C
       data north, south, east, west / 'N', 'S', 'E', 'W' /
       data nbrchr / '1', '2', '3', '4', '5', '6', '7', '8', '9', '0' /
       data ltrsml/ 'a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i',
      &             'j', 'k', 'l', 'm', 'n', 'o', 'p', 'q', 'r',
      &             's', 't', 'u', 'v', 'w', 'x', 'y', 'z' /
       data ltrbig/ 'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I',
      &             'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R',
      &             'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z' /
C
C         Translate latitude relative to 90 south, South Pole
C
       if( lans .eq. north )
      &   then
C             "north"
            latdeg = 90 + lad
            latmin = lam
         else
C             "south"
            if( lam .eq. 0.0 )
      &        then
                latdeg = 90 - lad
                latmin = 0.0
             else
                latdeg = 89 - lad
                latmin = 60.0 - lam
             end if
       end if
C
C         Translate longitude relative to 180 meridian
C              increasing toward the east
C
       if( loew .eq. west )
      &   then
C             "west"
            if( lom .eq. 0.0 )
```

```
     &         then
                  lngdeg = 180 - lod
                  lngmin = 0.0
               else
                  lngdeg = 179 - lod
                  lngmin = 60.0 - lom
            end if
         else
C             "east"
            lngdeg = 180 + lod
            lngmin = lom
      end if
C
C         NOTE: integer arithmetic with lngdeg and latdeg
C               meaning all fractional parts truncated
C
C         First Character = capital letter, A to R,
C               based on 20 degree longitude block from 180 meridian
C
      k = ( lngdeg / 20 ) + 1
C          Meridian 180
      if( k .eq. 19 ) k = 18
C
      grid( 1 ) = ltrbig( k )
C
C         Second Character = capital letter, A to R,
C                based on 10 degree latitude block from South Pole
C
      k = ( latdeg / 10 ) + 1
C         North Pole
      if( k .eq. 19 ) k = 18
C
      grid( 2 ) = ltrbig( k )
C
C         Third Character = number, 0 to 9, based on
C               position within 20 degree longitude block
C
      lotwty = lngdeg / 20
      k = ( lngdeg - ( lotwty * 20 ) ) / 2
      if( k .eq. 0 ) k = 10
      grid( 3 ) = nbrchr( k )
C
C         Fourth Character = number, 0 to 9, based on
C                position within 10 degree latitude block
C
      latens = latdeg / 10
      k = latdeg - ( latens * 10 )
      if( k .eq. 0 ) k = 10
      grid( 4 ) = nbrchr( k )
C
C         Fifth Character = small letter, a to x,
C           in 5 minute longitude blocks
C           based on odd or even longitude degrees
```

```
C
C             Note: real variables latmin and lngmin "ifix"ed
C                   to integers
C
      if( loew .eq. east )
     &   then
            j = ifix( lngmin / 4.999 ) + 1
         else
            j = ifix( lngmin / 5.001 ) + 1
      end if
      neveod = ( lngdeg / 2 ) * 2
      if( lngdeg .eq. neveod )
     &   then
C                "even"
             k = j
         else
C                "odd"
             k = 12 + j
             if( k .eq. 25 ) k = 1
      end if
      grid( 5 ) = ltrsml( k )
C
C          Sixth Character = small letter, a to x,
C                in 2.5 minute latitude blocks
C
      if( lans .eq. north )
     &   then
            k = ifix( latmin / 2.499 ) + 1
         else
            k = ifix( latmin / 2.501 ) + 1
      end if
      if( k .eq. 25 ) k = 1
      grid( 6 ) = ltrsml( k )
C
C    South Pole grid( 2 ) = "A", North Pole grid( 2 ) = "R"
C
      if( lad .eq. 90 ) then
         grid( 1 ) = ltrbig( 1 )
         grid( 3 ) = nbrchr( 10 )
         grid( 4 ) = nbrchr( 10 )
         grid( 5 ) = ltrsml( 1 )
         grid( 6 ) = ltrsml( 1 )
      end if
C
C        Meridian 180
C
      if( lod .eq. 180 ) then
         grid( 1 ) = ltrbig( 1 )
         grid( 3 ) = nbrchr( 10 )
         grid( 5 ) = ltrsml( 1 )
      end if
C
      return
```

```
      end
-------------------------------------------------------------------------------
--
```


R. J. Hanson N9DZZ ihnp4!ihuxq!hanson
AT&T Bell Labs Room IW 1A-407
1100 East Warrenville Road
Naperville, IL 60566   312-979-7663

From -3005778578444885880
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef30afa6f33ac4a2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-20 14:52:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!eagle!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: UoSAT-B Status Report
Message-ID: <2288@allegra.UUCP>
Date: Mon, 20-Feb-84 17:52:35 EST
Article-I.D.: allegra.2288
Posted: Mon Feb 20 17:52:35 1984
Date-Received: Tue, 21-Feb-84 08:12:30 EST
Organization: Bell Communications Research, Inc
Lines: 43

UOSAT-B SPACECRAFT STATUS REPORT   19TH FEB 1984 VAFB

First, apologies for the lack of communication from the UO-B team over the week or so - things have been just a little hectic with the final preparations for the launch of the UOSAT-B spacecraft still currently scheduled for 09:59 on 1st March. The UO-B launch crew of ten have been busy at the Western Test Range, Vandenberg Air Force Base, Ca carrying out experiment calibrations, last-minute de-bugging, application of the thermal surfaces and final, careful cleaning. The primary payload, LANDSAT-D', is a super-clean mission and has necessitated a rigorous contamination control program for UO-B, culminating in an unscheduled thermal vacuum bake-out when it was feared that some contamination had been picked up on the spacecraft from the original thermal vacuum tests. Cold finger and swab samples showed up some pthalate ester contaminants from the chamber mechanisms and there was a concern that some of this may have been deposited on the spacecraft interior where it would be difficult and dangerous to remove using solvents.

The spacecraft was shipped down to MDAC (Huntingdon Beach) for a bake-out and contamination assessment on Thursday 16th. The tests commenced that night and within a few hours it became apparent that the spacecraft was, in fact, extremely clean and the planned

24/36 hour tests were cancelled and the spacecraft removed from
the chamber and shipped (with a clean bill of health) back to
VAFB! This unscheduled activity has delayed the final tests and
preparations of UO-B and the spacecraft will now mate with the
launch vehicle at 1600 hrs local on Wednesday 22 Feb.

So far, the preparations for launch have proceeded well. There
have been a number of problems of which only a few remain
unresolved and work continues to overcome these in the next few
days. Time is very short and everyone is putting maximum effort
to ensuring the best possible spacecraft within this extremely
tight schedule. The spacecraft systems and experiments are
functioning well - a detailed Flight Status Report will be
released after the vehicle mate (if the telemail facility still
exists!) and details of the spacecraft calibrations/data formats
will appear over the next few days.

Thanks to all those who have sent their good wishes,
 Martin Sweeting G3YJO   UOSAT

From 8403574178398636211
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ddf375018f9ae12,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-20 14:55:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!floyd!harpo!eagle!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: UoSAT-B Prelim Telemetry
Message-ID: <2289@allegra.UUCP>
Date: Mon, 20-Feb-84 17:55:03 EST
Article-I.D.: allegra.2289
Posted: Mon Feb 20 17:55:03 1984
Date-Received: Tue, 21-Feb-84 08:13:20 EST
Organization: Bell Communications Research, Inc
Lines: 183

Following is some very preliminary info on the default telemetry format
for UOSAT-B. Some items have not yet been calibrated, others have been
but the equations aren't where I am. This is being entered during some
planned s/c down time. The DCE is in good shape so
I've got some spare time.

2/19/84   Preliminary UOSAT-B telemetry data format. Currently
           incomplete. All equations subject to change. Some
           item names will change, although the actual function of
           all telemetry items has now been fixed.

Checksummed TLM format. Channel format is:

nnvvvc

nn - channel number
vvv - value
c - To compute checksum, convert each ascii
character into the binary, e.g. 'A', which
comes in as 41H becomes 0AH. Exclusive OR
all 5 values. Convert the lower four bits
of the XOR answer to an ascii hex digit, e.g.
0BH becomes 42H, this character is the checksum.

A 1Eh cursor home character preceeds UOSAT-2 in each frame
The number after UOSAT-2 on the header line is the date
in YYMMDDWHHMMSS, W is day of week, 0-6. The date below
is bogus, it wasn't initialized after the s/c was powered
up. The s/c was in the Bldg 836 clean room when this
frame was taken. Some of the data is valid.

```
UOSAT-2           0000010040621

00515101039B020112030102040235050 28F06025107031508032909026D
10515011000012005613010314000515000416000717736418736B19736A
20515321032222667723000124001725000726077427736728736829736 9
30515231016532284F330000340007350305360005377366383 53E39353F
40763641000542688043000744000045056246000247736148353949346C
50561751017252661653263154111055852F56000357306758736F593539
602105617BC762800C630041641003651C0E66140567340668000E69000F
```

Non-checksummed frame. Everything is the same as above expect
that the checksum character becomes a space. This format is
more pleasing to the human eye.

```
UOSAT-2           0000010040630

00515 01035 02010 03010 04023 05028 06025 07031 08032 09026
10515 11000 12004 13010 14000 15000 16000 17736 18736 19736
20515 21032 22667 23000 24001 25000 26077 27736 28736 29736
30515 31016 32284 33000 34000 35028 36000 37736 38353 39353
40763 41000 42688 43000 44000 45055 46000 47736 48353 49346
50561 51017 52661 53256 54111 55852 56000 57306 58736 59353
60210 617BC 62800 63004 64100 651C0 66140 67340 68000 69000
```

A dwell format is also available, in which only selected
channels are displayed. The channels can come out in any

order, in checksummed or non-checkedsummed format. The
UOSAT-2 and time stamp may or may not be included.

Chan #	Name	Equation
00	Solar array current -Y	I=1.9(516-N) ma
01	Nav mag X axis	H=(0.1485N-68) uT
02	Nav Mag Z axis	H=(0.1523N-69.3) uT
03	Nav mag Y axis	H=(0.1507N-69) uT
04	Sun sensor #1	its
05	Sun sensor #2	a
06	Sun sensor #3	bit
07	Sun sensor #4	tricky
08	Sun sensor #5	at this
09	Sun sensor #6	time (Ian)
10	Solar array current +Y	I=1.9(516-N) mA
11	Nav mag (Wing) temp	T=(330-N)/3.45 C
12	Horizon sensor	
13	Spare (tbd)	
14	DCE RAMUNIT current	
15	DCE CPU current	
16	DCE GMEM current	
17	Facet temp +X	T=(480-N)/5 C
18	Facet temp +Y	T=(480-N)/5 C
19	Facet temp +Z	T=(480-N)/5 C
20	Solar array current -X	I=1.9(516-N) mA
21	+10V line current	I=0.97N mA
22	PCM voltage +10V	V=0.015N V
23	P/W logic current (+5V)	I=0.14 (N<=500)
24	P/W Geiger current (+14V)	I=0.21N mA
25	P/W Elec sp.curr (+10V)	I=0.096N mA
26	P/W Elec sp.curr (-10V)	I=0.093 mA
27	Facet temp -X	T=(480-N)/5 C
28	Facet temp -Y	T=(480-N)/5 C
29	Facet temp -Z	T=(480-N)/5 C
30	Solar array current +X	I=1.9(516-N) mA
31	-10V line current	I=0.48N mA
32	PCM voltage -10V	V=0.036N V
33	1802 comp curr (+10V)	I=0.21N mA
34	Digitalker current (+5V)	I=0.13N mA (N<=500)
35	145MHz beacon power O/P	P=(2.5N - 275) mW (N>200)
36	145MHz beacon current	I=0.22N mA
37	145MHz beacon temp	T=(480-N)/5 C
38	Command decoder temp (+Y)	T=(480-N)/5 C
39	Telemetry temp (+X)	T=(480-N)/5 C
40	Solar array voltage (+30V)	V=(0.1N-51.6) V
41	+5V line current	I=0.97N mA
42	PCM voltage +5V	V=0.0084N V
43	DSR current (+5V)	I=0.21N mA (n<=500)
44	Command RX current	I=0.92N mA
45	435MHz beacon power O/P	P=(2.5N-200) mW N>175
46	435MHz beacon current	I=0.44N mA
47	435MHz beacon temp	T=(480-N)/5 C

48	P/W temp (-X)	T=(480-N)/5 C
49	BCR temp (-Y)	T=(480-N)/5 C
50	Battery charge/dischg curr	I=8.8(N-513) mA
51	+14V line current	I-5N mA
52	Battery voltage (+14V)	V=0.21N V
53	Battery cell volts (MUX)	See below
54	Telemetry current (+10V)	I=0.02N mA
55	2.4GHz beacon power O/P	P=((N+50)**2)/480 mW
56	2.4GHz beacon current	I=0.45N mA
57	Battery temp	T=(480-N)/5 C
58	2.4GHz beacon temp	T=(480-N)/5 C
59	CCD imager temp	T=(480-N)/5 C
60-67	Status points 1-96	

(the status points have been keyed in already at surrey, I'm not
 going to key them in again, there are a whacking great lot of them
 (I'm picking up the lingo), I'll append them when Mac forwards the
 file from the UK.)

Multiplexed Battery Scheme (channel 53)

Six consecutive TLM frames will carry the total volts, the following ten frames will be individual cells, starting with cell #10. Each cell has its own equation.

Cell	Equation
ALL	
10	
9	
8	
7	
6	(not available, in Surrey)
5	
4	
3	
2	
1	

The DCE currents will have small counts even when the DCE is off. We think this is due to the +10 coming in from the Nav Mag lines. If the Nav Mag is off (unlikely), the DCE currents will be zero when both it and the Nav Mag are off.

Ps, the beacon freqs are
145.825 (yes, the same as uos-1, but
 6 hours apart)
435.025
2401.0

The tones are the same as uosat-1, but the
sense of mark and space are reversed.

Harold.

From 3943288286678593563
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6aa2f73b8b35a782,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-21 10:32:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!exodus!mhtsa!mh3bs!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT-B Status Points
Message-ID: <2292@allegra.UUCP>
Date: Tue, 21-Feb-84 13:32:00 EST
Article-I.D.: allegra.2292
Posted: Tue Feb 21 13:32:00 1984
Date-Received: Wed, 22-Feb-84 02:25:23 EST
Organization: Bell Communications Research, Inc
Lines: 114

Posted: Tue Feb 21, 1984   4:23 AM EST   Msg: FGIE-1721-8241
From: HPRICE
To: docs
Subj: uosat-b status points

Here are the status points as supplied by Mac back at Surrey, and
updated at VAFB. This is preliminary and subject to change. Some
items are undefined. These values are encoded in TLM channels
60-67, 12 points per channel, e.g. channel 60 has status bits
1,2,3,4,5,6,7,8,9,10,11,12 in that order. Thus, 60400 means status
point 2 is set, 1, and 3-12 are reset.

UOSAT-B STATUS POINTS - Prelim 2/20/84

1	145 MHZ GENERAL DOWNLINK POWER	OFF/ON
2	435 MHZ ENGINEERING DOWNLINK POWER	OFF/ON
3	2401 MHZ ENGINEERING DOWNLINK POWER	OFF/ON
4	TELEMETRY CHANNEL MODE SELECT	RUN/DWELL
5	TELEMETRY CHANNEL DWELL ADDRESS LOAD	OFF/ON
6	TELEMETRY CHANNEL DWELL ADDRESS SOURCE	GND/COMPUTER
7	PRIMARY SPACECRAFT COMPUTER POWER	OFF/ON
8	PRIMARY SPACECRAFT COMPUTER ERROR COUNT	BIT-1
9	PRIMARY SPACECRAFT COMPUTER ERROR COUNT	BIT-2
10	PRIMARY SPACECRAFT COMPUTER BOOTSTRAP	PROM/UART
11	PRIMARY SPACECRAFT COMPUTER ERROR COUNT	BIT-3

12	PRIMARY SPACECRAFT COMPUTER BOOTSTRAP	A/B
13	GRAVITY GRADIENT BOOM DEPLOYMENT PYROS	SAFE/ARM
14	GRAVITY GRADIENT BOOM DEPLOYMENT PYROS	HOLD/FIRE
15	GRAVITY GRADIENT BOOM DEPLOYMENT	SAFE/ARM
16	GRAVITY GRADIENT BOOM DEPLOYMENT	HOLD/DEPLOY
17	GRAVITY GRADIENT BOOM DEPLOYMENT	EXTEND/RETRACT
18	ATTITUDE CONTROL MAGNETORQUERS	SAFE/ARM
19	ATTITUDE CONTROL MAGNETORQUER -X	ON/OFF
20	ATTITUDE CONTROL MAGNETORQUER -Y	ON/OFF
21	ATTITUDE CONTROL MAGNETORQUER -Z	ON/OFF
22	ATTITUDE CONTROL MAGNETORQUER	REVERSE/FORWARD
23	435 MHZ PSK MODE	NRZI/NRZIC
24	2401 MHZ PSK MODE	NRZI/NRZIC
25	ATTITUDE CONTROL MAGNETORQUERS	HIGH/LOW POWER
26	DIGITALKER EXPT. POWER	OFF/ON
27	CCD CAMERA EXPT. POWER	OFF/ON
28	CCD CAMERA EXPT. INTEGRATION PERIOD	BIT 0
29	CCD CAMERA EXPT. INTEGRATION PERIOD	BIT 1
30	CCD CAMERA EXPT. VIDEO AMP. GAIN	BIT 0
31	CCD CAMERA EXPT. VIDEO AMP. GAIN	BIT 1
32	DSR POWER	OFF/ON
33	DSR MODE	READ/WRITE
34	DSR MODE	RUN/RESET
35	RADIATION DETECTORS GEIGER-A EHT POWER	OFF/ON
36	RADIATION DETECTORS GEIGER-B EHT POWER	OFF/ON
37	RADIATION DETECTORS GEIGER-C EHT POWER	OFF/ON
38	ELECTRON SPECTROMETER SENSOR EHT POWER	OFF/ON
39	DCE EXPERIMENT POWER	OFF/ON
40	DCE EXPT.	RESET/RUN
41	DCE EXPT. PROM SELECT	A/B
42	DCE EXPT. CPU CLOCK RATE SELECT	0.9/1.8 MHZ
43	NAVIGATION MAGNETOMETER POWER	OFF/ON
44	SPACE DUST EXPERIMENT POWER	OFF/ON
45	SPARE DUST EXPERIMENT LEVEL SELECT	BIT 0
46	BCR STATUS	0/1
47	435 MHZ DOWNLINK MODULATION SELECT	AFSK/PSK
48	2401 MHZ DOWNLINK MODULATION SELECT	AFSK/PSK
49		
50		
51		
52		
53		
54	COMMAND WATCHDOG ENABLE	
55	COMMAND WATCHDOG RESET	
56	145 MHZ DOWNLINK DATA SELECT	A
57	145 MHZ DOWNLINK DATA SELECT	B
58	145 MHZ DOWNLINK DATA SELECT	C
59	145 MHZ DOWNLINK DATA SELECT	D
60	145 MHZ DOWNLINK DATA SELECT	E
61	145 MHZ DOWNLINK DATA SELECT	F
62	145 MHZ DOWNLINK DATA RATE	A
63	145 MHZ DOWNLINK DATA RATE	B
64	435 MHZ DOWNLINK DATA RATE	A

65	435 MHZ DOWNLINK DATA RATE	B
66	435 MHZ DOWNLINK DATA RATE	C
67	PARTICLE/WAVECOUNTER CONTROL	COUNT/RESET
68	DOWNLINK LOCKOUT	ENABLE/DISABLE
69		
70		
71		
72		
73	P/W channel plate control BIT 0	
74	P/W channel plate control BIT 1	
75	P/W channel plate control BIT 2	
76	SPACE DUST	
77	SPACE DUST	
78	SPACE DUST	
79	SPACE DUST	
80	SPACE DUST	
81	SPACE DUST	
82	SPACE DUST	
83	SPACE DUST	
84	DSR WRITE CYCLE COMPLETE	
85	1802 CWO OUTPUT	
86	1802 TLM PORT (MSB)	
87	1802 TLM PORT	
88	1802 TLM PORT	
89	1802 TLM PORT	
90	1802 TLM PORT	
91	1802 TLM PORT	
92	1802 TLM PORT	
93	1802 TLM PORT	
94	1802 TLM PORT	
95	1802 TLM PORT	
96	1802 TLM PORT (LSB)	

From -8788274421751515064
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb4dde68c8ab66f7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-21 10:33:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!exodus!mhtsa!mh3bs!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT-B Orbital Params
Message-ID: <2293@allegra.UUCP>
Date: Tue, 21-Feb-84 13:33:27 EST
Article-I.D.: allegra.2293
Posted: Tue Feb 21 13:33:27 1984
Date-Received: Wed, 22-Feb-84 02:25:38 EST
Organization: Bell Communications Research, Inc
Lines: 50

Phil,

Here are some parameters from a set of 200 that I thought you might
be able to use to get a set of AMSAT standard keplerian elements for
UOSAT-B.

Launch.   17:57.00 UTC March 1, 1984
UOSAT-B deploy. Launch + 4300 seconds.

Following values are at the time of UOSAT-B deploy.

Rotation of line of Apsides, + is in the direction
     of the orbit: -3.12357 deg/mean solar day

Ascending node right ascension (ECI system): 175.3923 deg

Eccentricity: .4139783 E-3

Apogee: 372.62 n.mi

Perigee: 369.46 n.mi

Inclination: 98.25967 deg

Nodal regression, east is positive: 1.00073 deg/mean solar day

True anomoly: 226.9766 deg

Argument of perigee: 174.16983

Instantaneous geocentric latitude: 40.629187

Instantaneous longitude, positive west: -29.650437

Period: 98.5 min

Time since perigee: 3726.775 sec (may be bogus, since 50 seconds
                                   later, this value is 3549.826)

Let me know if there are any other values or info you need.

The figures I've got are for the second stage. The last time the second
stage and uosat-b are in similar orbits is launch +5453 seconds. At that
time, the lat. is 67.208371 and long. is 127.766825.

[The preceeding messages have been relayed from Harold Price, NK6K, who
is with the U of Surrey launch campaign team at Vandenburg Air Force
Base. I will be posting additional information on the launch of UoSAT-B
as it arrives. -Phil, KA9Q]

From -4608062663643531356

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b4d098618a209c4b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-21 12:49:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!exodus!mhtsa!mh3bs!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT-B Events, elements
Message-ID: <2294@allegra.UUCP>
Date: Tue, 21-Feb-84 15:49:31 EST
Article-I.D.: allegra.2294
Posted: Tue Feb 21 15:49:31 1984
Date-Received: Wed, 22-Feb-84 02:29:43 EST
Organization: Bell Communications Research, Inc
Lines: 48

I just made a phone call to Millstone Hill and received the following
information regarding the UoSAT-B launch events, relative to T = 0:

```
Event                   hh:mm:ss (relative to liftoff)
1st stage main engine cutoff:    00:03:47
Vernier engine cutoff:      00:03:53
Stage 1 separation:         00:03:55
Stage 2 ignition #1:        00:04:00
Stage 2 cutoff #1:      00:10:50
Stage 2 ignition #2:        00:54:04
Stage 2 cutoff #2:      00:54:17
Landsat separation:         00:59:10
Stage 2 maneuver start:     00:59:15
Stage 2 maneuver stop:      00:59:52
Uosat-B separation:         01:11:40
Stage 2 ignition #3:        01:30:53 distancing maneuver
Stage 2 cutoff #3:      01:30:58
Stage 2 ignition #4:        01:36:43 depletion (deorbit?) burn
Stage 2 cutoff #4:      01:37:05
```

I also got some numbers for preliminary orbital elements. These do not
necessarily agree exactly with the numbers Harold gave, so I suspect
either they were derived from a different source, or apply to different
instants in the launch sequence. The only major apparent discrepancy is
in RAAN, but we've seen this problem before - it probabably has only to
do with a different convention in coordinate systems.

```
Satellite: uosat-b
Epoch time:      84061.79768519 (separation)
   Thu Mar  1 19:08:40.000 1984 UTC
Element set:     prelaunch
Inclination:       98.2596 deg
RA of node:       124.2426 deg
Eccentricity:    0.0004100
Arg of perigee:   174.4207 deg
```

```
Mean anomaly:     226.7604 deg
Mean motion:   14.61025794 rev/day
Decay rate:              0 rev/day^2 (none given)
Epoch rev:               0
Semi major axis:  7065.080 km
Anom period:     98.560888 min
Apogee:            690.030 km (These I computed from other MH numbers,
Perigee:           684.236 km and agree pretty closely with Harold's numbers)

From this, I can see that the first pass visible over the eastern US
will occur just after 00:00 UTC on 2 Mar.

Phil


From -1287247855994436803
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf4c684131f2b2b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-21 17:40:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!watmath!clyde!burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL DX BULLETIN NR 7
Message-ID: <7254@mgweed.UUCP>
Date: Tue, 21-Feb-84 20:40:18 EST
Article-I.D.: mgweed.7254
Posted: Tue Feb 21 20:40:18 1984
Date-Received: Wed, 22-Feb-84 07:05:03 EST
Organization: AT&T Consumer Products - Montgomery Illinois
Lines: 52

//////////
QST DE K9EUI
ARRL DX BULLETIN NR 7 FROM ARRL HEADQUARTERS
NEWINGTON CT  FEBRUARY 17, 1984
(MODIFIED SLIGHTLY BY K9EUI)
TO ALL RADIO AMATEURS BT

COCOS ISLANDS.  AN EXPEDITION IS EXPECTED TO BEGIN OPERATION ON
FEBRUARY 17.  ITS TI9 CALL IS UNKNOWN.

KERMADEC.  THE JIM SMITH DXPEDITION IS SCHEDULED TO START MARCH 21 OR
12 AND RUN FOR TEN DAYS.  THE OPERATORS WILL BE VK9NS, ZL1AMO, ZL1BQD
AND ZL1AAS.

COMOROS.  D68WB IS A NEW OPERATOR, BILL, A MEDICAL DOCTOR FROM THE
U.S.  QSL TO BILL BARNETT, BOX 504, MORONI, COMOROS.

NORTH COOK ISLANDS.  ZK1MA AND ZK1XL PLAN TO OPERATE FOR A MONTH,
BEGINNING FEBRUARY 18, ON 160 THROUGH 10 METERS, MOSTLY CW.  THERE
```

WILL BE SOME RTTY OPERATION. QSL DIRECT ONLY TO VICTOR RIVERA, ZK1CG, BOX 618, RAROTON, COOK ISLANDS, SOUTH PACIFIC VIA N.Z.

REPUBLIC OF GUINEA. 3X4EX HAS BEEN VERY ACTIVE. CHECK 14235 KHZ AT 2300Z, 3790 TO 3800 KHZ AT 0100 TO 0200Z AND AT 0600Z. QSL TO N4CID.

BURUNDI. 9U5JB WAS WORKED LAST WEEKEND AT 1630Z ON 28610 KHZ AND HAS ALSO BEEN WORKED ON 80 AND 40 METER SSB.

LLOYD AND IRIS. THE COLVINS PLAN TO OPERATE FROM /ZP5 FOR TWO MORE WEEKS, THEN TO CE0, EASTER ISLAND, AND THEN JUAN FERNANDEZ.

UGANDA. G8GRN/5X WAS WORKED ON 14180 KHZ AT 2100Z LAST WEEKEND. QSL TO G4CTQ.

FALKLAND ISLANDS. VP8KF IS VERY ACTIVE ON CW. CHECK 21020 KHZ AT 1500Z. QSL TO G3PVW.

RTTY. FB8WK, CROZET, IS WILLING TO MAKE RTTY SCHEDULES.

MAURITIUS. 3B8CF IS ON 3505 KHZ REGULARLY BETWEEN 0200 AND 0300Z.

THE GAMBIA. C53AL IS ON NIGHTLY AT 0300Z ON 3792 KHZ SSB. QSL TO KA2CDE.

BOTSWANA. FIVE A22 OPERATORS WILL BE ACTIVE ON 80 THROUGH 10 METERS, SSB AND CW, FROM 0000Z ON THE 18TH TO 2400Z THE 19TH, IN THE FIRST BOTSWANA DX ASSOCIATION QSO PARTY. FOR A COMMEMORATIVE QSL, QSL TO CLARENCE A. ALLISON, A22CA, BOX 29, SELEBI PHIKWE, BOTSWANA, AFRICA.

WAKE ISLAND. AH3AA/KH9 HAS BEEN QUITE ACTIVE. LISTEN AROUND 21300 KHZ AT 2100Z. QSL VIA W1ISD AR

From 4115794290038137653
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,912fb34c8fc4c29a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-23 07:02:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou2h.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!mhuxl!houxm!hou2h!atttl
From: atttl@hou2h.UUCP (R.ARDIS)
Newsgroups: net.ham-radio
Subject: Barry's Green Flyer--Surplus Vacuum Tubes
Message-ID: <311@hou2h.UUCP>
Date: Thu, 23-Feb-84 10:02:06 EST
Article-I.D.: hou2h.311
Posted: Thu Feb 23 10:02:06 1984
Date-Received: Fri, 24-Feb-84 00:59:43 EST
Organization: Bell Labs, Holmdel NJ
Lines: 16

--
Is there still a Barry's Green Flyer for surplus vacuum tubes?

I mainly need the address so that I can send for one, can anyone
furnish such an address to me?

Any other sources of surplus vacuum tubes? (name & address)

(Just recently got a Tektronix 551 at a steal, but not equipped with
tubes and need a source to equip it to get it operational.)

Please reply to Ed Baldwin, hou2h!atttl

Many, Many thanks for your replies

Ed

From 3682510191770633200
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f851643ad86f5ebe,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-24 05:20:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!decvax!decwrl!lipman
From: lipman@decwrl.UUCP
Newsgroups: net.ham-radio
Subject: id AA15299; Fri, 24 Feb 84 05:20:26 pst
Message-ID: <5791@decwrl.UUCP>
Date: Fri, 24-Feb-84 08:20:35 EST
Article-I.D.: decwrl.5791
Posted: Fri Feb 24 08:20:35 1984
Date-Received: Sat, 25-Feb-84 03:30:43 EST
Sender: lipman@decwrl.UUCP
Organization: DEC Western Research Lab, Los Altos, CA
Lines: 14

Message-Id: <8402241320.AA15299@decwrl.ARPA>
Date: Friday, 24 Feb 1984 05:17:57-PST
From: cache::leigh
To: net.ham-radio
Subject: Question on call areas & licences

My call sign is a W7 but I'm now living in Massachusetts. I heard a rumor
that the FCC now lets one live in one call area and retain a licence from
another area. Anyone know anything pro or con about this? I want to keep
my 1x3 call if possible.

73,

Allen

From 9164560097662253960
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3daa15d65da956ca,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-24 05:24:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!decvax!decwrl!lipman
From: lipman@decwrl.UUCP
Newsgroups: net.ham-radio
Subject: id AA15398; Fri, 24 Feb 84 05:24:45 pst
Message-ID: <5793@decwrl.UUCP>
Date: Fri, 24-Feb-84 08:24:52 EST
Article-I.D.: decwrl.5793
Posted: Fri Feb 24 08:24:52 1984
Date-Received: Sat, 25-Feb-84 03:31:13 EST
Sender: lipman@decwrl.UUCP
Organization: DEC Western Research Lab, Los Altos, CA
Lines: 13

Message-Id: <8402241324.AA15398@decwrl.ARPA>
Date: Friday, 24 Feb 1984 05:23:09-PST
From: cache::leigh
To: net.ham-radio
Subject: Re: my question about call signs & licences. ops....

Sorry, forgot to give my net address.

...decvax!decwrl!rhea!cache!leigh

73,

Allen

From -6847165051513189951
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7166f12d793bc727,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-24 15:01:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!hpda!fortune!dsd!
dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: THE C3 COMPUTER (C3=CHEAP CHEAP COMPUTER)
Message-ID: <258@dsd.UUCP>
Date: Fri, 24-Feb-84 18:01:40 EST
Article-I.D.: dsd.258
Posted: Fri Feb 24 18:01:40 1984
Date-Received: Fri, 2-Mar-84 15:09:59 EST
Lines: 26

TO: CHEAP HAM'S EVERYWHERE

FROM: A EVEN CHEAPER HAM

MANY OF YOU HAVE PROBRABLY BEEN FOLLOWING RALPH AND THE GANG IN IOWA
EFFORTS TO DEVELOPE A LOW COST PACKET BBS AROUND THE SINGLE BOARD
CP/M COMPUTER CALLED THE BIG BOARD. MANY MAY NOT BE AWARE THAT THE
ORIGINAL XEROX 820 WAS ALSO DESIGNED AROUND THIS SAME UNIT. XEROX
WAS NEVER SUCCESSFUL WITH THIS PRODUCT (I.E. THEY LOST THERE SHIRT)
AND FOR SOME TIME HAVE BEEN WHOLESALE'N THE REMAINING STOCK AND
"PULL-OUTS" AT LOW PRICES. THE XEROX SURPLUS OUTLET IN DALLAS
HAS GOTTON DESPARATE (SP) ANYWAY THEY ARE SELLING THE XEROX 820
BOARD FOR $50 !! THESE UNITS WERE PULLED FROM SERVICE IN WORKING
CONDITION AND REPALACE WITH THE 820 BOARD. THE BOARDS CONTAIN
64K RAM SERIAL AND PARRALLEL, CTC, 24 X 80 TERMINAL, FLOPPY CONTROLLER
FOR 5.25 AND OR 8" DRIVES. ADD POWER A KEYBOARD MONITOR AND DRIVES
AND YOU ARE UP AND RUNNING. THE PACKET GROUP HAS GOTTON A BUNCH
OF THESE BOARDS IN LITTLE ROCK AND ALL HAVE BEEN BROUGHT UP WITH
NO PROBLEMS THEY HAVE EVEN GOT BYE (A REMOTE CP/M PROGRAM) RUNNING
ON PACKET. THE BOARDS ARE MULTILAYER WITH GROUND PLANE AND POWER
"SANDWICH#" IN THE MIDDLE RFI IS AT A MINIMUMN.

IF YOU ARE INTERESTED IN PURCHASING ONE THEY WILL ACCEPT PHONE
ORDERS AND UR VISA/ MC . THE XEROX OUTET STORES NO. IS (214) 960-3367

From -956798582492302920
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab47589dc86b8ee5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-24 15:07:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!hpda!fortune!dsd!
dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Uosat-B Status
Message-ID: <259@dsd.UUCP>
Date: Fri, 24-Feb-84 18:07:44 EST
Article-I.D.: dsd.259
Posted: Fri Feb 24 18:07:44 1984
Date-Received: Fri, 2-Mar-84 15:11:15 EST
Lines: 17

To: All stations interested in status of Uosat-B
From: Harold Price, NK6K
Sent: 17 FEB 84 17:14:17

All,

The pace is picking up! DCE now 99.9% checked out. Current sense problem fixed, a harness change was required. There was a problem with 1802<-> DCE communications but I now think it was a configuration problem with the s/c multiplexors, i.e. it was working but we couldn't see it at the monitor station.

An extra thermal-vac test was required, but outgassing dropped to 0 after a few hours, so we get the s/c back today (friday) instead of Sunday.

I'll be off the air again until next week sometime, a full report after that.

From 3362703258854024661
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ff36fff9b66ce9de,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-24 16:04:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!hpda!fortune!dsd!
dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: UoB Status
Message-ID: <261@dsd.UUCP>
Date: Fri, 24-Feb-84 19:04:45 EST
Article-I.D.: dsd.261
Posted: Fri Feb 24 19:04:45 1984
Date-Received: Fri, 2-Mar-84 15:12:03 EST
Lines: 44

Posted: Wed Feb 8, 1984   9:48 PM GMT   Msg: GGIE-1713-5938
From: MSWEETING
To: HPRICE/AMSAT
Subj: UoB Status
Harold,

   I have just sent the following to Larry in response to a number of (unanswered) requests for a status of the UoB project. The status was that we had no time to let anyone know the status - i.e. blind panic!!

Larry,

Sorry for neglecting you all over the past few days, but all hell broke loose!!   We have all been averaging 3 to 4 hours sleep, but excluding waking periods of up to 60 hours in the process.

The DCE has been tested using the harness simulator after the thermal vacuum tests and continues to function perfectly, bar

the memory bit fault which we saw when Harold was here. We could not test the DCE directly during thermal vac. due to a problem decoding data from the receivers and the impossibility of using the umbilical connector to feed the DCE. The 1802 route would have worked if I had spotted the trivial bug in the 'echo' program - too little sleep.

Both comms problems are now resolved, so we should have no problem at Vandenburg. Just one query - Harold increased the delay time on the TRS-80 Mdl 100 to take account of the delay through 2 uarts - does this allow sufficient for the 1802 computer as well?

UoSAT-B and almost all the equipment in our lab has been packed this afternoon for shipping (on the same flight as ourselves) to Washington on Thursday morning. The evening is being spent sorting out all our outstanding correspondence and finding the bits left behind.

We will be releasing more UoSAT-B documentation as soon as possible now, the publication and distribution is set up and the route back will be via Telemail.

From 2969372816657927487
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,afd55ec7dd9352af,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-24 16:11:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Water Rocket Report
Message-ID: <262@dsd.UUCP>
Date: Fri, 24-Feb-84 19:11:07 EST
Article-I.D.: dsd.262
Posted: Fri Feb 24 19:11:07 1984
Date-Received: Fri, 2-Mar-84 15:12:43 EST
Lines: 290

Posted: Wed Feb 8, 1984   7:15 AM GMT   Msg: NGIE-1712-8217
From: JKING
To: DOCS
CC: OFFICE
Subj: WATER ROCKET REPORT
          USING WATER AS A PRIMARY METHOD OF PROPULSION

            FOR SPACERAFT MODIFYING STANDARD STS ORBITS

Jan A. King W3GEY

V.P. Engineering

The Radio Amateur Satellite Corporation

The Space Shuttle has modified the method by which space-bound payloads enter orbit for the forseeable future. The STS offers the promise of lower payload cost and the ability to carry large payloads into orbit to mention but a few of its primary objectives. For very low cost payloads such as those pioneered by the radio amateur community (the OSCAR series), the Space Shuttle poses, however, a number of severe engineering obstacles which have become major stumbling blocks to the exploitation of this valuable resource. Not unlike most free flying satellites, the communications satellites launched by radio amateurs and used in the Amateur Satellite Service are intended to meet long life objectives. In addition, to meet mission objectives for the communications service to be provided either a geostationary transfer orbit or a sun synchronous polar orbit must be attained by the spacecraft. Unfortunately, neither of these objectives can be met by the standard provisions of a Space Shuttle mission.

STS orbits, typically 296 km in altitude and inclined from 25 to 57 degrees are unstable. A small spacecraft, with a low surface area to mass ratio, will decay from such an orbit in a matter of months. This class of orbits, with a few exceptions, is also unsuitable for communications experiments of interest to the Amateur Satellite Service. It is therefor a necessary requirement for Amateur Satellites and other free flying spacecraft seeking stable orbits to carry a propulsive capability if launched by the Space Shuttle.

Having accepted the burden of a propulsive system as an added spacecraft complexity, yet another problem becomes apparent. Classical propulsion systems employed by satellites are characterized as hazardous devices. Due to the manned presence on board Shuttle safety considerations are necessarily more stringent when using this method of launching a spacecraft. The added complexities and paperwork resulting from the inclusion of hazardous devices on board Shuttle launched satellites conflicts with the low cost nature of these programs and may make such payloads totally impractical or viable only if launched by alternative methods. This problem is exascerbated by the fact that most orbit alternatives can be reached from Shuttle orbits only by multiple delta-V maneuvers. This requires multiple solid rocket engines or a restartable engine on board the satellite, further multiplying the safety hazard problem.

A solution is sought to the "Shuttle Dilema." The Shuttle Dilemma may be defined as follows:

1/ A Shuttle payload is always two burns away from the desired orbital elements when separated from the cargo bay.

2/ The cost of NASA safety approval for a propulsive device used aboard Shuttle by a low cost user is approximately a factor of three higher than the entire cost of the payload itself.

3/ As a rule of thumb, the mass of the paperwork necessary for NASA approval of a hazardous device for a Shuttle flight is greater than or equal to the mass of the payload.

While the above may seem humorous, these statements are all too true and must be dealt with squarely by would-be Shuttle low cost payload designers.

A propulsion system that would solve the Shuttle Dilema could be expected to have the following characteristics:

1/ The propellant used should not be a chemical, pressue or explosive hazard as defined by NASA or the USAF (ref. AFETRM-127-1).

2/ The loading of propellant into the spacecraft should not constitute a hazardous activity. No special safety equipment should be required.

3/ No portion of the propulsion system should contain hazardous devices of any kind. Certain exceptions to this rule might be taken to include category B electro-explosive devices such as pyrotechnically operated valves.

4/ No portion of the propulsion system should be pressurized or become pressurized even remotely while the satellite is on the ground, during powered flight or during astronaut activities in orbit, including those conducted to separate the satellite from the Shuttle.

5/ No portion of the propulsion system should be susceptable to damage due to the environment of the Cargo Bay during powered flight or in orbit prior to or during separation of the satellite.

The Radio Amateur Satellite Corporation (AMSAT), having had practical experience with both liquid and solid propulsion systems on board low cost satellites believes that the above requirements will prove to be virtually mandatory for low cost payloads flown by the Space Transportation System. Two methods have been considered for some time by AMSAT that appear to meet the above five conditions and produce satisfactory performance for space applications. Both involve using water as a fuel and both have been considered by other groups from time to time as methods of space propulsion.

PROPULSION VIA WATER ELECTROLYSIS:

The propulsion of a space vehicle via hydrogen/oxygen fuel produced from the electrolysis of water is far from a novel idea. Hughes Aircraft Company, Space Systems Division documented the results of an internal research and development IR&D project which developed a working model of a water electrolysis rocket during the first half of 1964 (1,2,3,4). Using this technique a single pressure vessle acts as storage for the water and electolyte, as an electrolysis chamber and finally as a pressure bottle for the combined electolyzed gases. The premixed gas may be fed via a single line into the injection chamber of a small rocket engine or thruster. In their final report on this technology Hughes stated, "The Water Electrolysis Rocket has been explored in sufficient depth to verify the feasibility of the concept. Furthermore, it has been determined that this system offers significant advantages over other presently available reaction control systems. Among these advantages are:

1/ Higher specific impulse

2/ Lower system weight

3/ Lower power requirements

4/ Extended life in space

5/ Improved system reliablity

6/ System simplicity "

It is interesting to note that at the time of the writing Hughes did not cosider the safety advantages of the system which are of prime interest to AMSAT. The specific impulse of a small electrolysis motor of the type required for a low cost satellite mission is between 330 and 360 sec. This is considerably better than either an equivalent solid or bipropellant liquid motor system (270 and 305 sec. respectively). Preliminary investigations by AMSAT suggest that the power required to electolyze one kilogram of water is approximately 5,000 WH. This may be related to delta-V for a specific satellite case as shown in Table 1. A minimum system schematic is shown in Figure 1.

It is not known why Hughes did not continue to develope this technology to the point of commercial introduction. Clearly, however, monopropellant hydrazine systems replace other methods for reaction control starting about the same time as the Hughes research on water electrolysis motors. Since this work was done there have been dramatic improvements in both electrolysis electrode and thruster technologies. AMSAT has also conducted

preliminary studies on an advanced method of drying the hydrogen and oxygen gas which should lead to improved thruster performance. This was one problem reported by the Hughes research team.

PROPULSION BY STEAM EXPULSION:

A second method of exploiting water as a safe propellant is by means of a small steam engine integral to the thruster in a water fed propulsion system. Water is allowed to superheat in a small chamber adjacent to an expansion nozzle. Thrust is produced by the acceleration of water molecules as they exit the nozzle. The specific impulse of this technique is far poorer than the electrolysis method (107 sec.), however, the system complexity is very low indeed and the energy required to liberate a kilogram of water into steam is only 750 WH, considerably less than with electrolysis. The specific impulse for a motor of this type can be shown to be governed by the equation:

$$Isp = \sqrt{\frac{2\,C\,K\,Tb\,(1 - \langle Pexit/Pchamb.\rangle^{**}C-1/C)}{(C-1)n\,m}}$$

where:

C = Heat capacity of propellant (water = 1.3)

K = Boltzman Constant = 1.38E-23 J/K

Tb = Gas Temperature = (approx.) 400K

n = molecular weight of propellant (water = 18)

m = mass of a hydorgen atom = 1.66E-27 Kg

Pexit = Nozzle exit plane pressure (assumed = 0.01 Bar)

Pchamb. = Thruster chamber pressure (assumed = 5.0 Bar)

As can be seen, the specific impulse depends inversely on the molecular weight of the fuel used, taken to the 1/2 power. This favors the use of low molecular weight fuels. As can be seen water is nearly optimum for an engine of this type particularly when the other physical properties of this fluid are taken into consideration in a practical system.

While, on balance, a system using steam as a propulsion technique is far from optimum with respect to Isp it is simple enough to be included on even GAS CAN mission and can solve a reasonable

number of propulsion problems for small spacecraft. Figure 1 reviews the performance of this system for a variety of missions of interest to AMSAT and gives a comparison to the electrolysis method.

ORBIT CORRECTION TECHNIQUE USING WATER PROPUSLION METHODS:

A salient characteristic of both propulsion techniques reviewed is that they take electrical energy from the solar arrays of the spacecraft and convery it into potential energy (either in the form of stored gas to be burned or in the form of stored electrical energy). Thrust is best produced in a burst mode rather than with a continuous firing. This is a typical operating mode for a reaction control system (RCS) but is somewhat unusual for an orbit transfer maneuver. In effect, time is traded against the burn duration (power production rate of the satellite) so that a reasonable compromise for the total duration of the propulsion phase of the mission is reached. An important consideration for such a mode of operation is that the total delta-V achieved per day during the maneuver must be greater than the deceleration per day due to drag in the Shuttle base orbit. The orbit transfer strategy for circular orbits with a spinning spacecraft is shown in Figure 2. Two small thrusters at either end of the satellite are employed. Firings always occur at the line of apsidies. Alternate thrusters are used so that a first firing occurs at perigee thus raising apogee and a subsequent firing occurs at apogee now raising perigee. Mini-Hohman transfer maneuvers are repeated until the desired circular altitude is reached. Eliptical orbits can be achieved with a single thruster fired at consecutive perigees thus continuously raising apogee. Inclination changes with this technique are also possible and are most efficiently applied when apogee also coincides with the ascending node of the orbit.

SUMMARY:

The techniques reviewed have been considered in the past by space research projects and by commercial spacecraft manufacturers. While these propulsion technologies have never been reduced to commercial practice, sufficient study has been done to verify their applicability to space missions. If the STS is going to fulfill its mission as a launcher for ALL space interests then some acceptable methods of propulsion must be found for smaller payloads. These methods must take into consideration the low cost nature of such projects and the very stringent safety constraints imposed by NASA on all STS users. In view of the above AMSAT believes that water propulsion technologies should be revisited because they have the potential of solving the "Shuttle Dilema" for a class of users that can bring significant benefit to the space program as a whole.

REFERENCES:

1. Newman, Daniel D., Study of the Water Electrolysis Propulsion System- Final Report, Engineering Record No. 151, Hughes Aircraft Co., S.S.D., Propulsion and Power Systems Laboratory, 5 June 1964.

2. Water Electrolysis Rocket, Hughes Aircraft Company Proposal, 63H-7438/9419 (Dec. 1963).

3. Electrochemical Service Unit, Hughes Aircraft Company Proposal, 64H-2115/A3951-001 (April 1964).

4. Water Electrolysis Rocket, Hughes Aircraft Company Proposal, 64H-2510/A4682-001 (May 1964). .

From 4614892669557922598
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,664e1523b7da8297,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-24 16:16:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Space Shuttle Get-Away Special
Message-ID: <263@dsd.UUCP>
Date: Fri, 24-Feb-84 19:16:57 EST
Article-I.D.: dsd.263
Posted: Fri Feb 24 19:16:57 1984
Date-Received: Fri, 2-Mar-84 15:13:47 EST
Lines: 53

February 10, 1984

AMSAT has agreed to supply the primary controller for an Space Shuttle Get-Away Special experiment package. The GAS package, with 12 experiments mostly in the Biological sciences, is a community sponsored project in the Texas cities of El Paso and Ysleta.

The experiment is the primary GAS package on STS 41-F, currently scheduled for launch August 9, 1984. This mission will be the second flight for Discovery, the third orbiter in America's shuttle fleet.

The GAS experiment slot was originally obtained by the local Coors Beer distributor in 1977. The experiments are being designed and built by El Paso/Ysleta high school students. Technical advisors have been supplied by the local Gas and Electric companies. Funds and other support have been obtained

from community members.

When the original supplier of the controller backed out of the project, El Paso/Ysleta put out a general call for help. AMSAT accepted the challenge of designing and building the required hardware in the few months remaining. The basic requirements of the controller match the requirements of the PACSAT low power portable ground station controller. A team within AMSAT had already been formed to do that design, and the group had forward momentum built up from work on the Digital Communications Experiment, which will fly as part of the University of Surrey's UOSAT-B satellite on March 1, 1984.

The controller will monitor and record the temperature in each of the 12 experiment compartments. The temperature will be controlled in some areas by switching a heater on and off. Several experiments require movements of an actuator, controlled by a stepper motor.

Although the GAS experiment does not relate directly to amateur radio, AMSAT will gain experience with the shuttle and the GAS program, requirements for the PACSAT project which hopes to deploy from a GAS can in 1986. The controller design will be used for the low power portable PACSAT ground stations required by VITA, co-sponsor of the PACSAT project. Funding for the GAS controller will be supplied by the El Paso/Ysleta group.

The GAS controller will be implemented under the auspices of AMSAT's PACSAT project. Lyle Johnson, WA7GXD, is the group leader for the controller project. Much of the work will be done by Bill Reed, WD0ETZ, manager of PACSAT ground station design, and his group in Dallas. Chuck Green, N0ADI in Tucson will be involved in system design. Harold Price, NK6K will coordinate software activities.

From 6670537127248145382
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1cace1fb1755c1d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-24 16:48:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!watmath!clyde!burl!ulysses!gamma!exodus!mhtsa!mh3bs!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: FCC abolishes commercial radiotelephone license
Message-ID: <2302@allegra.UUCP>
Date: Fri, 24-Feb-84 19:48:18 EST
Article-I.D.: allegra.2302
Posted: Fri Feb 24 19:48:18 1984
Date-Received: Sat, 25-Feb-84 08:07:31 EST
Organization: Bell Communications Research, Inc

Lines: 7

The FCC today abolished the General Radiotelephone Operator's License
(formerly the 2nd class, before the 1st Phone was done away with),
saying that the industry could better regulate those who work on two-way
radio systems. Current holders of the license are to receive a special
lifetime certificate.

Phil

From 5133543382335455432
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f851643ad86f5ebe
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-02-25 03:10:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!watmath!clyde!akgua!mcnc!decvax!ucbvax!ucbcad!tektronix!zehntel!zps!
digger
From: digger@zps.UUCP
Newsgroups: net.ham-radio
Subject: Re: id AA15299; Fri, 24 Feb 84 05:20:26 pst
Message-ID: <159@zps.UUCP>
Date: Sat, 25-Feb-84 06:10:04 EST
Article-I.D.: zps.159
Posted: Sat Feb 25 06:10:04 1984
Date-Received: Mon, 27-Feb-84 08:48:42 EST
References: decwrl.5791
Lines: 7

    From what I can recall, You can keep your old call sign or
    request a new one.

             Scott MIles WB6PQM
             ...zehntel!zps!digger

From -971281530805951961
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,19d14f198c8694f4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-19 16:49:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!harpo!eagle!hou5h!hou5a!hou5d!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 135: Elections
Message-ID: <342@houxp.UUCP>
Date: Mon, 19-Dec-83 19:49:20 EST
Article-I.D.: houxp.342

Posted: Mon Dec 19 19:49:20 1983
Date-Received: Wed, 21-Dec-83 05:20:44 EST
Lines: 9

QST DE ad7i
HR ARRL BULLETIN NR 135 FROM ARRL HEADQUARTERS
NEWINGTON CT DECEMBER 15, 1983
TO ALL RADIO AMATEURS BT

THE FOLLOWING HAVE BEEN ELECTED WITHOUT BALLOTING AS SMS FOR THEIR
RESPECTIVE SECTIONS, EASTERN NEW YORK WB2VUK AND SOUTH DAKOTA KC0OO.
THOSE ELECTED WILL BEGIN NEW TERMS APRIL 1, 1984 AR

From 7815768792171027906
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b08d08bbc18058c5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-19 16:53:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!harpo!eagle!hou5h!hou5a!hou5d!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 137: Straight Key Night
Message-ID: <344@houxp.UUCP>
Date: Mon, 19-Dec-83 19:53:49 EST
Article-I.D.: houxp.344
Posted: Mon Dec 19 19:53:49 1983
Date-Received: Wed, 21-Dec-83 05:21:26 EST
Lines: 12

QST DE ad7i
HR ARRL BULLETIN NR 137 FROM ARRL HEADQUARTERS
NEWINGTON CT DECEMBER 19, 1983
TO ALL RADIO AMATEURS BT

THE NEW YEARS EVE STRAIGHT KEY NIGHT WILL BE DEDICATED TO THE MEMORY
OF VIC CLARK, W4KFC. AS A LAST TRIBUTE, ANYONE WHO CAN SCRATCH TWO
PIECES OF WIRE TOGETHER IS ENCOURAGED TO MAKE AT LEAST ONE SKN
CONTACT. INSTEAD OF THE TRADITIONAL SK AT THE END OF EACH CONTACT,
PARTICIPANTS WILL SIGN VIC. SKN DETAILS APPEAR ON PAGE 100 OF
DECEMBER QST AR

From -5988391025105887493
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,783beff58ec9ea11,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-19 16:54:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Path: utzoo!linus!philabs!cmcl2!floyd!harpo!eagle!hou5h!hou5a!hou5d!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 138: Korea Third Party Agreement
Message-ID: <345@houxp.UUCP>
Date: Mon, 19-Dec-83 19:54:11 EST
Article-I.D.: houxp.345
Posted: Mon Dec 19 19:54:11 1983
Date-Received: Wed, 21-Dec-83 05:22:07 EST
Lines: 11

QST DE ad7i
HR ARRL BULLETIN NR 138 FROM ARRL HEADQUARTERS
NEWINGTON CT DECEMBER 19, 1983
TO ALL RADIO AMATEURS BT

THE STATE DEPARTMENT TODAY ANNOUNCED A TEMPORARY THIRD PARTY TRAFFIC
AGREEMENT BETWEEN KOREA AND THE UNITED STATES. EFFECTIVE 0001 UTC
DECEMBER 20, AND UNTIL 2359 UTC JANUARY 4, 1984, U.S. AMATEURS MAY
EXCHANGE THIRD PARTY TRAFFIC WITH U.S. MILITARY PERSONNEL STATIONED
IN KOREA AR

From -2338666256875946443
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ec821023b148ccc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-19 16:55:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!harpo!eagle!hou5h!hou5a!hou5d!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 139: Grenada
Message-ID: <346@houxp.UUCP>
Date: Mon, 19-Dec-83 19:55:43 EST
Article-I.D.: houxp.346
Posted: Mon Dec 19 19:55:43 1983
Date-Received: Wed, 21-Dec-83 05:22:24 EST
Lines: 9

QST DE ad7i
HR Arrl BULLETIn NR 139 FROM ARRL HEADQUARTERS
newingTON CT DECEMBER 19, 1983
TO ALL RADIO AMATEURS BT

Arrl HQ HAS BEEN INFORMED BY FCC THAT A PERMANENT THIRD PARTY TRAFFIC
AGREEMENT IS NOW IN EFFECT BETween THE UNITED STATES AND GRENADA,
J3 AR

From -4391616383847521660
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2b6380ec62159a67,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-20 10:57:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!harpo!seismo!hao!hplabs!hpda!fortune!amd70!
decwrl!daemon
From: daemon@decwrl.UUCP
Newsgroups: net.ham-radio
Subject: ICOM 720A to Commodore 64 Interface
Message-ID: <4667@decwrl.UUCP>
Date: Tue, 20-Dec-83 13:57:19 EST
Article-I.D.: decwrl.4667
Posted: Tue Dec 20 13:57:19 1983
Date-Received: Fri, 23-Dec-83 00:41:16 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Western Research Lab, Los Altos, CA
Lines: 11

From: Paul 223-3439 CQ DX <moses::p_macdonald>

Does anyone have information on interfacing a Commodore 64 computer
to an Icom IC-720A for control purposes?

Thanks.

{decvax, ucbvax, allegra}!decwrl!rhea!moses!p_macdonald

Maynard, MA
617-493-3439

From 8431809305561760708
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,66d71ce9d9e8b4b7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-20 16:14:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 140: Alaska call signs
Message-ID: <347@houxp.UUCP>
Date: Tue, 20-Dec-83 19:14:27 EST
Article-I.D.: houxp.347
Posted: Tue Dec 20 19:14:27 1983
Date-Received: Thu, 22-Dec-83 00:54:06 EST
Lines: 14

qst de ad7i
hr arrl bulletin nr 140 from arrl headquarters
newington ct december 20, 1983
to all radio amateurs bt

the present series of amateur extra prefixes in alaska, kl7a thru
kl7z, wl7a thru wl7z and nl7a thru nl7z, has been used up. the fcc
will begin a new series, kl8a thru kl8z, wl8a thru wl8z and nl8a
thru nl8z, at almost any moment. before long a similar situation
will arise in the pacific. fcc will keep the calls kh7k, wh7k and
nh7k for potential extra class licensees on kure, with the rest of
the 7 block available for amateur extras in hawaii. the status of
al8 and ah7 is not known at this time ar

From -1755819096113580931
X-Google-Language: GERMAN,ASCII-7-bit
X-Google-Thread: 151e61,437467ecba62227d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-21 08:20:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!harpo!eagle!hou5h!
jak
From: jak@hou5h.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: dec. call book
Message-ID: <312@hou5h.UUCP>
Date: Wed, 21-Dec-83 11:20:09 EST
Article-I.D.: hou5h.312
Posted: Wed Dec 21 11:20:09 1983
Date-Received: Sat, 24-Dec-83 11:13:59 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 75

The following is a list of net.ham-radio readers/contributers:

call - name - mail address
wb0oew - elwood downey - kpno!fargovax!downey
ka1age - david kaufman - decvax!yale-comix!kaufman
k1dk - dan kahn - alice!danny
w1gd - gerry kersus - houxp!4421gjk
ka1gng - rob wood - decvax!genrad!rob
ka1hkn/6 - richard currier - mplvax!rec
ka1hkn/6 - richard currier - mplvax!rec
w1yu- the yale amateur radio club - decvax!yale-comix!w1yu
ky2d - jim kutsch - hou5h!jak
wb2iau - bill mitchell - whuxk!wjm
n2ic - steve london - druxm!n2ic
w2iol - ron mcconnell - harpo!whuxb!rcmcc
wa2jfm - bob moore - seismo!rochester!ritcv!tropix!rcm
kb2jg - joe massi - hogpc!4432jrm
ka2jqh - adam buchsbaum - research!alb

k2ph - bob schreibmaier - houxb!3435ras
k2pzh - art kamlet - cbosgd!cbdkc1!ask
n2xs - joe stephany - stephany.wbst@parc-maxc
n2yk - bruce mcnair - houxq!bem2 or houti!bem
wb2zlf - kevin redden - hou5h!kfr
wa3mez - rod hart - burdvax!bpa!cp1!hart
wa3sbt/4 - bob fabrizio - rlgvax!bob
wa3ymh - louis a. mamakos - {seismo,we13,mcnc}!rlgvax!cvl!louie
n4bgq - joe flake - mcnc!ncsu!ncrcae!flake
k4bgv - bob koch - bpa!cp1!koch
w4bzl - joe ragland - duke!mcnc!ecsvax!jrr
k4eo - larry - stewart.pa@parc-maxc
k4frs - jack buchanan - duke!mcnc!ecsvax!jwb
k4fum - jere sandidge - akgua!sb1!scbhq!jts
wb4fwl - ned danieley - duke!ndd
ai4g - allen r. shuff - burl!ars
wb4ioj - mike kersenbrock - teklabs!tekmdp!michaelk
w4izi - lindsay cleveland - ihnp4!akgua!glc
wa6bev - robert r. henry - ucbvax!rrh
wb6bxw - lauren weinstein - decvax!vortex!lauren or lauren@rand-unix
ka6epi - dave ross - seismo!sytek!syteka!ross
n6fqr - bill danielson - danielson.pa@parc-maxc
ko6g - steven schoch - ucbvax!schoch@miro
kd6hr - pete - mcafee.es@parc-maxc
n6icx - dan halbert - ucbvax!halbert, halbert.pa@parc-maxc
ka6klr - bob - seismo!hao!hplabs!piety
ka6klr - bob piety - seismo!hao!hplabs!piety
wa6lbv - gordon schlesinger - ucbvax!sdcsvax!sdchema!lbv
wa6lbv - gordon schlesinger - ucbvax!sdcsvax!sdchema!lbv
wb6ohf/7 - phil nelson - uw-june!phil
no6q - trung - tnguyen.es@parc-maxc
no6q - trung nguyen - tnguyen.es@parc-maxc
wb6qms - don - duncan.es@parc-maxc
n6zi - al - noscvax!agordon
ad7i - paul newland - houxp!ad7i
wa7kgx - chuck forsberg - cdi!caf
wa7njk - tom kloos - tektronix!tekecs!tomk or decvax!orca!tomk
w8- um u. of mich amateur radio club - mb2c!uofm-cv!tom
wb8wwv - greg ordy - decvax!cwruecmp!ordy
wb9aax - phil gunsul - we13!prg
wb9bkr - al whaley - pur-ee!uiucdcs!whaley
ku9c - steve wheatley - inuxc!wheatley
w9cc - larry card - inuxc!lrcard
k9eui - bob roehrig - we13!rjr
kx9g - stephan v. bechtolsheim - purdue!svb
kn9k - richard fitch - inuxd!rcf
ka9mqi - gary spahn - inuxd!gls
wn9nbt - dave chasey - pur-ee!wn9nbt
ka9q - phil karn - allegra!karn
ka9qbg - mike griffith - inuxe!in0095
wb9rky - bill malcolm - ihuxi!bmalc or ih1ap!bmalc
aj9s - robert s. parnass- ihnp4!ihuxf!parnass
kk9w - dave andersen - pur-ee!kk9w

(no call) - stan king - clyde!stan
(no call) - steven bellovin - ulysses!smb

Send additions/corrections to KY2D, Jim Kutsch -- hou5h!jak

From 2196811667455341731
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d3b47752a843a34,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,4d3b47752a843a34,start
X-Google-Attributes: gid15c702,public
X-Google-ArrivalTime: 1983-12-23 06:28:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!harpo!eagle!mhuxl!houxm!whuxk!wjm
From: wjm@whuxk.UUCP (MITCHELL)
Newsgroups: net.audio,net.ham-radio
Subject: Holiday Greetings
Message-ID: <354@whuxk.UUCP>
Date: Fri, 23-Dec-83 09:28:40 EST
Article-I.D.: whuxk.354
Posted: Fri Dec 23 09:28:40 1983
Date-Received: Sat, 24-Dec-83 10:48:36 EST
Lines: 8

To all my friends in net land,
Best wishes for a most happy holiday season, a very Merry Christmas, and
a most prosperous 1984.
As I leave Bell Laboratories to join the new Central Services Organization,
I wish all of you well, and look forward to seeing you next year.
Bill Mitchell, WB2IAU
Central Services Organization
Whippany NJ (whuxk!wjm)

From -4881483623922752468
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d220b12678f1c9e1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-26 22:26:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!sii!mem
From: mem@sii.UUCP (Mark Mallett)
Newsgroups: net.ham-radio
Subject: Kenwood TS430 problem
Message-ID: <366@sii.UUCP>
Date: Tue, 27-Dec-83 01:26:18 EST
Article-I.D.: sii.366
Posted: Tue Dec 27 01:26:18 1983
Date-Received: Wed, 28-Dec-83 02:10:46 EST
Lines: 17

b

Greetings

I have a Kenwood TS430s tranceiver which has been giving me troubles almost since I bought it. When I first brought it home, I made the modification to it to allow the 10hz digit to be displayed. This is all that I've done to it. I used it successfully for a month or so, then the problem cropped up: it would only show the 10hz digit (the one specially activated) and no others; furthermore, it wouldn't work. I took it to be repaired under warranty, used it for a couple months more and the same thing has happened again.

The question: has anybody seen this problem? That is, is it just a fluke or is it a known bug? And if the latter, is there a solution?

Mark E. Mallett (KA1KES)
decvax!sii!mem

From -8315330225191359993
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,79ea1ee2bf14a3ca
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-27 14:18:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site ucf-cs.UUCP
Path: utzoo!linus!decvax!duke!ucf-cs!giles
From: giles@ucf-cs.UUCP (Bruce Giles)
Newsgroups: net.ham-radio
Subject: Re: Cordless Phone Follies
Message-ID: <1131@ucf-cs.UUCP>
Date: Tue, 27-Dec-83 17:18:19 EST
Article-I.D.: ucf-cs.1131
Posted: Tue Dec 27 17:18:19 1983
Date-Received: Wed, 28-Dec-83 06:09:25 EST
References: <2117@allegra.UUCP>
Organization: University of Central Florida
Lines: 40

Yes, the moral of the story is painfully obvious:

> Constitutional Rights do not automatically extend
> to cover new technologies in the United States!

Does this mean that the IRS can confiscate the floppies for my computer without a search warrant? Or in the spirit of this case, that they can require that I surrender the discs to them to be copied? (They are only taking *information*, not material possessions).

If, through some gross miscarriage of justice this case is not thrown out by a higher court, what will happen next? Will the police affix induction coils against telephone lines to pick up the stray signals from the line? After all, how is that morally

different from actually connecting the wires to the line?

I admit that drug dealers belong behind bars, but there are clear precedents for handling open telephone conversations -- after all, telephones were intially all party-lines, right?

I hope I'm not the only one who feels this way. Even if I'm not alone, consider the effect the *perception* that the ham radio community condones such invasions of privacy in the United States will have on international conversations with hams under repressive regimes. After all, for them, they are taking a chance with the lives of both themselves *and* their families when they talk freely. For them, the price of letting one criminal go free will seem to be very cheap.

Bruce Giles

UUCP: decvax!ucf-cs!giles
cs-net: giles@ucf
ARPA: giles.ucf-cs@Rand-Relay
Snail: University of Central Florida
         Dept of Math, POB 26000
         Orlando Fl 32816

From -8115699355965585647
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,79ea1ee2bf14a3ca
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-29 12:19:09 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site wu1.UUCP
Path: utzoo!linus!decvax!genrad!grkermit!masscomp!clyde!floyd!cmcl2!rocky2!
cubsvax!wu1!rf
From: rf@wu1.UUCP
Newsgroups: net.ham-radio
Subject: Re: Cordless Phone Follies
Message-ID: <220@wu1.UUCP>
Date: Thu, 29-Dec-83 15:19:09 EST
Article-I.D.: wu1.220
Posted: Thu Dec 29 15:19:09 1983
Date-Received: Sat, 31-Dec-83 04:29:44 EST
References: <1131@ucf-cs.UUCP>
Organization: Western Union Telegraph, Mahwah, NJ
Lines: 11

The air waves are free. In the USA it is always legal to receive a broadcast transmission, though it is not always legal to retransmit it. Be thankful for this; were it not so there could be laws restricting the sale of radio transceivers and laws restricting reception of Radio Moscow. A plaintext

transmission over telephone circuits is never completely secure
anyway -- much telephony uses microwave transmission.

Draw your own morals.

Randolph Fritz

From -1169465506781732102
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47409a94d49754da,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-30 18:44:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version Vortex 1.1 8/4/83; site vortex.UUCP
Path: utzoo!linus!decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio
Subject: "broadcasting"
Message-ID: <208@vortex.UUCP>
Date: Fri, 30-Dec-83 21:44:39 EST
Article-I.D.: vortex.208
Posted: Fri Dec 30 21:44:39 1983
Date-Received: Sun, 1-Jan-84 02:16:28 EST
Organization: Vortex Technology, Los Angeles
Lines: 9

It is misleading to suggest that it is legal to receive ANY and ALL
transmissions. The key is the legal definition of "broadcasting",
which does not have the same meaning as "transmission". For example,
it is illegal to listen to point-to-point telephone microwave
transmissions (it is considered to be wiretapping), and in the last
couple of years prohibitions for NON-point-to-point operations such
as MDS and STV (scrambled) services have been enacted.

--Lauren--

From -3866382126231611491
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,79ea1ee2bf14a3ca
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-02 13:22:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site ucf-cs.UUCP
Path: utzoo!linus!decvax!duke!ucf-cs!giles
From: giles@ucf-cs.UUCP (Bruce Giles)
Newsgroups: net.ham-radio
Subject: Re: Cordless Phone Follies
Message-ID: <1134@ucf-cs.UUCP>
Date: Mon, 2-Jan-84 16:22:18 EST
Article-I.D.: ucf-cs.1134
Posted: Mon Jan 2 16:22:18 1984

Date-Received: Tue, 3-Jan-84 02:55:35 EST
References: <1131@ucf-cs.UUCP>, <220@wu1.UUCP>
Organization: University of Central Florida
Lines: 27

Actually, I had had the impression that it was legal to receive
anything you wanted, but there were strong restrictions on what
could be rebroadcast, recorded, or even discussed with individuals
who were not present during the original reception. That is why
I am somewhat confused over the complaints by the HBO et al over
home satellite dishes, Disney Productions over VCR's, etc. So long
as you don't invite the neighborhood over to watch a movie and then
charge admission, I thought it was legal to receive such signals.

But the point about microwave telephone links is more to the topic
of the original discussion. What is the `ethical' distinction
between a radio link between two microwave horns and a radio link
between a handset and a base unit in a cordless telephone. Sure,
the law doesn't cover them yet, but it is undoubtably more an over-
sight than a conscious decision.

Bruce Giles

UUCP: decvax!ucf-cs!giles
cs-net: giles@ucf
ARPA: giles.ucf-cs@Rand-Relay
Snail: University of Central Florida
         Dept of Math, POB 26000
         Orlando Fl 32816

From -1871778697716952728
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fbf8cb99aa7c46f6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-02 15:05:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site tekchips.UUCP
Path: utzoo!linus!decvax!microsoft!fluke!ssc-vax!uw-beaver!tektronix!tekchips!
jackg
From: jackg@tekchips.UUCP (Jack Gjovaag)
Newsgroups: net.ham-radio
Subject: searching for an article
Message-ID: <505@tekchips.UUCP>
Date: Mon, 2-Jan-84 18:05:25 EST
Article-I.D.: tekchips.505
Posted: Mon Jan 2 18:05:25 1984
Date-Received: Fri, 6-Jan-84 04:23:55 EST
Organization: Tektronix, Beaverton OR
Lines: 10

I am looking for a copy of an article that appeared in the
June 1976 issue of Ham Radio. The author was Doug DeMaw and
it dealt with solid state oscillator design. I don't have
the exact title or the page nuumbers. If anyone couuld
lend me a copy of the issue or perhaps send me a copy of
the article, I wouuld be forever indebted. Thanks.

Jack Gjovaag   decvax!teklabs!tekchips!jackg

US Mail: Mail Stn 50-662, Tektronix, P.O. Box 500, Beaverton, OR 97077

From -7802570377996306331
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,404bb9255507c649,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-02 23:25:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site drux3.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!hogpc!drutx!drux3!trb
From: trb@drux3.UUCP
Newsgroups: net.ham-radio
Subject: Ham Radio Equipment for Sale
Message-ID: <943@drux3.UUCP>
Date: Tue, 3-Jan-84 02:25:32 EST
Article-I.D.: drux3.943
Posted: Tue Jan 3 02:25:32 1984
Date-Received: Wed, 4-Jan-84 03:22:22 EST
Organization: AT&T Information Systems Laboratories, Denver
Lines: 23

For Sale:

JOHNSON KILOWATT MATCHBOX
     Mint Condition (enamel paint even has coat of wax)
     80-10m
     $95.00

KENWOOD MC-50 Desk Mike
     Mint Condition
     $30.00

ICOM IC2-AT HAND-HELD 2-METER RIG
     plus extra battery pack
     mint condition
     $190.00 or best offer

Contact: Tom Buckley
       2900 Aurora Ave. #355
       Boulder, CO 80303
       (303) 442-2673 evenings
       (303) 538-3442 days

From -4835578806267254869
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,28e59878c7317b8e,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 129c11,28e59878c7317b8e,start
X-Google-Attributes: gid129c11,public
X-Google-ArrivalTime: 1984-01-03 07:14:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 11/4/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Robert S. Parnass, AJ9S)
Newsgroups: net.ham-radio,net.micro
Subject: New! Computer Controlled Radio Scanner
Message-ID: <1685@ihuxf.UUCP>
Date: Tue, 3-Jan-84 10:14:56 EST
Article-I.D.: ihuxf.1685
Posted: Tue Jan 3 10:14:56 1984
Date-Received: Wed, 4-Jan-84 03:33:34 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 103

x

CompuScan 2100 Computer Controlled Scanning Radio

The Electra Company of Cumberland, Indiana, announced the new Bearcat CompuScan 2100 computer controlled scanner radio.

This radio scans up to 200 channels in selectable banks, and connects to a home computer (not supplied) via an RS-232 serial port. It will be available with software on 5.25" diskette or tape cassettes for many popular computers. I think the first offering will be for a Commodore 64.

Physically, the scanner is a low profile box with squelch and volume controls, and several connectors. Other controls are computer driven through the RS-232 interface. This scanner looks feature wise like a Bearcat 300, but with a personal computer serving as the control element. Some of the features listed on the data sheet:

+o frequency coverage:
    a. 29-54 (includes part of 10 and all of 6 meter bands)
    b. 118-136 (commercial AM aircraft band)

c. 136-174
d. 421-512

+o audio output: 1.0 watt RMS with internal speaker, 2.0 watts with external speaker

+o antenna: supplied with telescoping antenna, base, and 20 feet of coaxial cable with BNC connectors. (looks like the manufacturer doesn't want the antenna too close to the computer!)

+o sensitivity: 0.6 uv for 12 dB SINAD, all VHF-FM bands, 1.0 uv for 12 dB SINAD, Aircraft and UHF bands.

+o connectors:
a. external power supply
b. external antenna (finally! a female BNC type)
c. RS-232 interface
d. remote control interface

This scanner makes full use of the computer display. The software furnished drives the scanner and a menu interface which allows users to set scanning options, such as:

+o frequencies for up to 200 channels

+o individual channel lockout

+o individual channel delay, which delays the resumption of scanning for a few seconds after a station ends its transmission.

+o up to three nested priority channels

+o up to 4 lines of textual information for each channel, which will be displayed on the CRT when the scanner stops on that channel.

+o automatic search and store, which allows entering of 2 frequency limits, scanning between the two limits, and storing frequencies on which activity was found.

+o a Count register for each channel, to count the number of transmissions detected by the scanner on selected frequencies.

+o 4 auxiliary switches to control external devices, such as a tape recorder or alarm when a signal is received on a designated channel.

One may obtain a specification sheet by calling Bearcat at (317)894-1440.

It's a shame that the frequency coverage does not include the 800 - 1200 MHz bands. A computer controlled scanner may be put to good use in these bands to track trunked radio systems. Coverage of the military aircraft band in the 200 - 400 MHz range and the federal "secret" band in the 400 - 420 MHz range would also be appreciated.

I'd be interested to know if source code and documentation will be supplied so a user could develop truly custom scanning algorithms, rather than using forms-type software to just set options in a rigid, mundane scanning scheme.

Bob Grove, in an article in the January 1983 issue of Monitoring Times, stated that the CompuScan 2100 will scan 12 channels per second, but the search mode is extremely slow, at one increment every 2 seconds! The list price is expected to be near $600.

--
==========
Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From 777154137485273027
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cf77a713ab1389f6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-04 07:32:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: illegal monitoring?
Message-ID: <6018@mgweed.UUCP>
Date: Wed, 4-Jan-84 10:32:01 EST
Article-I.D.: mgweed.6018
Posted: Wed Jan 4 10:32:01 1984

Date-Received: Thu, 5-Jan-84 01:07:57 EST
Organization: AT&T Technologies - Montgomery Illinois
Lines: 25

Interesting topic on monitoring vs. eavesdropping vs. wiretapping, etc.

As far as I know in FCC rules, The Communications Act prohibits divulging
the contents of any communication except those from broadcast stations
and amateur stations. In other words, it is illegal for me to tell you
what I heard on a police scanner, CB radio, marine band, cordless phone,
etc. It is NOT illegal for you to receive transmissions
from a police scanner, marine radio, microwave system, cordless phone
or whatever, as long as you keep it to yourself. This should include
scrambled stuff on TV. As far as I am concerned, anything that
is transmitted on "Broadcast" frequencies by stations licensed for public
broadcasting, belongs to anyone that has the capability to watch/hear it.
My feeling is that services that want to get paid do not belong on standard
broadcast frequencies!

Notice that the FCC purposely has avoided making any decisions on this.

Interesting to note that "ON TV" has hired a detective to locate "illegal"
receiving setups. It was reported in a Chicago paper that they can drive
around and pick up signals from your set to determine what channel you
are watching and if it is channel 44 they will prosecute. I would love
to blanket the area with a signal operating on the local osc frequency
of a TV tuner that would be tuned to that channel.

From -1210814810605487507
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,599b2f2be9782f68,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-04 08:03:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 11/4/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!harpo!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Robert S. Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: New! Continous Coverage MX5000 Scanner
Message-ID: <1688@ihuxf.UUCP>
Date: Wed, 4-Jan-84 11:03:42 EST
Article-I.D.: ihuxf.1688
Posted: Wed Jan 4 11:03:42 1984
Date-Received: Thu, 5-Jan-84 01:08:55 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 29

x
New Continuous Coverage MX5000 Scanner Announced

Regency Electronics just announced the MX5000 scanner, a 20 channel unit which covers 25 through 550 MHz without gaps. Front panel buttons (on a membrane keyboard) allow selection of FM, WBFM, and AM modes.

The MX5000 has an LCD display and a digital clock. Search increments are selectable: 5, 12.5, and 25 KHz. Front panel switches control keyboard lock and dial lighting. The scanner will be available in February and list for about $600.

The MX5000 unit looks just like the one announced months back from Fanon. Rumor has it that Fanon withdrew it, along with a new continous coverage handheld scanner, that Regency now offers as the HX3000. Sounds like the two are from overseas.

A call to Regency, at (317)545-4281, will get you a data sheet.

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Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From 711174325497875193
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1176e95715b06d1b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-04 20:13:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site houxq.UUCP
Path: utzoo!linus!decvax!harpo!eagle!hou5h!hou5a!hou5d!hogpc!houxq!bem2
From: bem2@houxq.UUCP
Newsgroups: net.ham-radio
Subject: ham equipment for sale
Message-ID: <478@houxq.UUCP>
Date: Wed, 4-Jan-84 23:13:36 EST
Article-I.D.: houxq.478
Posted: Wed Jan 4 23:13:36 1984
Date-Received: Fri, 6-Jan-84 02:21:10 EST
Organization: American Bell, Holmdel NJ
Lines: 16

FOR SALE

Heath SB101 SSB/CW transceiver. 180 watt 80-10 meter transceiver
with 400 Hz CW filter. Includes 117 v power supply, speaker, external

VFO, station console, and (somewhat sick) monitorscope (everything else in outstanding condition). $350

Bruce McNair, N2YK
AT&T Information Systems Labs
Room 4F303
Holmdel, NJ 07733

201-834-3692

...!houti!bem

From -4890645450334911376
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,46e640fb5e301985,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-06 08:24:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sbcs.UUCP
Path: utzoo!linus!philabs!sbcs!rick
From: rick@sbcs.UUCP (Rick Spanbauer)
Newsgroups: net.ham-radio
Subject: illegal monitoring (oh, groan, not again)
Message-ID: <564@sbcs.UUCP>
Date: Fri, 6-Jan-84 11:24:02 EST
Article-I.D.: sbcs.564
Posted: Fri Jan 6 11:24:02 1984
Date-Received: Sat, 7-Jan-84 11:21:21 EST
Organization: SUNY at Stony Brook
Lines: 31

With regard to the illegal monitoring question, the issue reduces to:

1. Those who have `illegal' setups regularly quote FCC regulations, i.e. as long as the signals cross my property, and I do not divulge their contents, I may legally view/listen to the signals.

2. The utilities (MDS, satellite movie companies, etc) quote the theft of service laws, i.e. if you are somehow bypassing their rate structure (it really does not matter how), then you are breaking the law.

So please, lets not start a debate over who is correct; many inconclusive wars have already been fought over this question. Let the courts decide.

Rick Spanbauer

SUNY/Stony Brook

ps. I fall into category (1), and believe that if the sender
wants to protect the message contents, it should be
encrypted in such a way that it is not cost effective for
me to decrypt the message.

From -8762085473812364828
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,703a1cfcc16345a1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-07 15:36:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site watcgl.UUCP
Path: utzoo!watmath!watcgl!defield
From: defield@watcgl.UUCP (Dan Field)
Newsgroups: net.ham-radio
Subject: info wanted about sw receivers
Message-ID: <1184@watcgl.UUCP>
Date: Sat, 7-Jan-84 18:36:00 EST
Article-I.D.: watcgl.1184
Posted: Sat Jan 7 18:36:00 1984
Date-Received: Sun, 8-Jan-84 06:50:57 EST
Organization: U of Waterloo, Ontario
Lines: 13

I am looking for information that will enable me to
make an intelligent decision about purchasing a
sw radio receiver. It must be able to pick up all the
major news services, have an am section good enough
to pull in many of the east coast baseball games and an
fm section. Any help with brand names or availability of
printed information would be great. Thanks for the help.

Dan Field

(allegra)!watcgl!defield
or
watmath!watcgl!defield

From 2532139403282011109
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,558ec833698f3ad0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-09 07:19:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site houxu.UUCP
Path: utzoo!linus!decvax!harpo!ihnp4!houxm!houxu!jhv
From: jhv@houxu.UUCP (James Van Ornum)

Newsgroups: net.ham-radio
Subject: SWL DX Help Needed
Message-ID: <273@houxu.UUCP>
Date: Mon, 9-Jan-84 10:19:48 EST
Article-I.D.: houxu.273
Posted: Mon Jan 9 10:19:48 1984
Date-Received: Tue, 10-Jan-84 02:08:08 EST
Organization: Bell Labs, Holmdel NJ
Lines: 18

I am restarting my shortwave listening activity after some 25 years.
But I'm having difficulty finding current DX reports, it seems that
Popular Electronics has changed its name and no longer covers the
SWL front. I have heard of a SWL club (Shortwave Listeners of
North America - or some similar name) but do not have an address
for them.

I would appreciate any pointers to SWL clubs with newsletters, to
stations with a DX report segment, or lists of English language broadcasts
with times, frequencies and station identification.

I am not sure this belongs in net.ham-radio, but I've seen other references
to scanners (public service bands, etc) here.

Thanks in advance, and responses will be summarized for the net.

     Jim Van Ornum, AT&T BL
     houxu!jhv

From 2533678631137413598
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3ac89172f6e7b96b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-09 10:11:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!linus!decvax!harpo!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: HW5400 Information
Message-ID: <407@inuxd.UUCP>
Date: Mon, 9-Jan-84 13:11:28 EST
Article-I.D.: inuxd.407
Posted: Mon Jan 9 13:11:28 1984
Date-Received: Tue, 10-Jan-84 02:10:37 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 8

     With a reduction of price of the Heath HW5400,several
     of us are interested in this rig. Does anyone own one
     or have seen any performance reports?? If so please

post the information or get in touch with me.

Thanks KN9K Rich

From -8370606130381575925
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cf77a713ab1389f6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-09 13:21:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site ucf-cs.UUCP
Path: utzoo!linus!decvax!duke!ucf-cs!giles
From: giles@ucf-cs.UUCP (Bruce Giles)
Newsgroups: net.ham-radio
Subject: Re: illegal monitoring?
Message-ID: <1141@ucf-cs.UUCP>
Date: Mon, 9-Jan-84 16:21:13 EST
Article-I.D.: ucf-cs.1141
Posted: Mon Jan 9 16:21:13 1984
Date-Received: Tue, 10-Jan-84 02:05:47 EST
References: <6018@mgweed.UUCP>
Organization: University of Central Florida
Lines: 41

<<eeck--- this sentence isn't dressed yet....>>

> Interesting to note that "ON TV" has hired a detective to locate "illegal"
> receiving setups. It was reported in a Chicago paper that they can drive
> around and pick up signals from your set to determine what channel you
> are watching and if it is channel 44 they will prosecute. I would love
> to blanket the area with a signal operating on the local osc frequency
> of a TV tuner that would be tuned to that channel.

Lovely. I remember the local moral mafia (sorry for the insult to the mafia) taking photographs of car license plates at local adult bookstores several years ago. I seem to recall that they then published the tags in the local paper, harassed the owners at work, or some other upstanding and moral activity.

What will happen now? If some station (cable or broadcast) shows a movie/show/documentary which group * doen't like, will * go around in their cars determining who is watching it? I can see it now, with selectors set to the 'Playboy Channel' and the automatic dialers starting prerecorded sermons on sin.

What *are* the laws regarding privacy in the Chicago area? Could that station be hit with a megabuck suit for invasion of privacy? I generally don't like such apparently trivia lawsuits, but this reeks of big brother too much. After all, think of how much you could determine about a person knowing `only' what shows [s]he watched.

Or for that matter, why should you be open to a law suit solely because

your television is tuned to channel 44. Perhaps you enjoy watching encoded
television shows. Like, you know, they're sortta like koans, man!

Next thing you know, typewriters will be contraband (as in most of the
world today).

Bruce Giles

UUCP: decvax!ucf-cs!giles
cs-net: giles@ucf
ARPA: giles.ucf-cs@Rand-Relay

From 1749676440642456246
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,28e59878c7317b8e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-09 15:28:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site druny.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!hogpc!drutx!drux3!druny!jml
From: jml@druny.UUCP
Newsgroups: net.ham-radio
Subject: re: New! Computer Controlled Radio Scanner
Message-ID: <775@druny.UUCP>
Date: Mon, 9-Jan-84 18:28:48 EST
Article-I.D.: druny.775
Posted: Mon Jan 9 18:28:48 1984
Date-Received: Tue, 10-Jan-84 05:44:05 EST
Organization: AT&T Information Systems Laboratories, Denver
Lines: 15

I saw the Bearcat CompuScan 2100 at Comdex. Unfortunately, my initial
impression was not good. The scanner was connected to a Commodore 64
and every time it found a frequency with something happening, the C64 went
to it's disk to find the appropriate info belonging to that frequency.
The program is written in BASIC (or so the salesperson said) and it was
slow. It would take several seconds to find the info on the disk, by
which time the scanner would have taken off trying to find another
active frequency. Therefore, the display was useless in search mode.
The idea is good however, as happens all to often, the implementation was
lacking. The scanner itself was a nice machine, and the potential with a
fast micro is good. It would probably be better with a micro that had a hard
disk or ram-disk.
John Leon druny!jml
AT&T Information Systems Labs

From -6885413355663092743
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,a182110d7152f69a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-10 06:25:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou2f.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!hou2f!4391aas
From: 4391aas@hou2f.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: Please repost
Message-ID: <132@hou2f.UUCP>
Date: Tue, 10-Jan-84 09:25:37 EST
Article-I.D.: hou2f.132
Posted: Tue Jan 10 09:25:37 1984
Date-Received: Wed, 11-Jan-84 03:48:10 EST
Organization: Bell Labs, Holmdel NJ
Lines: 5

Whoever posted a Johnson KW matchbox for 95 bucks please post again if you haven't already sold it. I know somebody who wants it.

Al Schwarz ND2K

From -5605821758875411729
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1b33e4f51de14ca2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-10 06:33:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL propagation Nr1
Message-ID: <6149@mgweed.UUCP>
Date: Tue, 10-Jan-84 09:33:41 EST
Article-I.D.: mgweed.6149
Posted: Tue Jan 10 09:33:41 1984
Date-Received: Wed, 11-Jan-84 03:51:55 EST
Organization: AT&T Technologies - Montgomery Illinois
Lines: 31

PROPAGATION BULLETIN NR 1 FROM ARRL HEADQUARTERS NEWINGTON CT JANUARY 3 1984 TO ALL RADIO AMATEURS

SOLAR ACTIVITY IN DECEMBER WAS SIMILAR TO THAT IN NOVEMBER. THE MONTHLY SOLAR FLUX AVERAGE WAS 93.7...UP LESS THAN ONE UNIT FROM NOVEMBER. BOTH MONTHS SET A PATTERN TYPICAL OF EXPECTATIONS FOR THE COOLER MONTHS OF 1984. THERE WILL BE HIGHER PEAKS AND LOWER VALLEYS AT TIMES BUT THE OVERALL DECLINE WILL BE BARELY NOTICEABLE TO THE CASUAL USER OF THE HF BANDS OTHER THAN 28 MHZ.

IN PRACTICAL TERMS THE DECLINE OF CYCLE 21 HAS MOVED DX CONDITIONS ONE BAND LOWER IN FREQUENCY. THE EFFECT IS MOST NOTICEABLE ON 28 MHZ BUT IT WILL BE SHOWING MORE ON 21 MHZ AS THE SOLAR FLUX AVERAGE MOVES BELOW ABOUT 90. BY CONTAST...WORLDWIDE DX ON 160 AND 80 IS PICKING UP MARKEDLY...A CHANGE NOT WELCOMED BY TRAFFIC HANDLERS WHO LIKE THE SEMI LOCAL CHARACTER OF THESE BANDS DURING THE HIGH SOLAR ACTIVITY YEARS.

FOR EARLY JANUARY WE CAN EXPECT VARIABLE CONDITIONS THROUGH ABOUT THE 12TH...EXCEPT FOR A BRIEF SPELL OF GOOD PROPAGATION AROUND JANUARY 5. A LONGER STRETCH OF GOOD SIGNAL LEVELS AND MINIMIM FADING IS EXPECTED THE 13TH TO 18TH. ABOUT AVERAGE WINTER PROPAGATION IS LIKELY THE 19TH THROUGH 26TH. THE SOLAR FLUX WILL BE LOW ENOUGH IN THE LAST HALF OF THE MONTH TO LIMIT DX ACTIVITY ON 28 MHZ TO THE LOWER LATITUDES AND TRANSEQUATORIAL CIRCUITS MOST OF THE TIME.

AMERICAN SUNSPOT NUMBERS FOR THE PERIOD DECEMBER 22 THROUGH 28 WERE BETWEEN 0 AND 21 WITH A MEAN OF 10.3.

From 5101580314677217212
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5cb5ed0772bf62c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-10 06:34:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL DX bulletin
Message-ID: <6150@mgweed.UUCP>
Date: Tue, 10-Jan-84 09:34:05 EST
Article-I.D.: mgweed.6150
Posted: Tue Jan 10 09:34:05 1984
Date-Received: Wed, 11-Jan-84 03:58:34 EST
Organization: AT&T Technologies - Montgomery Illinois
Lines: 56

DX BULLETIN NR 1 FROM ARRL HEADQUARTERS NEWINGTON CT
JANUARY 6 1984 TO ALL RADIO AMATEURS

FRANZ JOSEF LAND. UK1PGO...OPERATOR SLAVA...HAS BEEN QUITE ACTIVE ON 40 METER CW BOTH MORNING AND EVENING. REMEMBER THAT AT THIS TIME OF YEAR FRANZ JOSEF LAND IS IN DARKNESS THROUGHOUT THE DAY...MAKING FOR EXCELLENT LOW FREQUENCY CONDITIONS.

LACCADIVES. VU2GDG HAS CONFIRMED THAT HE WILL LEAVE INDIA ON 7 JAN FOR THE LACCADIVE ISLANDS WITH 6 OPERATORS...3 COMPLETE STATIONS AND SPLIT CAPABILITY. THE CALL SIGN MAY BE

VU7WCY...BUT IT IS UNCERTAIN AT PRESENT. QSL TO VU2GDG.

GUYANA. DICK...8R1RBF...IS NOW ACTIVE ON 80 METERS WITH A NEW DIPOLE ANTENNA. WATCH 3795 KHZ AFTER EAST COAST SUNSET.

TUVALU. GORDON...T2GSH...HAS BEEN ACTIVE ALMOST DAILY ON 80 METER SSB BEGINNING AT 1200Z.

CAMBODIA. XU1SS IS A FREQUENT VISITOR TO 20 METER CW AROUND 14015 KHZ. SIGNALS TO NORTH AMERICA ARE STRONGEST FROM 1130 TO 1300Z. QSL WUTH THE OPERATOR VIA JA1HQG.

NIUE. BOB...ZK2RS...RECENTLY HAS BEEN REPORTED ON 40 AND 80 METER SSB AT HIS SUNSET. WATCH 0530 TO 0630 UTC.

IRAQ. YI1BGD HAS A VERY STRONG SIGNAL ON THE LONG PATH TO NORTH AMERICA ON 20 METER SSB. LOOK FOR SAAD ON 14205 AFTER 1100Z.

WESTERN KIRIBATI. T30CT IS REALLY KARL...DL1VU...ON HIS TRANSPACIFIC TRIP. WATCH FOR PLENTY OF LOW BAND CW ACTIVITY FROM THIS AND OTHER SPOTS. QSL AS INSTRUCTED.

DJIBOUTI. BOTH J28DP AND J28DS ARE EXTREMELY ACTIVE ON 40 METER CW FROM 2100 TO 0400Z.

160 METERS. SUPERB CONDITIONS HAVE PREVAILED FOR THE PAST TWO DAYS ON TOP BAND. MANY ASIATIC RUSSIAN STATIONS...AS WELL AS JAPAN...HAVE BEEN WORKED BY NORTH AMERICANS. INTERESTING STATIONS REPORTED INCLUDE EZ6GAW...UF6FHL AND UD6DKW.

SOUTH ORKNEY. THE ARGENTINE EXPEDITION SIGNING AZ5ZA CONTINUES ACTIVE ON 160 THROUGH 10 METER CW AND SSB. THE OPERATION SHOULD CONTINUE UNTIL AT LEAST 17 JAN. QSL VIA LU2A.

ST. MARTIN. FG0HYJ/FS7 IS PRESENTLY ACTIVE FROM THE FRENCH SIDE OF THE ISLAND. JOSE PREFERS CW AND OPERATES HIGH IN THE CW BANDS.

CROZET. FB8WK HAS BEEN REPORTED NIGHTLY ON 80 AND 40 METER CW WITH STRONG SIGNALS IN NORTH AMERICA. WATCH FOR JAN FROM 0030Z ON 80 METERS...SWITCHING TO 40 METERS AROUND 0200Z. QSL TO BOX 190...81200 MAZAMET...FRANCE.

From 5258306382715152522
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ac120f246aa21c7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-10 15:29:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5a.UUCP
Path: utzoo!linus!decvax!harpo!ihnp4!houxm!hogpc!houti!lime!odin!orion!hou5f!

hou5e!hou5d!hou5a!pbn
From: pbn@hou5a.UUCP
Newsgroups: net.ham-radio
Subject: Propagation Bulletin 2
Message-ID: <484@hou5a.UUCP>
Date: Tue, 10-Jan-84 18:29:00 EST
Article-I.D.: hou5a.484
Posted: Tue Jan 10 18:29:00 1984
Date-Received: Thu, 12-Jan-84 00:35:34 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 27

qst de w1aw
hr propagation forecast bulletin nr 2 from arrl headquarters
newington ct january 9, 1984
to all radio amateurs bt

thus far in january, the solar flux has been running lower than for
the corresponding days in december. activity of the earths magnetic
field has also been lower, especially just preceding issuance of this
bulletin. these conditions have made for improved propagation on the
lower amateur frequencies, but they have brought reduced coverage and
fewer hours of dx on 28 mhz, and to some extent on 21 mhz.

active areas presently visible on the sun are in the eastern
quadrant, which would indicate continuance of stable propagation
through about january 10. more geomagnetic activity and degraded
propagation are likely about january 12 and 15, but no serious
disturbances are expected before about the 26th to 29th.

because the solar flux will almost certainly be lower than 124, the
figure used for the prediction charts in december qst, the muf on
most communications circuits will tend to be lower than these charts
indicate.

american sunspot numbers for the period december 29 through january 4
were between 0 and 18 with a mean of 10.3 ar

From 4165724991880207496
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e8cb64b24aac7de,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-10 20:04:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cmcl2.UUCP
Path: utzoo!linus!decvax!harpo!floyd!cmcl2!sullivan
From: sullivan@cmcl2.UUCP
Newsgroups: net.ham-radio
Subject: Re: SWL DX Help Needed - (nf)
Message-ID: <1264@cmcl2.UUCP>
Date: Tue, 10-Jan-84 23:04:51 EST

Article-I.D.: cmcl2.1264
Posted: Tue Jan 10 23:04:51 1984
Date-Received: Thu, 12-Jan-84 00:46:44 EST
Sender: sullivan@cmcl2.UUCP
Organization: New York University
Lines: 10

#R:houxu:-27300:cmcl2:8700004:000:1
cmcl2!sullivan   Jan 10 19:12:00 1984

--

David Sullivan, WA1TNS   UUCP: ...!floyd!cmcl2!sullivan
(212) 460-7287   ARPA: SULLIVAN@NYU
New York University

From 3536801768527484241
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e8cb64b24aac7de
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-10 20:05:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cmcl2.UUCP
Path: utzoo!linus!decvax!harpo!floyd!cmcl2!sullivan
From: sullivan@cmcl2.UUCP
Newsgroups: net.ham-radio
Subject: Re: SWL DX Help Needed - (nf)
Message-ID: <1265@cmcl2.UUCP>
Date: Tue, 10-Jan-84 23:05:06 EST
Article-I.D.: cmcl2.1265
Posted: Tue Jan 10 23:05:06 1984
Date-Received: Thu, 12-Jan-84 00:47:06 EST
Sender: sullivan@cmcl2.UUCP
Organization: New York University
Lines: 53

#R:houxu:-27300:cmcl2:8700005:000:2250
cmcl2!sullivan   Jan 10 23:04:00 1984

Since I imagine that a few people might be interested in a answer, I'm posting
this to the net.

The major (only?) magazine for SWLing is Popular Communications, which you
should find in a good magazine shop. Their address is 76 North Broadway,
Hicksville, New York, 11801. It's a pretty good, general interest magazine,
but with some slant to clandestine and survivalist communications.

Several `clubs' publish newletters on a regular basis. The American Shortwave
Listeners Club (ASWLC) publishes a fairly packed newsletter, about 45 pages
worth, covering all aspects of SWLing, and even FM DXing. Their address is

16182 Ballad Lane, Huntington Beach, California, 92649. Of a similar vein, the Society for the Promotion of the Engrossing Enjoyment of DX (SPEEDX) puts out roughly the same number of pages, but is concerned only with SWL, and not Broadcast Band (BCB) and FM too like the ASWLC. Their address is P.O. Box E, Lake Elsinore, California, 92330.

For all BCB DXing, which is easy for anyone to get into, and surprisingly fun, the two major groups which cover BCB only are the National Radio CLub (NRC), and the International Radio Club of America (IRCA). They publish their newsletters, roughly 40 pages each, about 30 times a year, with issues coming weekly in the winter DX months. The NRC publishes `DX News', and their address is P.O. Box 24, Cambridge, Wisconsin, 53523.  The IRCA publishes the `DX Monitor', and their address is P.O. Box 21074, Seattle, Washington, 98111.

For those with a penchant for the out-of-the-way, their is a group which specializes in the frequencies from 150 - 500 KHz, and they are named appropriately the Longwave Club of America (LWCA). Their publication, `The Lowdown', is about 20 to 30 pages a month, and their address is 45 Wildflower Road, Levittown, Pennsylvania, 19057.

All of the clubs also offer various publications and guides to all aspects of the hobby. They all run about $10 to $20 a year to subscribe to.

And, before I forget, the World Radio and TV Handbook (WRTVH) is a bible, and even for the casual listener, it is a boon.

Enough? I hope this helps!

David Sullivan, WA1TNS   UUCP: ...!floyd!cmcl2!sullivan
(212) 460-7287   ARPA: SULLIVAN@NYU
New York University

--

David Sullivan, WA1TNS   UUCP: ...!floyd!cmcl2!sullivan
(212) 460-7287   ARPA: SULLIVAN@NYU
New York University

From -7487232238423733527
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,48486b2254e166bf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-11 01:52:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!decvax!harpo!ulysses!mhuxl!eagle!allegra!karn
From: karn@allegra.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: TAPR Annual Meeting
Message-ID: <2195@allegra.UUCP>

Date: Wed, 11-Jan-84 04:52:00 EST
Article-I.D.: allegra.2195
Posted: Wed Jan 11 04:52:00 1984
Date-Received: Thu, 12-Jan-84 00:44:37 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 53

M E E T I N G A N N O U N C E M E N T

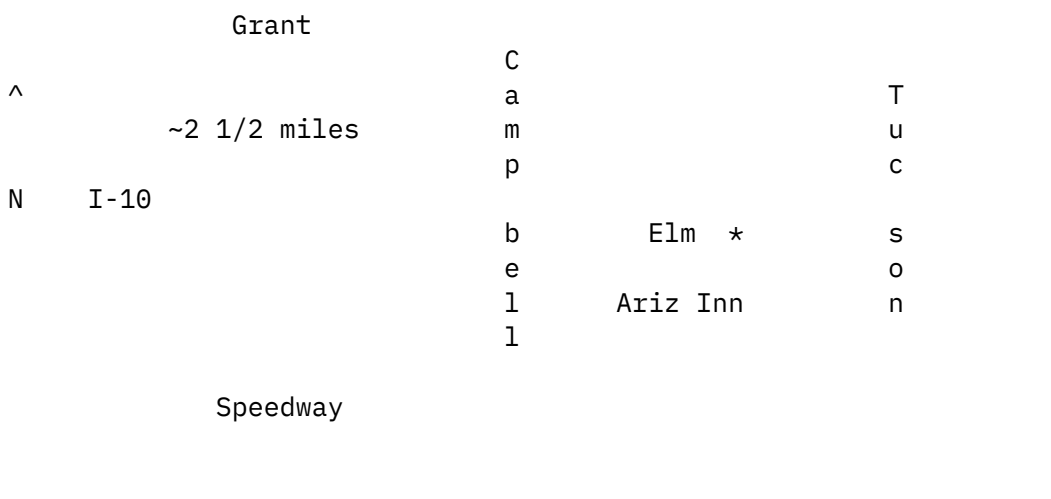
The Tucson Amateur Packet Radio Corporation's annual meeting will be held on Saturday, February 4th, 1984 at the Arizona Inn, located at 2200 East Elm Street in Tucson. See map below for detailed directions to the Arizona Inn.

The meeting will begin at 10 AM and end near 5 PM. Please see the meeting announcement on page 1 of the January PSR for details of the program.

A catered lunch will be provided for those who wish to partake. The cost is $5.00 and includes choice of beverage, salad, a main course of chicken, rice and vegetable, and a dessert.

Due to the limited space available, we request that you fill in the reservation form below and return it to TAPR, PO Box 22888, Tucson AZ 85734 at your earliest convenience. If you wish to have lunch with us, please send a check for $5.00 per person. It is important that we know of your plans by the 28th of January so we can make the appropriate arrangements with the Inn.

We look forward to meeting with you on February 4th!



==========

Name _____

Number in party _____ Number for lunch _____

Please enclose a check or money order for $5.00 per lunch, and

mail to TAPR, PO Box 22888, Tucson, AZ 85734.

Thank you!

From 527827120765012739
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e76747ec790f02f3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-11 09:03:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site fluke.UUCP
Path: utzoo!linus!decvax!harpo!ihnp4!alberta!ubc-vision!uw-beaver!ssc-vax!fluke!
chuckb
From: chuckb@fluke.UUCP (Chuck Bowden)
Newsgroups: net.ham-radio
Subject: re:request.for.sw.radio.info
Message-ID: <159@tpvax.fluke.UUCP>
Date: Wed, 11-Jan-84 12:03:29 EST
Article-I.D.: tpvax.159
Posted: Wed Jan 11 12:03:29 1984
Date-Received: Sun, 15-Jan-84 06:04:04 EST
Organization: John Fluke Mfg. Co., Everett, Wash
Lines: 43

phere (much more
during the day then at night).

FM Broadcast is limited to line of sight (actually about 1/3 farther than line of sight) because it is in the VHF portion of the spectrum, where in most cases, signals pass right through the ionosphere without being refracted downward at all.

In the shortwave part of the spectrum, however, signals are refracted back to earth, even bouncing multiple times. This phenomenon varies quite a bit with changes in the earth's magnetic field, the amount of charged particles coming from the sun, and from day to night.

For a shortwave radio (if by major news services you meant BBC, Radio Moscow, etc.) anything but the very lowest quality "all-band" jobs will be fine. Since ionospheric conditions the major factor in whether you will hear a station, and government SW broadcast stations use a lot of power, most shortwave receivers work fine for this. Sony's very small SW receivers are good. If you want to cover everything in the SW spectrum with a top quality receiver and can afford it, an Icom R-70 is hard to beat.

For getting the baseball games on AM, though, there are some problems.

The MW frequencies are noisy, so a very sensitive receiver will still get a lot of static. A good antenna is always important, but an ideal antenna for MW reception would be too big to be practical. One designed like a TV antenna would probably be bigger than a city block. The longest wire you can string up will help bring in any distant AM broadcast stations you can get, though.

Chuck Bowden, KD7LZ

From 4597259515681168153
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f8821ebf97d7dcc1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-12 07:00:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!linus!decvax!harpo!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP (R Fitch)
Newsgroups: net.ham-radio
Subject: W5LFL Zone 9 Confirmations
Message-ID: <414@inuxd.UUCP>
Date: Thu, 12-Jan-84 10:00:36 EST
Article-I.D.: inuxd.414
Posted: Thu Jan 12 10:00:36 1984
Date-Received: Fri, 13-Jan-84 06:39:40 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 97

Indianapolis Repeater Association Net on 146.70 1-11-84 re-broadcasted a special ARRL Bulletin listing the zone 9 stations that were sorted from the STS tapes and are as follows:

K9VI
N9GA
K9HMB
WB9MSB
WB9C??

Congradulations to those stations although few. I beleive that the 9 zone stations being in the middle of the country were working against great odds. The coastal stations had first contact as he broke the horizon and the maximum QRM would most likely occur at mid orbit and those at the Canadian border may have had the best "last" shot.

It was fun and we did hear him loud and clear and better luck the next time (which we hope is soon) is all we can ask for.

73 KN9K RICH

Subject: W5LFL Zone 9 Confirmations
Newsgroups: ham-radio

Indianapolis Repeater Association Net on 146.70 1-11-84
re-broadcasted a special ARRL Bulletin listing the zone
9 stations that were sorted from the STS tapes and are
as follows:

K9VI
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Congradulations to those stations although few. I beleive
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Newsgroups: net.ham-radio
Subject: W5LFL Zone 9 Confirmations
Newsgroups: ham-radio

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the next time (which we hope is soon) is all we can ask for.

73 KN9K RICH

Newsgroups: net.ham-radio
Newsgroups: net.ham-radio
Newsgroups: net.ham-radio

From 6397863704591723896
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,70b827e659d36ca7,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,70b827e659d36ca7,start
X-Google-Attributes: gid15c702,public
X-Google-ArrivalTime: 1984-01-12 11:44:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxj.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!whuxj!wjm
From: wjm@whuxj.UUCP (MITCHELL)
Newsgroups: net.audio,net.ham-radio
Subject: Re: Dirty transmitters
Message-ID: <52@whuxj.UUCP>
Date: Thu, 12-Jan-84 14:44:52 EST
Article-I.D.: whuxj.52
Posted: Thu Jan 12 14:44:52 1984
Date-Received: Fri, 13-Jan-84 07:29:16 EST
Organization: Bell Labs, Whippany, N.J.
Lines: 15

The FCC requires operators of radio transmitters to operate on certain
radio frequencies, and to keep their transmitter outputs within those
frequency bands. Unfortunately, it costs GREEN STAMPS to provide RF
shielding, so many manufacturers of consumer electronics skimp on this
shielding. Therefore, even a clean transmitter will interfere with
this equimpent. If the transmitter is operating on its proper frequency,
it is the responsibility of the user of the receiving equipment to clear

up the problem. Often, a local ham can help you install shielding to solve the problem. However, RFI problems can sometimes be tough to solve and may require quite a bit of perserverance.
[I'm also posting this to net.ham-radio to give my fellow hams notice that this discussion is going on on net.audio]
Bill Mitchell
CSO
Whippany NJ (whuxj!wjm) Note that I've moved to a new system - whuxj

From 6007758058443104477
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fec741c6a2a888a7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-13 17:14:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site ucf-cs.UUCP
Path: utzoo!linus!decvax!duke!ucf-cs!giles
From: giles@ucf-cs.UUCP (Bruce Giles)
Newsgroups: net.ham-radio
Subject: Re: TV detective/contraband typewriters/UNIX 2meter net?
Message-ID: <1153@ucf-cs.UUCP>
Date: Fri, 13-Jan-84 20:14:51 EST
Article-I.D.: ucf-cs.1153
Posted: Fri Jan 13 20:14:51 1984
Date-Received: Sun, 15-Jan-84 00:18:14 EST
References: <340@rdin.UUCP>
Organization: University of Central Florida
Lines: 39

I remember coming across an article (I think in *Newsweek*) shortly after the imposition of martial law in Poland that Poland required samples of a typewriter's output (i.e. aAbBcCdD...) be submitted to the state police, that all typewriters be registered with the state police, and that the penalty for an unregistered typewriter was something pretty extreme, like 10-20 years at hard labor. This article was consistent with several other things I had come across earlier, primarily with regard to the Soviet Union, but references elude me. In most of the rest of the world, of course, the question is somewhat academic as there is effectively no one who has the resources to obtain a typewriter, the knowledge to use it (I'm ducking now on that one, I can see comments coming already), and the desire to oppose the government. (I.e. bite the hand that feeds them).

Perhaps they are not contraband in the sense that possession is illegal, period; but I have the distinct impression that they are definitely `controlled substances' in every socialist, authoritarian, or [whatever the other type is] country.

Food for thought: I was looking through the Code of Federal Regulations a while back and it appears that the government has the authority to confiscate every ham radio in the country if it wants to. It was some-
where near the front of the section on the Amateur Radio Service, and

I may have just misread it, but you may want to check it out. After all,
in a very real sense there is no difference between confiscating
typewriters because they can be used to criticize the government and
confiscating ham radios because they are an uncontrolled communications
resource.

Bruce Giles

UUCP: decvax!ucf-cs!giles
cs-net: giles@ucf
ARPA: giles.ucf-cs@Rand-Relay
Snail: University of Central Florida
         Dept of Math, POB 26000
         Orlando Fl 32816

From -4259417164929544802
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e76747ec790f02f3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-14 15:20:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cdi.UUCP
Path: utzoo!linus!philabs!seismo!harpo!ihnp4!alberta!ubc-vision!uw-beaver!
tektronix!reed!cdi!caf
From: caf@cdi.UUCP (caf)
Newsgroups: net.ham-radio
Subject: re:request.for.sw.radio.info
Message-ID: <290@cdi.UUCP>
Date: Sat, 14-Jan-84 18:20:43 EST
Article-I.D.: cdi.290
Posted: Sat Jan 14 18:20:43 1984
Date-Received: Tue, 17-Jan-84 02:44:26 EST
References: <159@tpvax.fluke.UUCP>
Organization: Computer Development Inc, Beaverton OR
Lines: 9

Concerning MW listening: A loop antenna with amplifier is often
the best bet. Another good alternative is an active antenna
(uses a short whip) mounted in the clear, well away from power lines
et al., with the mast well grounded. Then again, maybe you are lucky
and live where the power lines are clean and the neighbors don't
use light dimmers. Then fifty feet of wire strung into a tree will
do great!
--
Chuck Forsberg WA7KGX CDI Portland OR (503)-646-1599 cdi!caf

From -8465013567464222883
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,32e144d42585beeb,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-14 19:20:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site houxu.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!houxu!jhv
From: jhv@houxu.UUCP (James Van Ornum)
Newsgroups: net.ham-radio
Subject: SWL DX Help Summary
Message-ID: <286@houxu.UUCP>
Date: Sat, 14-Jan-84 22:20:30 EST
Article-I.D.: houxu.286
Posted: Sat Jan 14 22:20:30 1984
Date-Received: Sun, 15-Jan-84 06:16:34 EST
Organization: Bell Labs, Holmdel NJ
Lines: 63

A summary of the SWL DX information I received to date follows:

PUBLISHERS ----------

CRB Research; PO Box 56; Commack, NY 11725
"The Top Secret Registry of US Government Radio Frequencies," 5th edition, about $15; "Rail-Scan," "Air-Scan," "Confidential Frequency List."

Centry Print Shop; 6059 Essex Street; Riverside, CA 92504
"World Radio-TV Handbook (WRTH)," $15 UPS, $16 1st class mail; schedule and club listings, receiver reviews.

PROGRAMS ----------

Radio Canada SWL Digest
Sat 2130GMT 17875, 17820, 15325, 15150, 11945 kHz,
Sun 1930GMT 17875, 15325, 11905 kHz (abbrevuated version),
Sun 2330GMT 11895, 9755 kHz,
Mon 0300GMT 9755, 5960 kHz
Tue 1920GMT 17820, 15260 kHz.

MAGAZINES ----------

"Monitoring Times;" Grove Enterprises; (704) 837-2216; $10.50/year.

"Popular Communications;" 76 North Broadway; Hicksville, NY 11801; general interest with clandestine and survivalist coverage.

"Review of International Broadcasting;" Glenn Hauser; PO Box 6287; Knoxville, TN 37914; $15/year, $1.25 sample; program content, schedules, equipment.

DEALERS ----------

Gilfer Associates; Park Ridge, NJ (201) 391-7887
CRB books, WRTH, customized general coverage receivers, other hardware.

CLUBS ----------

American Shortwave Listeners Club (ASWLC); 16182 Ballad Lane;
Huntington Beach, CA 92649; bulletin 45 pages covering SWL and FM DX.

Association of North American Radio Clubs (ANARC); 1500 Bunbury Drive;
Whittier, CA 90601; $5/year, $0.75+SASE sample, $0.50+SASE club list;
newsletter with club and equipment news.

International Radio Club of America (IRCA); PO Box 21074; Seattle, WA 98111;
DX Monitor bulletin; "DX Monitor" bulletin covers broadcast band DX only.

Longwave Club of America (LWCA); 45 Wildflower Road; Levittown, PA 19057;
"The Lowdown" bulletin specializes in 150 - 500 kHz.

NASWA; PO Box 13; Liberty, IN 47353; $16/year, $1 sample; "FRENDX" bulletin,
SW BC station logs, extensive schedule and station info.

National Radio Club; PO Box 24; Cambridge, WI 53523; "DX News" bulletin covers
broadcast band DXing only

Society for the Promotion of the Engrossing Enjoyment of DX (SPEEDX);
PO Box E; Lake Elsinore, CA 92330; $18/year, $1 sample; bulletin w/ logs
(especially utility stations), some schedule and program info.

ACKNOWLEDGEMENTS ------
Margot Flowers, ihnp4!decvax!Flowers
Dan Halbert, ihnp4!decvax!ucbvax!halbert
Robert S. Parnass, ihnp4!inuxf!parnass
David Sullivan, harpo!floyd!cmc12!sullivan

From -5020787549209120518
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fec741c6a2a888a7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-15 06:49:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!duke!mcnc!ecsvax!mjg
From: mjg@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: TV detective/contraband typewriters/UNIX 2meter net?
Message-ID: <1865@ecsvax.UUCP>
Date: Sun, 15-Jan-84 09:49:57 EST
Article-I.D.: ecsvax.1865
Posted: Sun Jan 15 09:49:57 1984
Date-Received: Mon, 16-Jan-84 01:11:34 EST
References: rdin.340
Lines: 14

I can tell one place where TV detectives come to your door and threaten
prsecution - thats England!. Over there you have to pay a licence fee per
household to operate at TV - thats what finances the BBC and makes it
independant of Government handouts and commercials - say 10 million
housholds paying around $75 per year brings in enough to run 2 TV channels
4 national radio channels and many local stations. Of course there are lots
of people who would like to get away without paying so the Post Office, whose

job it is to collect and administer the licence scheme has for years had detector vans of increasing sophistication to detect unlicensed users. They have it to a fine art where they can tell what channel you are watching and what corner of the room the TV is in!. 1984 came a long time ago in Britain as far as TV is concerned!.

- Mike Gingell, Raleigh, NC (ex UK!)   ...mcnc!ecsvax!mjg

From 2212174528603012250
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6b9465c5e2c9b2f9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-16 07:24:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!linus!philabs!seismo!harpo!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Robert S. Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: radio magazines confiscated in Canada
Message-ID: <1708@ihuxf.UUCP>
Date: Mon, 16-Jan-84 10:24:35 EST
Article-I.D.: ihuxf.1708
Posted: Mon Jan 16 10:24:35 1984
Date-Received: Tue, 17-Jan-84 02:43:58 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 19

x

At a local chapter meeting of the Radio Communications Monitoring Association (RCMA), a club officer announced that Canadian members were not receiving the club newsletters. The newsletters are being confiscated by the postal authorities because they contain frequency information for radio systems for the Royal Canadian Mounted Police (RCMP), airport security, etc.

A letter in the January 1984 issue of Monitoring Times, another publication which includes frequency listings, claims that this magazine is being confiscated in Canada also.

--
==========
Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -1119626219316602986
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,801156022acfb55e,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1984-01-16 11:17:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 ggr 10/28/83; site pyuxdd.UUCP
Path: utzoo!linus!decvax!harpo!eagle!allegra!alice!rabbit!pyuxdd!hcl
From: hcl@pyuxdd.UUCP (HC Lee)
Newsgroups: net.ham-radio
Subject: Heathkit SB-220 Linear, Tri-bander, and rotator for sale
Message-ID: <212@pyuxdd.UUCP>
Date: Mon, 16-Jan-84 14:17:58 EST
Article-I.D.: pyuxdd.212
Posted: Mon Jan 16 14:17:58 1984
Date-Received: Tue, 17-Jan-84 03:01:31 EST
Distribution: net.ham-radio
Organization: AT&T Bell Laboratories, Piscataway
Lines: 3

For sale - Heathkit SB-220 (2KW) Linear amp, Mosley CL-33 Tri-band yagi, and
CDE rotator. Entire pkg. $625.00. Will also sell separates. Contact
Don Pelrine at PY x2589 or (201) 981-2589.

From 2665158310083943818
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4302585eb108b355,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-16 15:54:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!harpo!seismo!hao!
hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: 1984 Vintage Orbital Elements in BASIC
Message-ID: <238@dsd.UUCP>
Date: Mon, 16-Jan-84 18:54:15 EST
Article-I.D.: dsd.238
Posted: Mon Jan 16 18:54:15 1984
Date-Received: Sat, 21-Jan-84 02:26:53 EST
Lines: 78

Posted: Sat Jan 14, 1984 11:36 PM PST   Msg: OGIE-1696-2330
From: TCLARK
To: ops
Subj: 1984 Vintage Orbital Elements in BASIC

Here follow the most recent compilation of 1984 vintage orbital
elements direct from NASA (except for AO-10, where Millstone Hill
values are included). These are already in the format for inclusion
directly in the infamous 'IWI program. Sorry, but no suitable data
for RS-3 or RS-5 has yet been received. The 203xx and 205xx blocks
of data will be posted when it becomes available. 73, Tom

           - - - - - - - - - - - - - - - - - -

```
20000 REM------------------------
20010 DATA "Phase-3B === AMSAT-OSCAR-10"
20020 DATA "Element Set # MH -- 3Jan84 de KA9Q"
20030 DATA 84,001.67617120,  0,0,0,  416 : REM-Epoch date/time & Rev#
20040 DATA 054.0540,    2.05854161,  0   : REM-Mean Anom, Mean Motion/SMA
20050 DATA 0.0000000, 25.8370,  .6084848 : REM-Drag, Incl & Ecr
20060 DATA 233.3550,  222.8130,  145.810 : REM-Arg Perg, RAAN & Freq

20100 REM------------------------
20110 DATA "AMSAT-OSCAR-8 == 78026B == #10703"
20120 DATA "NASA Element Set # 825 -- 11Jan84"
20130 DATA 84,009.96380133,  0,0,0,29810 : REM-Epoch date/time & Rev#
20140 DATA 240.7071,  13.96589923,   0   : REM-Mean Anom, Mean Motion/SMA
20150 DATA -.00000017, 98.7528, .0006653 : REM-Drag, Incl & Ecr
20160 DATA 119.4867,  017.6920,  175.5   : REM-Arg Perg, RAAN & Freq

20300 REM------------------------
20310 REM--DATA FOR RS-3 == 81120A == #12997 MISSING

20400 REM------------------------
20410 DATA "RS-4 == 81120D == #13000"
20420 DATA "NASA Element Set # 169 -- 11Jan84"
20430 DATA 84,008.54245459,  0,0,0, 9071 : REM-Epoch date/time & Rev#
20440 DATA 316.9684,  12.06669164,   0   : REM-Mean Anom, Mean Motion/SMA
20450 DATA +.00000004, 82.9623, .0018329 : REM-Drag, Incl & Ecr
20460 DATA 043.2813,  229.3468,  175.3   : REM-Arg Perg, RAAN & Freq

20500 REM------------------------
20510 REM--DATA FOR RS-5 == 81120C == #12999 MISSING

20600 REM------------------------
20610 DATA "RS-6 == 81120F == #13002"
20620 DATA "NASA Element Set # 071 -- 11Jan84"
20630 DATA 84,008.06605693,  0,0,0, 9117 : REM-Epoch date/time & Rev#
20640 DATA 016.7752,  12.13557899,   0   : REM-Mean Anom, Mean Motion/SMA
20650 DATA +.00000004, 82.9596, .0050499 : REM-Drag, Incl & Ecr
20660 DATA 343.1632,  224.0269,  175.3   : REM-Arg Perg, RAAN & Freq

20700 REM------------------------
20710 DATA "RS-7 == 81120E == #13001"
20720 DATA "NASA Element Set # 139 -- 11Jan84"
20730 DATA 84,007.53970377,  0,0,0, 9074 : REM-Epoch date/time & Rev#
20740 DATA 354.7537,  12.08675623,   0   : REM-Mean Anom, Mean Motion/SMA
20750 DATA +.00000004, 82.9560, .0022468 : REM-Drag, Incl & Ecr
20760 DATA 005.3765,  228.1470,  175.3   : REM-Arg Perg, RAAN & Freq

20800 REM------------------------
20810 DATA "RS-8 == 81120B == #12998"
20820 DATA "NASA Element Set # 258 -- 11Jan84"
20830 DATA 84,005.54938692,  0,0,0, 9007 : REM-Epoch date/time & Rev#
20840 DATA 235.2706,  12.02939653,   0   : REM-Mean Anom, Mean Motion/SMA
20850 DATA +.00000003, 82.9586, .0019431 : REM-Drag, Incl & Ecr
20860 DATA 125.0161,  233.7424,  175.3   : REM-Arg Perg, RAAN & Freq
```

```
20900 REM-------------------------
20910 DATA "UoSAT-OSCAR-9 == 81100B == #12888"
20920 DATA "NASA Element Set # 569 -- 11Jan84"
20930 DATA 84,009.09096800,  0,0,0,12514 : REM-Epoch date/time & Rev#
20940 DATA 008.6588,  15.24107802,   0   : REM-Mean Anom, Mean Motion/SMA
20950 DATA +.00003186, 97.5719, .0001926 : REM-Drag, Incl & Ecr
20960 DATA 351.4572,  341.5961,  145.8   : REM-Arg Perg, RAAN & Freq

29000 REM-------------------------
29999 DATA "END" : END
```

```
From 5023309103623817886
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 15c702,fa70bc2d9ceaf609,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 14596d,fa70bc2d9ceaf609,start
X-Google-Attributes: gid14596d,public
X-Google-Thread: 151e61,fa70bc2d9ceaf609,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-17 07:43:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!linus!decvax!harpo!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Robert S. Parnass, AJ9S)
Newsgroups: net.ham-radio,net.audio,net.tv
Subject: hint: finding nearby transmitters
Message-ID: <1709@ihuxf.UUCP>
Date: Tue, 17-Jan-84 10:43:47 EST
Article-I.D.: ihuxf.1709
Posted: Tue Jan 17 10:43:47 1984
Date-Received: Wed, 18-Jan-84 06:52:13 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 35
```

x

Hint for Finding Nearby Transmitters

There's been discussion about neighborhood transmitters interfering with TV's and stereo equipment. Here's a tip for finding a radio transmitter operating close by:

Connect a frequency counter1 to an outside antenna!

One of my scanners was being overloaded by a nearby transmitter. I didn't know anything about the type or location of this transmitter, but was determined to find out.

By connecting my 520 MHz frequency counter to an outdoor 2 meter antenna, I was able to determine the station's fre-

quency. The strong signals were coming from another radio amateur that was operating his own 147 MHz repeater in an apartment about 500 feet away from me!

His signal was so strong, that my counter indicated a stable frequency reading with a 19" wire antenna plugged directly into the counter!

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1. Insensitive frequency counters may require the use of a broadband preamplifier between the counter input and the antenna.

--
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Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From 6293963329305167892
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,237ec4db7fb6ba2e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-17 13:48:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!harpo!eagle!mhuxl!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: ARRL DX bulletin Nr. 2
Message-ID: <6314@mgweed.UUCP>
Date: Tue, 17-Jan-84 16:48:14 EST
Article-I.D.: mgweed.6314
Posted: Tue Jan 17 16:48:14 1984
Date-Received: Wed, 18-Jan-84 07:44:23 EST
Organization: AT&T Technologies - Montgomery Illinois
Lines: 51

QST DE K9EUI
DX BULLETIN NR 2 FROM ARRL HEADQUARTERS NEWINGTON CT
JANUARY 13 1984 TO ALL RADIO AMATEURS

JUAN FERNANDEZ. CE0EVG/0Z, RUDY, IS ACTIVE ON 14210 KHZ BETWEEN 0300 AND 0500Z. QSL VIA WB6WOD.

SYRIA. YK1AO, OMAR, HAS BEEN ACTIVE ON 14202 KHZ, GIVING OUT CW CONTACTS ON REQUEST. QSL DIRECT.

LLOYD AND IRIS. 4T4WCY ACTIVITY IS BEING WRAPPED UP, AND THEY PLAN TO GO NEXT TO BOLIVIA. QSL VIA YASME.

LIECHTENSTEIN. DL7NS/HB0 CONTINUES TO BE ACTIVE ON 80 THROUGH 10 METERS.

UPPER VOLTA. XT2AU, ANNO, HAS BEEN WORKED ON 21335 KHZ AT 1600Z. QSL TO WA1ZEZ.

DODECANESE. SV1OL/SV5 IS ACTIVE ON 21025 KHZ AT 1300 TO 1400Z. QSL TO GEORGE, SV1NA, WHO IS BELIEVED TO BE THE OPERATOR.

ZAMBIA. 9J2JH, JACK, HAS BEEN ACTIVE ON 21265 KHZ AT ABOUT 1900Z. QSL DIRECT.

JORDAN. JY9CZ HAS BEEN ACTIVE ON 21021 KHZ FROM 1200 TO 1300Z. QSL VIA THE BUREAU.

160 METERS. NEW CALL SIGNS HEARD ON 160 METERS INCLUDE 5B4PW, SV1IW AND SV1JG. ALSO ACTIVE STATIONS INCLUDE JX5DW, OH0BH, UF6FHC AND MANY OTHER RUSSIANS, AS WELL AS 4X4NJ AND 4Z4DX.

LACCADIVES. A GROUP OF OPERATORS ARRIVED ON THE LACCADIVES ON JANUARY 8 AND ARE EXPECTED TO STAY FOR ABOUT TEN DAYS. THEY ARE ACTIVE ON 80 THROUGH 10 METERS. THEY HAVE BEEN WORKING NORTH AMERICA ON 20 METERS FROM 1230 TO 1700Z, FIRST LONG PATH, THEN SHORT. TRANSMITTING FREQUENCIES USED HAVE BEEN 14025 KHZ CW AND 14145, 14180 AND 14190 KHZ SSB. THEY HAVE ALSO BEEN WORKED BY NORTH AMERICAN STATIONS ON 40 METER CW FROM 1830 TO 0200Z. THEY HAVE BEEN TRANSMITTING ON 7002 AND 7005 KHZ. QSL TO VU2GDG.

COCOS ISLAND. NINE OPERATORS PLAN TO BE ACTIVE FROM COCOS BETWEEN 1800Z JANUARY 14 AND 2000Z ON THE 20TH, OPERATING SSB AND CW ON 160 THROUGH 10 METERS. OPERATION WILL BE ON 10, 15 AND 20 METERS FROM 1200Z TO 0000Z. THE 10 METER STATION WILL MOVE TO 40 METERS AT 0000Z AND A FOURTH STATION WILL BE ON 80 METERS. 160 METER CONTACTS WILL BE AVAILABLE ON SCHEDULE. QSL VIA TI2CF.

From 3021111131328597288
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ea30ff96e0abe0c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-17 13:48:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!harpo!eagle!mhuxl!
ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: ARRL Propagation bulletin Nr. 3

Message-ID: <6315@mgweed.UUCP>
Date: Tue, 17-Jan-84 16:48:51 EST
Article-I.D.: mgweed.6315
Posted: Tue Jan 17 16:48:51 1984
Date-Received: Wed, 18-Jan-84 07:44:42 EST
Organization: AT&T Technologies - Montgomery Illinois
Lines: 33

QST DE K9EUI
PROPAGATION BULLETIN NR 3 FROM ARRL HEADQUARTERS NEWINGTON CT
JANUARY 16 1984 TO ALL RADIO AMATEURS

BEGINNING JANUARY 6,THE SOLAR FLUX ROSE GRADUALLY,REACHING A HIGH OF 106 ON THE 13TH. IT WAS DROPPING BACK AS THIS BULLETIN WAS ISSUED AND THE DOWNTREND IS EXPECTED TO CONTINUE THROUGH THE 19TH. THERE WILL BE ONLY A SLIGHT RISE THEREAFTER UNTIL THE END OF JANUARY.

WE HAVE BEEN IN A RELATIVE PERIOD OF SOLAR CALM FOR ABOUT TEN DAYS IN WHICH THE MUF HAS BEEN LOW, BUT PROPAGATION HAS BEEN GENERALLY GOOD OTHERWISE. JANUARY HAS BEEN TYPICAL OF WHAT CAN BE EXPECTED FOR THE NEXT SIX WEEKS OR SO. PROPAGATION CHANGES WILL BE MORE THE RESULT OF THE SUN'S MOVE NORTHWARD THAN OF ANY MAJOR CHANGES IN SUNSPOT ACTIVITY.

FOR THE FORECAST WEEK, THERE WILL BE INCREASING GEOMAGNETIC ACTIVITY, WHICH WILL DEGRADE HIGH LATITUDE CIRCUITS MAINLY. TRANSEQUATORIAL AND OTHER LOW LATITUDE PATHS WILL BE MOSTLY GOOD. NO SERIOUS DISTURBANCES ARE EXPECTED BEFORE THE LAST FEW DAYS OF JANUARY.

SOLAR FLUX NUMBERS ARE LIKELY TO BE ON THE LOW SIDE FOR THE SAME PERIOD. THE NORTH ATLANTIC PATH WILL CONTINUE TO BE THE MOST VARIABLE, PARTICULARLY ON 21 AND 28 MHZ. THE LATTER BAND WILL BE USEFUL MAINLY IN THE LOW LATITUDES AND THE TRANSEQUATORIAL PATHS.

AMERICAN SUNSPOT NUMBERS FOR JANUARY 5 THROUGH 11 WERE BETWEEN 20 AND 46, WITH A MEAN OF 33.4.

From 8620085644971969856
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a34f3185b753856,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-17 15:30:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5a.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!harpo!eagle!hou5h!hou5a!pbn
From: pbn@hou5a.UUCP
Newsgroups: net.ham-radio

Subject: Propagation Bulletin 3
Message-ID: <489@hou5a.UUCP>
Date: Tue, 17-Jan-84 18:30:07 EST
Article-I.D.: hou5a.489
Posted: Tue Jan 17 18:30:07 1984
Date-Received: Wed, 18-Jan-84 07:45:14 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 30

qst de ad7i
hr propagation bulletin nr 3
newington ct january 16, 1984
to all radio amateurs bt

beginning january 6, the solar flux rose gradually, reaching a high
of 106 on the 13th. it was dropping back as this bulletin was
issued, and the downtrend is expected to continue through the 19th.
there will be only a slight rise thereafter until the end of january.

we have been in a relative period of solar calm for about ten days in
which the muf has been low, but propagation has been generally good
otherwise. january has been typical of what can be expected for the
next six weeks or so. propagation changes will be more the result of
the suns move northward than of any major changes in sunspot
activity.

for the forecast week, there will be increasing geomagnetic activity,
which will degrade high latitude circuits mainly. transequatorial
and other low latitude paths will be mostly good. no serious
disturbances are expected before the last few days of january.

solar flux numbers are likely to be on the low side for the same
period. the north atlantic path will continue to be the most
variable, particularly on 21 and 28 mhz. the latter band will be
useful mainly in the low latitudes and the transequatorial paths.

american sunspot numbers for january 5 through 11 were between 20 and
46, with a mean of 33.4 ar

From -4246458872228640907
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fec741c6a2a888a7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-19 00:09:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!rdin!abs
From: abs@rdin.UUCP (Andrew Siegel)
Newsgroups: net.ham-radio
Subject: TV detective/contraband typewriters/UNIX 2meter net?
Message-ID: <340@rdin.UUCP>
Date: Thu, 19-Jan-84 03:09:43 EST
Article-I.D.: rdin.340

Posted: Thu Jan 19 03:09:43 1984
Date-Received: Fri, 13-Jan-84 05:06:14 EST
Lines: 25

Concerning the recent mention of a detective searching for illegal viewers of channel 44, has anyone ever heard of any cases of this "TV detective" actually coming to someone's door and threatening prosecution? It seems to me that the viewer need never admit that he/she was watching channel 44 (or whatever), and that the detective could never prove beyond a reasonable doubt to a court of law that someone had been illegally watching channel 44 without entering the house (violation of constitutional rights of privacy), which a private detective has absolutely no authority to do. I would assume that the detective depends on scaring the viewer into admitting verbally that he/she was watching illegally, and would use this verbal confession to support any court case.

I was also intrigued by the statement made by Bruce Giles that typewriters are contraband in most of the world. Is this true? Could you elaborate, Bruce?

Is there any sort of "UNIX discussion net" on the air in the Northern New Jersey or NYC area, perhaps on a 2-meter or 220 repeater? If so, I would love to participate. If not, anyone interested in starting one?

Andrew Siegel, N2CN
Resource Dynamics, Inc.
New York, NY
philabs!rdin!abs

From -3086589336208682845
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9bc89be50406f5f8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-19 00:47:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site hp-pcd.UUCP
Path: utzoo!linus!philabs!seismo!hao!hplabs!hp-pcd!hpfcla!hpcnoa!rmd
From: rmd@hpcnoa.UUCP
Newsgroups: net.ham-radio
Subject: Re: illegal monitoring? - (nf)
Message-ID: <4297@hp-pcd.UUCP>
Date: Thu, 19-Jan-84 03:47:56 EST
Article-I.D.: hp-pcd.4297
Posted: Thu Jan 19 03:47:56 1984
Date-Received: Sat, 21-Jan-84 01:34:02 EST
Sender: notes_gateway@hp-pcd.UUCP
Organization: Hewlett-Packard, Fort Collins, CO
Lines: 14

#R:mgweed:-601800:hpcnoa:15300001:000:445
hpcnoa!rmd Jan 14 16:12:00 1984

Doesn't the cable companies' own argument apply to them in this case?

They are running around monitoring radio signals with information not intended for their use. It is OK for them to receive these signals but it should not be OK for them to make use of the information they obtain from such eavesdropping -- just as the eavesdroppers on other radio broadcasts may not sell them or use them for financial gain.

Rick Dow
hpfcla!rmd

From 1559726601789339708
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e6b8cb8ebcf28060,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-19 11:00:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 exptools 1/6/84; site ihuxf.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!burl!hou3c!hocda!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: more wireless phone monitoring
Message-ID: <1719@ihuxf.UUCP>
Date: Thu, 19-Jan-84 14:00:22 EST
Article-I.D.: ihuxf.1719
Posted: Thu Jan 19 14:00:22 1984
Date-Received: Fri, 20-Jan-84 06:47:23 EST
Organization: AT&T Bell Labs, Naperville, IL
Lines: 32

x

Just when you thought the discussion of listening in on cordless telephones was over:

While looking through an old issue of Popular Communications, I found the following text in the Letters to the Editor column, page 12, in the October 1982 issue.

A Pop Com reader asks:

"You mentioned listening in on cordless phones in the September issue of Popular Communications. That made me wonder if this constitutes wiretapping. How about discussing listening in on cordless phone conversations?"

Tom Kneitel, the Editor responds:

"....It doesn't require any direct wire connection to monitor them so it can't be considered wiretapping. However, since these units aren't FCC licensed (they operate under Part 15 regulations), they may well not be covered under the secrecy of communications provisions (Section 605) of the Communications Act...."

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==========
Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -8910150152042928279
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d3e5488e0d3f1b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1984-01-19 13:22:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!harpo!eagle!hou5h!jak
From: jak@hou5h.UUCP
Newsgroups: net.ham-radio
Subject: jan. call book
Message-ID: <321@hou5h.UUCP>
Date: Thu, 19-Jan-84 16:22:19 EST
Article-I.D.: hou5h.321
Posted: Thu Jan 19 16:22:19 1984
Date-Received: Sat, 21-Jan-84 02:18:51 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 85

The following is a list of net.ham-radio readers/contributers:

call - name - mail address
wb0oew - elwood downey - kpno!fargovax!downey
ka1age - david kaufman - decvax!yale-comix!kaufman
k1dk - dan kahn - alice!danny
w1gd - gerry kersus - houxp!4421gjk
ka1gng - rob wood - decvax!genrad!rob
ka1hkn/6 - richard currier - mplvax!rec
ka1hkn/6 - richard currier - mplvax!rec
w1yu- the yale amateur radio club - decvax!yale-comix!w1yu
N2ARX - ? - fortune!wdl1!carol
K2DI - Bill Brelsford - mhuxv!wmb
N2FC - Rob Botwin - houxn!rb

KB2IB - Gerry Prins - hou2g!3123gcp
ky2d - jim kutsch - hou5h!jak
wa2hpd - Jim McEowen - npoiv!jrm
wb2iau - bill mitchell - whuxk!wjm
n2ic - steve london - druxm!n2ic
w2iol - ron mcconnell - harpo!whuxb!rcmcc
wa2jfm - bob moore - seismo!rochester!ritcv!tropix!rcm
kb2jg - joe massi - hogpc!4432jrm
ka2jqh - adam buchsbaum - research!alb
n2nd - dick maybach - hou2a!4373rlm
wb2nzl - robert i. block - eagle!pyuxdd!rib
k2ph - bob schreibmaier - houxb!3435ras
k2pzh - art kamlet - cbosgd!cbdkc1!ask
n2xs - joe stephany - stephany.wbst@parc-maxc
n2yk - bruce mcnair - houxq!bem2 or houti!bem
wb2zlf - kevin redden - hou5h!kfr
WA3YMH - Louis A. Mamakos - rlgvax!cvl!louie
n3bjk - Andrew Jay Schneider - {qubix amd70 hplabs}!cae780!ajs
wa3mez - rod hart - burdvax!bpa!cp1!hart
wa3sbt/4 - bob fabrizio - rlgvax!bob
n4bgq - joe flake - mcnc!ncsu!ncrcae!flake
k4bgv - bob koch - bpa!cp1!koch
w4bzl - joe ragland - duke!mcnc!ecsvax!jrr
k4eo - larry - stewart.pa@parc-maxc
k4frs - jack buchanan - duke!mcnc!ecsvax!jwb
k4fum - jere sandidge - akgua!sb1!scbhq!jts
wb4fwl - ned danieley - duke!ndd
ai4g - allen r. shuff - burl!ars
wb4ioj - mike kersenbrock - teklabs!tekmdp!michaelk
w4izi - lindsay cleveland - ihnp4!akgua!glc
wa6bev - robert r. henry - ucbvax!rrh
wb6bxw - lauren weinstein - decvax!vortex!lauren or lauren@rand-unix
ka6epi - dave ross - seismo!sytek!syteka!ross
n6fqr - bill danielson - danielson.pa@parc-maxc
ko6g - steven schoch - ucbvax!schoch@miro
kd6hr - pete - mcafee.es@parc-maxc
n6icx - dan halbert - ucbvax!halbert, halbert.pa@parc-maxc
ka6klr - bob - seismo!hao!hplabs!piety
ka6klr - bob piety - seismo!hao!hplabs!piety
wa6lbv - gordon schlesinger - ucbvax!sdcsvax!sdchema!lbv
wa6lbv - gordon schlesinger - ucbvax!sdcsvax!sdchema!lbv
wb6ohf/7 - phil nelson - uw-june!phil
no6q - trung - tnguyen.es@parc-maxc
no6q - trung nguyen - tnguyen.es@parc-maxc
wb6qms - don - duncan.es@parc-maxc
n6zi - al - noscvax!agordon
KA7RFO - Peter Allan - seismo!hao!kpno!allan
n7ahz - Jim Rees - uw-beaver!apollo!rees
ad7i - paul newland - houxp!ad7i
wa7kgx - chuck forsberg - cdi!caf
wa7njk - tom kloos - tektronix!tekecs!tomk or decvax!orca!tomk
w8- um u. of mich amateur radio club - mb2c!uofm-cv!tom
wb8wwv - greg ordy - decvax!cwruecmp!ordy

wb9aax - phil gunsul - we13!prg
wb9bkr - al whaley - pur-ee!uiucdcs!whaley
ku9c - steve wheatley - inuxg!wheatley
w9cc - larry card - inuxc!lrcard
k9eui - bob roehrig - we13!rjr
kx9g - stephan v. bechtolsheim - purdue!svb
kn9k - richard fitch - inuxd!rcf
ka9mqi - gary spahn - inuxd!gls
wn9nbt - dave chasey - pur-ee!wn9nbt
ka9q - phil karn - allegra!karn
ka9qbg - mike griffith - inuxe!in0095
wb9rky - bill malcolm - ihuxi!bmalc or ih1ap!bmalc
aj9s - robert s. parnass- ihnp4!ihuxf!parnass
kk9w - dave andersen - pur-ee!kk9w
(no call) - stan king - clyde!stan
(no call) - steven bellovin - ulysses!smb

Send additions/corrections to KY2D, Jim Kutsch -- hou5h!jak

From 3783270666724389093
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,bae7c65257465f77,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,bae7c65257465f77,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-02 05:42:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxc.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!ihnp4!inuxc!wheatley
From: wheatley@inuxc.UUCP
Newsgroups: net.columbia,net.ham-radio
Subject: Optical Sightings of STS-9
Message-ID: <851@inuxc.UUCP>
Date: Fri, 2-Dec-83 08:42:41 EST
Article-I.D.: inuxc.851
Posted: Fri Dec 2 08:42:41 1983
Date-Received: Sun, 4-Dec-83 04:22:13 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 8

STS-9 was seen over indianapolis Thursday evening, and was shadowed
by the sun at 6:27:30 EST. I suspect that it will be visible this
evening (Friday), and most of the ham operators here will be listening
for the orbit 70d, 605 to 625pm EST. Part of this orbit should be
visible, given clear skys!

Steve Wheatley, KU9C
inuxc!wheatley

From -2719923100120743441
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,bae7c65257465f77
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,bae7c65257465f77
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1983-12-02 11:23:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!decvax!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.columbia,net.ham-radio
Subject: Re: Optical Sightings of STS-9
Message-ID: <2058@allegra.UUCP>
Date: Fri, 2-Dec-83 14:23:03 EST
Article-I.D.: allegra.2058
Posted: Fri Dec 2 14:23:03 1983
Date-Received: Sun, 4-Dec-83 03:49:59 EST
References: <851@inuxc.UUCP>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 7

Fantastic!! This is only two seconds early compared to my predictions
based on a NORAD element set from earlier in the day. This is easily
explained by the effects of the atmosphere, etc.

When I compute further sightings, I'll post them.

Phil

From -5310411048324334339
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,52fc6bd283912e46,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,52fc6bd283912e46,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1983-12-02 13:50:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.columbia,net.ham-radio
Subject: STS-9 element update
Message-ID: <2060@allegra.UUCP>
Date: Fri, 2-Dec-83 16:50:42 EST
Article-I.D.: allegra.2060
Posted: Fri Dec 2 16:50:42 1983
Date-Received: Sun, 4-Dec-83 06:26:29 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 25

Note that the epoch time is just before an ascending node; hence the
orbit number is still 65, but changes to 66 just a few seconds after
epoch.

Phil

Satellite: sts-9
Catalog number: 14523
Epoch time: 83336.69925498
   Fri Dec 2 16:46:55.630 1983 UTC
Element set: MH 12-2
Inclination: 57.0130 deg
RA of node: 188.0470 deg
Eccentricity: 0.0007644
Arg of perigee: 302.3730 deg
Mean anomaly: 57.4320 deg
Mean motion: 16.10618270 rev/day
Decay rate: 0.0042755 rev/day^2
Epoch rev: 65
Semi major axis: 6622.921 km
Anom period: 89.406660 min
Apogee: 260.571 km
Perigee: 250.446 km

From 8910632323475068850
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,99e1d460e5ac80da,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,99e1d460e5ac80da,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1983-12-03 12:19:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!decvax!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio,net.columbia
Subject: STS-9 equator crossing reference
Message-ID: <2062@allegra.UUCP>
Date: Sat, 3-Dec-83 15:19:42 EST
Article-I.D.: allegra.2062
Posted: Sat Dec 3 15:19:42 1983
Date-Received: Sun, 4-Dec-83 08:27:51 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 4

Sun Dec 4 00:03:12.317 1983 UTC: Ascending node at 108.8
Nodal period: 89.30857 min
Longitude increment: 22.683098 deg w/orbit
Element set MH 12-2, epoch: Fri Dec 2 16:46:55.630 1983 UTC

From -6000969176596149588
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,797c01371ee118ba,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1983-12-04 05:55:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!hou5f!hou5g!hou5h!eagle!allegra!
karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: W5LFL on east cost!
Message-ID: <2064@allegra.UUCP>
Date: Sun, 4-Dec-83 08:55:44 EST
Article-I.D.: allegra.2064
Posted: Sun Dec 4 08:55:44 1983
Date-Received: Sun, 4-Dec-83 22:56:51 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 5

Finally... heard during the 8:30am EST pass over the east coast. Brief
transmissions, good signals, very clean audio. As usual, plenty of lids
and self-appointed policemen.

Phil

From -4813307376856082594
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,52fc6bd283912e46
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,52fc6bd283912e46
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1983-12-04 08:23:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!decvax!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio,net.columbia
Subject: STS-9 element update
Message-ID: <2065@allegra.UUCP>
Date: Sun, 4-Dec-83 11:23:01 EST
Article-I.D.: allegra.2065
Posted: Sun Dec 4 11:23:01 1983
Date-Received: Sun, 4-Dec-83 22:59:08 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 17

Satellite: sts-9
Catalog number: 14523
Epoch time: 83338.55976020
   Sun Dec 4 13:26:03.281 1983 UTC
Element set: MH 12-4
Inclination: 57.0140 deg
RA of node: 179.1810 deg
Eccentricity: 0.0004664
Arg of perigee: 287.5080 deg

Mean anomaly: 72.4560 deg
Mean motion: 16.12408909 rev/day
Decay rate: 0.0046165 rev/day^2
Epoch rev: 95
Semi major axis: 6618.016 km
Anom period: 89.307371 min
Apogee: 256.642 km
Perigee: 250.469 km

From -6379334770201122079
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a489e30370662f78,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-04 18:50:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: arrl 124
Message-ID: <5115@mgweed.UUCP>
Date: Sun, 4-Dec-83 21:50:49 EST
Article-I.D.: mgweed.5115
Posted: Sun Dec 4 21:50:49 1983
Date-Received: Mon, 5-Dec-83 23:08:48 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 12

QST DE K9EUI
HR ARRL BULLETIN NR 124 FROM ARRL HEADQUARTERS
NEWINGTON CT DECEMBER 4, 1983
TO ALL RADIO AMATEURS BT

A RECENTLY SCHEDULED PRESS CONFERENCE MAY PREEMPT W5LFL AMATEUR
RADIO OPERATION DURING ORBIT NUMBER 113A ON MONDAY MORNING,
DECEMBER 5. THOUGH OPERATION IS STILL POSSIBLE, ORBIT 113A IS
NO LONGER AMONG THE MORE LIKELY OPPORTUNITIES AR

From 3239883698074426039
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1e8faa49891e3470,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-04 18:51:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: arrl 123
Message-ID: <5116@mgweed.UUCP>

Date: Sun, 4-Dec-83 21:51:04 EST
Article-I.D.: mgweed.5116
Posted: Sun Dec 4 21:51:04 1983
Date-Received: Mon, 5-Dec-83 23:09:12 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 14

QST DE K9EUI
HR ARRL BULLETIN NR 123 FROM ARRL HEADQUARTERS
NEWINGTON CT DECEMBER 3, 1983
TO ALL RADIO AMATEURS BT

NASA ANNOUNCED SATURDAY AFTERNOON THAT THE STS 9 SPACE SHUTTLE MISSION WILL BE EXTENDED ONE DAY. IF MISSION DUTIES OR RADIO BATTERIES DO NOT PREVENT ADDITIONAL AMATEUR OPERATION, ASTRONAUT OWEN GARRIOT, W5LFL, MAY BE INDEED ON THE AIR DURING THIS EXTRA DAY. AS YET, NO EXPANDED OPERATING SCHEDULE OR POSSIBLE ORBITS HAVE BEEN ANNOUNCED. W1AW WILL ANNOUNCE AS SOON AS POSSIBLE ANY LATE MINUTE CHANGES AR

From -6094310021112350915
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,21347f52151c2748,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-05 06:25:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!duke!mcnc!ecsvax!jwb
From: jwb@ecsvax.UUCP
Newsgroups: net.ham-radio
Subject: w5lfl
Message-ID: <1648@ecsvax.UUCP>
Date: Mon, 5-Dec-83 09:25:01 EST
Article-I.D.: ecsvax.1648
Posted: Mon Dec 5 09:25:01 1983
Date-Received: Fri, 9-Dec-83 06:18:33 EST
Lines: 8

w5lfl heard in North Carolina 5 DEC, 8:28 am calling CQ North America, will listen for 5 seconds. Signal was a little weak to my mobile rig. The scheds I had did not list this pass for operation, so I heard him mostly through luck. Heard three transmissions but did not hear any calls read back.

Jack Buchanan K4FRS
Chapel Hill NC
ed

From -407471697813273344
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,408726dbde7a56d0,start
X-Google-Attributes: gid151e61,public

X-Google-Thread: 116b5e,408726dbde7a56d0,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1983-12-05 07:33:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxc.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!ihnp4!inuxc!wheatley
From: wheatley@inuxc.UUCP
Newsgroups: net.ham-radio,net.columbia
Subject: W5LFL heard in INDIANA
Message-ID: <859@inuxc.UUCP>
Date: Mon, 5-Dec-83 10:33:54 EST
Article-I.D.: inuxc.859
Posted: Mon Dec 5 10:33:54 1983
Date-Received: Tue, 6-Dec-83 23:22:03 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 22

W5LFL was heard with a very strong signal at 10:08:15EST and 10:10 EST
in central indiana Sunday Morning. He seemed to not follow the format
prescribed where he was to transmit for an entire minute. He transmitted
quickly, and then allowed more than the allotted minute for ground
stations to contact him. He gave a brief account of the view from the
spacecraft, as it crossed from Houston up over the Great lakes, and
acknowledged only one call, but he was not sure of the exact call, indicating
that he would retrieve it from the tape when he was on the ground. At any
rate, the best chance of working W5LFL seems to be a matter of getting on his
tape, in other words, don't worry if you dont hear him acknowledge your call!

On other matters, anyone volunteer to decipher the tape he is making!! What
a job that will be, especially if a intense effort is made to pull all the calls
out of the tape, rather than just the obvious ones. I guess they will be listed
in some form or another in the future.

W5LFL was reported , by W5RRR and others, to have worked JY1, King Hussein of
Jordan, on the same orbit referred to above, as the shuttle descended over
Europe and Asia. In fact, local repeater chatter indicated that perhaps a
qso occurred, not just a one way "I heard JY1" by W5LFL.

Steve Wheatley, inuxc!wheatley

From -4673160792550035304
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a1befecf75b09bf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-05 08:53:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cmcl2.UUCP
Path: utzoo!linus!decvax!harpo!floyd!cmcl2!sullivan
From: sullivan@cmcl2.UUCP
Newsgroups: net.ham-radio
Subject: Request For Rig Info - (nf)
Message-ID: <629@cmcl2.UUCP>

Date: Mon, 5-Dec-83 11:53:26 EST
Article-I.D.: cmcl2.629
Posted: Mon Dec 5 11:53:26 1983
Date-Received: Wed, 7-Dec-83 00:08:42 EST
Sender: sullivan@cmcl2.UUCP
Organization: New York University
Lines: 18

#N:cmcl2:8700002:000:461
cmcl2!sullivan   Dec 5 11:53:00 1983

I am looking to buy myself a new rig for low-band work. Currently I have
a Heath HW-8 QRPp rig, but I live in an apartment and just can't seem to
get a signal out. I'd like to keep expenses to around $600-$700, and CW
performance is of paramount concern. In fact, lower priced CW only rigs
would be ok, if such creatures exist. Any ideas and suggestions?

     David Sullivan   UUCP: ...!floyd!cmcl2!sullivan
     (212) 460-7287   ARPA: SULLIVAN@NYU.ARPA
     WA1TNS

--

     David Sullivan   UUCP: ...!floyd!cmcl2!sullivan
     (212) 460-7287   ARPA: SULLIVAN@NYU

From 6115493769280219198
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,52fc6bd283912e46
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,52fc6bd283912e46
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-05 11:52:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!decvax!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio,net.columbia
Subject: STS-9 element update
Message-ID: <2066@allegra.UUCP>
Date: Mon, 5-Dec-83 14:52:25 EST
Article-I.D.: allegra.2066
Posted: Mon Dec 5 14:52:25 1983
Date-Received: Wed, 7-Dec-83 00:08:12 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 17

Satellite: sts-9
Catalog number: 14523
Epoch time: 83339.61349018
   Mon Dec 5 14:43:25.552 1983 UTC

```
Element set:     MH 12-5-83
Inclination:       57.0190 deg
RA of node:       174.1650 deg
Eccentricity:    0.0004531
Arg of perigee:   313.5410 deg
Mean anomaly:      46.3590 deg
Mean motion:   16.12125940 rev/day
Decay rate:      0.0048117 rev/day^2
Epoch rev:             112
Semi major axis:  6618.790 km
Anom period:     89.323046 min
Apogee:            251.551 km
Perigee:           245.553 km
```

```
From -7385645682672582014
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,a9c93599f51ed773,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,a9c93599f51ed773,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-05 13:04:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!decvax!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio,net.columbia
Subject: Orbit tracking info
Message-ID: <2069@allegra.UUCP>
Date: Mon, 5-Dec-83 16:04:33 EST
Article-I.D.: allegra.2069
Posted: Mon Dec  5 16:04:33 1983
Date-Received: Wed, 7-Dec-83 00:11:43 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 22

A number of you have written asking for information about orbital
elements, tracking programs, etc.

A description of the meaning of each orbital element appears in the
current (December, 1983) issue of QST in Bernie Glassmeyer's Amateur
Satellite Program News column.  This is an excerpt from a longer article
(with some explanatory diagrams) that I wrote which appears in the current
issue of Orbit Magazine (the AMSAT publication).

A wide variety of turnkey programs all adapted from W3IWI's BASIC
tracking program (Orbit Magazine #6) are available for nominal donations
(~$15/copy) from the AMSAT Software Exchange, PO Box 27, Washington, DC
20044.  Be sure to include an SASE with your request for information.
Versions are available for such small computers as the Timex Sinclair 1000,
Commodore C64, CP/M, etc.

I have a fairly comprehensive Unix software package for satellite
```

tracking that maintains an updated display (using curses) of satellite
position, tracking station az/el, AOS/LOS times, etc. This is available
for a small magtape and SASE.

Phil Karn, KA9Q

From -8340900068081616311
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3648acadaebd156f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-06 05:34:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site alice.UUCP
Path: utzoo!linus!decvax!harpo!eagle!allegra!alice!tbl
From: tbl@alice.UUCP
Newsgroups: net.ham-radio
Subject: want additional orbit information for STS9
Message-ID: <2343@alice.UUCP>
Date: Tue, 6-Dec-83 08:34:58 EST
Article-I.D.: alice.2343
Posted: Tue Dec 6 08:34:58 1983
Date-Received: Fri, 9-Dec-83 01:12:55 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 11

Is W5LFL planning to operate during the extra day in the STS9 mission?
A recent news article says that orbit 144 will pass over Boston.

Can anybody send me the scheduled times for passes over the East Coast
or his operating schedule?

By the way - I heard him on my scanner radio last Sunday morning.
His signal was clear and crisp.

Howard Katseff
Bell Labs, Holmdel NJ

From 4494507092217006120
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 127033,503918678180cd16,start
X-Google-Attributes: gid127033,public
X-Google-Thread: 151e61,503918678180cd16,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-06 08:13:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxc.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!inuxc!wheatley
From: wheatley@inuxc.UUCP (Steven Wheatley)
Newsgroups: indy.ham-radio,net.ham-radio
Subject: ARRL 10 Meter Contest
Message-ID: <867@inuxc.UUCP>

Date: Tue, 6-Dec-83 11:13:42 EST
Article-I.D.: inuxc.867
Posted: Tue Dec 6 11:13:42 1983
Date-Received: Fri, 9-Dec-83 01:46:17 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 21

This weekend is the weekend of the ARRL 10 meter contest. The point structure has been changed to promote cw activity, and also to promote novice/technician interest. an outline of the rules follow:

Starts 0000z saturday, 12/10/83 Ends 2400z sunday, 12/11

exchange signal report and state/province dx stations exchange signal report and serial number.

points: phone qso 2 points, cw qso 4 points, novice/tech in the 28.1 to 28.2 mhz band (signing /N or /T) 8 POINTS!!!

Unless someone is going for the score, this should be enough info to get on and participate. Note that the incentive is there for contesters to be in the novice band....REMEMBER TO take the linear off line in this band because of the reduced power limit of 200watts in the novice band!...and hopefully some of the /N's and /T's out there will try their hand at contesting, as its a good way to help your dxcc totals, and was totals..and you will be helping out the heavyweight contesters also...

good luck, Steve Wheatley, KU9C, inuxc!wheatley

From 6714402698630711159
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ad32fb54890b7e9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-06 11:06:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!decvax!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: Tuesday W5LFL sched
Message-ID: <2070@allegra.UUCP>
Date: Tue, 6-Dec-83 14:06:30 EST
Article-I.D.: allegra.2070
Posted: Tue Dec 6 14:06:30 1983
Date-Received: Fri, 9-Dec-83 02:18:44 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 14

According to the ARRL information line, the following orbits are
scheduled for W5LFL operation for today (Tuesday):

Orbit   Time

129A 9:29 AM   [note- I heard him on during this orbit -KA9Q]
130A 11:10AM
132D 2:00 PM
133D 3:44 PM
134D 5:18 PM
135D 6:45 PM

No details of his Wednesday operations have been released yet.

Phil

From 7404410071048799944
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,20158eb99d6a227e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-06 14:37:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!floyd!clyde!ihnp4!houxm!mhuxl!
eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: 420-450 radar info wanted
Message-ID: <2071@allegra.UUCP>
Date: Tue, 6-Dec-83 17:37:20 EST
Article-I.D.: allegra.2071
Posted: Tue Dec 6 17:37:20 1983
Date-Received: Fri, 9-Dec-83 04:33:30 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 28

As part of the design effort for the PACSAT store-and-forward satellite,
I would like to gather as much information as possible about all
non-amateur users of the 420-450 mhz amateur band, in North America
and elsewhere. Since it is currently planned to use this band
(specifically the 435-438 mhz subband allocated to the Amateur Satellite
Service) for the digital uplinks to PACSAT, I particularly need to know if
interference from ground radar systems (e.g., Pave Paws) is likely to be
a problem.

In the past, amateur satellite transponders have used simple pulse
blankers to suppress any radar interference, which has worked well with
SSB and low rate data. However, PACSAT will carry PSK demodulators
running at bit rates on the order of 9600 bps. At such speeds I suspect
that there might be radars with pulse durations greater than one bit
time.

Specifically, I would like to know:

Locations
Frequencies in use
Pulse shapes, durations and repetition rates

Occupied bandwidth
Peak power levels
Antenna patterns
Operating schedules (24 hrs/day, etc)

Thanks,
Phil Karn, KA9Q

From -238348648429334588
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4c0ee5e8ff27f008
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-06 21:46:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site azure.UUCP
Path: utzoo!linus!decvax!tektronix!azure!michaelk
From: michaelk@azure.UUCP (Michael Kersenbrock)
Newsgroups: net.ham-radio
Subject: Re: W5LFL
Message-ID: <2383@azure.UUCP>
Date: Wed, 7-Dec-83 00:46:24 EST
Article-I.D.: azure.2383
Posted: Wed Dec 7 00:46:24 1983
Date-Received: Fri, 2-Dec-83 06:50:55 EST
Organization: Tektronix, Beaverton OR
Lines: 7

W5LFL on the shuttle "came in" very strong tonight. He did seem to be
further east than expected.   A lot of hams (sigh) did not seem to know
better than to call him on his downlink frequency.

Mike Kersenbrock WB4IOJ
Tektronix Microcomputer Development Products
Aloha, Oregon

From -735269134389630720
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3b3a051a78585f81,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-07 05:46:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 118: STS-9
Message-ID: <333@houxp.UUCP>
Date: Wed, 7-Dec-83 08:46:08 EST
Article-I.D.: houxp.333
Posted: Wed Dec 7 08:46:08 1983
Date-Received: Fri, 9-Dec-83 06:05:32 EST
Lines: 34

qst de ad7i
hr arrl bulletin nr 118r5 from arrl headquarters
newington ct december 5, 1983
to all radio amateurs bt

nasa has announced more details of w5lfls operating schedule. these are the orbits, acquisition of signal, loss of signal and area covered.

in the table, the orbit number is followed by an a or d. a is fo ascending and d is for descending. the time, d, days, h, hours, and m, minutes, is expressed in mission elapsed time, met, and can be calculated by adding this amount of time to your actual local launch time.

orbit	aos met			los met			area
	d	h	m	d	h	m	
119d	7	08	07	7	08	20	western u.s.
125a	7	16	42	7	16	50	spain and europe
126a	7	18	17	7	18	24	europe
126d	7	18	52	7	19	w	australia
129a	7	22	29	7	22	50	central u.s.
130a	8	00	10	8	00	20	western u.s.
132d	8	03	00	8	03	12	canada
133d	8	04	44	8	05	06	northeastern u.s.
134d	8	06	18	8	06	48	central u.s.
135d	8	07	4	8	08	07	western u.s.

of the above orbits, the best opportunities to contact w5lfl are orbits 119, 126, 129 and 130. these represent orbits during which his antenna will be oriented toward the earth. during other orbits his antenna will be pointed toward the stars. w5lfl will be listening, but two way communication may not be possible ar

From -194061300972358269
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c420eae3d1b9ee17,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-07 05:46:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: Propagation bulletin 49
Message-ID: <334@houxp.UUCP>
Date: Wed, 7-Dec-83 08:46:30 EST
Article-I.D.: houxp.334
Posted: Wed Dec 7 08:46:30 1983
Date-Received: Fri, 9-Dec-83 06:06:04 EST
Lines: 32

qst de ad7i
hr propagation forecast bulletin nr 49 from arrl headquarters
newington ct december 5, 1983
to all radio amateurs bt

looking back at the first seven years of solar cycle 21 shows that the sun was active for a much longer period than earlier predictions had indicated. it also hit much higher peaks than all but two previous solar cycles for which reliable records are available. it is obvious that the pendulum has now swung the other way. the solar flux high for november was only 111 and the low was 80. the monthly average was 93. all three figures are the lowest recorded since august, 1977.

what these figures mean in terms of propagation on our dx bands is shown clearly by conditions observed in the past week or so. nov. 28 to dec. 1 was mostly below average. dec. 2 to 4 was a period typical of quite favorable conditions, with the solar flux in the 90s and the k index consistently below 2. propagation in the northern hemisphere should be mostly between these two extremes during the colder months of 1984, at least.

for the immediate future, dec. 5 to 16 will be mostly below normal. december 17 through 24 will be mostly above normal, with the muf depending on the solar flux level in this period. the flux is currently lower than the base figures used for the propagation charts in qst for november and december, so these charts will tend to be on the optimistic side.

american sunspot numbers for november 24 through 30 were between 0 and 16 with a mean of 6.0 ar

From 1011336322924025548
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bea454514f0fde67,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-07 06:40:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: W5LFL more active
Message-ID: <2074@allegra.UUCP>
Date: Wed, 7-Dec-83 09:40:12 EST
Article-I.D.: allegra.2074
Posted: Wed Dec 7 09:40:12 1983
Date-Received: Fri, 9-Dec-83 05:49:04 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 4

W5LFL seems more active now that the mission is nearly over. He was
on during both orbits 144 and 145 this morning.

Phil

From -4982160819255276849
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,52fc6bd283912e46
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,52fc6bd283912e46
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-07 07:00:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio,net.columbia
Subject: STS-9 element update
Message-ID: <2075@allegra.UUCP>
Date: Wed, 7-Dec-83 10:00:37 EST
Article-I.D.: allegra.2075
Posted: Wed Dec 7 10:00:37 1983
Date-Received: Fri, 9-Dec-83 05:51:02 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 30

Satellite: sts-9
Catalog number: 14523
Epoch time: 83341.54513838
   Wed Dec 7 13:04:59.956 1983 UTC
Element set: MH 12-7-83
Inclination: 57.0140 deg
RA of node: 164.9430 deg
Eccentricity: 0.0005229
Arg of perigee: 326.0820 deg
Mean anomaly: 97.8970 deg
Mean motion: 16.13365400 rev/day
Decay rate: 0.0051403 rev/day^2
Epoch rev: 143
Semi major axis: 6615.400 km
Anom period: 89.254424 min
Apogee: 245.399 km
Perigee: 238.481 km
Beacon: 145.5500 mhz

This thing is coming down so fast that if they just waited for a few
days, they wouldn't have to fire retrorockets! MH 12-7-83 AOS/LOS times
for the last pass this morning showed a 45 second discrepancy with
respect to MH 12-5-83, a set only two days old, and in fact I noticed
this in my tracking of W5LFL.

With each new set, the updated times show the orbiter to be running
early with respect to each old set; this means that the drag factors
must be consistently too small.

Phil

From 9061067136687351926
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4c0ee5e8ff27f008
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-07 08:31:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site decwrl.UUCP
Path: utzoo!linus!decvax!decwrl!daemon
From: daemon@decwrl.UUCP
Newsgroups: net.ham-radio
Subject: W5LFL
Message-ID: <4481@decwrl.UUCP>
Date: Wed, 7-Dec-83 11:31:08 EST
Article-I.D.: decwrl.4481
Posted: Wed Dec 7 11:31:08 1983
Date-Received: Fri, 9-Dec-83 06:49:37 EST
Sender: daemon@decwrl.UUCP
Organization: DEC Western Research Lab, Los Altos, CA
Lines: 23

From: Ed Featherston HL01-1/P06 225-5241 <roll::featherston>

 Begin Forwarded Message:

Newsgroup : net.ham-radio
>From : JETSAM::SMITH
Organization : Digital Equipment Corp.
Subject: W5LFL

     W5LFL was heard at my home QTH at 8:10 AM (EST), Wed. 12/7/83. His
  signal was DFQ (full quieting) my ICOM IC-2AT handie talkie. My antenna
  was a VOCOM 3" Stubby Duck. Also, heard him while mobile at 9:35 AM (EST)
  this morning (Orbit #145). My antenna was a 1/4 mag mount on the car roof,
  and his signal was 90% quieting my IC-2AT.

                                KA1VF

          Mail address : ...decvax!decwrl!rhea!jetsam!smith

 End Forwarded Message

From 1200291542445833936
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,fe50340de5c31e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-07 13:30:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!harpo!seismo!hao!
hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: W5LFL Full Queting
Message-ID: <219@dsd.UUCP>
Date: Wed, 7-Dec-83 16:30:35 EST
Article-I.D.: dsd.219
Posted: Wed Dec 7 16:30:35 1983
Date-Received: Sat, 10-Dec-83 22:02:12 EST
Lines: 19

Posted: Tue Dec 6, 1983   4:02 PM PST   Msg: RGID-1673-8449
From: RDUNBAR
To: amsat
Subj: W5LFL full quieting.
Reports from other stations in the Duluth, MN area indicate
that Owen was operating orbits 129 and 130 this morning with
good signals into the area.

I have excellent full quieting recordings of him on orbit 134
as he passed over mid-Montana.   On that pass, he acknowledged
WA7DPM, N7ARE (on CW, yet!) and W5FFM.

Apparently, DPM was broadcasting on several channels, since
Owen commented on how he 'certainly covered the spectrum'.

Signal levels into a 12 db RHCP yagi and TS-700 were running
as high as S9 +20 db.

Ron

From 9103672781935842778
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,700b408db94503e0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-08 10:37:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: STS-9
Message-ID: <220@dsd.UUCP>
Date: Thu, 8-Dec-83 13:37:59 EST
Article-I.D.: dsd.220
Posted: Thu Dec 8 13:37:59 1983
Date-Received: Sun, 11-Dec-83 01:32:22 EST
Lines: 61

Posted: Wed Dec 7, 1983   7:07 AM PST   Msg: SGID-1674-2798
From: PKARN
To: amsat
Subj: STS-9 MH 12-7-83
is now on 'ops'. That thing is coming down so fast that if they just waited for a few days, they wouldn't have to fire retrorockets!
MH 12-7-83 AOS/LOS times for the last pass this morning showed a 45 second discrepancy with respect to MH 12-5-83, a set only two days old. With each new set, the updated times show the orbiter to be running early with respect to each old set; this means that the drag factors must be consistently too small.

Phil

Posted: Wed Dec 7, 1983   8:53 AM PST   Msg: EGID-1674-3824
From: ARRL
To: AMSAT
CC: ARRL
Subj: W1AW TWO WAY WITH W5LFL
ON ORBIT 145 AT 8:37 E.S.T. W1AW WAS HEARD BY DR. OWEN GARRIOTT, ON THE SPACE SHUTTLE COLUMBIA. WE WERE TRANSMITTING ON 145.090 ALTERNATING VOICE AND TONE MODULATED CODE. THANKS TO AMSAT FOR UPDATING THE ELEMENTS TO HELP THE GANG AT W1AW MAKE THIS HISTORICAL CONTACT. 73 BERNIE W9KDR.

Posted: Wed Dec 7, 1983 10:18 AM PST   Msg: TGID-1674-4499
From: ARRL
To: AMSAT
CC: ARRL
Subj: W5LFL CONTACT
THE FIRST MESSAGE EGID-1674-3824 SHOULD BE CHANGED TO READ; ON ORBIT 145 AT 9:37 E.S.T. W1AW WAS HEARD BY DR. OWEN GARRIOTT, ON THE SPACE SHUTTLE COLUMBIA. SORRY ABOUT THE BLUNDER BUT I THINK MY BLOOD PRESSURE HAS BEEN RUNNING 50 OVER S-9 THIS MORNING.
73 BERNIE W9KDR.

Posted: Wed Dec 7, 1983   7:07 AM PST   Msg: RGID-1674-2797
From: PKARN
To: ops
Subj: STS-9 MH 12-7-83

Satellite: sts-9
Catalog number: 14523
Epoch time: 833B41.Y54513838E
   Wed Dec
 7 13:04:59.956 1983 UTC
Element set: MH 12-7-83
Inclination: 57.0140 deg
RA of node: 164.9430 deg
Eccentricity: 0.0005229
Arg of perigee: 326.0820 deg

```
Mean anomaly:      97.8970 deg
Mean motion:   16.13365400 rev/day
Decay rate:      0.0051403 rev/day^2
Epoch rev:             143
Semi major axis:  6615.400 km
Anom period:     89.254424 min
Apogee:            245.399 km
Perigee:           238.481 km
Beacon:           145.5500 mhz
```

```
From 7355915249603536806
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c3693fb949889cc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-08 12:24:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!linus!decvax!tektronix!tekchips!teklabs!rayc
From: rayc@teklabs.UUCP (Ray Chase)
Newsgroups: net.ham-radio
Subject: This is a test
Message-ID: <2676@teklabs.UUCP>
Date: Thu, 8-Dec-83 15:24:54 EST
Article-I.D.: teklabs.2676
Posted: Thu Dec  8 15:24:54 1983
Date-Received: Sun, 11-Dec-83 00:57:25 EST
Organization: Tektronix, Beaverton OR
Lines: 3

Test

WB7DUB
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```
From 4662119849283406034
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,226a0ef084082108,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-08 21:03:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!clyde!ihnp4!houxm!mhuxl!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: W5LFL signal strength
Message-ID: <2054@allegra.UUCP>
Date: Fri, 9-Dec-83 00:03:16 EST
Article-I.D.: allegra.2054
Posted: Fri Dec  9 00:03:16 1983
Date-Received: Sun, 4-Dec-83 02:32:42 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 33
```

Everyone who has heard W5LFL has remarked about his strong signal strength. Those who are familiar with satellite link calculations are not suprised; they are familiar with what can be done when you don't have the earth standing in your way!

Here's a rough calculation to give you an idea of what to expect. W5LFL is running 4 watts out to an antenna with a gain (lets be charitable) of 0 db. Lets also assume you have a 0 db gain antenna on the ground (most verticals have 5-6 db over this, while HT rubber duckies may have a gain of -1 or -2 db, this info coming from memory and not from any authoritative reference). Of course, these numbers are affected by lots of things, so they are only approximations.

At the horizon, the straight-line range to the shuttle, flying at an altitude of 250 km, is about 1800 km. The path loss is approximately equal to

22 + 20 * log10(distance in wavelengths)

For 1800 km on 2 meters, this is about 141 db. Directly overhead (250 km), this is reduced to 124 db. For a transmit power of 4 watts, which is equivalent to +6 dbW (6 decibels over 1 watt), received signal strengths in omni antennas would be -135 and -118 dbW, respectively. This translates into levels of 1.3 and 8.9 microvolts into 50 ohms: capable of full-quieting signals into almost any modern 2m transceiver.

Remember also that the link is reciprocal: if you can hear him when he runs 4 watts, he could also theoretically hear YOU running only 4 watts. Of course with the pileups he hears nothing but QRM unless one station is at least several db stronger than all the others, which naturally leads to an all-out power war.

Phil Karn, KA9Q

From 7566498238647744293
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b34e26c9673dc7e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-09 14:48:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!linus!security!genrad!decvax!tektronix!tekchips!teklabs!keithe
From: keithe@teklabs.UUCP (Keith Ericson)
Newsgroups: net.ham-radio
Subject: back issues of QST available
Message-ID: <2678@teklabs.UUCP>
Date: Fri, 9-Dec-83 17:48:28 EST
Article-I.D.: teklabs.2678
Posted: Fri Dec 9 17:48:28 1983
Date-Received: Tue, 13-Dec-83 01:31:11 EST
Organization: Tektronix, Beaverton OR

Lines: 18

A friend of mine has several years of QST back issued he'd like to
donate to a worthy cause. They date back to before 1960. If you know of
a charitable organization that would be interested in having them
please let me know - by mail - and I'll forward the information on
to him.

Keith Ericson

uucp ('|' = 'or'):
     [aat | arizona | cbosg | chico | cwruecmp |
     decvax | eagle | groucho | harpo | ihnss |
     lbl-csam | lbl-unix | mit-dspg | ogcvax |
     orstcs | orstcsp | pur-ee | purdue | reed |
     ssc-vax | tektronix | ttc | ucbcad | ucbopt | ucbvax |
     unc | uophysics | watcgl | watmath | zehntel] !teklabs!keithe

ARPAnet: keithe.tek@rand-relay
Phone: 503-627-6042

From 3510593499177764567
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d6ec6e8fb89d6c8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-09 16:00:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!houxm!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: DX 48
Message-ID: <335@houxp.UUCP>
Date: Fri, 9-Dec-83 19:00:47 EST
Article-I.D.: houxp.335
Posted: Fri Dec 9 19:00:47 1983
Date-Received: Sat, 10-Dec-83 22:40:41 EST
Lines: 37

QST DE ad7i
HR DX BULLETIN NR 48 FROM ARRL HEADQUARTERS
NEWINGTON CT DECEMBER 9, 1983
TO ALL RADIO AMATEURS BT

THANKS TO K1XM, K1MM, AND W1TRC OF THE SOUTHERN NEW ENGLAND DX
ASSOCIATION FOR THE FOLLOWING DX INFORMATION.

LACCADIVES. VU7WCY, OPERATED BY VU2BBJ, VU2TN, AND VU2RX, IS
EXPECTED TO BE ACTIVE ON 14195 KHZ STARTING DECEMBER 15 FOR ABOUT
TWO WEEKS. THE LICENSE ISSUED BY THE INDIAN GOVERNMENT IS REPORTED
TO BE GOOD UNTIL THE END OF DECEMBER 1983.

S42HZR. S42HZR HAS BEEN ACTIVE AROUND 14027 KHZ AT 2200Z. QSL TO WA2HZR.

REUNION ISLAND. N6ZV, DON, HAS COMPLETED OPERATION FROM FH0GA AND IS NOW ON REUNION ISLAND. HE IS EXPECTED TO OPERATE AS FR0GA.

ANDORRA. C31NP, JUAN, HAS BEEN WORKED AT ABOUT 7010 KHZ AT 0400Z.

CROZET. FB8WK HAS BEEN ACTIVE AROUND 7011 KHZ, FROM 0300 TO 0330Z.

SURINAM. PZ1DV CONTINUES TO OPERATE ON 3505 AND 3795 KHZ AT AROUND 0400Z.

RUSSIAN SPECIAL PREFIXES. THERE HAVE BEEN MANY RUSSIAN WORLD COMMUNICATIONS YEAR SPECIAL CALLSIGNS ON THE AIR, INCLUDING RJ8WCY, RP2WCY, RG6WCY AND RV4WCY. RJ8WCY QSLS VIA UK8JCQ. RG6WCY QSLS VIA UK6GAA.

SIERRA LEONE. DJ6SI HAS BEEN ON FROM SIERRA LEONE USING THE SPECIAL WORLD COMMUNICATIONS YEAR CALLSIGN 9L0WCY. QSL VIA DJ6SI.

NIUE. ZK2IK, PETER, WILL BE OPERATING F OM NIUE FOR TWO YEARS. HE FREQUENTS 28502 KHZ AT AROUND 2100Z AR

From 8279515879655875981
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4de13cf3517e197d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-12 08:19:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 11/4/83; site ihuxq.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!clyde!ihnp4!ihuxq!hanson
From: hanson@ihuxq.UUCP (R. J. Hanson)
Newsgroups: net.ham-radio
Subject: Radio Shack portable CB antenna usable for 2m ?
Message-ID: <412@ihuxq.UUCP>
Date: Mon, 12-Dec-83 11:19:39 EST
Article-I.D.: ihuxq.412
Posted: Mon Dec 12 11:19:39 1983
Date-Received: Tue, 13-Dec-83 06:20:33 EST
Organization: AT&T Bell Labs, Naperville, Il
Lines: 21

Radio shack has this little back-of-set antenna for CB's (sorry about the curse word...). It is about a foot or so high and has a 90 degree construction, so you just plug it in to turn the set into a portable. It sells for $ 8.95.

Questions for the net:
1) Can it be used for 2m, or will the center loading coil make it

impossible to match to 144 MHz ? Anybody try this particular antenna ?
2) Does anybody in the ham world make such antennas, for any band ?
3) How about homebrew ? Does anybody know of articles for back-of-rig portable antennas, especially 2m ?

My intended application is for travel. I do not have an HT, but would like to be able to carry my rig with me on trips, and be able to set up anywhere (hotel rooms, etc.). My suitcase will fit my rig and a small power supply, but Ringo Rangers or Butternut Verticals are obviously out of the question.

R.J.Hanson N9DZZ, BTL Naperville, IL., IW 1A-407, 312-979-7663,
ihuxq!hanson, iwsl6!hanson, iwlca!hanson

From 3041106378345819812
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69d348dbd6f54ed9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-12 11:43:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 11/4/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: FCC catches another bootlegger
Message-ID: <1674@ihuxf.UUCP>
Date: Mon, 12-Dec-83 14:43:23 EST
Article-I.D.: ihuxf.1674
Posted: Mon Dec 12 14:43:23 1983
Date-Received: Tue, 13-Dec-83 06:32:31 EST
Organization: AT&T Bell Labs, Naperville, Il
Lines: 61

x

FCC Shuts Down Another Pirate Radio Station

The following excerpt is from the Pirates Den column in the December 1983 issue of Popular Communications magazine:

> The letters WRAM comprise the self-proclaimed callsign of a shortwave pirate broadcaster ... "RAM Radio" was famous in SWL circles for their marathon transmissions, and were widely heard on their frequency of 7430 KHz.
>
> Perhaps WRAM was on once too often and heard by one SWL too many. The station was closed recently

by Enice C.
Coleman from the Federal Communications Commission's office in Oxford Valley, PA. I had a chance to talk to the operator, Ron, about the closer [sic]. He admits that WRAM's twenty hour broadcasts may have had something to do with Mr. Coleman's ability to track down the station.

"I just had it on too long," says Ron, referring to his transmitter. "I just left it on - it was in my room. I kept on switching tapes and had announcements."

Another underlying cause was the television interference (TVI) that Ron's neighbors were receiving from WRAM. Evidentally [sic], complaints were received by the FCC regarding this interference....

When Coleman knocked on Ron's door and identified himself as an agent from the FCC, Ron knew the game was over and invited him inside. "I figured ... that if I gave them any trouble, they'd be back in five minutes with a warrant anyway" he says.

One of Ron's first thoughts when he saw the agents was one of disappointment. "I was having a lot of fun with my broadcasts and they ruined it!" he says with a chuckle. His thoughts then became a bit more serious as he realized there was a possibility that the vintage radio equipment he owned might be confiscated. "I thought they were gonna take my stuff!" he said.

WRAM was still on the air when Coleman arrived, and Ron was told to inform his listeners that the station had been closed down by the FCC.

Ron is not exactly sure what penalties will be levied against him for broadcasting without a license, but Mr. Coleman has hinted that a fine somewhere in the range of $750.00 could be expected...

--
==========
Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From 4102769389459379432
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1c4a6fd75c43594e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-12 16:19:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site sdchema.UUCP
Path: utzoo!linus!security!genrad!decvax!ittvax!dcdwest!sdcsvax!sdchema!lbv
From: lbv@sdchema.UUCP
Newsgroups: net.ham-radio
Subject: "Turkeys" clobbering Columbia communications
Message-ID: <983@sdchema.UUCP>
Date: Mon, 12-Dec-83 19:19:59 EST
Article-I.D.: sdchema.983
Posted: Mon Dec 12 19:19:59 1983
Date-Received: Wed, 14-Dec-83 01:38:47 EST
Organization: U.C. San Diego, Chemistry Dept. Administration
Lines: 84

Those with some experience in the VHF/UHF end of the Service
saw this fiasco building from quite a ways back down the road. There are
no surprises here; I went through the dress rehersal about 10 years ago.

At that time I was trustee for the "first" 2 meter repeater in my
area. It was the beginning of an era of transition. Prior to 1973
those who wanted to play around with Amateur "repeaters" bought up
surplus "highband" taxicab radios, rextaled and retuned them, and
put them on the air. To be fair, most hams usually watched as a
more experienced friend tuned and installed their first working
2 meter FM radio, but by their time their 3rd or 4th radio went into
service, most were capable of "doing it themselves". For $25-50
invested in an old boat-anchor, $15 in a set of crystals, occasional
maintainance work and some luck, we all were "talking on the radio".
The price of admission was the willingness to work and to learn.

Then, of course, the "10 watt wonders" arrived from the land of the
rising sun. We called them "Riceboxes" or "JapTracs" (appologies to
Motorola). Quickly enough the price of admission became the ability
to write a check; no knowledge required.

"Never mind", said the check-writers, "that we don't really understand
how our equipment works.....we are 'communicators', not engineers.
We will provide the corps of 'trained operators' to meet any
communications need".

It also happened, at that time, that the repeater group took on a
committment to provide emergency communications for a local public service
agency, principally during the frequent brush fires that occur
during the late Fall. I served, for a while, as coordinator of
this activity, and I had numerous occasions to activate the emergency
net. It was, as they say, a "learning experience".

I found, while running this *directed & disciplined net*----much to my surprise----that the sub-set of the local operators who caught on to the idea of net discipline and precision communications were (GENERALLY) the "technical types", the very ones who were constantly building and tearing through the latest "boat anchor" they could locate. The 'communicators' were (GENERALLY) complete busts at their 'speciality'. They could waste more precious net time with their superfluous blabberings and their inability to adapt to any "out of the ordinary" demands.

Time progressed and the technical types slowly abandoned 2 meters as the numbers and influence of the pure "communicators" grew. As a consequence, the average level of technical understanding on the band began a gradual, continuing decline.

I (and others) no longer operate on 2 meters, and I have no interest in returning to that band. But I am in no way surprised by the idiotic foulups that occured during the flight of the Columbia..

FLAME ON

****

How much (expletives deleted) "technical ability" does it really take to read and digest the operating schedules (published endlessly) for Columbia in advance? To grasp the idea of a "communications protocol"? To understand what the front panel controls on a simple 2 meter radio do, and how to conform them to that protocol (it's unrealistic to expect today's "ham" to understand how the components behind the front pannel behave, but must he be ignorant of the frontside controls as well)?

WHAT A DISGRACE THIS ENTIRE EPISODE HAS BECOME!
What a disgrace to our Service, which went before the news media, both local and national, and presented a picture of belligerent incompetence! What a disgrace for W5LFL, a trained and disciplined professional, to have to attempt to communicate with a flock composed of substantial numbers of incompetent boobs! What a disgrace to the FCC, who probably want to strike #97.1 from their Rules!

****

For the sake of whatever credibility our Service still retains, I hope that there will be no further ARS operations from Columbia or Challenger.

More in sadness than in anger,

Gordon Schlesinger, WA6LBV
Dept. of Chemistry,
University of California at San Diego
.....!ucbvax!sdcsvax!sdchema!lbv

From 5052398079381835869
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b369cdd51fa3fe1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-13 09:06:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cmcl2.UUCP
Path: utzoo!linus!philabs!seismo!harpo!floyd!cmcl2!sullivan
From: sullivan@cmcl2.UUCP
Newsgroups: net.ham-radio
Subject: Request for ax.25 info - (nf)
Message-ID: <813@cmcl2.UUCP>
Date: Tue, 13-Dec-83 12:06:18 EST
Article-I.D.: cmcl2.813
Posted: Tue Dec 13 12:06:18 1983
Date-Received: Thu, 15-Dec-83 01:17:59 EST
Sender: sullivan@cmcl2.UUCP
Organization: New York University
Lines: 16

#N:cmcl2:8700003:000:293
cmcl2!sullivan   Dec 13 12:06:00 1983

My interests seem to be lagging the net by a few months. If anyone has a
copy of the AX.25 packet radio specification that was sent over the net
could you please send me a copy?

David Sullivan, WA1TNS   UUCP: ...!floyd!cmcl2!sullivan
(212) 460-7287   ARPA: SULLIVAN@NYU
New York University

--

David Sullivan, WA1TNS   UUCP: ...!floyd!cmcl2!sullivan
(212) 460-7287   ARPA: SULLIVAN@NYU
New York University

From -962343203358622802
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c916d13d2992e92d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-13 09:36:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Comments on portable 2 meter antennas
Message-ID: <5310@mgweed.UUCP>
Date: Tue, 13-Dec-83 12:36:26 EST
Article-I.D.: mgweed.5310

Posted: Tue Dec 13 12:36:26 1983
Date-Received: Thu, 15-Dec-83 01:23:22 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 25

The Radio Shack center loaded/right angle CB antenna will not work
on 2 meters.

The best way to go is either a right angle (elbow) coax connector on the
back of the rig and either a "duckie" or 1/4 wave whip.

Two things to be aware of when using a rig mounted antenna:

1) There is a lot of rf in the vicinity of the rig this way and the rf
   can get into the mic input and cause problems.

2) since the antenna will not have a perfect ground plane, an exact
   quarter wave (19 inches) may not be the length that provides the
   best impedance match. Many years ago we found out that a 21" whip
   worked best on the back of a Regency HR-2, for example.

Make your own whip and prune the length for the best results.

The best bet is to use an external antenna that can be hung up somewhere
(like the "J") or else a mag-mount type if it can be placed on a metallic
surface for a ground plane.

Bob, K9EUI

From 2702892748584880868
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9df65ad070a7d649,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-13 12:23:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 11/4/83; site iwu1c.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!iwu1c!jgpo
From: jgpo@iwu1c.UUCP (John, KA9MNK)
Newsgroups: net.ham-radio
Subject: Need help with TAPR TNC
Message-ID: <180@iwu1c.UUCP>
Date: Tue, 13-Dec-83 15:23:13 EST
Article-I.D.: iwu1c.180
Posted: Tue Dec 13 15:23:13 1983
Date-Received: Thu, 15-Dec-83 01:59:35 EST
Organization: AT&T Bell Labs, Naperville, Il
Lines: 44

a

I'd like to correspond with anyone who has one of the new TAPR TNC's

or who has upgraded their Beta board to V 3.0 software.

The calibration routine won't light the LED's, so I had to calibrate the modem using a frequency counter. Some people have told me my tones aren't the same loudness, but that could be rolloff in my transmitter (ICOM 260-A). Regardless, my deviation is too low so I'm in the process of throwing together a preamp.

I can copy other packet stations with no problem, but they can't copy me. I don't know if it's a software problem (least likely), a bad chip, such as the VIA (a little more likely), or if I bollixed up the assembly (alas, most likely).

I don't know if this is significant, but at power-up, the RESET and SPARE LED's light okay, but the CWID LED lights at the same time, instead of turning on a couple of seconds later, like the manual says is supposed to happen. What *does* happen is the RESET, SPARE, and CWID LED's come on at the same time, together with the TXD LED. The TXD LED turns off a couple of seconds later and the sign-on message appears.

Also, is the RESET LED ever supposed to turn off? Mine never does.

The ROM checksums are correct.

Thanks in advance,

John Opalko

...!ihnp4!iwu1c!jgpo (UUCP)

IW 2D-336 (BTL)

Bell Laboratories }
1100 E. Warrenville Rd. }
Room 2D-336 } (Snail)
Naperville, IL 60566 }

From 7677259183377584502
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9df65ad070a7d649
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-13 12:30:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 11/4/83; site iwu1c.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!ihnp4!iwu1c!jgpo
From: jgpo@iwu1c.UUCP
Newsgroups: net.ham-radio
Subject: Re: Need help with TAPR TNC
Message-ID: <181@iwu1c.UUCP>
Date: Tue, 13-Dec-83 15:30:45 EST

Article-I.D.: iwu1c.181
Posted: Tue Dec 13 15:30:45 1983
Date-Received: Thu, 15-Dec-83 01:28:04 EST
Organization: AT&T Bell Labs, Naperville, Il
Lines: 10

PS:

The square-wave outputs of the modulator and demodulator get to the
VIA and HDLC just fine. What happens to them after they go through
those 40-pin black boxes, I haven't the foggiest idea.

     John O.

From 5913225243311540372
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,21731805b50666bf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-14 01:03:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site fortune.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!fortune!rpw3
From: rpw3@fortune.UUCP
Newsgroups: net.ham-radio
Subject: Re: Time - for a price - (nf)
Message-ID: <1962@fortune.UUCP>
Date: Wed, 14-Dec-83 04:03:14 EST
Article-I.D.: fortune.1962
Posted: Wed Dec 14 04:03:14 1983
Date-Received: Fri, 16-Dec-83 01:45:57 EST
Sender: notes@fortune.UUCP
Organization: Fortune Systems, Redwood City, CA
Lines: 13

#R:whuxk:-33700:fortune:5000001:000:333
fortune!rpw3   Dec 13 23:42:00 1983

Hey, guys & dolls, look up your long distance phone rates some time!
If dialed after 11pm or on Sat/Sun, etc., calling WWV directly in
Boulder is only $0.25 + $0.18/min. No (900) number needed!

The number is (303)499-7111.

There used to be a joke back when we were in school,

     "For the best time in the world, call (303)499-7111"

From 6418373459310084943
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a1a6889b3c44e6e2,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-14 13:10:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: FCC drops no-code proposal
Message-ID: <2100@allegra.UUCP>
Date: Wed, 14-Dec-83 16:10:44 EST
Article-I.D.: allegra.2100
Posted: Wed Dec 14 16:10:44 1983
Date-Received: Fri, 16-Dec-83 02:41:26 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 15

The FCC today abandoned its proposal to create a code-free amateur
license. The vote was unanimous despite the fact that the original vote
in January to propose the license was also unanimous.

The original chief of the Private Radio Bureau, James McKinney, whose
staff wrote the no-code proposal is now the head of the Mass Media
Bureau and his successor, Robert Foosaner, made the recommendation that
the commission drop the proposal, citing 5,000 comments that ran 20:1
against.

Personal comment: it does appear that, for better or worse, the FCC
weighs comments primarily on volume rather than on substantive
arguments. Sad.

Phil

From -969734651164473512
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6fdd807eebcb8d5e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-14 15:30:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 132: Reagan and VEC program
Message-ID: <336@houxp.UUCP>
Date: Wed, 14-Dec-83 18:30:15 EST
Article-I.D.: houxp.336
Posted: Wed Dec 14 18:30:15 1983
Date-Received: Fri, 16-Dec-83 02:50:18 EST
Lines: 9

qst de ad7i
hr arrl bulletin nr 132 from arrl headquarters

newington ct december 9, 1983
to all radio amateurs bt

on december 8, president reagan signed into law legislation providing
fcc the authority to reimburse volunteer examiner coordinators. it
has been designated public law 98 214 ar

From 4316714902438572302
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d40fbd45e2a5260,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-14 15:30:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 133: W1AW sked changes
Message-ID: <337@houxp.UUCP>
Date: Wed, 14-Dec-83 18:30:41 EST
Article-I.D.: houxp.337
Posted: Wed Dec 14 18:30:41 1983
Date-Received: Fri, 16-Dec-83 02:51:57 EST
Lines: 11

qst de ad7i
hr arrl bulletin nr 133 from arrl headquarters
newington ct december 14, 1983
to all radio amateurs bt

effective january 14, 1984, the w1aw saturday and sunday code
practice at 2100 utc, 4 pm est, and cw bulletin at 2200 utc, 5 pm
est, transmissions will be discontinued. the remainder of the w1aw
schedule remains unchanged. the complete schedule will appear in
february 1984 qst ar

From 7216554739702428078
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,10eb6c0b9f85bfa8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-14 15:31:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 134: FCC rules on NO-CODE
Message-ID: <338@houxp.UUCP>
Date: Wed, 14-Dec-83 18:31:05 EST
Article-I.D.: houxp.338
Posted: Wed Dec 14 18:31:05 1983
Date-Received: Fri, 16-Dec-83 02:53:25 EST

Lines: 18

qst de ad7i
hr arrl bulletin nr 134 from arrl headquarters
newington ct december 14, 1983
to all radio amateurs bt

the fcc on december 14, 1983, voted in the strongest possible manner to retain the morse code requirement for all classes of amateur radio licenses. private radio bureau chief robert foosaner said that the amateur radio service is well, thriving, and providing an excellent service to the american public. he strongly recommended that fcc maintain the code requirement, endorse the service as it is, and bury the concept of no code. chairman mark fowler stated that the code is very important and in some cases essential for getting the message through. he said further that radio amateurs have contributed vitally to the country and recently were stalwart in performing communications with grenada. the vote was unanimous to reject the concept of no code ar

From 7961442537773885102
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6d770b07d8a490a4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-14 15:31:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: CRRL 37: Autonomy for CRRL
Message-ID: <339@houxp.UUCP>
Date: Wed, 14-Dec-83 18:31:32 EST
Article-I.D.: houxp.339
Posted: Wed Dec 14 18:31:32 1983
Date-Received: Fri, 16-Dec-83 02:54:49 EST
Lines: 21

qst de ad7i
hr crrl bulletin nr 37 from crrl headquarters
london ont december 9, 1983
to all radio amateurs bt

the crrl board of directors met on november 20 approving a five year plan that will see crrl become an autonomous canadian league organization, crrl sponsorship of an annual can am contest and a request to doc to reinstate rtty on at least part of the 7.05 to 7.10 mhz segment of 40 metres. also discussed were ongoing initiatives with ccta, the canadian cable television association, amateur radio involvement in the popes visit, a crrl affiliated club program, and a canadian phone band extension as a response to

impending u.s. phone expansion on 10, 15, and 80 metres.

the national ares program is being developed by ve3gv at board request. four areas of the program are creation of a central ares file, implementation of a canadian ares net, development of a national ares plan and possible expansion of the canadian ares net to become a canadian ares and traffic net ar

From 5565611772494776118
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a1e2f605a1a10146,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-14 15:31:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: Propagation bulletin 50
Message-ID: <340@houxp.UUCP>
Date: Wed, 14-Dec-83 18:31:46 EST
Article-I.D.: houxp.340
Posted: Wed Dec 14 18:31:46 1983
Date-Received: Fri, 16-Dec-83 02:55:43 EST
Lines: 25

qst de ad7i
hr propagatin forecast bulletin nr 50 from arrl headquarters
newington ct december 12, 1983
to all radio amateurs bt

during the last half of november, solar activity was very low and there were days when no sunspots could be seen. after december 2, the sun began to look more as it should for this point in the solar cycle. the solar flux had been as low as 80, but it peaked at 112 on the 9th, just in time for the arrl 10 meter contest on the 10th and 11th. there was worldwide contest activity and the many impressive scores will show that this is no time to be writing off 28 mhz for the rest of the solar cycle. an outbreak of new sunspots is nearly always followed by an increase in geomagnetic activity and generally poor propagation in the higher latitudes of the northern hemisphere. we were close to auroral conditions as this bulletin was being prepared, and high absorption and severe fading are likely to be with us most of the time through the 15th. conditions will improve the next two days and remain quite good through the 21st. the balance of the month will be erratic, until the 30th, bit generally gmod propagation will close out the old year and usher in the new.

american sunspot numbers for december 1 through 7 were between 3 and 42 with a mean of 18.3 ar

From 8358945324823587946
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,53420f2444080482,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-15 12:18:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 11/4/83; site ihuxq.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!ihuxq!hanson
From: hanson@ihuxq.UUCP (R. J. Hanson)
Newsgroups: net.ham-radio
Subject: 2-meter FLAME rebuttal: more FLAME !
Message-ID: <420@ihuxq.UUCP>
Date: Thu, 15-Dec-83 15:18:10 EST
Article-I.D.: ihuxq.420
Posted: Thu Dec 15 15:18:10 1983
Date-Received: Sat, 17-Dec-83 01:22:41 EST
Organization: AT&T Bell Labs, Naperville, Il
Lines: 53

I agree that there were turkeys who could not seem to stay off of the downlink frequency. I do NOT, however, agree with anything else which Mr. Schlesinger had to say.

A pileup is a pileup. Just because there were thousands of people trying to get ahold of Dr. Garriott doesn't mean that a 2-meter pileup is any worse than any other rare DX pileup on HF. You must admit that a ham in space is a lot rarer than your run of the mill DX. I didn't think it was too bad here in Chicago the one day I tried to call "the wild blue". I wouldn't turn my nose up at all 2-meter op's just because I never heard a royal pileup on such a special event before. Since there was no DX control standing by, sure there will be lids... it would have happened on 20 meters or wherever, too ! To illustrate that point just a little further, I heard a most nauseating ragchew on 40 meters a few days ago (AM phone, too). Is that representative of your band choice or your license class ?

Just because I have a new callsign, been a ham only about a year, and was a babe when you OM's were tearing apart 2-meter boat-anchors, doesn't necessarily mean you guys are any more technically capable than I am. You may know more about tubes, but I probably know more about MOSFET's and IC's! My Technician class effectively keeps me off of the low bands, and so all of my computer-based crowd congregate on the higher bands. We are more interested in state-of-the-art things like microprocessor-controlled repeaters, autopatch, voting repeater networks, RTTY, packet radio networks, crossband links, satellite and auroral operation, and even moonbounce than we are interested in getting our code speed up to unbelievable levels (our processors can do that... why bother?). I think there is more technology on 2-meters than on any other band! By the way, I have a 2-meter boat anchor in my basement, too! I use it to hold my Kenwood 7950 2-meter rig (which is the only one I have).

I see no reason to work on my code on the low bands if all the OM's are going to treat me like a member of an inferior race because I can't operate a CW hand key as well as they can. How many times have I seen some ancient Extra callsign write into QST or '73, complaining about the quality of code on the Novice HF CW bands? Remember, they are NOVICE bands! Don't scare all of us newcomers away! If you want to KILL CW for good, just keep complaining about our code... pretty soon we'll give up. And when you old guys die off, there'll be NOBODY to replace you on the CW bands!

Getting back to the main point, I hope NASA *DOES* allow more operation from space. Sure, we might have to change the protocol somewhat, but there's a first time for everything. I saw a TV news story about our working Columbia, and I feel we came across to the public very well.

Long live amateur radio ! Long live computers ! Long live 2-meters !

R.J. Hanson N9DZZ, MTS @ Bell Labs, Naperville, Il. (IW 1A-407 x7663)
...ihnp4!ihuxq!hanson

From -3256404163883425087
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2fbdbdd1293bc6aa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-15 15:43:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 11/4/83; site iwu1c.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!iwu1c!jgpo
From: jgpo@iwu1c.UUCP (John, KA9MNK)
Newsgroups: net.ham-radio
Subject: Re: 2-meter FLAME rebuttal
Message-ID: <184@iwu1c.UUCP>
Date: Thu, 15-Dec-83 18:43:55 EST
Article-I.D.: iwu1c.184
Posted: Thu Dec 15 18:43:55 1983
Date-Received: Sat, 17-Dec-83 02:09:14 EST
Organization: AT&T Bell Labs, Naperville, Il
Lines: 23

a

Yes, but this *isn't* like HF DX operations. When working a DX station, you have no well-defined frequency on which to call him, unless he specifies "listening 25 up" or whatever. The W5LFL operation *did have* well-defined frequencies for use, ten uplink and one downlink. Sure W5LFL was the rarest DX in the history of Ham Radio. Sure a pileup was expected, but *not* on his downlink frequency. The pileups should have been on the uplink frequencies. If somebody is calling during the wrong minute (on the proper frequency), he's hurting no one but himself. But when you get a bunch of lids yelling on Owen's *downlink* frequency (especially during the wrong minute), then everybody is being hurt.

These people must have seen Owen's operating schedule (at least they seemed
to know when he was within range) so why couldn't they at least select the
proper frequency, even if they can't tell even minutes from odd?

     John Opalko, KA9MNK
     Technician class and 2M denizen

From -1280512450506913382
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c63734a66a74993,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-16 16:08:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site kpno.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!ulysses!princeton!astrovax!
kpno!jacoby
From: jacoby@kpno.UUCP
Newsgroups: net.ham-radio
Subject: TAPR with IBM PC
Message-ID: <275@kpno.UUCP>
Date: Fri, 16-Dec-83 19:08:41 EST
Article-I.D.: kpno.275
Posted: Fri Dec 16 19:08:41 1983
Date-Received: Sat, 17-Dec-83 08:05:38 EST
Organization: Kitt Peak Natl. Obs. Tucson, AZ
Lines: 22

Does anyone have any experience interfacing the TAPR
boards to the IBM PC? In particular, I am looking for
mailbox programs.

We are planning to provide digital communications
between our location in Tucson with our sister organization
in Chile. We currently use HF radio for voice and RTTY
and plan to replace the RTTY with packet.
Due to the 3-4 hour time difference, we would like to
be able to store message in the PC and download them
to the TAPR board starting at 5AM, and also receive
new messages with no operator present.

We operate just below 21 Mhz on a nice clear gov't channel.
Generally communications quality is excellent.
Does anyone have experience running packet at these frequencies?
What baud rates might one hope to reliably achieve?

george jacoby, kitt peak national observatory, 950 n. cherry ave, tucson, az
WD6BBQ   (602) 325-9292
               {{{ucbvax|utah-cs|purdue|mcnc}!arizona}|unc|hao}!kpno!jacoby

From 608411376409100433
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,79ea1ee2bf14a3ca,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-18 23:55:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: Cordless Phone Follies
Message-ID: <2117@allegra.UUCP>
Date: Mon, 19-Dec-83 02:55:26 EST
Article-I.D.: allegra.2117
Posted: Mon Dec 19 02:55:26 1983
Date-Received: Tue, 20-Dec-83 02:14:14 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 13

If you scan your local newspapers, you may have come across a rather
unusual story.

It seems that a woman in Rhode Island happened to tune her AM radio up a
little too high and came across a cordless telephone conversation of a
drug dealing ring. She reported it to the police, who began listening
themselves for a period of 6 weeks. After taping something like 100
hours of incriminating conversations (no warrant was necessary) they
just busted the whole bunch.

The moral should be obvious.

73, Phil

From -4900987051303686191
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f4e8458e821c979f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-19 06:30:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou2f.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!houxm!hou2f!
4391aas
From: 4391aas@hou2f.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: headphones inquiry
Message-ID: <125@hou2f.UUCP>
Date: Mon, 19-Dec-83 09:30:23 EST
Article-I.D.: hou2f.125
Posted: Mon Dec 19 09:30:23 1983
Date-Received: Tue, 20-Dec-83 06:40:21 EST
Organization: Bell Labs, Holmdel NJ
Lines: 12

Can anyone recommend any particular brand of communications headphones? I do a lot of cw dxing and contesting.

What I'm looking for is a pair that is comfortable, even after hours of wear. The pair I have now do a number on my ears after about half an hour and I have to take them off for relief.

Thanx
Al ND2K

From -8424961064857922665
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1cdbcce75771d857,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-19 06:31:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou2f.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!houxm!hou2f!4391aas
From: 4391aas@hou2f.UUCP (A.SCHWARZ)
Newsgroups: net.ham-radio
Subject: Antennas
Message-ID: <127@hou2f.UUCP>
Date: Mon, 19-Dec-83 09:31:47 EST
Article-I.D.: hou2f.127
Posted: Mon Dec 19 09:31:47 1983
Date-Received: Tue, 20-Dec-83 06:40:41 EST
Organization: Bell Labs, Holmdel NJ
Lines: 13

****
Quarter wave mag mount
Asking 12 bucks
****
HQ-1 Mini-Quad with W2AU balun.
20-15-10-6 m.
Up only 3 months.
Asking 90 bucks.
****
Al Schwarz ND2K
(201) 949-3337
****

From -4331585602918340432
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,46a06b2fde8fb930,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-19 16:49:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!harpo!eagle!hou5h!hou5a!hou5d!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 136: World of Radio
Message-ID: <341@houxp.UUCP>
Date: Mon, 19-Dec-83 19:49:20 EST
Article-I.D.: houxp.341
Posted: Mon Dec 19 19:49:20 1983
Date-Received: Wed, 21-Dec-83 05:19:50 EST
Lines: 12

QST DE ad7i
HR ARRL BULLETIN NR 136 FROM A   HEADQUARTERS
NEWINGTON CT DECEMBER 17, 1983
TO ALL RADIO AMATEURS BT

WORLD OF RADIO, A PROGRAM DEVOTED TO RADIO COMMUNICATIONS THAT
FREQUENTLY AIRS ITEMS ABOUT AMATEUR RADIO, HAS A REVISED PROGRAM
SCHeDULE. IT CAN BE HEARD ON WRNO WORLDWIDE ON 6185 KHZ AT 0530Z
SATURDAY, 6045 KHZ AT 0230Z SUNDAY, AND 9715 KHZ AT 1400Z SUNDAY.
times are APPROXIMATE. IN SOME CASES A REPEAT OF LAST WEEKS SHOW
CAN BE HEARD ONE HALF HOUR BEFORE THE SATURDAY TRANSMISSION AR

From -231921065050243114
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,617affeec9192b76
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-30 11:10:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site uw-june
Path: utzoo!linus!decvax!tektronix!uw-beaver!uw-june!phil
From: phil@uw-june (Phil Nelson)
Newsgroups: net.ham-radio
Subject: Re: mobile 2-meter rig
Message-ID: <626@uw-june>
Date: Fri, 30-Sep-83 14:10:14 EDT
Article-I.D.: uw-june.626
Posted: Fri Sep 30 14:10:14 1983
Date-Received: Sun, 2-Oct-83 03:50:12 EDT
Organization: U. Washington, Computer Sci
Lines: 20

  I use an Azden PCS-2000 for my 2m mobile rig. I have found this to be
a very nice rig. The PCS-3000 and PCS-4000 have fixed several problems
with the design of the 2000. It does have a small control head, about
the first 2 inches, and a 10 foot cable to the "rest of the guts." With

that small a control head, it does not have the speaker. It does have a speaker jack if you put the rest of the guts is some place where you can not hear the speaker. It is also synthesized. It also has at least 6 memories for your favorite frequencies. The 3000 and 4000, as I recall, also remember the offset along with the frequency. These memories may also be scanned. It has two power settings, the high power being 25 watts.

  A better place to find out all the things is to look in QST or Ham Radio for an advertisment. What I wanted to do was to let you know that I would buy another Azden if I had the money. I am very happy with the PCS-2000, with the exception of a few things, that seem to be fixed in the 3000 and 4000.

  Phil Nelson WB6OHF/7 Seattle, Wa

  ...decvax!microsoft!uw-beaver!uw-june!phil

From 6227107335622193496
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2b73d5e9d6098fd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-30 17:12:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!hou5f!hou5g!hou5h!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Good news for Mode L
Message-ID: <1104@eagle.UUCP>
Date: Fri, 30-Sep-83 20:12:53 EDT
Article-I.D.: eagle.1104
Posted: Fri Sep 30 20:12:53 1983
Date-Received: Sun, 2-Oct-83 14:55:06 EDT
Lines: 32

The Oscar-10 mode L transponder (1269 up, 436 down) was turned on for the first time a week ago with disappointing results. The downlink was excellent, with steady non-fading signals, but the uplink receiver performance was more than 20 db worse than expected. While the spacecraft beacons were of excellent quality, very few stations could get enough power into the satellite to rise above the noise level; the strongest was only 6db above the noise.

A theory was constructed having to do with the relay that switches the receiver between the high and low gain antennas. Since the first test, this relay was toggled a number of times under ground command. The second mode L test was conducted this week and the following bulletin was later loaded into the onboard computer:

M FROM DJ4ZC, 28.9.83: THE MULTIPLE SWITCHING OF THE 24 CM
ANTENNA RELAY RESULTED IN A 10 - 20 DB IMPROVEMENT OF MODE L
PERFORMANCE. NOW PERFORMANCE IS ABOUT 10 DB BELOW NOMINAL AND
A NUMBER OF STATIONS HAD VERY GOOD SIGNALS. THE MODE L RX ON THE

OMNI RESULTED IN A 12 DB LEVEL REDUCTION. CONCLUSION: WE HAVE AN
ANTENNA RELAY PROBLEM. FOR SSB QSO'S AN EIRP OF 40 DBW OR MORE
IS SUGGESTED. OVER THE WEEKEND ATTITUDE WILL BE CORRECTED AND
THEREAFTER CONTINOUS MODE B (EXCEPT L-DAY) IS PLANNED. KARL

The guess that the relay was at fault is apparently correct, and I'd
suspect that some further toggling of the relay should help things
further. The advantage of the mode L transponder will be that it has a
wider bandwidth (800 khz vs 150 for mode B), better antennas since the
70cm and 23cm high gain antennas were apparently uninvolved in the
launcher collision, and better downlink performance since the cosmic
noise background is much lower on 70cm than on 2m.

73, Phil Karn, KA9Q

From 2660744952458305302
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9647696a65855b7d,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15517a,9647696a65855b7d,start
X-Google-Attributes: gid15517a,public
X-Google-Thread: 15f443,9647696a65855b7d,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1983-10-02 15:44:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cdi.UUCP
Path: utzoo!linus!decvax!tektronix!reed!cdi!caf
From: caf@cdi.UUCP (caf)
Newsgroups: net.wanted,net.micro.pc,net.ham-radio
Subject: RF Problem in IBM PC Keyboard
Message-ID: <262@cdi.UUCP>
Date: Sun, 2-Oct-83 18:44:29 EDT
Article-I.D.: cdi.262
Posted: Sun Oct 2 18:44:29 1983
Date-Received: Mon, 3-Oct-83 23:28:48 EDT
Organization: Computer Development Inc, Beaverton OR
Lines: 14

The Keyboard on the IBM Personal Computer is very sensitive to RF
fields. The problem is about the same on an old keyboard as well as on
one recently manmufacured.

Surely this problem has come up before as a 1KW transmitter would
tickle PC's for several blocks.

Does anybody (especially IBM) know of a fix?? The PC is fairly quiet
on the ham bands (provided the cables are shielded and/or filtered)
but the KB is about 20 db too sensitive.
     Chuck WA7KGX

--
Chuck Forsberg WA7KGX CDI Portland OR (503)-646-1599 cdi!caf

From 7540803579550488565
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11e8b6,dc173b21479d7611,start
X-Google-Attributes: gid11e8b6,public
X-Google-Thread: 151e61,dc173b21479d7611,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-03 07:29:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.followup,net.ham-radio
Subject: Re: cordless phone repair (retraction)
Message-ID: <710@ihuxf.UUCP>
Date: Mon, 3-Oct-83 10:29:28 EDT
Article-I.D.: ihuxf.710
Posted: Mon Oct 3 10:29:28 1983
Date-Received: Mon, 3-Oct-83 23:41:02 EDT
Organization: BTL Naperville, Il.
Lines: 30

On the repair of cordless phones, Cliff Shackelton writes:

> ----------
>
> ".... since cordless phones are also covered under FCC part 68, A FCC 2nd or 1st class license doesn't mean diddly squat. Only the factory or it's authorized agent may repair a phone. If you want to repair phones you need to send a repaired unit in for FCC Part 68 testing and submit the data to the FCC and get a FCC number to stick on the bottom of the phone....
>
> FLAME OFF"
> ----------

My apologies. My first article was based on a September 28 regulatory discussion with Ms. Flora Stewart, FCC Field Operations Bureau in Chicago.

After reading Cliff's heated response on October 3, I called

the FCC, and spoke with a Mr. Sklom. This fellow contradicted the information given in the first conversation!

--
==========
Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -9203772259982274309
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6bcfc11b2034cbab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-03 08:27:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!hou5h!hou5a!hou5d!hogpc!houxn!rb
From: rb@houxn.UUCP
Newsgroups: net.ham-radio
Subject: For Mark Weiser Re:FCC License
Message-ID: <415@houxn.UUCP>
Date: Mon, 3-Oct-83 11:27:45 EDT
Article-I.D.: houxn.415
Posted: Mon Oct 3 11:27:45 1983
Date-Received: Tue, 4-Oct-83 00:17:05 EDT
Lines: 9

Pardon posting but my system won't mail to seismo!

Mark:
The second & first class R/T licenses (commercial) were merged a little over a year ago. If you renewed it longer ago than that, it will be replaced on the next renewal with just a "General" R/T license. There is no difference in priveleges for a first/second class licensee.

Rob

From 1007775638996882131
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b58fa09a7252cdd0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-03 10:26:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: cordless fones, etc.
Message-ID: <3892@mgweed.UUCP>
Date: Mon, 3-Oct-83 13:26:35 EDT
Article-I.D.: mgweed.3892
Posted: Mon Oct 3 13:26:35 1983
Date-Received: Tue, 4-Oct-83 02:49:39 EDT
Organization: Western Electric - Montgomery Illinois

Lines: 13

There is a docket pending, I believe, that would eliminate the requirement
of a FCC licensed technician for repairs/adjustments of many items.
The FCC has slowly been de-regulating away to the point where someday
the commercial license won't be needed for anything. (I remember being
shocked to find out that broadcast stations no longer needed a frequency
monitor). Back when I was in the BC biz, we had to have a 1st class
licensee on duty at the transmitter all the time the transmitter was on.
I don't think that directional AM stations even need to have a full-time
1st fone (now general radio-telephone) on the staff any more, right??

Bob, mgweed!rjr

From 3935487087398341012
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,21260563a7bd9f0c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-03 19:55:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 90
Message-ID: <3909@mgweed.UUCP>
Date: Mon, 3-Oct-83 22:55:30 EDT
Article-I.D.: mgweed.3909
Posted: Mon Oct 3 22:55:30 1983
Date-Received: Tue, 4-Oct-83 03:31:42 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 20

QST DE W1AW
HR ARRL BULLETIN NR 90 FROM ARRL HEADQUARTERS
NEWINGTON CT SEPTEMBER 27, 1983
TO ALL RADIO AMATEURS BT

AT ITS SEPTEMBER 22 MEETING, FCC ADOPTED A REPORT AND ORDER IN
DOCKET NO. 83 27, CONCERNING VOLUNTEER EXAMS. ALTHOUGH THE
COMPLETE REPORT HAS NOT BEEN RELEASED, ARRL HAS LEARNED SOME OF
THE CONTENTS. FCC ENVISIONS THE ESTABLISHMENT OF REGIONAL
VOLUNTEER EXAM COORDINATORS INSTEAD OF NATIONAL VECS. FCC WILL
HAVE THE POWER TO RETEST ANYONE WHO RECEIVES A LICENSE FROM A
VOLUNTEER ADMINISTERED EXAM. THE PROGRAM WILL START WITH GENERAL
AND TECHNICIAN. THE OTHER TWO CLASSES WILL BE ADDED LATER.
THIRTY DAYS ADVANCE REGISTRATION WILL BE REQUIRED OF APPLICANTS.
INSTANT UPGRADING WILL BE PERMISSIBLE. THE TELEGRAPHY TEST
REMAINS THE SAME AS NOW, I.E. A SENDING TEST IS PERMISSIBLE BUT
NOT REQUIRED. MEMBERSHIP IN AN ORGANIZATION CANNOT BE A
REQUIREMENT FOR PARTICIPATING IN A TEST. THIS BULLETIN WILL BE

UPDATED WHEN FCC RELEASES THE TEXT OF THE REPORT AND ORDER AR
DE K9EUI

From 8824014276378935064
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,68c37869ac48d580,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-03 19:55:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 89
Message-ID: <3910@mgweed.UUCP>
Date: Mon, 3-Oct-83 22:55:52 EDT
Article-I.D.: mgweed.3910
Posted: Mon Oct 3 22:55:52 1983
Date-Received: Tue, 4-Oct-83 06:27:41 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 12

QST DE W1AW
HR ARRL BULLETIN NR 89 FROM ARRL HEADQUARTERS
NEWINGTON CT SEPTEMBER 26, 1983
TO ALL RADIO AMATEURS BT

IN RECOGNITION OF INTERNATIONAL AMATEUR RADIO DAY ON OCTOBER 23,
4U1ITU WILL BE AVAILABLE FOR OPERATION BY ANY VISITING AMATEURS.
ALSO, CERTIFICATES WILL BE AVAILABLE FOR CONTACTING 4U1ITU ON THAT
DATE. 4U1ITU WILL BE ACTIVE ON SSB, CW AND RTTY, 80 THROUGH 10
METERS. ADDITIONALLY, THE CALLSIGN 4U38ITU WILL BE USED ON OCTOBER
24 AR
DE K9EUI

From -4381748472358519107
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c62e73a4ac3ce1e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-03 19:56:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: ARRL BULLETIN NR 88
Message-ID: <3911@mgweed.UUCP>
Date: Mon, 3-Oct-83 22:56:20 EDT
Article-I.D.: mgweed.3911
Posted: Mon Oct 3 22:56:20 1983
Date-Received: Tue, 4-Oct-83 06:30:11 EDT

Organization: Western Electric - Montgomery Illinois
Lines: 12

QST DE W1AW
HR ARRL BULLETIN NR 88 FROM ARRL HEADQUARTERS
NEWINGTON CT SEPTEMBER 26, 1983
TO ALL RADIO AMATEURS BT

ARRL, IN CONJUNCTION WITH WESTLINK, IS OFFERING PUBLIC SERVICE
ANNOUNCEMENTS FOR USE BY BROADCAST RADIO STATIONS PROMOTING THE
UPCOMING STS9 MISSION. IF YOU WOULD LIKE A COPY OF THESE PSA'S,
PLEASE SEND A BLANK FIVE INCH REEL OF TAPE ALONG WITH A FIRST CLASS
RETURN MAILER WITH POSTAGE TO BILL PASTERNAK, WA6ITF, 28197 ROBIN
AVE, SAUGUS, CA 91350 AR
DE K9EUI

From -2283180695735004323
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9540ff6727740bbf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-03 19:56:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: CRRL BULLETIN NR 28
Message-ID: <3912@mgweed.UUCP>
Date: Mon, 3-Oct-83 22:56:46 EDT
Article-I.D.: mgweed.3912
Posted: Mon Oct 3 22:56:46 1983
Date-Received: Tue, 4-Oct-83 06:31:25 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 9

QST DE W1AW
HR CRRL BULLETIN NR 28 FROM CRRL HEADQUARTERS
LONDON, ONT OCTOBER 3, 1983
TO ALL RADIO AMATEURS BT

TEN CANADIAN REPEATERS TOOK PART IN THE SEPTEMBER 1 TELECONFERENCE
NET FEATURING SENATOR GOLDWATER. CRRL HAS ARRANGED FOR A CANADIAN
SPEAKER, DR. JOHN BELROSE, VE2CV, FOR A FUTURE NET AR
DE K9EUI

From -5349382522907126323
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e1db01f020a4d156,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-03 19:57:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: PROPAGATION BULLETIN NR 40
Message-ID: <3913@mgweed.UUCP>
Date: Mon, 3-Oct-83 22:57:18 EDT
Article-I.D.: mgweed.3913
Posted: Mon Oct 3 22:57:18 1983
Date-Received: Tue, 4-Oct-83 06:32:39 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 22

QST DE W1AW
HR PROPAGATION FORECAST BULLETIN NR 40 FROM ARRL HEADQUARTERS
NEWINGTON CT OCTOBER 3, 1983
TO ALL RADIO AMATEURS BT

THE SOLAR FLUX AVERAGED JUST OVER 109 IN SEPTEMBER, THE LOWEST VALUES
SINCE LATE 1947. SOLAR ACTIVITY WAS RISING AFTER THE 20TH, THE TREND
CONTINUING INTO EARLY OCTOBER. THE FLUX REACHED 120 ON THE 2ND, THE
HIGHEST SINCE THE MIDDLE OF AUGUST.
THE SOLAR FLUX RISE REPORTED LAST WEEK IS EXPECTED TO FLATTEN OFF IN
THE 120S AND START DOWN ABOUT THE 4TH. THERE WILL BE ANOTHER LOW
PERIOD ABOUT THE 7TH TO 20TH. A RISE EXPECTED AT THE END OF OCTOBER
SHOULD BRING THE BEST OVERALL PROPAGATION OF THE AUTUMN SEASON TO
DATE.
ABOVE AVERAGE MAGNETIC FIELD ACTIVITY BEGINNING ABOUT OCTOBER 5, 13,
17, 23 AND 28 WILL CAUSE INCREASED SIGNAL ABSORPTION AND SEVERE
FADING OVER PERIODS OF ONE TO THREE DAYS. THE MUF WILL TEND TO PEAK
ABOUT OCTOBER 4, 7, 14, 25 AND 29, REACHING ITS HIGH FOR THE MONTH ON
THE LAST TWO DATES.
AMERICAN SUNSPOT NUMBERS FOR SEPTEMBER 22 THROUGH 28 WERE BETWEEN 39
AND 54 WITH A MEAN OF 46.7 AR
DE K9EUI

From -2346203998767651744
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,35be525b272229d5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-03 19:58:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: SATELLITE BULLETIN NR 267
Message-ID: <3914@mgweed.UUCP>
Date: Mon, 3-Oct-83 22:58:11 EDT
Article-I.D.: mgweed.3914
Posted: Mon Oct 3 22:58:11 1983
Date-Received: Tue, 4-Oct-83 06:33:43 EDT

Organization: Western Electric - Montgomery Illinois
Lines: 15

QST DE W1AW
HR SATELLITE BULLETIN NR 267 FROM ARRL HEADQUARTERS
NEWINGTON CT OCTOBER 3, 1983
TO ALL RADIO AMATEURS BT

OSCAR 10 APOGEE TIMES AND POSITIONS,
OCT 4 1107Z AT 272W 2247Z AT 87W
OCT 5 1026Z AT 262W 2206Z AT 77W
OTHER AMATEUR SATELLITE REFERENCE ORBITS,
OCT 4 OSCAR 9 0043Z AT 139W RS5 0159Z AT 119W
RS6 0031Z AT 103W RS7 0026Z AT 98W RS8 0137Z AT 112W
OCT 5 OSCAR 9 0022Z AT 134W RS5 0153Z AT 119W
RS6 0016Z AT 101W RS7 0016Z AT 97W RS8 0134Z AT 113W
NOAA 7 AND 8 ORBITAL DATA WILL BE SENT WHEN RECEIVED FROM NOAA AR
DE K9EUI

From -9043031018628455283
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,25ec2ed1174e813f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-03 20:00:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houti!
ariel!hou5f!hou5g!hou5h!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Oscar-10 transponder trip
Message-ID: <1105@eagle.UUCP>
Date: Mon, 3-Oct-83 23:00:43 EDT
Article-I.D.: eagle.1105
Posted: Mon Oct 3 23:00:43 1983
Date-Received: Tue, 4-Oct-83 02:54:06 EDT
Lines: 17

Over the weekend, a "software fuse" in the Oscar-10 onboard software
tripped several times, shutting off the Mode B transponder. A routine
which checks several vital parameters in the spacecraft detected that
the battery voltage was below a specified limit and shut the transponder
off. This caused quite a bit of concern among the users, as the beacon
could be heard but no stations could access the transponder.

The problem was that the satellite began experiencing solar eclipses for
the first time since launch, starting about 20 September. As the
eclipse durations increased (they will reach a maximum of about 35
minutes later this month), the battery, which then has to supply the entire
spacecraft load, dropped below a trip point of 13.0 volts. This was
clearly too high and has since been reduced to 11 volts. The satellite
went back into normal operation yesterday and no more problems are
anticipated.

Phil Karn

From 7705394309640671818
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93e3ab394174260e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-03 20:39:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Preliminary STS-9 elements
Message-ID: <1106@eagle.UUCP>
Date: Mon, 3-Oct-83 23:39:19 EDT
Article-I.D.: eagle.1106
Posted: Mon Oct 3 23:39:19 1983
Date-Received: Tue, 4-Oct-83 02:34:22 EDT
Lines: 26

>From the AMSAT bulletin board (512) 852-8194:

NUMBER: 1052 DATE: 100283 TO: ALL FROM: N5AHD
SUBJECT: STS-9 ELEMENTS

FOR THOSE OF YOU WHO WANT TO DO SOME PRELIMINARY COMPUTATIONS THE
FOLLOWING ELEMENTS WERE SUPPLIED BY W5RRR ON THE AMSAT NET FOR THE
STS-9 MISSION. THESE ARE OF COURSE THE BEST ESTIMATES AVAILABLE
AT THE TIME. UPDATES WILL BE POSTED HERE.

EPOCH	1983 DAY 302
TIME	17:46:44.89
INCLINATION	57.0248
RAAN	178.60498
ECCENTRICITY	0.00083
ARG OF PERIGEE	1.86848
MEAN ANOMALY	358.13682
MEAN MOTION	16.07142857
DECAY RATE	0.030
SEMI-MAJOR AXIS	6633.118215
NODAL PERIOD	89.40 MINUTES
LONG. INCREMENT	22.71 DEGREES/ORBIT
AVERAGE HEIGHT	249.5 KM

W5LFL WILL BE OPERATIONAL ON A TOTAL OF 8 ORBITS ONLY 3 OF
WHICH ARE VISIBLE TO THE CONTINENTAL UNITED STATES. THESE
ARE ORBITS 39, 40, AND 80.

From 3137987217944309768
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2a1b8934f9491589,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1983-10-03 21:21:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site akgua.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!floyd!clyde!akgua!glc
From: glc@akgua.UUCP (g.l. cleveland)
Newsgroups: net.ham-radio
Subject: Re: Morse punctuation
Message-ID: <331@akgua.UUCP>
Date: Tue, 4-Oct-83 00:21:56 EDT
Article-I.D.: akgua.331
Posted: Tue Oct 4 00:21:56 1983
Date-Received: Wed, 5-Oct-83 12:10:24 EDT
Organization: Western Electric, Atlanta
Lines: 40
Reference: <3758@mgweed.UUCP>

Last week, Bob, K9EUI asked about the Morse characters for various punctuation characters. Since I saw no comment or reply on the net, I am hoping that someone supplied them. However, on the off-chance nobody came thru and/or others may be interested, I quote from the ARRL publication "Learning the Radiotelegraph Code", copyright 1957 (when Headquarters was still located in Hartford, Conn.):

SPECIAL SYMBOLS

In transmitting text there of course is a need for code symbols for punctuation marks and some special procedure signals to facilitate rapid transmission. The important ones are:

Period	didahdidahdidah	._._._	
Comma	dahdahdididahdah	__.__	
Question mark	dididahdahdidit	..__..	
Double dash	dahdididididah	_..._	(BT)
End of message	didahdidahdit	._._.	(AR)
End of work	didididahdidah	..._._	(SK)
Wait	didahdididit	._...	(AS)
Invitation to xmit	dahdidah	_._	(K)
Hyphen	dahdidididididah	_...._	
Parentheses	dahdidahdahdidah	_.__._	
Colon	dahdahdahdididit	___...	
Semicolon	dahdidahdidahdit	_._._.	
Quotes	didahdididah	._.._	
Error	didididididididit	....	
Apostrophe	didahdahdahdahdit	.____.	
Fraction Bar	dahdididahdit	_.._.	
Understood	didididahdit	..._.	
Attention	dahdidahdidah	_._._	

Hope this is useful.

73, Lindsay W4IZI

Lindsay Cleveland (...{ihnp4|mhux?|clyde}!akgua!glc)
AT&T Western Electric/Bell Labs ... Atlanta, Ga
(404) 447-3909 ... Cornet 583-3909

From -5146392981180143815
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d0ef5868c370285e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-04 05:58:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!hogpc!houxo!ad7i
From: ad7i@houxo.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 88: STS9 information
Message-ID: <201@houxo.UUCP>
Date: Tue, 4-Oct-83 08:58:40 EDT
Article-I.D.: houxo.201
Posted: Tue Oct 4 08:58:40 1983
Date-Received: Thu, 6-Oct-83 23:29:43 EDT
Lines: 12

qst de w1aw
hr arrl bulletin nr 88 from arrl headquarters
newington ct september 26, 1983
to all radio amateurs bt

arrl, in conjunction with westlink, is offering public service
announcements for use by broadcast radio stations promoting the
upcoming sts9 mission. if you would like a copy of these psas,
please send a blank five inch reel of tape along with a first class
return mailer with postage to bill pasternak, wa6itf, 28197 robin
ave, saugus, ca 91350 ar

From -8865392551184869679
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a375df5f5dc752ed,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-04 06:03:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!hou5h!hou5g!hou5f!hou5e!hou5d!hogpc!houxo!
ad7i
From: ad7i@houxo.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 90: Volunteer Exam program
Message-ID: <203@houxo.UUCP>
Date: Tue, 4-Oct-83 09:03:10 EDT
Article-I.D.: houxo.203
Posted: Tue Oct 4 09:03:10 1983
Date-Received: Thu, 6-Oct-83 23:31:22 EDT
Lines: 20

qst de w1aw
hr arrl bulletin nr 90 from arrl headquarters
newington ct september 27, 1983
to all radio amateurs bt

at its september 22 meeting, fcc adopted a report and order in
docket no. 83 27, concerning volunteer exams. although the
complete report has not been released, arrl has learned some of
the contents. fcc envisions the establishment of regional
volunteer exam coordinators instead of national vecs. fcc will
have the power to retest anyone who receives a license from a
volunteer administered exam. the program will start with general
and technician. the other two classes will be added later.
thirty days advance registration will be required of applicants.
instant upgrading will be permissible. the telegraphy test
remains the same as now, i.e. a sending test is permissible but
not required. membership in an organization cannot be a
requirement for participating in a test. this bulletin will be
updated when fcc releases the text of the report and order ar

From -3610901704027099588
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a96ee3ad40bd0df,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-04 06:05:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!hou5h!hou5g!hou5f!hou5e!hou5d!hogpc!houxo!
ad7i
From: ad7i@houxo.UUCP
Newsgroups: net.ham-radio
Subject: CRRL 28: Teleconference
Message-ID: <204@houxo.UUCP>
Date: Tue, 4-Oct-83 09:05:23 EDT
Article-I.D.: houxo.204
Posted: Tue Oct 4 09:05:23 1983
Date-Received: Thu, 6-Oct-83 23:28:23 EDT
Lines: 9

qst de w1aw
hr crrl bulletin nr 28 from crrl headquarters
london ont october 3, 1983
to all radio amateurs bt

ten canadian repeaters took part in the september 1 teleconference
net featuring senator goldwater. crrl has arranged for a canadian
speaker, dr. john belrose, ve2cv, for a future net ar

From 9103047120589324342

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,77cb524e1f846b33,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-04 06:08:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!hogpc!houxo!ad7i
From: ad7i@houxo.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 89: United Nations operation
Message-ID: <202@houxo.UUCP>
Date: Tue, 4-Oct-83 09:08:30 EDT
Article-I.D.: houxo.202
Posted: Tue Oct 4 09:08:30 1983
Date-Received: Thu, 6-Oct-83 22:56:59 EDT
Lines: 12

qst de w1aw
hr arrl bulletin nr 89 from arrl headquarters
newington ct september 26, 1983
to all radio amateurs bt

in recognition of international amateur radio day on october 23,
4u1itu will be available for operation by any visiting amateurs.
also, certificates will be available for contacting 4u1itu on that
date. 4u1itu will be active on ssb, cw and rtty, 80 through 10
meters. additionally, the callsign 4u38itu will be used on october
24 ar

From 7729118439930823702
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bb7f7dc6ece66d8f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-04 06:10:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!hogpc!houxo!ad7i
From: ad7i@houxo.UUCP
Newsgroups: net.ham-radio
Subject: Propagation Bulletin 40
Message-ID: <205@houxo.UUCP>
Date: Tue, 4-Oct-83 09:10:58 EDT
Article-I.D.: houxo.205
Posted: Tue Oct 4 09:10:58 1983
Date-Received: Thu, 6-Oct-83 23:14:10 EDT
Lines: 25

qst de w1aw
hr propagation forecast bulletin nr 40 from arrl headquarters
newington ct october 3, 1983
to all radio amateurs bt

the solar flux averaged just over 109 in september, the lowest values since late 1947. solar activity was rising after the 20th, the trend continuing into early october. the flux reached 120 on the 2nd, the highest since the middle of august.

the solar flux rise reported last week is expected to flatten off in the 120s and start down about the 4th. there will be another low period about the 7th to 20th. a rise expected at the end of october should bring the best overall propagation of the autumn season to date.

above average magnetic field activity beginning about october 5, 13, 17, 23 and 28 will cause increased signal absorption and severe fading over periods of one to three days. the muf will tend to peak about october 4, 7, 14, 25 and 29, reaching its high for the month on the last two dates.

american sunspot numbers for september 22 through 28 were between 39 and 54 with a mean of 46.7 ar

From -6410852958668653737
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,db679c40dbd94b03,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-04 06:22:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!hogpc!houxo!ad7i
From: ad7i@houxo.UUCP
Newsgroups: net.ham-radio
Subject: ad7i bulletin 1: W1AW bulletin posting
Message-ID: <206@houxo.UUCP>
Date: Tue, 4-Oct-83 09:22:23 EDT
Article-I.D.: houxo.206
Posted: Tue Oct 4 09:22:23 1983
Date-Received: Thu, 6-Oct-83 23:15:35 EDT
Lines: 11

Hello from ad7i ------------------------

ARRL HQ station W1AW is once again transmitting bulletins
on a regularly scheduled basis using AMTOR. Because
bulletins are being sent using AMTOR, ad7i is again in
a position to copy and post them to the net. Sorry for
any problems missed bulletins have caused in the past
months.

                73, Paul Newland, ad7i

From 4042328631185051O9
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,70f31a510507511a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-04 07:13:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: Morse Code
Message-ID: <3922@mgweed.UUCP>
Date: Tue, 4-Oct-83 10:13:42 EDT
Article-I.D.: mgweed.3922
Posted: Tue Oct 4 10:13:42 1983
Date-Received: Thu, 6-Oct-83 23:56:53 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 22

Thanks to all that responded to my Morse code question.

(Lindsay, there is a dit missing at the end of the quote character
you had in your chart - maybe the ARRL was wrong....)

I guess part of my confusion was due to an old article I had (I just
found it again) that was printed in 1939 and gave both the original
Morse code and the Continental code. The Continental (International)
Code is the same as we use today except for a few punctuation
differences. The Continental Code was created in 1875 at a convention
held in Russia. The differences in it and the code we use today are:

	1875	Today
Period	.. .. ..	._._._
Comma	._._._	__..__
Exclamation	__..__	none

I wonder when it got changed.

Bob, K9EUI

From -4284895156981131068
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bbdb78500cfdf697,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-07 03:30:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site alice.UUCP
Path: utzoo!linus!decvax!harpo!eagle!allegra!alice!alb
From: alb@alice.UUCP
Newsgroups: net.ham-radio
Subject: Ten Year Licenses Approved by FCC
Message-ID: <2231@alice.UUCP>
Date: Fri, 7-Oct-83 06:30:10 EDT

Article-I.D.: alice.2231
Posted: Fri Oct 7 06:30:10 1983
Date-Received: Sat, 8-Oct-83 04:08:32 EDT
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 4

The FCC yesterday unamiously decided to extend the license term
of amateur radio licenses from 5 to 10 years. The change will
be phases in gradually; as the current 5 five licenses expire,
they will be renewed with 10 year tickets.

From 1074800339945071574
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d4bbac220c51f26b,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 12f221,d4bbac220c51f26b,start
X-Google-Attributes: gid12f221,public
X-Google-ArrivalTime: 1983-10-07 14:47:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site ssc-vax.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!cornell!uw-beaver!ssc-vax!tjj
From: tjj@ssc-vax.UUCP (T J Jardine)
Newsgroups: net.misc,net.ham-radio
Subject: Re: Correction to new WWV phone number
Message-ID: <553@ssc-vax.UUCP>
Date: Fri, 7-Oct-83 17:47:50 EDT
Article-I.D.: ssc-vax.553
Posted: Fri Oct 7 17:47:50 1983
Date-Received: Sun, 9-Oct-83 04:16:16 EDT
References: <730@ihuxf.UUCP>
Organization: Boeing Aerospace, Seattle
Lines: 7

Just tried both 800-957-7111 and 800-957-9999 from the 206 calling area
and got the now infamous intercept recording. Anyone have words of
wisdom suitable to this predicament?

Ted Jardine
TJ (with Amazing Grace) The Piper
...uw-beaver!ssc-vax!tjj

From -7903218180110348620
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,256c7248b6b0115a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-07 16:02:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxle!pyuxll!eisx!npoiv!npois!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio

Subject: ARRL 93: Board Meeting
Message-ID: <285@houxp.UUCP>
Date: Fri, 7-Oct-83 19:02:19 EDT
Article-I.D.: houxp.285
Posted: Fri Oct 7 19:02:19 1983
Date-Received: Sun, 9-Oct-83 10:05:52 EDT
Lines: 50

qst de ad7i
hr arrl bulletin nr 93 from arrl headquarters
newington ct october 7, 1983
to all radio amateurs bt

the arrl board of directors held its second meeting of 1983 on october 5 and 6 in houston, texas. the following resolution was unanimously adopted.

whereas, the continued availability of amateur license examination opportunities and the integrity of the examination process are both vital to the future of the amateur radio service in the united states, and

whereas, in its report and order in pr docket no. 83 27 the fcc has outlined a volunteer examiner program in which arrl participation as volunteer examiner coordinator, vec, is both desirable and appropriate, and

whereas, legislation is to be introduced which, if enacted, will permit the recoupment of out of pocket administrative expenses of a vec, such recoupment being essential to arrl participation, now, therefore

be it resolved that the league participate as a volunteer examiner coordinator, such participation, however, only to commence upon governmental authorization for recoupment of vec expenses and approval of any agreement between arrl and the fcc by the board of directors.

in another regulatory matter, the league will petition fcc to adopt american national standards institute standard c95.1 1982 as an interim rf protection guideline and thereby establish federal preemption in this area. the arrl will petition the fcc for rtty privileges on the 160 meter band. the board endorsed the concept of early iaru preparation for the next general world administrative radio conference.

in other matters, the board amended the bylaws to allow technician class licensees or higher and canadian amateur certificate holders or higher to run for elective arrl/crrl office. the arrl president was authorized to sign an agreement with the quarter century wireless association, embracing a plan of mutual support and cooperation. the board also authorized the signing of a memorandum of understanding

with the associated public safety communications officers, apco. the arrl letter will be made available at reduced cost to arrl affiliated club newsletter editors and to section level appointees. san diego was chosen as the site for the 1986 national convention. complete minutes will appear in december 1983 qst ar

From 7554946627515875140
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cd52f04c0a53dbcd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-07 16:02:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxle!pyuxll!eisx!npoiv!npois!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: DX 39
Message-ID: <286@houxp.UUCP>
Date: Fri, 7-Oct-83 19:02:39 EDT
Article-I.D.: houxp.286
Posted: Fri Oct 7 19:02:39 1983
Date-Received: Sun, 9-Oct-83 09:01:42 EDT
Lines: 73

qst de ad7i
hr dx bulletin nr 39 from arrl headquarters
newington ct october 7, 1983
to all radio amateurs bt

thanks to k1mm, n1ajo and w1trc of the southern new england dx association for the following dx information.

kampuchea. confirmations for the recent kampuchea, xu, operation will be accepted for dxcc credit. one of the local operators trained by the japanese group has been appearing frequently on 20 meter ssb at both european sunrise and usa sunrise. the operator is learning quickly how to handle pileups, but since there is no split operation at the present time, please have patience. qsl to ja1hqg.

niue. zl1amo is currently signing zk9rw from niue island. ron is using the special zk9 prefix in commemoration of wcy. the operation is expected to last approximately one more week, mostly cw. qsl to zl1amo.

nigeria. 5n8ary, arye, is often working 40 and 80 meter ssb and cw near the low band edges. qsl direct to his callbook address. he expects to have his 160 meter antenna back up in a few weeks.

liechtenstein. frank, hb9nl, continues his month long operation as hb0nl, cw only. he is frequently visited by hb9hk, who operates as hb0hk on rtty. qsl to their respective home callsigns.

tuvalu. ordon, t2gsh, has been reported now active on 80 meter ssb but with a rather weak signal in north america.

greece, etc. sv0aa is now operating as sv0aa/8 and is planning to make a trip to sv5 and sv9 in the near future. remember that jack is now qrv on 160 through 10 meters, cw only.

juan fernandez. ce0evg/0z, operated by rudy, a resident of juan fernandez island, is regularly on 20 meter ssb around 0100 to 0300z. qsl to wb6wod.

antarctica. richard, vp8ant, is preparing to leave his post within a few weeks and will return to the uk. check 10 khz from the bottom on cw and the usual dx frequencies on ssb. qsl direct to p.0. box 146, cambridge, england.

china. by1pk was operated on ssb last week for four days. signals were weak and not many stations were worked. the operator was tom wong, ve7bc. however, due to qrm and jamming on the frequency, it is rumored that ssb operation may not be allowed again, at least for a while. a japanese group will go to shanghai next week and start up a new station, by4aa. it is unknown how long the operation will last or whether there will be all band all mode operation.

the sudan. for waz hunters, look for df3nz/st2, who has surfaced again, this time on 80 meter ssb around 0130z.

160 meters. many ussr stations have been worked in north america over the last week, including ua, ua9, uq2, up2 and ub5. with decreasing sunspot numbers, low band conditions will continue to improve, so this is a band to watch carefully.

st. paul island. when last heard, the combined american/canadian dxpedition, cy0spi, had made over 15,000 qsos, spread over nine bands and four modes. qsl to ve1asj. congratulations on a fine expedition.

zone 2. ve8dx will be active on ssb and rtty with some cw. look for bob on 1825 khz at 0000z, on 80 at 0900, on 40 at 0700 on 7234 khz, and on 20 at 1500z on 14178 khz.

belize. listen for v30, v3t, v30yl and others october 22 through november 5, on 160 through 10 meters. cw will be emphasized before the cq ww contest. qsl via n6 -8 ar

From -3672092336116785230
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,35c35812fcdf40db,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-09 03:30:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!ihnp4!inuxc!pur-ee!uiucdcs!
uokvax!emks
From: emks@uokvax.UUCP
Newsgroups: net.ham-radio
Subject: RTTY Code Generators (where?) - (nf)
Message-ID: <3178@uiucdcs.UUCP>
Date: Sun, 9-Oct-83 06:30:13 EDT
Article-I.D.: uiucdcs.3178
Posted: Sun Oct 9 06:30:13 1983
Date-Received: Mon, 10-Oct-83 08:15:24 EDT
Lines: 14

#N:uokvax:2800001:000:340
uokvax!emks   Oct 6 18:13:00 1983

I'm looking for a RATT (RTTY) generator for a Commodore 64 personal computer.
I am really looking for something that can speak ASCII and BAUDOT code ...
but I don't know if such a monster even exists. Please reply by mail (or you
can post to the net if you wish).

Thanks in adv.

kurt
{ ctvax | uok } ! uokvax!emks
kurt@okc-unix

From 4082192020768534898
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bd8b8342fe8d3d11,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-10 08:23:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 10/6/83; site ihuxf.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!eagle!mhuxi!houxm!ihnp4!ihuxf!
parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: Product Review: PRO-30 synthesized portable scanner
Message-ID: <751@ihuxf.UUCP>
Date: Mon, 10-Oct-83 11:23:01 EDT
Article-I.D.: ihuxf.751
Posted: Mon Oct 10 11:23:01 1983
Date-Received: Tue, 11-Oct-83 00:26:07 EDT
Organization: AT&T Bell Labs, Naperville, Il
Lines: 201

I recently purchased a Radio Shack PRO-30 synthesized handheld scanner. Here are some details:

- Price: $300.

- Batteries are not included. The PRO-30 requires 3 "hearing aid type" batteries for memory retention and 6 AA batteries.

- Frequency coverage is fixed. The manual states: "In case you're wondering, the tuning range of your PRO-30 is permanently stored in the microprocessor chip. There's no way it can be extended or altered - even by a skilled electronics technician. So if you try to enter a frequency not in the PRO-30's tuning ranges, you'll get an error message every time!"

    - 30 - 54 (includes entire 6 meter ham band)

    - 108 - 136 (AM commercial aircraft band)

    - 138 - 174 (includes some military frequencies below the 2 meter ham band)

    - 380 - 512 (several military and "secret" US government frequencies in this range)

- Semiconductor components: 1 LSI microprocessor, 1 LSI PLL chip, 3 CMOS chips, 5 other chips, 39 transistors, and 75 diodes!

- Selectivity: +-9 KHz @ 6 db., +-15 KHz @ 50 db.

- Scanning rate: Fast = 10 channels/second, Slow = 5 channels/second.

- IF frequencies: 10.7 MHz and 455 KHz.

- Current drain (not including memory backup cells): 55 mA squelched, 100 mA unsquelched at full volume.

- Priority Sampling: 2 seconds.

o+ BNC antenna connector. A multi band semi-flexible antenna is supplied.

o+ The case is plastic, with a hinged, spring loaded belt clip on the rear. The inside of the case has been sprayed with some type of gold colored RFI shielding material.

o+ The keyboard buttons are made of a rubber type material, that compress slightly when depressed. An audio tone is used to confirm key depression.

o+ Three pushbutton switches on the top of the unit duplicate functions on the front mounted keypad:

a. Scan

b. Manual

c. Speed

This allows the user to manipulate these functions while the scanner is worn on the belt.

o+ The PRO-30 is made in Japan by GRE, the same company that makes Radio Shack's crystal controlled scanners.

o+ The owner's manual contains a block diagram, but no schematic. I am told that a service manual, with schematic, will be available for sale. The owner's manual contains a list of "birdies."

Some early impressions:

o+ The scanner works quite well.1

o+ The instruction manual is pretty good, although a schematic should be included.

o+ The scanner is bigger than the Bearcat BC-100. No leather case is available to protect the PRO-30, so the scanner could be "bruised" in heavy service.

o+ The LCD display contains several status indicators, including a low battery warning message.2 The display

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1. The PRO-30 being reviewed is one of the first available in the northern Illinois area. Early models of complex radio equipment from other companies have been plagued by several problems. Examples are the Drake TR-7 transceiver, the Bearcat BC-100 and BC-300 scanners, and the Collins KWM-380 transceiver.

2. The user is also warned of failing batteries by a audio alarm.

is quite crisp and clear in good light, and when the internal dial light is activated. It is difficult to read under low lighting conditions and at various angles, a characteristic of LCD technology.

o+ Striking a key does not always actuate the desired function. If a key is struck off center, the rubber key top compresses without actuating the switch mechanism. The user is made aware of this situation when no audio tone is heard after a key depression.

A nice aspect is that the keyboard is less prone to damage if it is struck against the corner of a desk.

- Sensitivity on UHF is at least as good as the several crystal controlled portable scanners I've aligned, maybe even better!

- The internal construction looks decent. There are two printed circuit boards in the radio, connected via a multi pin connector rather than messy wiring harnesses. The component designations (e.g. R102, C212, etc.) are printed on the board. Resistors are 1/8 watt and mounted vertically. Layout appears clean, not over-crowded.

- The priority scan feature works well and uses a "reasonable" algorithm, like that used in most Bearcat and Regency scanners.3

- Audio output circuitry uses the LM386 audio amplifier chip, producing about 220 milliwatts of audio power out.4 This is a bit on the weak side if your using the scanner in a truck, or wearing it in a noisy situation without benefit of an earphone. The audio is crisp and clean, without synthesizer noise.

- The 2nd IF, FM detector and squelch circuitry is implemented using a Motorola MC3357 IC, now quite common in scanners.5

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3. The algorithms used in most Japanese 2 meter ham radio transceivers, discussed in a previous article, are not very useful to American amateurs.

4. The LM386 is also used in the PRO-24 crystal controlled handheld scanner, reviewed in a previous article.

5. The squelch function works quite well and is not plagued by the hysteresis problem found in the PRO-24.

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Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -4019229007396900439
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d8711a45a8364728,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-10 14:03:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: AM Pirates
Message-ID: <1112@eagle.UUCP>
Date: Mon, 10-Oct-83 17:03:57 EDT
Article-I.D.: eagle.1112
Posted: Mon Oct 10 17:03:57 1983
Date-Received: Tue, 11-Oct-83 00:27:22 EDT
Lines: 38

For those of you looking for something completely different, try this:

Last night, while tuning the range 1.6-1.8 mhz looking for cordless telephones, I came across a guy calling himself "KPRC, Pirate Joe" on 1.616 mhz. This guy claimed to be running THREE simultaneous transmitters from somewhere in New York on AM, shortwave (6.280 mhz) and FM stereo (91.5). I was able to hear the first two but not the FM signal.

This guy was quite talented. His signon was "Who's afraid of the Big Bad Wolf?" He played music, naturally enough, but the most entertaining part of his show was the telephone call-in. He gave a New York number but suffix of the number was 99xx, which I suspect was a port of an internal telephone company conference bridge (to avoid tracing, of course.) His first caller was from a fellow pirate ("WDX") who said he would resume operations around Thanksgiving. Another caller was a SWLer who read off a long list of other pirate operations that she had heard. They then got into "hey, did you hear that so-and-so got caught by the FCC a while ago and got fined $2000? How much do you think you'd get fined if you got caught?" "By the way, how much power are you running?" "Now you know the ground rules, there's certain things we can't talk about over the air..." etc, etc. Naturally, a pirate radio station wouldn't be a pirate radio station without political harangues, so he then went on awhile about Ronnie and Central America. Then he played a pretty good parody of "Electric Avenue" called "Stupid Avenue", by Pirate "N" and the Plate Tuners.

This went on for quite a while, with phone calls from places like Chicago and London, Ontario, until at 2:30AM I decided I needed some sleep. He gave a PO box in Exeter, NH to which listeners could write

for QSL cards, etc. I have about an hour or so of him on tape.

I think I'll have to drop him a line. It'd be a shame for this guy to get thrown off the air, he was so much more entertaining than the usual soul-saver drivel on the AM stations!

Happy listening,
Phil

From -1239218696828738397
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d8711a45a8364728
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-11 05:46:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 10/6/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Robert S. Parnass, AJ9S @ Bell Labs, Naperville, IL)
Newsgroups: net.ham-radio
Subject: RE: AM Pirates
Message-ID: <758@ihuxf.UUCP>
Date: Tue, 11-Oct-83 08:46:39 EDT
Article-I.D.: ihuxf.758
Posted: Tue Oct 11 08:46:39 1983
Date-Received: Thu, 13-Oct-83 00:17:02 EDT
Organization: AT&T Bell Labs, Naperville, Il
Lines: 31

It looks like this pirate station has been operating on 1616 KHz for at least a year now. The "Free Radio Focus" column of Popular Communications magazine for July 1983 makes reference to this station:

" ... The first bit of information this month comes from my cousin, Bob Kratzer in Allentown, Pennsylvania. Bob Reports hearing KPRC in New York sporadically on Sundays on 1616 KHz between 0600 and 0800 GMT. Their programming is a mix of editorials, phone calls from listeners, and assorted music. One November 3 [1982], they discussed the New York elections, but had a slight problem with their phone line, which was telephone number (212)799-9906. On December 31 [1983], the highlight of the night was someone calling to complain that KPRC was RFI'ing a neighbor's stereo ... thank goodness the call was only a prank! Their address is:
P. O. Box 747, Exeter, NH 03833 ..."

This column is a regular monthly feature in Pop Comm. Starting with the October 1983 issue, the column has been renamed "Pirates Den", and been given a new editor.

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Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From 3321281905554690173
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 132415,f4e7db96174df643,start
X-Google-Attributes: gid132415,public
X-Google-Thread: 151e61,f4e7db96174df643,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 139baf,f4e7db96174df643,start
X-Google-Attributes: gid139baf,public
X-Google-ArrivalTime: 1983-10-11 14:47:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 10/6/83; site ihps3.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxle!pyuxll!eisx!npoiv!npois!hogpc!houxm!
ihnp4!ihps3!ka9s
From: ka9s@ihps3.UUCP
Newsgroups: bell.ham-radio,net.ham-radio,btl.ham-radio
Subject: HELP? - Solid State Tubes
Message-ID: <437@ihps3.UUCP>
Date: Tue, 11-Oct-83 17:47:32 EDT
Article-I.D.: ihps3.437
Posted: Tue Oct 11 17:47:32 1983
Date-Received: Thu, 13-Oct-83 03:16:24 EDT
Organization: AT&T Bell Labs, Naperville, Il
Lines: 49

I am looking for schematic diagrams and parts sources that will enable me to home-brew solid state tube replacements for my old DRAKE C-line.

Years ago I purchased four solid state tubes from Sartori Associates Associates, W5DA and placed them in my R-4C. They have worked fine and I have no complaints. At the time I corresponded with Howard Sartori about the Solid Tubes and was informed that he could not develope a solid tube that would perform better than the glass (6BA6) tubes. Around the same time Howard published an article in QST describing his Solid Tubes:

"Solid - Tubes - a New Life for Old Designs
by Howard J. Sartori W5DA
QST, April 1977, page 45 "

Since that time technology has improved (namely the invention of

VMOS) and I have decided to convert as much of the old C-line to solid state as I can.

I wrote Mr. Sartori to see what new products might be available and if he had any new designs he might be willing to share with me. Howard now has developed solid state tube replacements for all the tubes in the DRAKE C-line (including the 6BA6) with the exception of the 6JB6 finals and the 12BY7A driver. He promises to have a solid state tube replacement for the 12BY7A some time this fall. The bad news is the price of the Solid Tubes ($23.00 each) which I find to be a little prohibitive. Secondly Howard is not giving out any design information for these new Solid Tubes.

After reading over the article he wrote years ago, it appears that he is using some very high voltage solid state devices and I do not know where to purchase them. I also feel that there must be better designs around now that VMOS devices are available.

If any of you have the designs or parts sources I need, I would appreciate some mail to the effect.

TNX n 73's

Jeff Goodspeed KA9S

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Jeff Goodspeed, Western Electric Network Software Center, ihnp4!ihps3!ka9s
(312)-260-4838

From -8075096846263325535
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8f33344113899c2a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-11 14:53:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site oliveb.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxle!pyuxll!eisx!npoiv!npois!hogpc!drux3!
ihnp4!zehntel!hplabs!oliveb!gnome
From: gnome@oliveb.UUCP
Newsgroups: net.ham-radio
Subject: Regency 7000 scanner?
Message-ID: <209@oliveb.UUCP>
Date: Tue, 11-Oct-83 17:53:36 EDT
Article-I.D.: oliveb.209
Posted: Tue Oct 11 17:53:36 1983
Date-Received: Thu, 13-Oct-83 22:17:55 EDT
Organization: Olivetti ATC., Cupertino, Ca

Lines: 13

Does anyone know about the Regency ?7000 scanner?
I've heard that it scans from 24mhz to 1.2Ghz...

Also, where can one be found at a discount??
(Mail order or whatever...)

Gary Traveis

Olivetti ATC, Cupertino, CA
oliveb!olivee!oliven!gnome (N:gnome)

From 97505966446134119
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c9f43539966a97b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-12 07:57:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Midwest Aeronautical Radiobeacons
Message-ID: <4085@mgweed.UUCP>
Date: Wed, 12-Oct-83 10:57:28 EDT
Article-I.D.: mgweed.4085
Posted: Wed Oct 12 10:57:28 1983
Date-Received: Thu, 13-Oct-83 20:57:00 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 284

Low Frequency Aeronautical Radionavigation Beacons
(Illinois, Indiana, Iowa, Wisconsin, & Michigan)
In order of frequency
200 - 415 kHz and 510 - 525 kHz
(This list has been verified by FAA)
10-12-83

	200	HXF	Hartford, Wi.
	201	GYG	Grayling, Mi.
203	BXR	Siren, Wi.	
	203	PVB	Platteville, Wi.
	206	AP	Alpena, Mi.
	206	BDJ	Boulder Junct. Wi.
	206	CKP	Cherokee, Ia.
206	IIB	Independence, Ia.	

206	LA	Lansing, Mi.
206	RA	Racine, Wi.
206	TEL	Tell City, In.
209	CLI	Clintonville, Wi.
209	CNC	Chariton, Ia.
209	DKB	DeKalb, Il.
209	GDW	Gladwin, Mi.
212	AWW	Winchester, In.
212	DCY	Washington, In.
212	JX	Jackson, Mi.
212	MC	Mason City, Ia.
212	MHW	Mt. Pleasant, Mi.
212	MJY	Middleton, Wi.
212	MPZ	Mt. Pleasant, Ia.
212	SSQ	Shell Lake, Wi.
212	VP	Valparaiso, In.
215	EBS	Webster City, Ia.
215	ISW	Wis. Rapids, Wi.
215	ML	Moline, Il.
215	PZQ	Presque Isle, Mi.
215	UIZ	Utica, Mi.
216	RCR	Rochester, In.
218	AL	Alton, Il.
218	DRM	Drummond Island, Mi.
219	AWG	Washington, Ia.
219	EV	Evansville, In.
219	MD	Chicago, Il.
219	MK	Muskegon, Mi.
221	ARV	Lakeland, Wi.
222	CVX	Charlevoix, Mi.
223	DM	Detroit, Mi.
224	BBC	Cody, Ia.
224	II	Sturgeon Bay, Wi.
227	SLB	Storm Lake, Ia.
227	TZY	Warsaw, In.
230	AT	Appleton, Wi.
230	HPT	Hampton, Ia.
230	HSB	Harrisburg, Il.
230	PYN	Chicago (Pine), Il.
230	RDK	Red Oak, Ia.
230	VQ	Detroit, Mi.
232	CO	Indianapolis, In.
233	CWI	Clinton, Ia.
233	GRE	Greenville, Il.
233	HLM	Holland, Mi.
233	OEO	Osceola, Wi.
233	OI	Sioux City, Ia.
236	ADU	Audubon, Ia.
236	BHW	West Branch, Mi.
236	CTK	Canton, Il.
236	GY	Gary, In.
236	RUF	Woodruf, Wi.
239	EA	Eau Claire, Wi.

239	HNB	Huntingburg, In.
239	MIW	Marshalltown, Ia.
239	SAR	Sparta, Il.
242	GM	Milwaukee, Wi.
245	EZI	Kewanee, Il.
245	HU	Terra Haute, In.
248	FLD	FondDuLac, Wi.
248	HZP	Zionsville, In.
248	MX	Kedzie, Il.
251	CXK	Calm Lake, Mi.
251	FW	Fort Wayne, In.
251	HBW	Kickapoo, Wi.
251	MQB	Macomb, Il.
251	OEA	Vincennes, In.
251	PRO	Perry Ia.
254	BDD	Brookport, Il.
254	BOZ	Sterling, Il.
254	ENY	Ashland, Wi.
257	FWC	Fairfield, Il.
257	MB	Saginaw, Mi.
257	PEA	Pella City, Ia.
257	PLD	Portland, In.
257	RNH	New Richmond, Wi.
257	RRL	Merrill, Wi.
257	RV	Chicago, Il.
260	BL	Milwaukee, Wi.
260	OLZ	Oelwein, Ia.
260	SUW	Superior, Wi.
263	BFA	Boyne Falls, Mi.
263	CVM	Alton, Il.
263	GGP	Logansport, In.
263	GR	Grand Rapids, Mi.
263	PBH	Phillips, Wi.
266	DU	Marshfield, Wi.
266	IN	Indianapolis, In.
266	OIX	Ottawa, Il.
269	BEX	Bloomfield, Ia.
269	CAD	Cadillac, Mi.
269	FN	Flint, Mi.
269	NBU	Glenview, Il.
272	BT	Battle Creek, Mi.
272	HNR	Harlan, Ia.
272	LS	La Crosse, Wi.
272	MUT	Muscatine, Ia.
272	OLY	Olney, Il.
275	AMW	Ames, Ia.
275	CEV	Connersville, In.
275	CM	Hancock, Mi.
275	DE	Decatur, Il.
275	RF	Rockford, Il.
278	ADG	Adrian, Mi.
278	AHH	Amery, Wi.
278	FKR	Frankfort, In.

278	XWY	West Union, Ia.
281	HMJ	Homer, Il.
281	IDG	Ida Grove, In.
281	MIX	Metropolis, Il.
281	ROQ	Roscommen, Mi.
281	VOK	Volk, Wi.
282	OXD	Oxford, In.
284	OXV	Knoxville, Ia.
284	PDW	Evansville, In.
285	RT	????
286	A	S. Ste. Marie, Ont.
293	CJJ	Cresco, Ia.
293	UI	Quincy, Il.
296	CRZ	Corning, Ia.
308	EQZ	Seymore, In.
314	POH	Pocahontas, Ia.
326	CI	Cedar Rapids, Ia.
326	EK	Wis. Rapids, Wi.
326	LTU	Spencer, Ia.
326	SIV	Sullivan, In.
326	SU	E. St. Louis, Il.
329	AAA	Lincoln, Il.
329	AMN	Alma, Mi.
329	IWH	Wabash, In.
329	LLE	Kettle Moraine, Wi.
332	CUL	Carmi, Il.
332	EPE	Pellston, Mi.
332	FFL	Fairfield, Ia.
332	HK	Herman, Il.
332	PHN	Port Huron, Mi.
332	SG	Green Bay, Wi.
335	FEP	Freeport, Il.
335	MDZ	Medford, Wi.
335	MEY	Mapleton, Ia.
335	RWN	Winimac, In.
338	DE	Detroit, Mi.
338	GFZ	Greenfield, Ia.
338	LM	St. Louis, Mo.
338	PKW	Kenosha, Wi.
338	SHL	Sheldon, Ia.
338	VTI	Vinton, Ia.
341	DB	Dubuque, Ia.
341	EGV	Eagle River, Wi.
341	FO	Fort Dodge, Ia.
341	LDM	Ludington, Mi.
341	PRG	Paris, Il.
341	SB	South Bend, In.
344	BFR	Bedford, In.
344	DS	Des Moines, Ia.
344	DTG	Dwight, Il.
344	PPQ	Pittsfield, Il.
344	SLY	Hayward, Wi.
344	UNU	Juneau, Wi.

347	AIG	Antigo, Wi.
347	ANQ	Angola, In.
347	DEH	Decorah, Ia.
347	MT	Matoon, Il.
350	DNS	Denison, Ia.
350	ME	Medina, Il.
353	FOA	Flora, Il.
353	ICL	Clarinda, Ia.
353	QG	Windsor, Ont.
356	GR	Green Bay, Wi.
356	PI	Peoria, Il.
356	RCX	Ladysmith, Wi.
356	SKI	Sac City, Ia.
359	CZB	Casey, Il.
359	FXY	Forest City, Ia.
359	YI	Detroit, Mi.
362	BCK	Bk River Falls, Wi.
362	BL	Bellville, Il.
362	RZL	Rensselear, In.
362	SRK	Spirit Lake, Ia.
365	AIO	Atlantic, Ia.
365	MI	Muncie, In.
365	MRJ	Mineral Pt., Wi.
365	SYZ	Shelbyville, Il.
365	TV	Traverse City, Mi.
366	EOK	Keokuk, Ia.
368	FRH	French Lake, In.
368	IFA	Iowa Falls, Ia.
368	OH	Chicago, Il.
368	SOY	Sioux Center, Ia.
368	VIQ	Neilsville, Wi.
371	AI	Anderson, In.
371	AZ	Kalamazoo, Mi.
371	LTD	Litchfield, Il.
371	RYV	Watertown, Wi.
374	OVO	North Vernon, In.
375	ALV	Gaylord, Mi.
375	CCY	Charles City, Ia.
375	CPS	E. St. Louis, Il.
375	JVL	Janesville, Wi.
375	OGM	Ontonagon, Mi.
377	MCX	Monticello, In.
378	DQV	Deckersville, Mi.
379	CSQ	Creston, Ia.
379	UG	Waukeegan, Il.
382	AL	Waterloo, Ia.
382	BM	Bloomington, In.
382	IRS	Sturgis, Mi.
382	LRJ	Lemars, Ia.
382	MW	Marion, IL.
382	PCZ	Waupaca, Wi.
382	SP	Springfield, Il.
385	ID	Chicago, Il.

385	UWL	New Castle, In.
386	OQW	Maquoketa, Ia.
387	CAV	Clarion, Ia.
388	CFJ	Crawfordsville, In.
388	DT	Detroit, Mi.
388	MD	Carbondale, Il.
388	OCQ	Oconto, Wi.
390	BR	Burlington, Ia.
391	CPB	Culver, In.
391	EFW	Jefferson, Ia.
391	MFI	Marshfield, Wi.
391	PLX	Robinson, Il.
392	DSN	Marquette, Mi.
394	OR	Chicago, Il.
395	OS	Oshkosh, Wi.
395	TAZ	Taylorville, Il.
396	LNL	Land O' Lakes, Wi.
397	BE	Benton Harbor, Mi.
397	CIN	Carroll, Ia.
397	CIR	Cairo, Il.
397	MXO	Monticello, Ia.
398	G	Windsor, Ont.
400	CI	S. St. Marie, Mi.
400	MS	Monah, Wi.
400	SLO	Salem, Il.
401	LA	LaFayette, In.
403	AXA	Algona, Ia.
404	IMS	Madison, In.
404	LVV	Delevan, Wi.
404	ST	St. Louis, Mo.
404	ZR	Sarnia, Ont.
407	BNW	Boone, Ia.
407	CM	Champaign, Il.
407	FXV	Appleton, Wi.
407	HAI	Three Rivers, Mi.
407	RIE	Rice Lake, Wi.
407	RXW	Watersmeet, Mi.
410	BA	Columbus, In.
410	EGQ	Emmetsburg, Ia.
410	MK	Milwaukee, Wi.
411	SDA	Shenandoah, Ia.
412	CMY	Camp McCoy, Wi.
414	BEE	Benton, Il.
414	IA	Chicago, Il.
414	OOA	Oskaloosa, Ia.
414	SU	Sioux City, Ia.
414	SUE	Sturgeon Bay, Wi.
515	RRQ	Rock Rapids, Ia.
517	FN	Clinton, Ia.
521	ORC	Orange City, Ia.
524	AJG**	Mount Carmel, Il.
524	UOC	Iowa City, Ia.

** = not commissioned yet

From 434935538901700958
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,604e6749678de74,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-12 07:57:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Midwest Marine Radiobeacons
Message-ID: <4086@mgweed.UUCP>
Date: Wed, 12-Oct-83 10:57:59 EDT
Article-I.D.: mgweed.4086
Posted: Wed Oct 12 10:57:59 1983
Date-Received: Thu, 13-Oct-83 20:58:10 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 97

LAKE MICHIGAN AREA MARINE RADIOBEACONS (USCG)

Most marine radiobeacons must share a group frequency with other beacons. Beacons in the same general geographical area are divided into groups of up to six beacons per single frequency, with the sequence repeated continually. Each radiobeacon transmits for at least one minute out of the total period of six minutes (SEQ 1 starts on the hour). In the following list, where no SEQ number is shown, that station is a low powered local beacon that transmits continuously, transmitting either a Morse character or half second dashes. The last ten seconds of the sequential beacon's transmission is a long dash for maximum accuracy while taking direction fixes. ID's in "()" are those monitored but not appearing in Coast Guard documentation. Sequential beacons generally have a range of 40 to 100 miles, while the local ones are not given. The chart below shows SEQ numbers vs. minutes after the hour.

SEQ	1	2	3	4	5	6
MIN:	0	1	2	3	4	5
	6	7	8	9	10	11
	12	13	14	15	16	17

18	19	20	21	22	23
24	25	26	27	28	29
30	31	32	33	34	35
36	37	38	39	40	41
42	43	44	45	46	47
48	49	50	51	52	53
54	55	56	57	58	59

LAKE MICHIGAN AREA MARINE RADIOBEACONS (USCG)
285 to 335 kHz

KHZ	ID	SEQ	LOCATION
285	RT	????	
286			Sherwood Pt., Wi.
288	(FR)		Frankfort, Mi.
294	(J)		
298	AA	5	Chicago, Il.
298	C	4	Muskegon, Mi.
298	E	1	N. Manitou Is., Mi.
298	M	3	Milwaukee, Wi.
298	P	2	Pt. Betsie, Mi.
298	Y	6	Indiana Harbor, In.
302	C	3	St. Martin, Mi.
302	OT	1,4	Detour Reef, Mi.
302	W	2	Poe Reef, Mi.
302	X	6	Grays Reef, Mi.
302	Z	5	Lansing Shoal, Mi.
304	W		Waukeegan, Il.

308	G	3	Kewaunee, Wi.
308	K	2	Green Bay, Wi.
308	L	6	Rawley Pt., Wi.
308	OE	1	Sturgeon Bay, Wi.
308	OT	5	Ludington, Mi.
308	Y	4	Minn. Shoal, Mi.
316	(GO)		Grand Haven, Mi.
318			Port Inland, Mi.
320	(KX)		Calumet Harbor, In.
322			Round Is. Passage, Mi.
324			Plum Is., Wi.
324	(SY)		Sheboygan, Wi.
329			Manitowoc, Wi.

From -3856022340236292519
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3808631f8f32e9a8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-12 08:19:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!hou5h!hou5g!hou5f!ariel!vax135!floyd!whuxle!
pyuxll!eisx!npoiv!npois!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: operation on 160-190 KHz
Message-ID: <288@houxp.UUCP>
Date: Wed, 12-Oct-83 11:19:26 EDT
Article-I.D.: houxp.288
Posted: Wed Oct 12 11:19:26 1983
Date-Received: Thu, 13-Oct-83 21:06:49 EDT
Lines: 8

greetings from ad7i ---------------------------------------

does anyone have experience with operating on 160 to 190 KHz.
i am interested in using it for packet and/or AMTOR communications.
any information anyone can offer would be appreciated.

tnx -- paul newland, ad7i

From 1898536288346610742
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 139baf,f4e7db96174df643
X-Google-Attributes: gid139baf,public
X-Google-Thread: 151e61,f4e7db96174df643
X-Google-Attributes: gid151e61,public
X-Google-Thread: 132415,f4e7db96174df643
X-Google-Attributes: gid132415,public
X-Google-ArrivalTime: 1983-10-12 11:15:43 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site rabbit.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!hou5f!hou5g!hou5h!eagle!allegra!
alice!rabbit!jj
From: jj@rabbit.UUCP
Newsgroups: bell.ham-radio,net.ham-radio,btl.ham-radio
Subject: Re: HELP? - Solid State Tubes
Message-ID: <2055@rabbit.UUCP>
Date: Wed, 12-Oct-83 14:15:43 EDT
Article-I.D.: rabbit.2055
Posted: Wed Oct 12 14:15:43 1983
Date-Received: Thu, 13-Oct-83 22:10:44 EDT
References: <437@ihps3.UUCP>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 24

I suggest that you look through the Supertex and Ferranti
Power FET lines. You might also consider combinations of
a Depletion(naturally0 JFET and an Enhancement V-FET
for tube replacements.   I don't know of any useful
depletion mode Power FET's, partly because the mechanism that
most of the Power FETS use is easier done in enhancement
mode. With a few circuit componenets, though, making
single device replacements for many low frequency tubes
isn't impossible.

I recently hacked up a couple of power fet's into an
old tube (audio) amplifier for the heck of it. There
weren't any real complications other than the fact that
I had to make the bias supply positive rather than negative.

If anyone out there has more info on these tube replacements,
let's hear it! I'm interested for other than tube replacement
reasons. <sigh>
--
 O   o   From the pyrolagnic keyboard of
   ~   rabbit!jj
 -v-v-
 \^_^/

From 9082323095299197766
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8f33344113899c2a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-12 17:43:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site genrad.UUCP
Path: utzoo!linus!security!genrad!rob
From: rob@genrad.UUCP (Rob Wood)
Newsgroups: net.ham-radio
Subject: vec's -- watch out!

Message-ID: <3600@genrad.UUCP>
Date: Wed, 12-Oct-83 20:43:29 EDT
Article-I.D.: genrad.3600
Posted: Wed Oct 12 20:43:29 1983
Date-Received: Thu, 13-Oct-83 22:51:41 EDT
References: <209@oliveb.UUCP>
Organization: GenRad, Bolton, Mass.
Lines: 4

In general aviation we got designated examiners to give us flight tests
if we didn't want to wait for 2 months, or wanted to do it on a weekend.
Well these guys now charge $50 for a flight test and $30 for a written
test. The $4 of vec seems inconsequential now, but .. could it grow????

From -8944094505159613415
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,af4b4c91967865e3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-13 06:03:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Shuttle delay
Message-ID: <4112@mgweed.UUCP>
Date: Thu, 13-Oct-83 09:03:50 EDT
Article-I.D.: mgweed.4112
Posted: Thu Oct 13 09:03:50 1983
Date-Received: Fri, 14-Oct-83 06:13:09 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 6

I heard on this morning's news that the next shuttle flight may be delayed
a few months due to a faulty nozzle. Anyone have any more details??

K9EUI

From -2155608536809770791
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fbe8d2a2e9872ddd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-13 06:56:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 10/6/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: RE: Regency 7000 scanner?
Message-ID: <768@ihuxf.UUCP>

Date: Thu, 13-Oct-83 09:56:35 EDT
Article-I.D.: ihuxf.768
Posted: Thu Oct 13 09:56:35 1983
Date-Received: Fri, 14-Oct-83 04:31:27 EDT
Organization: AT&T Bell Labs, Naperville, Il
Lines: 40

You're talking about the MX7000 Regency scanner, list price about $600.

I spoke with Regency yesterday (10-12-83), and was told that this model would be shipped to dealers during the summer of 1984. I think the dealers have been given an earlier date, so it's ambiguous at this point.

Discount scanner dealers include:

o+ Gaxaly Electronics, Box 1202, Akron, OH 44309, (216)376-2402

o+ Communications Electronics, 818 Phoenix, Box 1002, Ann Arbor, Michigan 48106, (800)973-8888

o+ Scanner World, USA, 10 New Scotland Ave., Albany, NY 12208, (518)436-9606

Unfortunately, the specifications sheet for the MX7000 does not specify continuous frequency coverage.

Its limited 20 channel capacity may prove insufficient for programming in all the frequencies in a large 800 MHz trunked system, or cellular mobile telephone frequencies. An editorial on the MX7000 appears in the October 1983 issue of the Radio Communications Monitoring Association (RCMA) Newsletter.

Several years back, Bearcat introduced an 800 MHz scanner, but it was removed from the market due to technical problems.

--
Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -6563103356137633428
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3808631f8f32e9a8
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-13 11:14:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 10/6/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Robert S. Parnass, AJ9S @ Bell Labs, Naperville, IL)
Newsgroups: net.ham-radio
Subject: RE: operation on 160-190 KHz
Message-ID: <770@ihuxf.UUCP>
Date: Thu, 13-Oct-83 14:14:14 EDT
Article-I.D.: ihuxf.770
Posted: Thu Oct 13 14:14:14 1983
Date-Received: Fri, 14-Oct-83 09:00:34 EDT
Organization: AT&T Bell Labs, Naperville, Il
Lines: 28

One of the largest VLF/LF clubs in the United States is the Longwave Club of America. This club publishes a monthly newsletter, "The Lowdown", in which Ken Cornell, W2IMB, writes a column devoted to 1750 meter operation. The column contains equipment schematics and antenna information for this experimenters' band, as well as information on beacons and activity there.

Ken Stryker, of Chicago, writes the "Lost and Found Department" column, identifying various VLF beacons (air and marine) for members.

The club address is:
Longwave Club of America
45 Wildflower
Levittown, PA 19057

Membership dues are $10 a year, which include First Class mailing of the newsletter. The newsletter is good ... no hype or commercial advertisements. Looks like a decent club for those interested in operation at low frequencies.

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Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -7749652014944722811
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e7d35760154d8a14,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-13 16:13:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!hogpc!houxo!ad7i
From: ad7i@houxo.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 95: FCC License Extension
Message-ID: <215@houxo.UUCP>
Date: Thu, 13-Oct-83 19:13:48 EDT
Article-I.D.: houxo.215
Posted: Thu Oct 13 19:13:48 1983
Date-Received: Fri, 14-Oct-83 20:52:51 EDT
Lines: 11

qst de ad7i
hr arrl bulletin nr 95 from arrl headquarters
newington ct october 11, 1983
to all radio amateurs bt

the fcc issued a news release on october 7 granting the extension of
amateur station and operator license terms from five to ten years,
p.r. docket 83 337. the renewal grace period is two years. the new
license terms will be phased in as licenses come up for renewal.
details will appear in december 1983 qst ar

From 2838040892309759395
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd0e00c3849f4963,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-13 16:14:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!houxm!hogpc!houxo!
ad7i
From: ad7i@houxo.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 96: STS9 undate
Message-ID: <216@houxo.UUCP>
Date: Thu, 13-Oct-83 19:14:20 EDT
Article-I.D.: houxo.216
Posted: Thu Oct 13 19:14:20 1983
Date-Received: Sun, 16-Oct-83 09:09:56 EDT
Lines: 38

qst de ad7i
hr arrl bulletin nr 96 from arrl headquarters

newington ct october 13, 1983
to all radio amateurs bt

sts9 update. launch is scheduled for 1630 utc october 28. nasa is investigating a problem with the solid fuel booster rockets that could force a postponement, but the tests thus far have been inconclusive. no decision has been made yet, but is expected by october 18. currently, nasa is operating on the assumption that sts9 will lift off on schedule.

for u.s. stations, sts9 ham operations will be as follows. dr. garriott will transmit on 145.55 mhz, with 145.53 or 145.57 as backup. he will listen only on 144.91, 144.93, 144.95, 144.97, 144.99, 145.01, 145.03, 145.05, 145.07 and 145.09 mhz. he will not listen on his transmitting frequency. w5lfl will transmit for the 60 seconds of each even minute and will scan the ten receive channels for the 60 seconds of each odd minute. when calling, say columbia w5lfl only once, followed by your call several times. for operation to be possible, dr. garriott must be off duty and awake and the columbia must be in the right attitude. see november qst for a schedule of orbits that are most probable for operation.

during the flight of sts9, the goddard space flight center amateur radio club station, wa3nan, will be retransmitting shuttle communications on 3.860 and 147.45 mhz as long as audio is present. additional frequencies, as conditions permit, will be 7.185, 14.295, 21.390 and 28.610 mhz. when video is available from sts9, wa3nan will retransmit it on 439.25 mhz and it will also be sent by wa9gvk/r on 426.25 mhz.

the deadline for submitting footage of hams working sts9 for inclusion in the new frontiers videotape is november 17. we need broadcast quality, 3/4 inch umatic cassettes. send the tapes to sts9, public information office, arrl hq. all submissions must be accompanied by a release form from the tv station shooting them ar

From -2658286698544338388
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6a649d3a1d6f4025,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-13 16:14:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!hogpc!houxo!ad7i
From: ad7i@houxo.UUCP
Newsgroups: net.ham-radio
Subject: CRRL 29: No special prefixes
Message-ID: <217@houxo.UUCP>
Date: Thu, 13-Oct-83 19:14:31 EDT
Article-I.D.: houxo.217
Posted: Thu Oct 13 19:14:31 1983
Date-Received: Fri, 14-Oct-83 20:45:03 EDT
Lines: 16

qst de ad7i
hr crrl bulletin nr 29 from crrl headquarters
london, ont october 13, 1983
to all radio amateurs bt

last month doc rejected a crrl request for permanent special prefixes
for sable and saint paul islands. however, two special permanent
callsigns, cy9sab for sable island and cy0spi for saint paul island,
will be available to any amateurs conducting dxpeditions to these
islands.

ve6abc, of edmonton, alberta, is crrl amateur of the year.

doc will conduct amateur examinations across canada on october 19.
these will be the last exams based on the old trc84 ar

From -4861965888310639588
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,af4b4c91967865e3
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-13 17:39:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site alice.UUCP
Path: utzoo!linus!decvax!harpo!eagle!allegra!alice!alb
From: alb@alice.UUCP
Newsgroups: net.ham-radio
Subject: Re: Shuttle delay
Message-ID: <2245@alice.UUCP>
Date: Thu, 13-Oct-83 20:39:40 EDT
Article-I.D.: alice.2245
Posted: Thu Oct 13 20:39:40 1983
Date-Received: Fri, 14-Oct-83 21:37:27 EDT
References: <4112@mgweed.UUCP>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 3

It is indeed true that STS-9 may be delayed because of
faulty heat protection on an SRB nozzle. More complete
information may be found in net.columbia.

From -3295598029462286220
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4ba6ca504fb1a4d9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-13 20:23:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!sii!mem
From: mem@sii.UUCP (Mark Mallett)
Newsgroups: net.ham-radio

Subject: Re: watching out for vecs
Message-ID: <320@sii.UUCP>
Date: Thu, 13-Oct-83 23:23:43 EDT
Article-I.D.: sii.320
Posted: Thu Oct 13 23:23:43 1983
Date-Received: Fri, 14-Oct-83 22:41:23 EDT
Lines: 11

b
Volunteer flight examiners are not required to charge for their time. I paid $15 to the examiner for my private license; but I got a lesson out of it as well. You take your pick; you pay taxes and somehow pay all money to all these diddling little services; or you pay for what you use. Anytime you can replace so-called "free" government services with pay-on-demand private equivalents, I'm going to think a long time before criticizing.

Mark Mallett (KA1KES)
decvax!sii!mem

From 7218744263476788042
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a1751b02760ca3ba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-15 09:25:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site kpno.UUCP
Path: utzoo!linus!philabs!seismo!hao!kpno!jacoby
From: jacoby@kpno.UUCP
Newsgroups: net.ham-radio
Subject: Re: HT recommendation
Message-ID: <251@kpno.UUCP>
Date: Sat, 15-Oct-83 12:25:55 EDT
Article-I.D.: kpno.251
Posted: Sat Oct 15 12:25:55 1983
Date-Received: Sun, 16-Oct-83 13:45:18 EDT
Organization: Kitt Peak Natl. Obs. Tucson, AZ
Lines: 43

I recently read the news on HT advice, and felt I should point out some lesser known facts about the ICOM 2AT.

1. One of the most important aspects of an HT is its battery lifetime. How often have you heard someone sign off due to low batteries. The 2AT allows use of standard alkaline cells which provide about 4 times the operating life of the nicads. This is especially important if you have an emergency situation.

   The reason alkaline cells will work in a 2AT and not many other HTs is because the ICOM has an operating voltage regime of 6 - 16 volts, whereas most other HTs require

a fairly tight 8 - 10 or so volts, and alkaline cells
tend to slowly drop in output voltage with time.

Also, because the 2AT is a simple no-frills HT, the current
drain is relatively low (squelched: 18ma, receive: ~40ma.)

2. The 2AT has one of the most sensitive receivers of the HTs.
   This is only important if you plan to operate simplex much.
   I once had a simplex QSO over 275 miles to a Yaesu FT-207R.
   I could copy 100%, but I was only marginally detected.
   (Both of us were on mountain tops at the time. Otherwise,
   there were no abnormal conditions.)

3. Perhaps because of the receiver sensitivity, intermod is
   particularly bad with the 2AT. This is only a problem in
   heavy rf areas with external gain antennas.

In addition, I would recommend for any HT user that the rubber duck
antenna be ignored. At least use a quarter-wave whip, and I find
a 5/8ths wave (esp. Vocom) to work as advertised. That is, you
DO get about 10 db gain over the rubber duck. That's a big
difference.

george jacoby, kitt peak national observatory, 950 n. cherry ave, tucson, az
WD6BBQ (602) 325-9292
{{{ucbvax|utah-cs|purdue|mcnc}!arizona}|unc|hao}!kpno!jacoby

From -753049209845596381
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,15c3bd3a71c4217f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-16 22:13:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!clyde!ihnp4!cbosgd!mhuxi!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Exotic standard time stations
Message-ID: <1117@eagle.UUCP>
Date: Mon, 17-Oct-83 01:13:02 EDT
Article-I.D.: eagle.1117
Posted: Mon Oct 17 01:13:02 1983
Date-Received: Tue, 18-Oct-83 09:39:52 EDT
Lines: 10

While checking my watch against WWV on 15 mhz, I noticed a weak signal
in the background that appeared to be another standard time station (no,
it wasn't WWVH, which was also barely audible.) It had seconds pulses
consisting of tone bursts about 100 ms or so long that were about 1/2

second late with respect to WWV. On the 29 and 59th minutes of the hour
it signed "BPM" repeatedly in mcw. In my references this isn't listed
as a standard time station. The prefix "B" is supposed to be China. Any
ideas?

Phil

From 4267372368365047186
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f3616856b99191e3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-17 15:39:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!harpo!eagle!mhuxi!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 97: STS delay
Message-ID: <289@houxp.UUCP>
Date: Mon, 17-Oct-83 18:39:32 EDT
Article-I.D.: houxp.289
Posted: Mon Oct 17 18:39:32 1983
Date-Received: Wed, 19-Oct-83 20:49:13 EDT
Lines: 11

qst de ad7i
hr arrl bulletin nr 97 from arrl headquarters
newington ct october 17, 1983
to all radio amateurs bt

the launch of sts9 has been postponed for at least one month because
of concerns about the integrity of the solid rocke boosters used
during the first two minutes of the flight. nasa has not yet set a
new launch date, but the earliest sts9 could now launch is late
november ar

From 8332690411813450968
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2bc81feae18a37e6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-17 15:46:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!harpo!eagle!mhuxi!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: Propagation Bulletin 42
Message-ID: <290@houxp.UUCP>
Date: Mon, 17-Oct-83 18:46:58 EDT
Article-I.D.: houxp.290
Posted: Mon Oct 17 18:46:58 1983
Date-Received: Wed, 19-Oct-83 20:50:49 EDT

Lines: 27

qst de ad7i
hr propagation forecast bulletin nr 42 from arrl headquarters
newington ct october 17, 1983
to all radio amateurs bt

two of the largest active areas seen on the sun in recent weeks
brought the solar flux to a two month high of 140 on october 13. the
first of these areas will disappear around the west limb by october
18 and the other is only a few days behind it. thus we see the solar
flux dropping sharply, to 112, on the 16th. a reversal and a gradual
rise are expected after about the 20th.

fairly high geomagnetic activity has kept propagation to better than
fair on all circuits traversing the higher latitudes. this will
continue, except for brief periods of good conditions centered on
october 20, 27, and november 1.

the falling off of high latitude muf with decreasing solar activity
is apparent from the propagation charts in qst for october, pages 66
and 67. the muf will continue high on north south paths, and to a
lesser extent on all transequatorial circuits. the next six weeks or
so will bring the highest muf and the most favorable dx con itions of
the entire year, for a given level of solar flux.

american sunspot numbers for october 6 through 12 were between 81 and
133 with a mean of 102.3 ar

From 6934101589124261876
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,197b6aa074542844,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-18 11:21:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 10/6/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Robert S. Parnass, AJ9S @ Bell Labs, Naperville, IL)
Newsgroups: net.ham-radio
Subject: Standard Time Stations near 15 MHz.
Message-ID: <1434@ihuxf.UUCP>
Date: Tue, 18-Oct-83 14:21:10 EDT
Article-I.D.: ihuxf.1434
Posted: Tue Oct 18 14:21:10 1983
Date-Received: Thu, 20-Oct-83 06:01:11 EDT
Organization: AT&T Bell Labs, Naperville, Il
Lines: 38

       According to Oliver Ferrell's "Confidential Frequency List",

5th edition, the following standard frequency and time signals stations may be found in the band between 14,990 and 15,005 KHz.:

Freq. in KHz.	Mode	Call	Location	Power (Kw.)
14,996	a1	RWM	Moscow, USSR	8
15,000	a2	LOL1	Buenos Aires, Argentina	2
	a1/a3	BPM	Xian, PRC	50
	a3	WWVH	Kauai, Hawaii	10
	a2	ATA	New Delhi, India	8
	a2	JJY	Tokyo (Sanwa, Ibaraki), Japan	2
	a2	BSF	Chung-li, Taiwan	5
	a1	RTA	Novosibirsk, USSR	5
	a3	WWV	Fort Collins, Colorado	10
15,004	a1	RID	Irkutsk, USSR	1

This book is a distillation of the International Frequency List prepared by the International Telecommunications Union (ITU), plus other listings submitted by listeners. This 224 page book lists for $9.95, is published by Gilfer Associates, and may be ordered from:

Gilfer Associates
P.O. Box 239
52 Park Avenue
Park Ridge, New Jersey 07656
USA

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Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -2911190898662808176
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1c594160c2c92635,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-11 05:57:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!hogpc!houxb!3435ras
From: 3435ras@houxb.UUCP
Newsgroups: net.ham-radio
Subject: FT-101EX for sale
Message-ID: <232@houxb.UUCP>
Date: Fri, 11-Nov-83 08:57:37 EST
Article-I.D.: houxb.232
Posted: Fri Nov 11 08:57:37 1983

Date-Received: Sun, 13-Nov-83 03:34:06 EST
Lines: 10

Yaesu FT-101EX 160-10 meter SSB/CW transceiver in mint condition with built-in RF speech processor and CW filter. For more info, contact:

Bob Schreibmaier, K2PH
39 Arlyn Drive
Howell, N.J. 07731
201-576-6154 (work)
201-458-0757 (home)
...!houxb!3435ras

From -4198088041472756994
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6a45c6bbcdac0c8f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-13 10:26:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: Novice Study Guide
Message-ID: <313@houxp.UUCP>
Date: Sun, 13-Nov-83 13:26:24 EST
Article-I.D.: houxp.313
Posted: Sun Nov 13 13:26:24 1983
Date-Received: Tue, 15-Nov-83 01:02:30 EST
Lines: 2679

========== n o t i c e ==========

Here is a Novice study guide that I have prepared. Some of the answers may not be the best. If you have better or alternatively worded answers please let me know of them and I will correct the original.

tnx, Paul

Rules and Regulations

2A-1.1 What is the Amateur Radio Service?

A: A radio communication service of self-training, intercommunication, and technical investigation carried on by amateur radio operators.

2A-2.1 Who is an amateur radio operator?

A: A person holding a valid license to operate an amateur radio station issued by the Federal Communications Commission.

2A-3.1 What is an amateur radio station?

A: A station licensed in the amateur radio service embracing necessary apparatus at a particular location used for amateur radio communication.

2A-4.1 What is amateur radio-communications?

A: Non-commercial radio communication by or among amateur radio stations solely with a personal aim and without pecuniary or business interest.

2A-5.1 What is that portion of an amateur radio license that conveys operator privileges called?

A: Operator's license.

2A-6.1 What authority is derived from an amateur radio station license?

A: Authorization for a radio station in the Amateur Radio Service.

2A-7.1 What is a control operator?

A: An amateur radio operator designated by the licensee of an amateur radio station to also be responsible for the emissions from that station.

2A-7.2 What is the term used in Part 97 of the FCC Rules to define the amateur radio operator designated by the licensee of an amateur radio station to also be responsible for the emissions from that station?

A: Control operator.

2A-8.1 What is third-party traffic?

A: Amateur radio communication by or under the supervision of the control operator at an amateur radio station to another amateur radio station on behalf of anyone other than the control operator.

2A-8.2 Who is a third-party in amateur radio communications?

A: Anyone other than the control operator.

2A-9.1 What are the Novice class operator transmitting frequency privileges in

the 80 meter band?

A: 3700 to 3750 KHz

2A-9.2 What are the Novice class operator transmitting frequency privileges in the 40 meter band?

A: 7100 to 7150 KHz

2A-9.3 What are the Novice class operator transmitting frequency privileges in the 15 meter band?

A: 21100 to 21200 KHz

2A-9.4 What are the Novice class operator transmitting frequency privileges in the 10 meter band?

A: 28100 to 28200 KHz

2A-9.5 What, if any, transmitting frequency privileges are authorized to the Novice class operator besides those in the 80, 40, 15 and 10 meter bands?

A: None.

2A-9.6 In what frequency bands is a Novice class operator authorized to be the control operator of an amateur radio station?

A: 80, 40, 15, and 10 meter bands.

2A-9.7 What does the term frequency band

mean?

A: All frequencies that fall between and upper and lower frequency limit.

2A-9.8 What does the term frequency privilege mean?

A: Frequencies where operation of an amateur radio station is permitted.

2A-9.9 In what frequency band is the Novice

class operator transmitting frequency privileges 3700-3750 KHz?

A: 80 meter band.

2A-9.10 In what frequency band is the Novice class operator transmitting frequency privileges 7100-7150 KHz?

A: 40 meter band.

2A-10.1 What is the only emission authorized for use by Novice class operators?

A: A1, C.W., international morse code.

2A-10.2 What does the term A1 emission mean?

A: Sending signals by turning a transmitter on and off. Also known as on-off keying.

2A-10.3 What is the symbol for a transmission of telegraphy by on-off keying?

A: A1

2A-10.4 What does the term CW mean?

A: Continuous wave. Transmission of

signals by letting a transmitter send a continuous wave or turning it off. This might be accomplished by connecting a telegraph key to the "send" control of a transmitter.

2A-10.5 What, if any, emission privileges are authorized to the Novice class beside A1?

A: None

2A-10.6 What is the only telegraphy code a Novice class operator may use?

A: international Morse code.

2A-10.7 Which, if any, telegraphy codes may a Novice class operator use beside the international Morse code?

A: None

2A-10.8 What does the term emission mean?

A: emission refers to the type or nature of a transmitted signal.

2A-10.9 What is the term for a transmission from a radio station, as used in the FCC Rules?

A: emission

2A-10.10 What does the term emission privileges mean?

A: This refers to what emissions a station is allowed to use.

2A-11.1 Under what circumstances, if any, may the control operator cause unidentified radio-communications or signals to be transmitted from an amateur radio station?

A: None

2A-11.2 What is the meaning of the term unidentified radio-communications or signals?

A: Signals that do not use FCC approved call signs.

2A-11.3 What is the term for transmissions from an amateur radio station without the required station identification?

A: Unidentified radio-communications or signals.

2A-12.1 Under what circumstances, if any, may the control operator of an amateur radio station willfully or maliciously interfere with or cause interference to a radio-communication or signal?

A: None

2A-12.2 What is the term for transmissions from an amateur radio station which are intended by the control operator to disrupt other communications in

progress?

A: Malicious interference

2A-13.1 Under what circumstances, if any, may the control operator cause false or deceptive signals or communications to be transmitted?

A: None

2A-13.2 What is the term for a transmission from an amateur radio station of the word MAYDAY when no actual emergency has occurred?

A: False or deceptive

2A14.1 Under what circumstances, if any, may an amateur radio station be used to transmit messages for hire?

A: None

2A-14.2 Under what circumstances, if any, may the control operator be paid to transmit messages from an amateur radio station?

A: None

2A-15.1 What is one of the five principles which express the fundamental purpose for which the Rules for the Amateur Radio Service are designed?

A: Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.

2A-20.1 Call sings of amateur radio stations licensed to Novice class operators are from which call sign group?

A: Group D

2A-20.2 What is the format of a group D call sing?

A: two letters a number and three letters

2A-20.3 What are the call sign prefixes for

amateur radio stations licensed by the FCC

A: AA to AM, K, N, and W

2A-20.4 In what call sign district will your amateur radio call sing be assigned?

A: That depends on your mailing address. For those in New York and New Jersey the district is number 2.

2A-21.1 With which amateur radio stations may an FCC-licensed amateur radio station communicate?

A: Only with other amateur radio stations.

2A-21.2 With which non-amateur radio stations may an FCC-licensed amateur radio station communicate?

A: None, except in an emergency.

2A-21.3 Under what circumstances may an FCC-licensed amateur radio station communicate with another amateur radio station in a foreign country?

A: Only when the each country's government permits international communications by their respective amateur operators. (this is usually the case)

2A-21.4 Under what circumstances (other than RACES operation) may an FCC-licensed amateur radio station communicate with a non-amateur radio station?

A: None, except in an emergency.

2A-21.5 What is the term used in FCC Rules to describe transmitting signals to receiving apparatus while in beacon or radio control operation?

A: One way communications.

2A-23.1 How often must an amateur radio station be identified?

A: At the beginning and end of every transmission or exchange of transmissions. Also, every 10 minutes for transmission longer than 10 minutes.

2A-23.2 How do I identify my amateur radio station communications?

A: send the letters "DE" followed by your FCC assigned call letters.

2A-23.3 Do the FCC Rules require an amateur radio station to identify at the beginning of a transmission?

A: Yes

2A-23.4 duplicate question of 2A23.1

2A-23.5 What is the FCC Rule for amateur radio station identification?

A: identification is required at the beginning and end of each transmission or exchange of transmissions. Plus, for transmissions longer than 10 minutes, identification must be given every 10 minutes.

2A-23.6 What is the least number of times an amateur radio station must transmit its station identification during a 15 minute communication?

A: 3 times: When starting, 10 minutes into the transmission, and at the end.

2A-23.7 What is the least number of times an amateur radio station must transmit its station identification during a 25 minute communication?

A: 4 times: When starting, 10 minutes into the transmission, 20 minutes into the transmission, and at the

end.

2A-23.8 What is the least number of times an amateur radio station must transmit its station identification during a

35 minute communication?

A: 5 times: When starting, 10 minutes into the transmission, 20 minutes into the transmission, 30 minutes into the transmission, and at the end.

2A-23.9 What is the longest period of time during a communication that an amateur radio station does not need to transmit its station identification?

A: 10 minutes

2A-23.10 What is the least number of times an amateur radio station must identify itself during a 5 minute communication.

A: twice: at the beginning and at the end.

2A-24.1 What amount of transmitter power may

an amateur radio station use?

A: The rule here has recently changed. The correct answer is 1500 Watts peak output power.

2A-24.2 What is the maximum transmitter power input permitted to be used at an amateur radio station transmitting on frequencies available to the Novice class operator?

A: 250 Watts input. 200 Watts output.

2A-24.3 In what circuit stage in an amateur radio station transmitter is power input determined?

A: Final amplifying radio frequency stage.

2A-24.4 Which individual circuit power inputs must be included in determining the total power input to the final amplifying radio frequency stage to the antenna?

A: all radio frequency inputs

2A-25.1 Should an amateur radio operator receive an Official Notice of Violation from the FCC, how promptly should he/she respond.

A: 10 days.

2A-25.2 Should an amateur radio operator receive an Official Notice of Violation from the FCC, to whom does he/she respond?

A: To the office that originated the Notice.

2A-25.3 Should an amateur radio operator receive an Official Notice of Violation from the FCC relating to some violation that may be due to the physical or electrical characteristic of the transmitting apparatus, what information must be included in the response?

A: It should indicate what steps have or will be taken to correct the problem. If the correction will take place in the future, a scheduled date of the

correction must be included.

2A-26.1 Whom does the FCC hold responsible

for the proper operation of an amateur radio station?

A: Station licensee.

2A-26.2 When must an amateur radio station have a control operator?

A: Always, unless the station is operated under automatic control.

2A-26.3 Who may be the control operator of an amateur radio station?

A: The control operator may be the station licensee, if a licensed amateur radio operator, or may be another amateur radio operator with the required class of licensee.

OPERATING PROCEDURES

2B-1.1 What does the R in the RST signal report mean?

A: Readability

2B-1.2 What does the S in the RST signal report mean?

A: Strength

2B-1.3 What does the T in the RST signal report mean?

A: Tone

2B-2.1 At what telegraphy speed should a CQ message be transmitted?

A: At a speed you would like to receive a response.

2B-3.2 Why should amateur radio stations in communication with each other zero beat?

A: So that they will both transmit on the same frequency.

2B-4.1 How can on-the-air transmitter tune-up be kept as short as possible.

A: By using a dummy load antenna for initial adjustments

2B-5.1 What is the difference between the telegraphy abbreviation CQ and QRZ?

A: CQ means "anyone please reply." QRZ means "who is calling me?"

2B-5.2 What is the difference between the telegraphy abbreviation K and SK?

A: K means "go ahead." SK means "I have finished, no reply is expected."

2B-5.3.1 What is the meaning of the telegraphy abbreviation DE.

A: DE means "from."

2B-5.3.2 What is the meaning of the telegraphy abbreviation R.

A: R means "I acknowledge receipt of your message."

2B-5.3.3 What is the meaning of the telegraphy abbreviation AR.

A: AR means "end of message."

2B-5.3.4 What is the meaning of the telegraphy abbreviation 73.

A: 73 means "best regards."

2B-5.3.5 What is the meaning of the telegraphy abbreviation QRS.

A: QRS means "please send more slowly."

2B-5.3.6 What is the meaning of the telegraphy

abbreviation QTH.

A: QTH means "my location is."

2B-5.3.7 What is the meaning of the telegraphy abbreviation QSL.

A: QSL means "I acknowledge receipt of your message."

2B-5.3.8 What is the meaning of the telegraphy abbreviation QRM.

A: QRM means "I am being interfered with".

2B-5.3.9 What is the meaning of the telegraphy abbreviation QRN.

A: QRN means "I am troubled by static."

Radio Wave Propagation

2C-1.1 What type of propagation uses radio

signals refracted back to earth by the ionosphere?

A: Skip propagation.

2C-1.2 What is the meaning of the term skip propagation?

A: radio waves that are refracted (or skipped) back to earth by the ionosphere.

2C-1.3 What is the area of weak signals between the ranges of ground waves and the first-hop called?

A: skip zone.

2C-1.4 What is the meaning of the term skip zone?

A: It is the area of weak signals between the ranges of ground waves and the first-hop.

2C-1.5 What does the term skip mean?

A: signals that are bounced off the ionosphere back to earth

2C-1.6 What type of radio wave propagation makes it possible for amateur radio stations to communicate long

distances?

A: skip propagation

2C-2.1 What type of propagation involves radio signals that travel along the ground?

A: ground wave

2C-2.2 What is the meaning of the term ground wave propagation?

A: radio signals that travel along the ground

2C-2.3 When two amateur radio station located a few miles apart are separated by a low hill blocking their line-of-sight path, daytime communications between them on 3.725 MHz is probably via what kind of propagation?

A: ground wave

2C-2.4 When compared to skip propagation, what is the usual effective range of ground wave propagation.

A: much shorter

Amateur Radio Practice

2D-1.1 How can an amateur radio station be protected against being operated by unauthorized persons?

A: Lock the room that contains the equipment.

2D-2.1 Why should all antenna and rotor cables be grounded when an amateur radio station is not in use?

A: to reduce shock hazard from lightning.

2D-2.2 How can an antenna system be protected from damage due a to nearby lightning strike?

A: By grounding the antenna system when not in use.

2D-2.3 How can an amateur radio station

equipment be protected from damage due to lightning striking the electrical wiring in the building?

A: by unplugging it from the electrical outlet when not in use

2D-3.1 For proper protection from lightning strikes, what pieces of equipment should be grounded in an amateur radio station?

A: anything that can conduct electricity.

2D-3.2 What is a convenient indoor grounding point for an amateur radio station?

A: a cold water pipe.

2D-3.3 To protect against electrical shock hazards, the chassis of each equipment in an amateur radio station should be connected to what?

A: ground

2D-4.1 When working on an antenna mounted on a tower, a person doing the climbing should always wear what type of safety equipment?

A: a safety belt.

2D-4.2 For safety purposes, how high should all portions of a horizontal wire antenna be located?

A: high enough so that it won't pose a hazard to people or vehicles.

2D-4.3 What type of safety equipment should a person on the ground wear while assisting another person on an antenna tower?

A: a hard-hat.

2D-5.1 What is a likely indication that radio frequency interference to a receiver is caused by front-end overload?

A: interference is present regardless of the frequency that the receiver is tuned to.

2D-5.2 When radio frequency interference occurs to a receiver regardless of frequency, while an amateur radio station is transmitting, what is likely the problem?

A: front-end overload

2D-5.3 What type of filter should be installed on a television receiver's tuner input as the first step in preventing overload from an amateur radio station's signal?

A: a high pass filter

2D-5.4 What is meant by receiver overload?

A: the receiver hears signals that are too strong for it (these signals may be on frequencies other that what the receiver is tuned to).

2D-6.1 What is meant by harmonic radiation?

A: radiation (or transmission) of energy on frequencies that are integer multiples of the intended signal.

2D-6.2 Why is harmonic radiation by an amateur radio station undesirable?

A: causes interference

2D-6.3 A multi-band antenna connected to an improperly tuned transmitter may radiate what type of interference?

A: harmonic radiation

2D-6.4 What is the purpose of properly shielding a transmitter?

A: to prevent spurious radiation

2D-6.5 When interference is observed on only one or two channels of a TV receiver while an amateur radio station is transmitting, what is the likely problem.

A: harmonic radiation

2D-6.6 What type of filter should be installed on an amateur radio transmitter as the first step in reducing harmonic radiation?

A: low pass

2D-7.1 Why is it important to have the impedance of a transmitter final amplifier circuit match the impedance of the antenna or feedline?

A: so that SWR will be minimum

2D-7.2 What is the term for the measurement of the impedance match between a transmitter final amplifier circuit and the antenna or feedline?

A: One measurement would be standing wave ratio or SWR.

2D-7.3 What station accessory is used to measure RF power being reflected back

down the feedline from the antenna to

the transmitter.

A: directional watt meter or SWR meter

2D-7.4 What station accessory is often used to measure voltage standing wave ratio?

A: SWR bridge

2D-7.5 Where should an SWR bridge be connected to indicate the impedance match of a transmitter and an antenna.

A: Either between the transmitter and the feedline or between the feedline and the antenna (latter is best).

2D-7.6 Coaxial feedlines are designed to be operated with what kind of standing wave radio?

A: low or 1:1

2D-7.7 If the SWR bridge reading is higher

at 3700 KHz than at 3750 KHz, what does this indicate about the antenna?

A: It provides a better match at 3750 KHz than at 3700 KHz.

2D-7.8 If the SWR bridge reading is lower at 3700 KHz than at 3750 kHz, what does this indicate about the antenna?

A: It provides a better match at 3700 KHz than at 3750 KHz.

2D-8.1 What kind of SWR meter reading may indicate poor electrical contact between parts of an antenna system?

A: unusually high (more than 4:1)

2D-8.2 High SWR readings measured from a half-wave dipole antenna being fed by coaxial cable can be lowered by doing what to the antenna?

A: changing its length

Electrical Principles

2E-1.1 Electrons will flow in a copper wire when its two ends are connected to the poles of what kind of source?

A: a current or voltage source

2E-1.2 The pressure in a water pipe is comparable to what force in an electrical circuit?

A: voltage

2E-2.1 What are the two polarities of a voltage?

A: positive and negative

2E-2.2 What type of current changes direction over and over again in a cyclical manner?

A: alternating current

2E-2.3 What is a type of electrical current called that does not periodically reverse direction?

A: direct current

2E-3.1 List at least four good electrical insulating materials.

A: glass, plastic, rubber, mica

2E-3.2 List at least three good electrical conductors.

A: silver, gold, aluminum

2E-3.3 What is the term for the lowest voltage which will cause current in an insulator?

A: break-down voltage

2E-4.1 What is the term for a failure in an electrical circuit that causes excessively high current?

A: a short circuit

2E-4.2 What is the term for an electrical circuit in which there can be no current flow?

A: an open circuit

2E-5.1 When a voltage is applied to a circuit causing an electrical current to flow, what is consumed?

A: Power or Energy

2E-6.1 What is the approximate length, in meters, of a radio wave having a frequency of 3.725 MHz?

A: 300/3.725 = 80.5 meters

2E-6.2 What is the relationship between

frequency and wavelength?

A: inversely proportional OR speed = wavelength times frequency.

2E-6.3 What is the approximate length, in meters, of a radio wave having a frequency of 21.120 MHz?

A: 300/21.120 = 14.2 meters

2E-7.1 Which are higher: radio frequencies or audio frequencies?

A: radio

2E-7.2 Is 3,500,000 Hertz a radio frequency or an audio frequency?

A: radio

2E-7.3 Radio frequencies are considered to be those above what frequency?

A: 30 KHz

2E-8.1 Are audio frequencies higher or lower than radio frequencies?

A: lower

2E-8.2 Audio frequencies are considered to be those below what frequency?

A: 30 KHz

2E-8.3 what frequency range is 2500 Hertz: audio or radio?

A: audio

2E-9.1 What is the unit of electromotive force?

A: Volt

2E-10.1 What is the unit of electrical current?

A: Ampere

2E-11.1 What is the unit of electrical power?

A: Watt

2E-12.1 What is Hertz the unit measurement of?

A: frequency

2E-12.2 What is another popular term for Hertz?

A: cycles-per-second

2E-13.1 A frequency of 40,000 Hertz is equal to how many kilohertz?

A: 40 KHz

2E-13.2 A current of 20 millionths of an ampere is equal to how many

microamperes.

A: 20 microamperes

2E-13.3 A current of 2000 milliamperes is equivalent to how many amperes?

A: 2 amperes

2E-13.4 What do the prefixes mega and centi mean?

A: Mega is million and Centi is hundredth.

2E-13.5 What do the prefixes micro and pico mean?

A: Micro is millionths and pico is million-millionths.

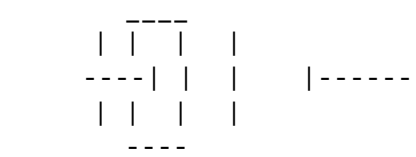
Circuit Components

2F-1.1 What is the general relationship between the thickness of a quartz crystal and its fundamental operating frequency?

A: As the crystal becomes thinner and thinner, the frequency becomes higher and higher.

2F-1.2 What is the schematic symbol for a quartz crystal?

A:



2F-1.3 What chief advantage does a crystal controlled transmitter have over one controlled by a variable frequency oscillator?

A: Crystal controlled will be much more stable in frequency

2F-2.1 What two internal components of a D'Arsonval meter interact to cause the indicating needle to move when current flow through the meter?

A: A permanent magnet and an electro-magnet

2F-2.2 What does a voltmeter measure?

A: voltage

2F-3.1 Draw the schematic diagram of a triode vacuum tube and label the elements.

A:

2F-3.2 Draw the schematic symbol for a tetrode vacuum tube and label the elements.

A:

2F-3.3 What was one of the earliest uses of a two-element vacuum tube?

A: rectifier or diode to convert AC to DC

2F-4.1 What device should be included in electronic equipment to protect it from damage resulting from a short circuit?

A: a fuse

Practical Circuits

2G-1.1 Draw a block diagram for a simple crystal controlled transmitter.

A:

2G-1.2 Draw a block diagram for a simple transmitter having a variable frequency oscillator.

A:

2G-2.1 Draw a block diagram for a simple superheterodyne receiver capable of receiving A1 telegraphy radio signals.

A:

2G-3.1 Draw a block diagram for a portion of an amateur radio station including a transmitter, an antenna feedline, an antenna and an SWR bridge.

A:

2G-3.2 Draw a block diagram for a portion of an amateur radio station including a transmitter, a receiver, a T-R switch, an antenna feedline and an antenna.

A:

2G-3.3 Draw a block diagram for a portion of an amateur radio station including a transmitter, an antenna tuner, an antenna feedline and an antenna.

A:

2G-3.4 Draw a block diagram for a portion of an amateur radio station including a transmitter, telegraphy key, antenna

feedline and antenna.

A:

2G-3.5 Draw a block diagram for a portion of an amateur radio station showing how two different antennas and a dummy antenna can be switched to the same transmitter.

A:

2G-3.6 Draw a block diagram for a portion of amateur radio station including a transmitter, an SWR meter, an antenna tuner, an antenna feedline and an antenna.

A:

2G-3.7 Draw a block diagram for a typical Novice station including a transmitter, a receiver, an antenna feedline, an antenna, a T-R switch, grounding provisions and a telegraph

key.

A:

Signals and Emissions

2H-1.1 An interrupted carrier wave is considered to be which type of emission?

A: Continuous wave or CW

2H-2.1 What does the term backwave mean?

A: backwave is a signal heard in a receiver after a transmitter is de-energized. This is caused when a transmitter continues to output energy when the receiver becomes activated

2H-2.2 What is a possible cause of backwave.

A: improper transmit-receive switching circuitry operation.

2H-3.1 What does the term key clicks mean?

A: clicks generated by a transmitter when the key is opened or closed.

2H-3.2 How can key clicks be eliminated?

A: With a key click filter

2H-4.1 What does the term chirp mean?

A: Frequency shift of a transmitter when the key is closed.

2H-4.2 What can be done to a telegraph transmitter's power supply to avoid chirp.

A: ensure that it has good voltage regulation

2H-5.1 What is a common cause of superimposed hum?

A: poor transmitter power supply filtering.

2H-6.1 A signal received on 28.160 MHz is the 4th harmonic of what fundamental frequency?

A: 28.160/4 = 7.040 MHz

2H-7. Spurious emissions from a transmitter may be caused by what problem in the power amplifier stage?

A: over-drive or improper neutralization.

Antennas and Feedlines

2I-1.1 What is the approximate total length in feet of a half-wave dipole antenna cut for 3725 KHz?

A: (300/3.725) * 3.28 *(1/2) = 132 ft.

2I-1.2 What is the approximate total length in feet of a half-wave dipole antenna cut for 7125 KHz?

A: (300/7.125) * 3.28 *(1/2) = 61.9 ft.

2I-1.3 What is the approximate total length in feet of a half-wave dipole antenna cut for 21125 KHz?

A: (300/21.125) * 3.28 * (1/2) = 23.3 ft.

2I-1.4 What is the approximate total length in feet of a half-wave dipole antenna cut for 28150 KHz?

A: (300/28.150) * 3.28 * (1/2) = 17.5 ft.

2I-1.5 How is the approximate total length in feet of a half-wave dipole antenna calculated?

A: determine the total length of a one wave and divide by 2.

2I-2.1 What is the approximate total length in feet of a quarter-wave vertical antenna adjusted to resonate at 3725

KHz?

A: (300/3.725) * 3.28 *(1/4) = 66 ft.

2I-2.2 What is the approximate total length in feet of a quarter-wave vertical antenna adjusted to resonate at 7125 KHz?

A: (300/7.125) * 3.28 *(1/4) = 34.5 ft.

2I-2.3 What is the approximate total length in feet of a quarter-wave vertical antenna adjusted to resonate at 21125 KHz?

A: (300/21.125) * 3.28 * (1/4) = 11.6 ft.

2I-2.4 What is the approximate total length in feet of a quarter-wave vertical antenna adjusted to resonate at 28250 KHz?

A: (300/28.250) * 3.28 * (1/4) = 8.7 ft.

2I-2.5 When a vertical antenna is lengthened, what happens to its resonant frequency?

A: As with most common antennas, when they are lengthened, the resonant frequency decreases.

2I-3.1 What is coaxial cable.

A: cable constructed of a center conductor encased in insulation, which is then covered by an outer conducting shield and weatherproof jacket.

2I-3.2 What kind of antenna feedline is constructed of a center conductor encased in insulation, which is then covered by an outer conducting shield and weatherproof jacket?

A: coaxial cable.

2I-3.3 What are some advantages in using coaxial cable as an antenna feedline?

A: can be located near other metal objects, can be buried.

2I-3.4 What commonly available antenna feedline can be buried directly in the ground for some distance without adverse effects?

A: coaxial cable

2I-3.5 When an antenna feedline must be located near grounded metal objects, which commonly available feedline should be used?

A: coaxial cable

2I-4.1 What is parallel conductor feedline?

A: feedline constructed of two conductors maintained a uniform distance apart by insulated spreaders.

2I-4.2 Can an amateur radio station use TV antenna "twin lead" as a feedline?

A: Yes

2I-4.3 What are some advantages in using a parallel conductor feedline?

A: very low loss, can be home-made.

2I-4.4 What are some disadvantages in using a parallel conductor feedline?

A: can't be buried or used near grounded metal objects.

2I-4.5 What kind of antenna feedline is constructed of two conductors maintained a uniform distance apart by insulated spreaders?

A: parallel conductor feedline

From -9128089435229371675
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,984808bf6227f95d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-13 15:55:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 108: VEC costs
Message-ID: <314@houxp.UUCP>
Date: Sun, 13-Nov-83 18:55:34 EST
Article-I.D.: houxp.314
Posted: Sun Nov 13 18:55:34 1983
Date-Received: Tue, 15-Nov-83 02:13:41 EST
Lines: 10

qst de ad7i
hr arrl bulletin nr 108 from arrl headquarters
newington ct november 7, 1983
to all radio amateurs bt

on november 3, senator barry goldwater introduced into the senate a bill, sb 2045, to permit the recovery of out of pocket costs inncurred by volunteer examiner coordinators. december qst league lines will have details ar

From -2981598885362957353
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5f16df79b38a3426,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-13 15:56:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 110: Teleconference
Message-ID: <315@houxp.UUCP>
Date: Sun, 13-Nov-83 18:56:04 EST
Article-I.D.: houxp.315

Posted: Sun Nov 13 18:56:04 1983
Date-Received: Tue, 15-Nov-83 02:14:48 EST
Lines: 13

qst de ad7i
hr arrl bulletin nr 110 from arrl headquarters
newington ct november 11, 1983
to all radio amateurs bt

a reminder. on november 14 at 0300 utc, november 13 at 10 pm est,
steve place, wb1eyi, manager of club and training at arrl
headquarters, will discuss the volunteer examination program via a
nationwide computer network. the program will take place on the
hamnet special interest group and can be accessed through the
compuserve information service. all interested parties are invited
to participate in this interactive discussion ar

From -1131911705836650422
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5850924bd0696252,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-13 15:56:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 111: STS9
Message-ID: <316@houxp.UUCP>
Date: Sun, 13-Nov-83 18:56:28 EST
Article-I.D.: houxp.316
Posted: Sun Nov 13 18:56:28 1983
Date-Received: Tue, 15-Nov-83 02:17:21 EST
Lines: 27

qst de ad7i
hr arrl bulletin nr 111 from arrl headquarters
newington ct november 11, 1983
to all radio amateurs bt

space shuttle sts9 launch is now scheduled for november 28 at 1600
utc. no ham transmissions should be expected from w5lfl before the
third day of the mission, wednesday, november 30. astronaut
garriotts original operating schedule has changed because a
substantial number of spacecraft attitude changes have been caused by
the launch delay. though specific times and locations are not yet
known, possible times for operation over the u.s. and canada could be
from 1300 to 1500 utc along the u.s. east coast, from 0100 to 0300
utc along the u.s. west coast, and on the final full day in orbit,
december 6, between 1300 and 0300 utc. more detailed information
will be reported as soon as it is released.

a recent announcement states that though w5lfl will not be available for hamming while engaged in experimental activities, he will occasionally leave his receiver set on one of the ten preselected frequencies while crossing the u.s. for these ten minutes or so, incoming calls will be tape recorded and played back later on the ground. calls in the blind should be made for no longer than 30 seconds near closest approach to give more hams a chance to be heard. which one of the ten preselected frequencies will be used will not be announced ar

From 7290643704798376078
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,588eb766b6cee753,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-13 15:56:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: CRRL 33: DOC exams
Message-ID: <317@houxp.UUCP>
Date: Sun, 13-Nov-83 18:56:58 EST
Article-I.D.: houxp.317
Posted: Sun Nov 13 18:56:58 1983
Date-Received: Tue, 15-Nov-83 02:18:29 EST
Lines: 16

qst de ad7i
hr crrl bulletin nr 33 from crrl headquarters
london ont november 9, 1983
to all radio amateurs bt

at a joint crrl/carf/doc meeting in ottawa, five amateurs and five doc officials reviewed over 350 questions for the amateur and advanced amateur examinations. some questions were discarded, some were improved and, as a result, candidates may expect fairer exams in the future.

a new request to doc to reinstate teleprinter operation in the 7.05 to 7.1 segment of the 40 meter band is being prepared. crrl is also asking doc to eliminate the need for cw identification during teleprinter contacts ar

From 2669790667067769244
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2822edccd5173a4c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-13 15:57:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: PFB 45
Message-ID: <318@houxp.UUCP>
Date: Sun, 13-Nov-83 18:57:27 EST
Article-I.D.: houxp.318
Posted: Sun Nov 13 18:57:27 1983
Date-Received: Tue, 15-Nov-83 02:19:37 EST
Lines: 23

qst de ad7i
hr propagation forecast bulletin nr 45 from arrl headquarters
newington ct november 7, 1983
to all radio amateurs bt

active areas of the sun that were responsible for the solar flux rise
in early october are facing the earth again. sunspot counts are far
below those of four weeks ago, and the solar flux high for november
is only 107 thus far. at the same sun position in october the flux
was 134 and rising. some further rise is expected in the next few
days, but anything approaching the october high of 140 now seems
unlikely.

november is traditionally a month of high muf and generally good
conditions on all dx frequencies, however, and prospects look good
for november 6 through 9, 16, 17, and 22 to 24. fairly severe
disturbances and possible auroral conditions in northern u.s. and
adjacent canadian areas are expected november 10 through 15, 18 to 21
and 25 to 30.

american sunspot numbers for october 27 through november 2 were
between 1 and 20 with a mean of 11.4 ar

From -130539539413553679
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,55e6def901dff301,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-15 11:12:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Ham Exams: new schedule
Message-ID: <4689@mgweed.UUCP>
Date: Tue, 15-Nov-83 14:12:10 EST
Article-I.D.: mgweed.4689
Posted: Tue Nov 15 14:12:10 1983
Date-Received: Wed, 16-Nov-83 07:08:34 EST
Organization: AT&T Western Electric - Montgomery Illinois

Lines: 57

FCC Drastically Reduces Ham Testing

The days are numbered for those applicants who simply want to walk into an FCC facility and take a Commission administered amateur radio examination.

The FCC Field Operations Bureau has issued an internal mimeographed memorandum indicating that amateur radio examinations given at all District FCC Offices throughout the country will be limited to a total of four during calendar year 1984. The author of the memo was the FCC's Field Operations Bureau Chief, Richard M. Smith.

The internal notice is now in the process of being printed and will be distributed shortly. No examinations will be given by the Commission (either at regular testing points or at remote locations) more often than quarterly. An appointment must be requested in advance. Needless to say, the opportunity for upgrading will be drastically reduced next year.

The examinations will be offered at FCC Field Offices during these periods:

Quarter Testing Dates ------- -------------
1 February 6 through 10, 1984
(Applications received by January 15).

2 May 7 through 11, 1984
(Applications received by April 15).

3 August 6 through 10, 1984
(Applications received by July 15).

4 November 5 through 9, 1984
(Applications received by October 15).

All FCC facilities will give both the commercial and amateur examinations on those dates. Amateurs should submit their Form 610 applications at least one month in afvance of the above dates if they want to take a particular examination. If the situation warrants, more than one day will be scheduled for testing during the above periods.

It is my understanding that the FCC will be looking for a free facility other than their current testing rooms to hold the exams because their offices would not be large enough to accomodate the large number of anticipated applicants.

While field offices have not received instructions regarding any correlation between the new FCC testing program

and the volunteer examination procedures recently approved by the Commission, the FCC feels that these will be numerous other testing opportunities at hamfests and other volunteer supervised examination sessions. ''We are working very closely with the Private Radio bureau to get that thing moving.''

From -4064906789601354927
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4e901b9f8021b791,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-15 11:14:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: additional 10 meter rptr freqs denied
Message-ID: <4690@mgweed.UUCP>
Date: Tue, 15-Nov-83 14:14:57 EST
Article-I.D.: mgweed.4690
Posted: Tue Nov 15 14:14:57 1983
Date-Received: Thu, 17-Nov-83 00:38:47 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 14

FOLLOWING FROM NOVEMBER 10 ISSUE OF ARRL LETTER

10 METER ALLOCATIONS...

THE FCC RELEASED AN ORDER NOVEMBER 2 DECLINING TO ALLOCATE ADDITIONAL FREQUENCIES FOR TEN METER REPEATERS, PR DOCKET 83-483. THE DENIAL WAS BASED ON THE ADVERSE IMPACT WHICH COULD OCCUR TO OTHER OPERATIONS, PARTICULARLY AMATEUR SATELLITES, AND UPON THE LACK OF A COMPELLING NEED. AS AUTHORIZED BY THE ARRL EXECUTIVE COMMITTEE, ARRL HAD FILED COMMENTS IN JULY REQUESTING DENIAL BASED ON SIMILAR REASONING. SEE ARRL LTR VOL 2 NR 16 AND OCT 1983 QST P60.

From 6773594530163113711
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5ba2c41135dd4ef8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-16 13:00:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 11/4/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: inside news from Bearcat
Message-ID: <1636@ihuxf.UUCP>

Date: Wed, 16-Nov-83 16:00:07 EST
Article-I.D.: ihuxf.1636
Posted: Wed Nov 16 16:00:07 1983
Date-Received: Thu, 17-Nov-83 08:04:37 EST
Organization: AT&T Bell Labs, Naperville, Il
Lines: 66

A marketing representative from Electra, manufacturer of Bearcat scanners, spoke at a recent scanner club meeting. He had some interesting comments:

o+ Bearcat manufacturing facilities were moved to Puerto Rico a month ago.

o+ Some Bearcat crystal controlled portable scanners are manufactured by Sanyo.

o+ Bearcat will not offer 800 MHz capability in a scanner until they can be assured of at least 10,000 sales.

o+ A new scanner/computer product will be announced in 1Q84. (Could this be a scanner with a computer interface?)

o+ Bearcat can no longer repair BC-101 scanners because the automatic test equipment used for troubleshooting this model broke down, and "is not worth fixing." Since a federal law requires manufacturers to repair or replace their products for a 7 year period after manufacture, BC-101 owners are being offered a trade in allowance on a new BC-250.

o+ SCAN Magazine, published by an advertising agency hired by Electra, will probably cease publication soon, as Electra is firing this agency.

o+ Electra interviewed several state police officers to determine what features they deemed most valuable in a scanner. This resulted in the new BC-260 mobile scanner. Its size permits mounting in a standard Motorola mounting bracket under the dashboard, and has 3 watts of audio output.

o+ The BC-220 is still being offered, but on a limited basis.

o+ The BC-250, although a current model, has not been manufactured for a while, because of large inventories.

o+ Newer BC-100's (the portable synthesized model) have the following improvements:

a. BNC antenna connector, which replaces the threaded type.
b. Fewer "birdies."
c. Greater sensitivity.
d. More audio output.
e. Four new chassis reinforcements. Owners of older BC-100s complained that the batteries would temporarily disconnect when the unit was jarred. Needless to say, this wiped out the contents of memory.

o+ Bearcat scanners will be sold at Ace Hardware stores.

o+ The lowest scanner prices may be found in places like Service Merchandise (BC-210XL < $200, BC-100 < $300).

--
==========
Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From 5518938727880333231
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3fadc5ce184470cc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-18 08:25:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!eagle!hou5h!hou5a!hou5d!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: Novice Exams
Message-ID: <319@houxp.UUCP>
Date: Fri, 18-Nov-83 11:25:26 EST
Article-I.D.: houxp.319
Posted: Fri Nov 18 11:25:26 1983
Date-Received: Sat, 19-Nov-83 22:53:10 EST
Lines: 12

Here is a note of interest to members of large employer
sponsered radio clubs from Steve Ewald of ARRL.

Begining December 1st, 1983, the rule that an employee of
a company may not administer a novice exam to another employee

of the same company will be dropped. All other constraints
remain the same.

----

ad7i

From 8594955843765866024
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba45eda5769e1eb1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-18 08:46:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 11/4/83; site ihuxf.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!eagle!mhuxl!houxm!ihnp4!ihuxf!
parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: Yet another Dentron disaster?
Message-ID: <1640@ihuxf.UUCP>
Date: Fri, 18-Nov-83 11:46:35 EST
Article-I.D.: ihuxf.1640
Posted: Fri Nov 18 11:46:35 1983
Date-Received: Sat, 19-Nov-83 23:18:14 EST
Organization: AT&T Bell Labs, Naperville, Il
Lines: 41

x
       A friend   in N.J., KC2KO,   once related his experiences with a
       new Dentron Clipperton-V 2 meter amplifier, purchased from
       Amateur   Electronics Supply (AES) in   Milwaukee.   This
       SSB/CW/RTTY/FM amp was   advertised by Dentron and AES as a
       500 watt   input unit. It   used a single 4CX-250B and required
       between 10 and 25 watts drive.

       In addition to experiencing bizarre   amplifier   input
       impedances, this fellow could   never   run the
     unit at 500
       watts input without it blowing up. It was sent back to
     the
       factory   for repair, but still wouldn't run at the rated
       input.

       Finally,   a Dentron engineer confessed that the
     Clipperton-
       V's design made it IMPOSSIBLE to   run 500 watts input without
       self-destructing! KC2KO wrote letters to AES, Dentron,
     and
       the Attorney General's office, claiming false advertising,
       and demanding a full refund. He   got one.

The Fall 1983 AES catalog contains a closeout advertisement on page 43 for this amplifier, reduced from $699 to $299! These units are new, not used. Beware, there is an interesting footnote in the ad:

> "This unit is being offered at this low price on an "as-is" basis with No Factory or AES Warranty and No Returns; all sales are final! Consider this purchase only if your [sic] have the technical expertise to perform any possible repairs and/or modifications on this type of equipment."

There are other Dentron items advertised on the same page, but they all carry a 90 day AES warranty. The Clipperton-V must have been a super lemon.

--

Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -6670552412775559974
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1a33747d5c2ee89d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-18 13:38:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Dentron power supply comment
Message-ID: <4749@mgweed.UUCP>
Date: Fri, 18-Nov-83 16:38:20 EST
Article-I.D.: mgweed.4749
Posted: Fri Nov 18 16:38:20 1983
Date-Received: Sun, 20-Nov-83 00:07:32 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 16

I just purchased the Dentron power supply listed in the new AES catalog. This is the supply that was used to power the Dentron transciever. It was a $129 unit now being sold for $39.

The specs are not too clear in the ad. The regulated output is only good for 2 amps. The high current output is unregulated and puts out 17.5 volts unloaded and drops to about 13 or so with a 16 amp load. The transformer is supposed to be rated

for 20 amps. Unfortunately, there is little room to add heat
sinks large enough to permit regularing the high current output
without mounting them on top of the cabinet.
I guess it is still worth the sale price, but not what I expected.

Bob, K9EUI

From -373278728359962222
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,42b0a3a4598b17b1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-18 17:15:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: DX bulletin 45
Message-ID: <320@houxp.UUCP>
Date: Fri, 18-Nov-83 20:15:20 EST
Article-I.D.: houxp.320
Posted: Fri Nov 18 20:15:20 1983
Date-Received: Sun, 20-Nov-83 00:40:39 EST
Lines: 52

qst de ad7i
hr dx bulletin nr 45 from arrl headquarters
newington ct november 18, 1983
to all radio amateurs bt

thanks to k1xm, k1mm and w1trc of the southern new england dx
association for the following dx information.

cameroon. tj1af is back in cameroon and has been heard around 21287
khz at 1900z.

ghana. el2z will be stationed permanently in 9g1 starting january 1.
his license status is uncertain.

nepal. yb5aso plans to be in 9n2 next week, and will try to be
active on cw.

seychelles. s79sm has been active on 20 cw about 1800z at about
14018 khz. qsl box 84, mahe, seychelles.

bahrain. walt, a92dt, has been on fairly regularly at 1200z at about
21295 khz.

the colvins. lloyd and iris are still on from w6kg/hk0, san andres.
qsl via the yasme foundation.

160 meters. between 0300 and 0500z, lz1kdp, uk2gab, fc9vn and ct1aoz

have been worked on 160.

tuvalu. t2gsh has been active at about 1200z around 3795 khz, and has been joined by other stations including yj8rg and zk1gc.

k1mm schedule. through november 20, bill will be at vs6im. between the 20th and 30th he will be near by1pk where he hopes to operate, december 2 and 3 near by8aa where he also hopes to operate, and the 4th and 5th at vs6im again.

lord howe island. vk2bqq/lh will be active november 23 through 29 on 3501, 7001, 14030, 21030 and 28030 khz cw and 14210 khz on ssb. operation is also possible on 160 and 30 meters. qsl to box 2309, sydney 2001, australia. remember, 30 meter contacts do not count toward dxcc.

belize. six operators from the kansas city dx club will be active from november 23 to 29. the call v3a will be used for the cq ww contest, and individual calls have been applied for. qsls go to kb0g.

special event station. ref of france will operate to8ab, in commemoration of the 60th anniversary of the first transatlantic qso, from 1800z november 23 to 0700z the 24th, on 3777 khz ar

From -6666019463612677477
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a985dd1cd4e19fcb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-19 21:27:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!mikey
From: mikey@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: 800-957-9999 - (nf)
Message-ID: <3791@uiucdcs.UUCP>
Date: Sun, 20-Nov-83 00:27:08 EST
Article-I.D.: uiucdcs.3791
Posted: Sun Nov 20 00:27:08 1983
Date-Received: Mon, 14-Nov-83 01:22:15 EST
Lines: 8

#R:eagle:-114000:trsvax:52800001:000:197
trsvax!mikey   Nov 10 08:43:00 1983

I get the same message from Ft. Worth as Dallas. This leads me to assume (Very Dangerous) that the number was set up by a Pirate and Ma Bell is now in the process of shutting it down.

Mikey

From -8194477329889915320
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a985dd1cd4e19fcb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-19 21:27:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!ron
From: ron@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: 800-957-9999 - (nf)
Message-ID: <3792@uiucdcs.UUCP>
Date: Sun, 20-Nov-83 00:27:21 EST
Article-I.D.: uiucdcs.3792
Posted: Sun Nov 20 00:27:21 1983
Date-Received: Mon, 14-Nov-83 01:24:58 EST
Lines: 6

#R:eagle:-114000:trsvax:52800003:000:202
trsvax!ron   Nov 10 09:42:00 1983

They've changed the number to 900-410-TIME. Turns out that the amount
of calls received on their wats ran their bill up to slightly over the
national debt. So they're letting the public foot the bill.

From 2518383302850167746
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3ab7d69ec979a3e6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-19 21:27:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!inuxc!pur-ee!uiucdcs!trsvax!ron
From: ron@trsvax.UUCP
Newsgroups: net.ham-radio
Subject: W5YI Report - (nf)
Message-ID: <3793@uiucdcs.UUCP>
Date: Sun, 20-Nov-83 00:27:36 EST
Article-I.D.: uiucdcs.3793
Posted: Sun Nov 20 00:27:36 1983
Date-Received: Mon, 14-Nov-83 01:27:41 EST
Lines: 309

#N:trsvax:52800004:000:16538
trsvax!ron   Nov 10 23:05:00 1983

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* * * * * * * * * * * * * * * * * *
*                                   *
*  T h e   W 5 Y I   R e p o r t  *
*                                   *
*      Vol 5 #22 - 11/15/83         *
*                                   *
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In this issue:

- Grenada and Ham Radio - What Really Happened!
- FCC to Test Hams Quarterly

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- Grenada and Ham Radio - What Really Happened!

The week of October 24th was to have been a very special one for amateur radio. It was delayed only to be outdone by another precedent setting ham radio spectacular... Grenada. It caught most ham operators by surprise and much misinformation exists. What follows is a researched account of amateur radio involvement in the Grenadian invasion and evacuation.

The chancellor of the Grenada St. George's Medical School heard a news report describing the invasion of the island of Grenada, West Indies. Concerned with the safety of hundreds of American students, he quickly telephoned Dick Zaretsky (WB2VGL/4) of West Palm Beach, Florida, with a request to establish contact with amateurs at the medical facility. They had previously arranged that Dick would go on the air in the event of trouble.

Dick hadn't operated HF ham radio since the early 1970's but set up a station specifically to operate with Grenada in the event of an emergency. It was set up just the week end before the invasion but due to a defective relay, couldn't be used. He arranged with WA2HOC/4 and WA2HOD/4 (James and Janet Nunziato of Jupiter, Florida) to assist with an HF link and via a 2 meter autopatch hooked Grenada into St. George's University in New York who had already been contacted by another amateur, K4DMK (Jack Mays of Folkston, Georgia).

Using the Nunziato's HF rig, Dick introduced himself to Mark Barattella (KA2ORK/4),a medical student, who recognized him from his previous involvement with the school. He told Mark that he had the New York line open to the University and would continue to keep it open. It ended up being a 36 hour phone call! Dick told Mark to drop the J3 suffix to facilitate communications.

Mark told Dick how he heard airplanes in the area. This was about 5:45 a.m. Tuesday morning, October 25th. A few minutes later Mark reported the shooting. Amateurs driving to work in West Palm Beach overheard a very interesting 2-meter net on the 147.885/285 repeater that morning as well as those listening to Mark on HF! The HF conversation remained on the two meter autopatch since the Nunziato's did not have a telephone in their ham shack.

Dick Zaretsky called the Department of State to relay to them a Radio Free Grenada transmission that he thought was coded concerning the "marriage of certain students that occurred at 6 AM that morning," the time of the invasion. None of the networks or news services knew anything about the invasion since

there was a news blackout! Reporters on the island had been taken off before the invasion and none were allowed in. The amateur radio hookup to Grenada provided the first news of it.

The Department of Defense apparently had gone to great pains to perform the invasion under cover of a news blackout and here was a ham radio eyewitness under a table with helicopters and gunfire overhead broadcasting it to the world! Needless to say, since the media was prevented from covering the invasion... radio, television and newspaper coverage of Mark Baratella's ham radio transmissions were followed very closely.

Within moments of notification of the emergency, amateur operators in key locations were activated. Special authorization (which is covered in Part 97.107) for amateur radio operation during declared emergencies was obtained through the help of Don Kay (K0IND, Delray Beach, Florida) and Jack Mays (K4DMK, Folkston, Georgia).

Because of the gravity of the situation, in-band and out-of-band frequencies were requested in order to secure the most interference free frequencies. The FCC in Washington granted the proper authorization within minutes of the request.

A vigil was conducted throughout different bands and frequencies authorized amateurs for the duration of the emergency. DUe to radio wave propagation differences, it was necessary to utilize control operators at different geographical locations and frequencies.

Mark Barattella did a magnificent job of operating under incredibly adverse conditions. Emergency power was used during the greatest portion of the time. Refueling was a problem since their personal safety was imperiled every time they ventured outside the facility. The Grand Anse campus which housed 176 Americans did not have U.S. military protection from the beginning of the invasion until the actual evacuation.

Mr. Reed Clark, of the US State Department, Grenada Task Force desk conveyed messages of great importance and received status reports from Grenada via amateur radio which was the only link between those 176 Americans isolated in a foreign country beseiged by war.

The State Department was particularly concerned with the Grenadian government in conjunction with Cuban advisers might hold the American students hostage. Evidence was found later supporting such a plan. Amateur Radio kept the State Department aware of the status of the students.

At 4:10 PM EDT, Wednesday, the 26th of October, the students at the Grand Anse facility were evacuated by US military helicopters. The actual Grenada emergency pertaining to amateur radio was then terminated thirty-six hours after its inception.

On October 28th, the ARRL released the following news bulletin, "The FCC has high praise for radio amateurs and the role they played in the recent Grenada situation. The Commission waived some of its rules to facilitate

communication by KA2ORK, Mark Baratella, and other assisting operators. In the Commission's words, (quote) 'At all times the paramount interest of this agency was the safety and welfare of the medical students on the Grenada campuses. Mr. Baratella and the amateur radio operators assisting him provided valuable services in relaying information as to the safety of the medical students and their families and as to the general situation existing at the Grenada station.' (unquote)"

- Ham Operation In and Out of Band

I had several questions that I thought should be discussed concerning the Grenada ham emergency operation and severl involved individuals were telephoned. One of those questions concerned amateur operation out of the ham band.

Mr. Bill Russell is the FCC Director of Public Affairs in Washington. He said that the State Department requested permission for voice operation in the code subband of the 20-meter band on Tuesday, October 25th. This was granted in the portion between 14.040 and 14.045 MHz. At night, out-of-band operation was granted to about six amateurs 1 KHz above the 40 and 80 meter bands dur to interference.

One of these amateurs (K4MM Bill Miller of Fairfax Station, VA) told me that this interference was principally from American amateurs. There was, however, some QRM from Spanish speaking stations - Cuba and South America. One message came across in CW, "Yankee Go Home."

The amateur operation was called the Grenada Emergency Net by the Net Control Don Kay (K0IND/4), once approval was obtained for other than standard amateur frequencies. Don Kay said he was in telephone contact with both the Department of Defense and the Pentagon during the crisis but he declined to discuss it further.

While it appears no FCC official actually gave specific permission for operation on 14.351 MHZ when the operation returned to 20 meters, the FCC decided to allow the net to continue there. The logic by the net was that since out-of-band operation was authorized on 40 and 80 meters, it must be OK to operate 1 KHz above the 20 meter band too.

I am unable to come up with the name of the FCC individual that actually gave approval for the 40 and 80 meter out-of-band operation. The approval was relayed to the net by the FCC Watch Officer in Washington through the FCC Field Office in Ft. Lauderdale. It was rumored, but never confirmed, that the FCC Chairman, Mark Fowler, was involved in the decision.

Bill Russell of the FCC said that he believed Mark Barattella probably made the 14.351 decision. Russell said that the State Department reported on the 14.351 MHz operation and the FCC said, "we don't care." The amateurs involved were told, "Just keep doing what you are doing because it is an essential service." They considered this being authorized.

The FCC cancelled all authorization for phone use of CW subbands and

non-amateur frequencies by radio amateurs on Wednesday, October 26th. On Friday morning, the FCC sent out the following electronic mail to all district Field Operations Bureau offices throughout the nation.

(Quote) "One of the objectives during the invasion of Grenada was to secure the campus of the medical school where a large number of American students were in attendance. Both the US forces and the Cuban were trying to gain the same objective. An amateur station located on the campus was apparently the only point of communication with anyone at the school and because of this, the US State Department requested a special authorization to use an amateur frequency to maintain contact with this amateur station to keep tabs on the situation at the school. Verbal authority was given for SSB use in the 14140 to 14145 KHz portion of the amateur band. This was later shifted to 7070 to 7100 KHz. Also by verbal permission, it appears that the authorization depended pretty much on what frequencies the Grenada station could work effectively without interference and would change accordingly. Ultimately, the net ended up on 14351 KHz.

While no special authorization was given for this out-of-band activity, the nature of the situation necessitated that it continue. For this reason, the Commission allowed the communications to continue and will take no enforcement action against those involved. Signed: Elliott Ours, Chief FCC Enforcement" (End Quote)

The FCC said that they received many requests from other amateur operators during the crisis to operate on the Grenada Emergency Net frequencies. They were all denied to prevent any further interference. Only about "half a dozen" amateurs were authorized to participate on other than normal amateur spectrum according to an October 28th news bulletin from the FCC.

- The Media and the Grenadian Incident

There are many sides to the ham stories in the invasion of Grenada. One of the more significant ones is the roll that the media played. The Department of Defense invaded Grenada under an imposed news blackout but private amateur radio communications were permitted. Many reported, not understanding amateur radio rules, couldn't comprehend why messahes and private conversation with Grenada was allowable but not getting status reports from these same private citizens. Some were furious to put it mildly.

The FCC Private Radio Bureau and the ARRL went over this many times with various radio, TV and newspaper reporters. They were told that they could retransmit anything they wanted since Section 605 (Secrecy provisions of the Communications Act) did not apply to amateur radio. The media was prohibited from acting as a Third Party (even though these privileges existed for one day) if they were gathering news reports.

Jim McKinney, Chief of the FCC Mass Media Bureau said that broadcasting was a professional use of amateur radio and specifically outlawed. He prohibited broadcasters from using amateur radio as a news gathering tool, a remote news pickup medium or to conduct interviews that would

be broadcast over other than the amateur service. He cited limitations in the rules about rebroadcasting from another service.

There was mass confusion as to what could and couldn't be done causing the FCC to issue a Public Notice on October 26th during the height of the invasion. IN part, the release said "...broadcasters are cautioned...that in covering amateur radio activity, they must not become actively involved in the amateur transmissions. That is to say, the broadcaster may not employ an amateur stations as it would a reporter or a translator in order to convey, directly or indirectly, questions or subject matter which the broadcast station desires to be addressed."

Furthermore, the broadcast stations were directed to advise the FCC how they had used ham radio in their news broadcasts. The media had trouble understanding that CB radio could be used as a news communications medium, but not amateur radio. Some said the administration obviously had something to hide and that the Constitution guaranteed Freedom of the Press and Speech.

Bill Miller (K4MM) one of the main US participants during the crisis said that he got a call from a CBS reporter who wanted to do a live interview via amateur radio. "I practically had to hang up on him he was so arrogant," BIll said. "I told him point blank I wouldn't do it! He kept on and on. 'USA Today' (a national newspaper) was here most of the day. The TV people wanted to come out here and I said "Be my guest." They wanted to do it live and I said you won't be able to do anything live while I'm on the air."

All across the country, radio and TV stations were showing ham operators listening to or participating in the Barattella communications. In all fairness, there was little else they could do. It was a major event and the news media was frozen out. Representatives of all three networks and one radio station reported live from the ARRL headquarters station, W1AW, for the better part of two days, according to Dave Sumner (K1ZZ), League general manager.

- FCC Drastically Reduces Ham Testing

The days are numbered for those applicants who simply want to walk into an FCC facility and take a Commission administered amateur radio examination.

The FCC Field Operations Bureau has issued an internal mimeographed memorandum indicating that amateur radio examinations given at all District FCC Offices throughout the country will be limited to a total of four during calendar year 1984. The author of the memo was the FCC's Field Operations Bureau Chief, Richard M. Smith.

The internal notice is now in the process of being printed and will be distributed shortly. No examinations will be given by the Commission (either at regular testing points or at remote locations) more often than quarterly. An appointment must be requested in advance. Needless to say, the opportunity for upgrading will be drastically reduced next year.

The examinations will be offered at FCC Field Offices during these periods:

Quarter Testing Dates
------- -------------
  1   February 6 through 10, 1984
      (Applications received by January 15).

  2   May 7 through 11, 1984
      (Applications received by April 15).

  3   August 6 through 10, 1984
      (Applications received by July 15).

  4   November 5 through 9, 1984
      (Applications received by October 15).

All FCC facilities will give both the commercial and amateur examinations on those dates. Amateurs should submit their Form 610 applications at least one month in afvance of the above dates if they want to take a particular examination. If the situation warrants, more than one day will be scheduled for testing during the above periods.

It is my understanding that the FCC will be looking for a free facility other than their current testing rooms to hold the exams because their offices would not be large enough to accomodate the large number of anticipated applicants.

While field offices have not received instructions regarding any correlation between the new FCC testing program and the volunteer examination procedures recently approved by the Commission, the FCC feels that these will be numerous other testing opportunities at hamfests and other volunteer supervised examination sessions. "We are working very closely with the Private Radio bureau to get that thing moving."

From 8941751956750309871
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7fb75b65e69d897d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-20 16:12:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 112: grenada
Message-ID: <321@houxp.UUCP>
Date: Sun, 20-Nov-83 19:12:22 EST
Article-I.D.: houxp.321
Posted: Sun Nov 20 19:12:22 1983
Date-Received: Tue, 22-Nov-83 00:22:53 EST
Lines: 9

qst de ad7i

hr arrl bulletin nr 112 from arrl headquarters
newington ct november 17, 1983
to all radio amateurs bt

effective immediately, a temporary third party traffic agreement is
in effect between the united states and grenada, j3. this agreement
expires december 10, pending the negotiation of a permanent
agreement. ar

From -3760413211736898731
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c963f1a4cdd36ab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-20 16:12:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: CRRL 34: DOC exams
Message-ID: <322@houxp.UUCP>
Date: Sun, 20-Nov-83 19:12:59 EST
Article-I.D.: houxp.322
Posted: Sun Nov 20 19:12:59 1983
Date-Received: Tue, 22-Nov-83 00:23:34 EST
Lines: 16

qst de ad7i
hr crrl bulletin nr 34 from crrl headquarters
london ont november 14, 1983
to all radio amateurs bt

doc will hold 1984 amateur radio examinations across canada on
february 4, april 18, june 20 and october 17. applications must be
submitted to doc a month before the writing. all examinations are
now based on the new trc24.

crrl is looking for good examination questions for future doc
examinations. questions submitted will be reviewed by both crrl and
carf and, if approved, forwarded to doc.

the crrl board meets by conference telephone call on november 20 ar

From 7455371959730439893
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3478c36d6b19b9e7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-20 16:13:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP

Newsgroups: net.ham-radio
Subject: Propagation Bulletin 46
Message-ID: <323@houxp.UUCP>
Date: Sun, 20-Nov-83 19:13:19 EST
Article-I.D.: houxp.323
Posted: Sun Nov 20 19:13:19 1983
Date-Received: Tue, 22-Nov-83 00:24:03 EST
Lines: 27

qst de ad7i
hr propagation forecast bulletin nr 46 from arrl headquarters
newington ct november 14, 1983
to all radio amateurs bt

during early november the solar flux rose gradually, to 111 on the
7th. it then turned downward, reaching a low of 92 on the 12th. it
went up two points the next day, but visual observation of the sun
has not indicated that any major upturn is imminent.

frequent geomagnetic disturbances beginning the 8th, and still with
us as this bulletin was issued, are expected to clear by the 15th,
bringing generally good propagation on all dx frequencies november 16
and 17. a longer stable period is expected about november 21.
higher solar activity and an unstable magnetic field will degrade
conditions during the 24th and for most of the balance of november.

the solar flux has been lower than at the same time in the previous
solar rotation since october 20. this will be the expected condition
more often than not for the next three years or so, but there will be
exceptions, usually brief. the 21 and 28 mhz bands have been very
good at times this month and they will be useful fairly often through
at least the next year.

american sunspot numbers for november 3 through 9 were between 42 and
94 with a mean of 62.9 ar

From 2439861005978995192
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba45eda5769e1eb1
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-20 18:12:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cdi.UUCP
Path: utzoo!linus!security!genrad!decvax!tektronix!reed!cdi!caf
From: caf@cdi.UUCP (caf)
Newsgroups: net.ham-radio
Subject: Re: Yet another Dentron disaster?
Message-ID: <272@cdi.UUCP>
Date: Sun, 20-Nov-83 21:12:02 EST
Article-I.D.: cdi.272
Posted: Sun Nov 20 21:12:02 1983

Date-Received: Wed, 23-Nov-83 04:09:29 EST
References: <1640@ihuxf.UUCP>
Organization: Computer Development Inc, Beaverton OR
Lines: 16

What are the previous Dentron Disasters implied in the subject?
I have had a MLA-2500 amp bought some years ago (to beat the FCC
ban on 10 meter linears) and have had no trouble with the little
amount that I have used it. I talked to a Dentron engineer once
and he mentioned that they run these amps at 2kw D.C. input for
an hour if they get one back with complaints about low output.
The MLA-2500 uses some of the newer technology and so they may have
been more careful than usual to get the bugs out.   The only problem
I have heard with 2500's has been power supply wipeouts caused by
the electrolytics shorting out (apparently not related to power
output, just inrush).   The main problem I have with the amp is that
seemingly everything electronic in my house goes fruitcake when the amp loads
up.

--
Chuck Forsberg WA7KGX CDI Portland OR (503)-646-1599 cdi!caf

From 111888425810033864
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5dec2af088e03db8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-21 11:46:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site cmcl2.UUCP
Path: utzoo!linus!philabs!cmcl2!sullivan
From: sullivan@cmcl2.UUCP
Newsgroups: net.ham-radio
Subject: RTTY Readers - (nf)
Message-ID: <228@cmcl2.UUCP>
Date: Mon, 21-Nov-83 14:46:54 EST
Article-I.D.: cmcl2.228
Posted: Mon Nov 21 14:46:54 1983
Date-Received: Wed, 23-Nov-83 02:27:38 EST
Sender: sullivan@cmcl2.UUCP
Organization: New York University
Lines: 26

#N:cmcl2:8700001:000:694
cmcl2!sullivan   Nov 21 14:46:00 1983

I am looking for information on ways to hook up a RTTY unit to my terminal
for receive only. I have seen many articles and adds for things that look
like they might do the job, like the AEA unit advertised in '73 Magazine,
but they don't contain enough information. (I have also sent off to the
various manufacturers, but haven't heard anything yet.) CW capabilty would
be a plus, but not essential.

I was wondering if I really need a small computer or not. I'd like to keep the costs as low as possible. Does anyone have any info or experience with these things?

Thanks In Advance,
David Sullivan, WA1TNS/2
New York University

ARPA: SULLIVAN@NYU UseNet: ...!floyd!cmcl2!sullivan

--

David Sullivan UUCP: ...!floyd!cmcl2!sullivan
(212) 460-7287 ARPA: SULLIVAN@NYU

From 7546858717528885964
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8363ef472ca36ac5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-25 15:09:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!clyde!ihnp4!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 113: W5LFL operation
Message-ID: <324@houxp.UUCP>
Date: Fri, 25-Nov-83 18:09:51 EST
Article-I.D.: houxp.324
Posted: Fri Nov 25 18:09:51 1983
Date-Received: Sun, 27-Nov-83 02:58:25 EST
Lines: 50

qst de ad7i
hr arrl bulletin nr 113 from arrl headquarters
newington ct november 21, 1983
to all radio amateurs bt

nasa has announced more details of w5lfls operating schedule. these are the orbits, acquisition of signal, loss of signal and area covered.

in the table, the orbit number is followed by an a or d. a is for ascending and d is for descending. the time, d, days, h, hours, and m, minutes, is expressed in mission elapsed time, met, and can be calculated by adding this amount of time to your actual local launch time.

orbit aos met los met area
  d h m d h m

34a	2	01	10	2	01	25	central u.s.
35a	2	02	43	2	03	00	western u.s.
39d	2	09	00	2	09	25	central u.s.
40d	2	10	33	2	10	45	western u.s.
49a	2	23	27	2	23	47	eastern u.s. and mexico
56d	3	10	15	3	10	32	western u.s. and mexico
70d	4	07	05	4	07	25	eastern u.s.
71d	4	08	35	4	08	55	central u.s.
72d	4	10	10	4	10	25	western u.s.
92d	5	15	55	5	16	05	japan
93a	5	17	00	5	17	20	spain and europe
94a	5	18	41	5	18	50	england and europe
94d	5	19	11	5	19	26	australia
97a	5	22	55	5	23	23	central u.s.
97d	5	23	28	5	23	40	europe
98a	6	00	30	6	00	48	western u.s.
108d	6	15	46	6	15	56	japan
109a	6	16	48	6	17	04	spain and europe
110a	6	18	24	6	18	36	europe
110d	6	19	04	6	19	14	asia
113a	6	22	42	6	23	05	central u.s.
114a	7	00	15	7	00	31	western u.s.
119d	7	08	07	7	08	20	western u.s.
125a	7	16	42	7	16	50	spain and europe
126a	7	18	17	7	18	24	europe
126d	7	18	52	7	19	02	australia
129a	7	22	29	7	22	50	central u.s.
130a	8	00	10	8	uw	20	western u.s.
132d	8	03	00	8	03	12	canada
133d	8	04	44	8	05	06	northeastern u.s.
134d	8	06	18	8	06	48	central u.s.
135d	8	07	45	8	08	07	western u.s. ar

From 3020114592473198298
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,67f757ce9b9bd6f7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-25 15:10:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!clyde!ihnp4!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 114: ARRL elections
Message-ID: <325@houxp.UUCP>
Date: Fri, 25-Nov-83 18:10:28 EST
Article-I.D.: houxp.325
Posted: Fri Nov 25 18:10:28 1983
Date-Received: Sun, 27-Nov-83 02:59:26 EST
Lines: 62

qst de ad7i

hr arrl bulletin nr 114 from arrl headquarters
newington ct november 21, 1983
to all radio amateurs bt

the arrl committee of tellers met today to count ballots in the elections just concluded for director and vice director. the number of votes credited to each candidate is as follows. the first listed candidate is declared elected for the next term of office.

atlantic division,
   for vice director,
      george w. hippisley, k2kir 2193
      merle e. glunt, w3okn 1399
      edward j. kuebert, k3ka 794
      vincent h. bardsley, kb3om 618

delta division,
   for director,
      clyde o. hurlbert, w5ch 1301
      o. d. keaton, wa4gls 834

midwest division,
   for director,
      paul grauer, w0fir 1606
      robert s. mccaffrey, k0cy 954
      wellington b. stewart, k0si 347

pacific division,
   for director,
      william j. stevens, w6zm 1467
      robert b. vallio, w6rgg 1089
      jettie b. hill, w6rff 760
   for vice director,
      kip edwards, w6szn 1537
      frederic n. barry, k6rtu 631
      james d. knochenhauer, k6itl 573
      james a. maxwell, w6cf 565

southeastern division,
   for director,
      frank m. butler, jr., w4rh 3235
      stewart h. woodward, k4smx 1680
   for vice director
      evelyn d. gauzens, w4wyr 3361
      james a. gundry, w4jm 1512

the new directors and vice directors take office starting january 1, 1984. on that date the following candidates, previously declared elected, also take office for two year terms.

canadian director thomas b. j. atkins, ve3cdm
canadian vice director harry maclean, ve3gro

atlantic division director hugh turnbull, w3abc
dakota division director tod olson, k0to
dakota division vice director howard mark, w0ozc
delta division vice director robert p. schmidt, w5ghp
great lakes division director leonard nathanson, w8rc
great lakes division vice director george wilson, w4oyi
midwest division vice director claire richard dyas, w0jcp ar

From 7854791579015769622
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,590ec4d75ae23263,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-25 15:11:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!clyde!ihnp4!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: Propagation bulletin 47
Message-ID: <327@houxp.UUCP>
Date: Fri, 25-Nov-83 18:11:17 EST
Article-I.D.: houxp.327
Posted: Fri Nov 25 18:11:17 1983
Date-Received: Sun, 27-Nov-83 03:00:19 EST
Lines: 24

qst de ad7i
hr propagation forecast bulletin nr 47 from arrl headquarters
newington ct november 21, 1983
to all radio amateurs bt

the solar flux curve continued downward, from 111 on november 9 to
82 on the 20th. the most recent 82 was recorded september 1, 1577,
only 14 months into the present solar cycle. this does not
indicate that we are 14 months from the end of cycle 21. solar
activity rises rapidly in the early years of the cycle, but the
decline afternthe peak is much more gradual. loss of dx on 28 mhz
this fall has resulted from high geomagnetic activity rather than
from the considerably lower solar flux values in recent weeks.

propagation was no better than fair from november 8 through 20.
things shokld improve early in the forecast week, holding up from
at least the 24th. the solar flux will be rising again by then,
but geomagnetic activity will be high intermittently from the 26th
to the rest of the month. the next really good conditions after
this thursday should begin about december 2.

american sunspot numbers for november 10 through 16 were between 25
and 62 with a mean of 39 ar

From 6672793802680907666

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,be213e50b4af1b8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-28 11:20:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cvl.UUCP
Path: utzoo!linus!philabs!seismo!rlgvax!cvl!louie
From: louie@cvl.UUCP (Louis A. Mamakos)
Newsgroups: net.ham-radio
Subject: space shuttle audio
Message-ID: <764@cvl.UUCP>
Date: Mon, 28-Nov-83 14:20:57 EST
Article-I.D.: cvl.764
Posted: Mon Nov 28 14:20:57 1983
Date-Received: Tue, 29-Nov-83 05:40:40 EST
Organization: U. of Md. Computer Vision Lab
Lines: 28

The STS-9 Columbia cabin to ground communications is being re-transmitted by
the Goddard Amateur Radio club on the following frequencies:

     3860 kHz 14295 kHz
     7185 kHz 21390 kHz
               28615 kHz

and in the Washington, DC area, on 147.45 MHz FM. Only 3 of the HF
frequencies will be used at any given time. In addition, cabin video and
audio will be re-tranmitted, in color fast-scan video on the Metrovision
ATV repeater in Alexandria, VA. The output frequence of the ATV repeater
is 426.25 MHz.

Take a listen; its refreashing not having to listen to television network
commentators babble about goings on..

        Louis A. Mamakos (WA3YMH)

     Internet: louie@cvl.arpa
     CSNet: louie.cvl@umcp-cs
     uucp: ..!{seismo,we13,mcnc}!rlgvax!cvl!louie
        phone: (301) 454-2946
        Snail Mail:
                   Computer Science Center - Systems Staff
                   University of Maryland
                   College Park, MD   20742

From -4945797567068493265
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3f04b0378aa4c362,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-28 12:00:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Path: utzoo!linus!decvax!genrad!grkermit!masscomp!clyde!akgua!sb1!sb6!bpa!burdvax!
presby!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: W5LFL SCHEDULE
Message-ID: <212@dsd.UUCP>
Date: Mon, 28-Nov-83 15:00:27 EST
Article-I.D.: dsd.212
Posted: Mon Nov 28 15:00:27 1983
Date-Received: Fri, 2-Dec-83 06:13:57 EST
Lines: 71

Posted: Mon Nov 21, 1983   8:25 PM PST   Msg: BGID-1665-3949
From: TCLARK
To: amsat
CC: arrl
Subj: W5LFL Operating Sked de W9KDR (repaired)
Somehow, Bernie's computer got into a foul mood earlier today
when he tried to download the info on the W5LFL schedule. After
a half-hour's work with my word processor, the following should
represent a fairly accurate transcription of what he tried to
post. Since the original was so badly garbled, I am taking the
liberty of purging it from the AMSAT BB.

Bernie: pse qsl that nothing got lost.

73, Tom

= = = = = = = = = = = = = = =

To: AMSAT
CC: ARRL
Subject: W5LFL OPERATING SCHEDULE
Text:

NASA HAS ANNOUNCED MORE DETAILS OF W5LFL'S STS9 OPERATING
SCHEDULE. THESE ARE THE ORBITS, AQUISITION OF SIGNAL, LOS OF
SIGNAL AND AREA COVERED.IN THE TABLE, THE ORBIT NUMBER IS
FOLLOWED BY AN "A" OR "D". "A" IS FOR ASCENDING AND "D" IS FOR
DECENDING. THE TIME, D (DAYS), HH (HOURS). AND MM (MINUTES), IS
EXPRESSED IN MISSION ELAPSED TIME (MET) AND CAN BE CALCULATED BY
ADDING THIS AMOUNT OF TIME TO YOUR ACTUAL LOCAL LAUNCH TIME.

ORBIT #	AOS MET D HH MM	LOS MET D HH MM	AREA
034A	2 01 10	2 01 25	CENTRAL US
035A	2 02 43	2 03 00	WESTERN US
039D	2 09 00	2 09 25	CENTRAL US
040D	2 10 33	2 10 45	WESTERN US
049A	2 23 27	2 23 47	EASTERN US & MEXICO
056D	3 10 15	3 10 32	WESTERN US & MEXICO

070D	4	07 05	4	07 25	EASTERN US
071D	4	08 35	4	08 55	CENTRAL US
074D	4	10 10	4	10 25	WESTERN US
092D	5	15 55	5	16 05	JAPAN
093A	5	17 00	5	17 20	SPAIN & EUROPE
094A	5	18 41	5	18 50	ENGLAND & EUROPE
094D	5	19 11	5	19 26	AUSTRAILIA
097A	5	22 55	5	23 23	CENTRAL US
097D	5	23 28	5	23 40	EUROPE
098A	6	00 30	6	00 48	WESTERN US
0108D	6	15 46	6	15 56	JAPAN
0109A	6	16 48	6	17 04	SPAIN AND EUROPE
0110A	6	18 24	6	18 36	EUROPE
0110D	6	19 04	6	19 14	ASIA
0113A	6	22 42	6	23 05	CENTRAL US
0114A	7	00 15	7	00 31	WESTERN US
0119D	7	08 07	7	08 20	WESTERN US
0125A	7	16 42	7	16 50	SPAIN & EUROPE
0126A	7	18 17	7	18 24	EUROPE
0126D	7	16 52	7	19 02	AUSTRAILIA
0129A	7	22 29	7	22 50	CENTRAL US
0130A	8	00 10	8	00 20	WESTERN US
0132D	8	03 00	8	03 12	CANADA
0133D	8	04 44	8	05 06	NORTHEASTERN US
0134D	8	06 18	8	06 48	CENTRAL US
0135D	8	07 45	8	08 07	WESTERN US

QSL TO: ARRL, 225 MAIN ST, NEWINGTON CT. PLEASE SEND S.A.S.E AND
MARK ENVELOPE QSO OR RECEPTION REPORT.
73 BERNIE W9KDR.

From 697090904738634443
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cafda1fa2bde7691,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-28 12:03:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!genrad!grkermit!masscomp!clyde!akgua!sb1!sb6!bpa!burdvax!
presby!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: STS-9
Message-ID: <213@dsd.UUCP>
Date: Mon, 28-Nov-83 15:03:51 EST
Article-I.D.: dsd.213
Posted: Mon Nov 28 15:03:51 1983
Date-Received: Fri, 2-Dec-83 06:15:28 EST
Lines: 36

Posted: Fri Nov 25, 1983   7:08 PM PST   Msg: QGID-1667-4480
From: RDIERSING
To: AMSAT

Subj: STS-9 Elements
Is the latest estimate for STS-9 elements posted anywhere? If not could someone give them to me. I was going to wait until the mission was actually in progress to post any elements to my BBS by my phone has been ringing off the wall with requests. Thanks.

Posted: Fri Nov 25, 1983   9:03 PM PST   Msg: FGID-1667-4629
From: VRIP
To: RDIERSING
CC: AMSAT
Subj: STS-9 Orbital Elements
Herewith enclosed the object of your affection:

STS-9 orbital elements per KS5Y A/O 23 Nov 83

Ref Epoch	83 335.58209491 (MET 2d 21h 58m 13s; orbit #48)
Inclination	57.01540
Right Ascension	193.1900
Eccentricity	0.000763
Argument of per.	355.91043
Mean Anomaly	4.08295
Mean Motion	16.10648
Drag Factor	0.002609
SMA	6623.16

Posted: Fri Nov 25, 1983   9:19 PM PST   Msg: QGID-1667-4660
From: VRIP
To: AMSAT
Subj: STS-9 Correction
In degarbling W9KDR's message on W5LFL's sked, an additional error apparently crept in. Please change orbit #74D to 72D. Rest of line OK. Orbit #s then run 71D, 72D, 92D, etc. Tks!

From 2744347637468169356
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9b98557eb6f93f03,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-28 12:51:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!genrad!grkermit!masscomp!clyde!akgua!sb1!sb6!bpa!burdvax!presby!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Silent Key W4KFC
Message-ID: <214@dsd.UUCP>
Date: Mon, 28-Nov-83 15:51:25 EST
Article-I.D.: dsd.214
Posted: Mon Nov 28 15:51:25 1983
Date-Received: Fri, 2-Dec-83 06:16:56 EST
Lines: 53

Posted: Sat Nov 26, 1983 8:11 AM PST Msg: MGID-1667-4956
From: VRIP
To: ARRL
CC: AMSAT
Subj: Silent Key W4KFC

AMSAT shares in all the Amateur Radio community's loss in mourning the untimely passing of ARRL President Victor C. Clark, W4KFC. Vic passed on on Friday evening, 25 Nov 83. Our loss is personal and deeply felt.

Posted: Sat Nov 26, 1983 10:07 PM PST Msg: NGID-1667-6097
From: TCLARK
To: amsat
Subj: W4KFC Remembered

Today was a day of personal sadness for me. I was informed of the passing last night of a friend, a Life Member of AMSAT, an inspiration to our hobby. Vic Clark, W4KFC, the President of the ARRL, passed away following a heart attack at his home in Virginia.

It was only two weeks earlier that many of us had seen Vic at the AMSAT annual meeting. He had the usual twinkle in his eye as we exchanged our old, oft stated personal joke about my being his older brother. His brief comments at the meeting again showed that he viewed AMSAT as a major contributor to the future of amateur radio. Vic's membership in AMSAT stems from the first inception of the organization and he was always there when we needed help. On losing Phase-3A, Vic was among the first to call in offering support by saying "that's OK, WE will do it again".

It is a great pity that Vic did not live to see one of his pet projects come to fruition -- the W5LFL flight scheduled to start on Monday. Vic was very much involved in all the planning for this mission. Vic and I (with W3XO doing much of the ghost writing) co-authored the joint ARRL/AMSAT proposal to NASA that resulted in this exciting adventure we are all waiting for.

On hearing of his passing, my retrospective thoughts went back to a time over a quarter of a century ago, when, as a student, I met Vic for the first time. I remember marveling at his abilities as an operator and contester; his exploits made him one of my true heros. Years later, our paths crossed again thru AMSAT. But after a decade and a half, he still remembered me and my shaky fist, and we joked about young "wet behind the ears" W0IUF and the QSO's we had. I imagine many others have been similarly inspired by his fine operating skills and his willingness to work with newcomers.

Vic, we'll miss you. I won't be surprised someday, out of a pileup, to hear a very distant voice saying "Kentucky Fried Chicken". Until then, 73.

W3IWI

From -4599938376757186466
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,76016812e1875996,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-28 15:52:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!houxm!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 116: Vic Clark
Message-ID: <328@houxp.UUCP>
Date: Mon, 28-Nov-83 18:52:45 EST
Article-I.D.: houxp.328
Posted: Mon Nov 28 18:52:45 1983
Date-Received: Wed, 30-Nov-83 02:27:14 EST
Lines: 23

qst de ad7i
hr arrl bulletin nr 116 from arrl headquarters
newington ct november 26, 1983
to all radio amateurs bt

radio amateurs throughout the world mourn the sudden passing, on
november 25, of our beloved arrl president, victor c. clark, w4kfc,
after a massive heart attack. vic had served as arrl president
since 1982, and had brought to the post the personal qualities
which made him one of the most respected and best known members of
the worldwide amateur radio fraternity. vic clarks passing brings
a great personal loss for those who knew him and leaves a void in
the arrl organization which he had served for five decades in a
variety of volunteer roles. a memorial service is scheduled for 2
pm. wednesday, november 30, at the christ church of washington,
3855 massachusetts ave, washington, dc. the family requests that
no flowers be sent, but that memorial contributions in lieu of
flowers be made to the arrl foundation, the purpose of the memorial
fund to be designated later. arrl first vice president, carl l.
smith, w0bwj, assumes the office of president for the remainder of
the term. to repeat, arrl president, victor c. clark, w4kfc, died
suddenly on november 25 ar

From 2504676838195401845
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d3811c13eef4f1d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-28 15:53:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!houxm!hogpc!houxp!
ad7i

From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: CRRL 36: Board Minutes
Message-ID: <329@houxp.UUCP>
Date: Mon, 28-Nov-83 18:53:08 EST
Article-I.D.: houxp.329
Posted: Mon Nov 28 18:53:08 1983
Date-Received: Wed, 30-Nov-83 02:27:43 EST
Lines: 14

qst de ad7i
hr crrl bulletin nr 36 from crrl headquarters
london ont november 28, 1983
to all radio amateurs bt

minutes of the crrl board meeting, which was held by telephone
conference call, on november 20 will appear in an early qst. among
the items on the agenda were crrl sponsorship of the can am contest,
a papal visit project, and the crrl five year plan.

ve3kqs is operating an electronic mailbox on 40 metres. oscar
orbits, propagation forecasts, and arrl and crrl bulletins are
available. contact ve3kqs for details ar

From 2366095450900800071
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1c5a1c43f0c9c864,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-28 15:53:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!houxm!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: Propagation Bulletin 48
Message-ID: <330@houxp.UUCP>
Date: Mon, 28-Nov-83 18:53:38 EST
Article-I.D.: houxp.330
Posted: Mon Nov 28 18:53:38 1983
Date-Received: Wed, 30-Nov-83 02:28:12 EST
Lines: 28

qst de ad7i
hr propagation forecast bulletin nr 48 from arrl headquarters
newington ct november 28, 1983
to all radio amateurs bt

the solar flux dropped to 80 on november 23, its lowest since early
august 1977. it has risen gradually since, reaching 87 on the 27th.
higher flux levels are likely through the first week of december.

when solar activity is low, the best available sho t term indicator of propagation conditions is the geomagnetic index given hourly by wwv and updated every three hours. if the k value is two or lower, and decreasing, good high latitude propagation will prevail. rising k values mean increased fading, lower muf, and loss of propagation on high latitude circuits.

poor conditions prevailed as this bulletin was being prepared, but improved propagation and higher muf are expected december 1 through 4. about a week of less favorable propagation is due after the 5th.

the f layer muf is closely related to the solar flux. values in the 80s or lower mean marginal propagation onn 21 and 28 mhz, and long skip on all dx fr quencies. dx horizons expand markedly on 80 and 160 meters when the flux is below 100 and falling. the number and duration of openings on 21 and 28 mhz are decreasing currently, but occasional high signal levels and very long skip will keep these bands interesting for another year, at least ar

From -4752345286280917557
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36c19e5a16cb4934,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-29 06:15:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: W5LFL
Message-ID: <4990@mgweed.UUCP>
Date: Tue, 29-Nov-83 09:15:16 EST
Article-I.D.: mgweed.4990
Posted: Tue Nov 29 09:15:16 1983
Date-Received: Wed, 30-Nov-83 04:03:32 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 25

According to my calculations, Hams in the Midwest can work W5LFL at the following times:

DATE	FROM (CST)	TO	ORBIT
WED 30	11:10 AM	11:25 AM	34A
FRI 02	6:35 PM	6:55 PM	71D
SUN 04	8:55 AM	9:23 AM	97A
MON 05	8:42 AM	9:05 AM	113A
TUE 06	8:29 AM	8:50 AM	129A
TUE 06	4:18 PM	4:48 PM	134D

W5LFL will transmit on even minutes, listen on odd minutes.

W5LFL will transmit on 145.55 (145.53, and 145.57 backup).

W5LFL will listen on 144.91/93/95/97/ 145.01/03/05/07/09.
     (one of the above at a time)

Give his call once at the beginning of an odd minute and repeat
your call several times.

Bob, K9EUI

From -7343399501319580719
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,42ab3430e49c0c7b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-29 07:31:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!houxm!whuxj!whuxk!wjm
From: wjm@whuxk.UUCP (MITCHELL)
Newsgroups: net.ham-radio
Subject: Time - for a price
Message-ID: <337@whuxk.UUCP>
Date: Tue, 29-Nov-83 10:31:07 EST
Article-I.D.: whuxk.337
Posted: Tue Nov 29 10:31:07 1983
Date-Received: Wed, 30-Nov-83 04:18:52 EST
Lines: 7

For those of you who need the exact time and are willing to pay for it - you
can get it from the US Naval Observatory by calling 900-410-TIME. The price
is 50 cents for the first minute and 35 cents for each additional minute.
I believe WWV now has a 900 number (although I don't know what it is) and
the rate would be the same.
Bill Mitchell (WB2IAU)
whuxk!wjm

From -7173597607581760205
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,381223cee82e8341,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,381223cee82e8341,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1983-11-29 12:30:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!floyd!harpo!eagle!
allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.columbia,net.ham-radio
Subject: STS-9 Orbital Elements

Message-ID: <2040@allegra.UUCP>
Date: Tue, 29-Nov-83 15:30:46 EST
Article-I.D.: allegra.2040
Posted: Tue Nov 29 15:30:46 1983
Date-Received: Thu, 1-Dec-83 03:22:24 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 17

Satellite: sts-9
Catalog number: 14523
Epoch time: 83333.59578650
   Tue Nov 29 14:17:55.954 1983 UTC
Element set: MH 11-29-83
Inclination: 57.0210 deg
RA of node: 202.7920 deg
Eccentricity: 0.0008415
Arg of perigee: 275.8170 deg
Mean anomaly: 84.0300 deg
Mean motion: 16.09484667 rev/day
Decay rate: 0.00294794 rev/day^2
Epoch rev: 0
Semi major axis: 6626.029 km
Anom period: 89.469631 min
Apogee: 268.354 km
Perigee: 257.202 km

From 3500668295404307435
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,99d1c27e37104b15,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-30 05:54:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: shuttle communications
Message-ID: <5011@mgweed.UUCP>
Date: Wed, 30-Nov-83 08:54:39 EST
Article-I.D.: mgweed.5011
Posted: Wed Nov 30 08:54:39 1983
Date-Received: Thu, 1-Dec-83 23:35:09 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 3

Yesterday, space shuttle communications were heard on 20.198 kHz.

From 4609775677195636062
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,543cb9b88cdcf450,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-30 06:06:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: W5LFL sked revised
Message-ID: <5012@mgweed.UUCP>
Date: Wed, 30-Nov-83 09:06:30 EST
Article-I.D.: mgweed.5012
Posted: Wed Nov 30 09:06:30 1983
Date-Received: Thu, 1-Dec-83 23:35:44 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 35

Revised list of times (CST) to work W5LFL.

Thanks to Steve, KU9C for correcting errors. This list is merely
a conversion to CST of the W1AW bulletin times and there could
be other errors.

DATE	FROM (CST)	TO	ORBIT
WED 30	11:10 AM	11:25 AM	34A
WED 30	7:00 PM	7:25 PM	39D
FRI 02	6:35 PM	6:55 PM	71D
SUN 04	8:55 AM	9:23 AM	97A
MON 05	8:42 AM	9:05 AM	113A
TUE 06	8:29 AM	8:50 AM	129A
TUE 06	4:18 PM	4:48 PM	134D

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W5LFL will transmit on 145.55 (145.53, and 145.57 backup).

W5LFL will listen on 144.91/93/95/97/ 145.01/03/05/07/09.
(one of the above at a time)

Give his call once at the beginning of an odd minute and repeat
your call several times.

listen to one of the HF ham stations for orbit time updates.
WA3NAN at Goddard has been on 3860, 7185, and 14296 kHz.

Shuttle communications have also been monitored on 20.198 kHz.

K9EUI

From -3226472040452241664
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,276f173fab353118,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-30 08:11:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!hou5h!hou5g!hou5f!hou5e!hou5d!hogpc!drux3!
ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: RF in audio ckt problem with 830
Message-ID: <5013@mgweed.UUCP>
Date: Wed, 30-Nov-83 11:11:30 EST
Article-I.D.: mgweed.5013
Posted: Wed Nov 30 11:11:30 1983
Date-Received: Fri, 2-Dec-83 00:16:05 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 22

Has anyone out there experienced any audio problems with Kenwood
HF transcievers? A specific case I ran into recently was with
a 830 that a friend of mine has. The problem is RF getting into
the processor via the mic cord. The rig performs well with the
processor off but only when connected to a dummy load, will it
work with the processor on. His shack is about 40 feet immediately
below the 15 meter beam. We solved the problem by adding a .01 cap
between the mic lead and chassis ground (not the mic shield).

The problem occured with both the MC-50 desk mic as well as the
Kenwood mobile mic.

I also wonder why, if the mic shield and chassis ground are supposed
to be "separate", they put a cap between those 2 grounds (I forget
the pinout). This is the only problem like this I have ever hear of
with a piece of Kenwood gear. I could perhaps understand it if he were
using a long wire or something with lotsa RF in the shack and getting
RF burns off the equipment......

K9EUI

From 6948476375596065621
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36c19e5a16cb4934
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-30 10:28:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxc.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!ihnp4!inuxc!wheatley
From: wheatley@inuxc.UUCP
Newsgroups: net.ham-radio
Subject: W5LFL
Message-ID: <846@inuxc.UUCP>

Date: Wed, 30-Nov-83 13:28:59 EST
Article-I.D.: inuxc.846
Posted: Wed Nov 30 13:28:59 1983
Date-Received: Fri, 2-Dec-83 00:13:29 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 11

Talked to the ARRL after this noons flyby, and I am told that the antenna
is not oriented to favor ground communications, nor will it be for a few
more days. Not sure quite what this means, but they felt that signals heard
would be weak copy. At any rate, about 4 or 5 carloads of hams here
listened, and a few of us thought we heard something, although VERY
weak. could be some local pranksters, however.

Anyone have any further information....ANYONE HEAR W5LFL???

Steve Wheatley
KU9C inuxc!wheatley

From 5339747845223093317
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b1feb1cac3f0f3bf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-30 11:53:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site fluke.UUCP
Path: utzoo!linus!philabs!seismo!harpo!decvax!microsoft!fluke!dahl
From: dahl@fluke.UUCP (Manley Dahl)
Newsgroups: net.ham-radio
Subject: Query - STS-9 EQX info
Message-ID: <1158@vax3.fluke.UUCP>
Date: Wed, 30-Nov-83 14:53:23 EST
Article-I.D.: vax3.1158
Posted: Wed Nov 30 14:53:23 1983
Date-Received: Sun, 4-Dec-83 06:12:24 EST
Organization: John Fluke Mfg. Co., Everett, Wash
Lines: 21

If anyone has the ascending node EQX times (UTC) and longitude for the
US orbits of STS-9, specifically the Western US, posting to this
net would be appreciated.

Also, I need to confirm the following orbital parameters:

Nodal period: 89.40 minutes
Long. Increment: 22.71 degrees/orbit
Average Height: 249.5 Km
Inclination: 57.0248 degrees

The above info was for the previous launch date.

Any updates would be appreciated.

Thank you,

WB7FFV
Manley Dahl

From 7298142760824394196
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e317eac49edcc7e7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-30 13:17:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!genrad!grkermit!masscomp!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: W5LFL sked revision
Message-ID: <5014@mgweed.UUCP>
Date: Wed, 30-Nov-83 16:17:45 EST
Article-I.D.: mgweed.5014
Posted: Wed Nov 30 16:17:45 1983
Date-Received: Fri, 2-Dec-83 06:01:43 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 42

2nd revision of Midwest W5LFL sked times:

DATE	FROM (CST)	TO	ORBIT
WED 30	11:10 AM	11:25 AM	34A
WED 30	7:00 PM	7:25 PM	39D
THU 01	9:27 AM	9:47 AM	49A*
FRI 02	5:05 PM	5:30 PM	70D*
FRI 02	6:35 PM	6:55 PM	71D
SUN 04	8:55 AM	9:23 AM	97A
MON 05	8:42 AM	9:05 AM	113A
TUE 06	8:29 AM	8:50 AM	129A
TUE 06	4:18 PM	4:48 PM	134D

* added orbits not originally listed for Midwest but
should be usable.

Orbit 49A Texas - Maine
Orbit 70D N. Dakota - N. Carolina
97A Texas - Indiana
113A Texas - Mich.
129A Texas - Ill.

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     (one of the above at a time)

Give his call once at the beginning of an odd minute and repeat
your call several times.

listen to one of the HF ham stations for orbit time updates.
WA3NAN at Goddard has been on 3860, 7185, and 14296 kHz.

Shuttle communications have also been monitored on 20.198 kHz.

K9EUI

From -814204514139490179
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36c19e5a16cb4934
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-30 13:26:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 11/4/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!genrad!grkermit!masscomp!clyde!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Robert S. Parnass, AJ9S)
Newsgroups: net.ham-radio
Subject: Re: W5LFL - heard QRM, not Owen
Message-ID: <1659@ihuxf.UUCP>
Date: Wed, 30-Nov-83 16:26:53 EST
Article-I.D.: ihuxf.1659
Posted: Wed Nov 30 16:26:53 1983
Date-Received: Fri, 2-Dec-83 05:59:20 EST
References: <846@inuxc.UUCP>
Organization: AT&T Bell Labs, Naperville, Il
Lines: 18

x
       At the Indian Hill (BTL) Amateur Radio Club, some of
      us
       tried listening on 2 meters for W5LFL during the 11:10 -
       11:25 AM pass this morning (November 30).

       Neither we, nor anyone else here in northern Illinois seemed
       to hear W5LFL. The biggest problem was the hoards of sta-
       tions transmitting on the downlink frequency. Many didn't
       know the correct procedure, others just acted as "kilocycle
       cops," compounding the QRM.

       If W5LFL was in there, he was deep underneath a
      pileup of
       others trying to call him!

--
==========
Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -3486389379297738420
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cafda1fa2bde7691
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-30 14:58:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: STS-9
Message-ID: <216@dsd.UUCP>
Date: Wed, 30-Nov-83 17:58:21 EST
Article-I.D.: dsd.216
Posted: Wed Nov 30 17:58:21 1983
Date-Received: Sun, 4-Dec-83 03:45:26 EST
Lines: 127

Posted: Sun Nov 27, 1983 10:10 AM PST Msg: BGID-1667-6345
From: JREYMANN
To: VRIP
CC: AMSAT
Subj: STS-9 Elements
Rip, I note the drag factor is an order of magnitude different
in this STS-9 element set. Any rationale for that?

Also, the set is for epoch on orbit 48. Bernie's message
shows earlier orbits usable in the western US. Is there
any chance of getting an earlier epoch?
73, Skip, W6PAJ

Posted: Sun Nov 27, 1983 10:12 AM PST Msg: DGID-1667-6347
From: JREYMANN
To: ARRL
CC: AMSAT
Subj: STS-9 Sked
Bernie, thanks for the operating sked for STS-9. I and many
others locally appreciate it. We are all planning some
mountaintopping.
The earlier schedule showed only one pass on which Owen
would be available from the western US. If this sked
is the actual ham operating sked, there are now 9 orbits
we can work. That seems like a tremendous increase in
available time. Am I misinterpreting the data?
73, Skip, W6PAJ

Posted: Mon Nov 28, 1983 10:07 AM PST Msg: CGID-1668-1434

From: TCLARK
To: amsat
Subj: W5LFL -- congratulations !!!!
I watched the launch on NASA closed-circuit TV and was very proud
of our newest satellite, "Oscar" Garriott. Best wishes to W5LFL
for a very succesful mission. I only wish that W4KFC had lived to
share today's excitement.

Posted: Tue Nov 29, 1983 12:49 PM PST Msg: AGID-1669-2000
From: RDIERSING
To: VRIP
CC: AMSAT
Subj: computing backwards
Rip, Could you please mention something like the following on the nets:

There have been a few comments that the preliminary element set given
by W5RRR was a couple of days into the mission and thus later than some
of the published orbits for communication with W5LFL. Users of any
version of the W3IWI program are reminded that computations can be made
for a days prior to the reference epoch by so specifying the date for
beginning of the prediction period.

(I have taken the beginning element set and computed backwards to the
launch date and time. All of the AOS/LOS times for my location, 27.48N
and 97.24W, are in close agreement with figures for CENTRAL U.S. orbits
that were previously published. Of course my times are toward the
beginning of the window for ascending passes and toward the end of the
window for descending passes.)

(There are a lot of folks out there who just decided to learn how to
use their programs yesterday.)

73, Bob

Posted: Tue Nov 29, 1983 2:51 PM PST Msg: IGID-1669-3188
From: PKARN
To: amsat
Subj: STS-9 Launch
The launch of STS-9 was witnessed at the Press Site yesterday by KB2M and
myself.

I must admit that it was one of the most impressive things I've ever
seen; after I've collected my thoughts I will attempt to write a more
lucid description of what it looked like. It's very difficult to do so
because it is so far outside the realm of everyday experience...

Phil

Posted: Tue Nov 29, 1983 2:51 PM PST Msg: MGID-1669-3192
From: PKARN
To: amsat
Subj: STS-9 drag
In reference to the high drag factor on STS-9, yes, this is quite

believable. The extremely low altitude, combined with the large cross-sectional area of the orbiter in certain attitudes (like belly first) causes this. There are a number of OMS burns scheduled during the mission to compensate for orbital decay.

Unless we can get very frequent Keplerian elements, I think that tracking this thing with a gain antenna is going to be an exercise in luck.

Phil

Posted: Tue Nov 29, 1983   2:52 PM PST   Msg: OGID-1669-3194
From: PKARN
To: amsat
Subj: STS-9 elements
An actual element set current as of several hours ago has been posted to the ops bb. All numbers are correct except orbit number, which you should ignore.

Phil

Posted: Tue Nov 29, 1983   2:51 PM PST   Msg: NGID-1669-3193
From: PKARN
To: ops
Subj: STS-9 elements

Satellite: sts-9
Catalog number: 14523
Epoch time: 83333.59578650
   Tue Nov 29 14:17:55.954 1983 UTC
Element set: MH 11-29-83
Inclination: 57.0210 deg
RA of node: 202.7920 deg
Eccentricity: 0.0008415
Arg of perigee: 275.8170 deg
Mean anomaly: 84.0300 deg
Mean motion: 16.09484667 rev/day
Decay rate: 0.00294794 rev/day^2
Epoch rev: 0
Semi major axis: 6626.029 km
Anom period: 89.469631 min
Apogee: 268.354 km
Perigee: 257.202 km

From -9005110654599246971
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,51f91a6ee1c093ca,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-30 15:01:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP

Newsgroups: net.ham-radio
Subject: Packet Radio Meeting
Message-ID: <217@dsd.UUCP>
Date: Wed, 30-Nov-83 18:01:49 EST
Article-I.D.: dsd.217
Posted: Wed Nov 30 18:01:49 1983
Date-Received: Sun, 4-Dec-83 03:46:45 EST
Lines: 45

The next meeting of the Pacific Packet Radio Society will be held on:

Tuesday, December 6th, 8:00 pm

AMPEX Cafeteria
401 Broadway
Redwood City, California

On Route 84 at 101 or 280, proceed south on Broadway in Redwood City about 2 to 3 blocks. The cafeteria is glass enclosed and is adjacent to a small fountain area. It will be on your right as you travel south.

The new TAPR kits have arrived, and the Tucson crew has outdone itself again! Packed in a magnificent shipping carton, and accompanied by a manual in a gold-embossed brown vinyl binder (and weighing as much as a phone book), the first few "gamma" boards have arrived in Northern California. If you think I'm kidding, come to the meeting to see Packet Radio's latest creation.

Our featured speaker will be Mike Spaan, WB6KTN, formerly of the Chico packet repeater, who will talk about contention. Mike will review the problems, strategy and theory behind contention protocols. He'll discuss the currently used contention algorithm in the VADCG sw, and will discuss some problems noticed when our channel gets busy.

Also, I'll give a report on the AMSAT General Meeting, and a summary of the ARRL Digital Communications Committee meeting held recently (we've allocated the lower 100kHz of 20 meters to be exclusively RTTY, AMTOR, MSO's and PACKET).

We also hope to have a short report on Cal Teague's experiments with Miller encoding (for high speed packet) and on two new host systems put on the air by WB2GDQ and WB6KTN.

And, of course, any other news that might come up.

See you at the meeting --- 73, Hank

P. S. Mark your calendar for these future meetings of PPRS:

January 10th, February 7th

From 8939792154943085659
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36c19e5a16cb4934
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-30 17:23:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!decvax!genrad!grkermit!masscomp!clyde!floyd!harpo!eagle!allegra!
karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: Re: W5LFL - heard QRM, not Owen
Message-ID: <2049@allegra.UUCP>
Date: Wed, 30-Nov-83 20:23:57 EST
Article-I.D.: allegra.2049
Posted: Wed Nov 30 20:23:57 1983
Date-Received: Fri, 2-Dec-83 07:09:54 EST
References: <846@inuxc.UUCP> <1659@ihuxf.UUCP>
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 26

The same phenomenon is happening in the New York area (QRM on
145.55mhz). It has bordered on becoming a real zoo. Unfortunately this
is precisely what many people were afraid of; there are probably more
scanners among the general public out there listening than have ever
been tuned to the 2 meter band, and look at the impression that is being
made. There were just as many people saying "Keep the frequency clear,
you $%#@@$#@!!" as were calling W5LFL on 145.55 mhz, even though
the shuttle was over Australia!! On the other hand, judging by how
quickly the channels from 144.91 to 145.09 filled up precisely on the
odd minutes with calls during the actual passes, I believe that the turkeys
were in the minority; there were many more people who did know proper
procedure.

I also found when I broke in (during times that I knew STS-9 to be
below the horizon, of course) and announced the exact rise and set
times, along with the fact that Owen will not listen to his downlink
frequency, and was probably not even on at the time, people appreciated
the information and the garbage seemed to subside quite a bit. Once
everybody knew when the actual rise and set times were, there was
very little QRM on 145.55 during actual passes.

If you have patience, access to up-to-date orbital information and an
authoratative-sounding voice, you may be able to do the same
in your local area.

Phil

From 8241761783244551400

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e63065813487e442,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,e63065813487e442,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1983-11-30 21:20:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!hou5f!hou5g!hou5h!eagle!allegra!
karn
From: karn@allegra.UUCP
Newsgroups: net.columbia,net.ham-radio
Subject: W5LFL Heard!
Message-ID: <2050@allegra.UUCP>
Date: Thu, 1-Dec-83 00:20:37 EST
Article-I.D.: allegra.2050
Posted: Thu Dec 1 00:20:37 1983
Date-Received: Fri, 2-Dec-83 07:34:10 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 42

Posted: Wed Nov 30, 1983   9:50 PM EST   Msg: TGID-1670-3247
From: JREYMANN
To: AMSAT
Subj: W5LFL, #40

W5LFL showed up on orbit 40. Heard the first part of his first space/
earth contact! Problem with people uplinking on his freq was compounded
an order of magnitude by turkeys trying to shut him up.

Much more discipline needed. KL7GRF and I trying to get out the word
with virtually non-stop info nets on fm and ssb when Owen not in range.

Gud luk!
73, W6PAJ

Posted: Wed Nov 30, 1983 10:58 PM EST   Msg: DGID-1670-3451
From: VRIP
To: AMSAT
Subj: More W5LFL #40

W5LFL apparently began operations from Columbia on orbit 40 this
evening. There are sketchy reports of hearing W5LFL on orbit 35
but these are as yet unconfirmed. According to ARRL, Columbia was
due to be flying in an unfavorable attitude on orbits 34 through
39 with the antenna pointed to the sky instead of earthward.

I have just listened to an audio recording of W5LFL's pass over
the northwest on orbit 40 made by KA7APJ, Jim Smith, Area Coordinator
for Washington, QTH, Seattle. Garriott's signal was truly outstanding.
A DFQ signal with no interference whatsoever. He was calling
CQ North America from W5LFL on the space ship Columbia. It was
really him too. I recognized his voice with certainty.

KA7APJ was not able to establish contact, however. He had a live
TV crew on-scene for the excitement. I think it's fair to say that
the media (broadcast and print) have glommed onto this event even
more strongly than we had hoped (feared?)!

Tomorrow the ultimate test. W5LFL over Washington, Baltimore, New York,
Boston, Philadelphia, Hartford, simultaneously.

Can you imagine the QRM?!?

From 4314210500070914232
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4c0ee5e8ff27f008,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-01 04:39:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxc.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!ihnp4!inuxc!wheatley
From: wheatley@inuxc.UUCP
Newsgroups: net.ham-radio
Subject: W5LFL
Message-ID: <850@inuxc.UUCP>
Date: Thu, 1-Dec-83 07:39:32 EST
Article-I.D.: inuxc.850
Posted: Thu Dec 1 07:39:32 1983
Date-Received: Sat, 3-Dec-83 01:24:50 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 18

I just listened to the ARRL Shuttle Hotline (203-666-0688) and was told
that W5LFL worked the west coast on orbit 35A, although his antenna is
NOT favorable in direction for ground communications. The schedule,
as of 5 pm yesterday (EST WED), is as follows

WED: 40D
THUR: 49A
      56D
FRI   70D
      71D
      72D

These are orbit numbers, so he is evidently still following the original
schedule, but no mention was made of operation on orbit 34A, so I guess
us midwesterners who thought we may have heard him faintly, were fooled
by the local qrm.

Good Luck, Steve Wheatley KU9C inuxc!wheatley

From 772760037602736396
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,f0baff94a049a9d0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-01 06:05:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: orbit info request
Message-ID: <5038@mgweed.UUCP>
Date: Thu, 1-Dec-83 09:05:26 EST
Article-I.D.: mgweed.5038
Posted: Thu Dec 1 09:05:26 1983
Date-Received: Fri, 2-Dec-83 23:57:45 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 5

Anyone have the path information for orbits 71D and 134D?

K9EUI

From -5886420426068837934
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,93b123d3915f50c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-12-01 06:10:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: TURKEYS on the air
Message-ID: <5039@mgweed.UUCP>
Date: Thu, 1-Dec-83 09:10:49 EST
Article-I.D.: mgweed.5039
Posted: Thu Dec 1 09:10:49 1983
Date-Received: Sat, 3-Dec-83 00:00:38 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 6

The operating during orbit 39D was a fiasco! There were more stations
calling on .53, .55, and .57 than there were on the proper freqs.
Also, I never realized how many hams can't tell time! I was most
surprised to hear W9JUV calling on even minutes.....

From 6659129871721094037
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f036e6aeab646d0b,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1983-12-01 12:48:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site allegra.UUCP
Path: utzoo!linus!decvax!harpo!eagle!allegra!karn
From: karn@allegra.UUCP
Newsgroups: net.ham-radio
Subject: more W5LFL orbits
Message-ID: <2053@allegra.UUCP>
Date: Thu, 1-Dec-83 15:48:58 EST
Article-I.D.: allegra.2053
Posted: Thu Dec 1 15:48:58 1983
Date-Received: Sat, 3-Dec-83 12:23:14 EST
Organization: AT&T Bell Laboratories, Murray Hill
Lines: 4

Late word from ARRL has it that two more passes will be added to W5LFL's
operation: orbits 96A and 112A.

Phil

From 842869494253936042
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,77a082072dc2f04c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-18 13:43:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site fluke.UUCP
Path: utzoo!linus!decvax!microsoft!fluke!limey
From: limey@fluke.UUCP (Paul Baldock)
Newsgroups: net.ham-radio
Subject: HP41C Locator for OSCAR 10
Message-ID: <1135@vax3.fluke.UUCP>
Date: Tue, 18-Oct-83 16:43:00 EDT
Article-I.D.: vax3.1135
Posted: Tue Oct 18 16:43:00 1983
Date-Received: Thu, 20-Oct-83 05:45:53 EDT
Organization: John Fluke Mfg. Co., Everett, Wash
Lines: 13

I have tried the program from March 81 Ham Radio, and it works fine.
The only problem is the required element entry format is different than
that normally supplied for OSCAR10. The program requires 'time reference
at apogee' and 'longitude at apogee', rather than RAAN and Epoch.

Does anybody have a modified version of the program, for the normal
data points, or any suggestions.

Paul kw7y

(Rick, W3WVC, please reply by typing 'r'. I've lost the path to you)

From 6677423752126849702
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b521898c5e81edbe,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-18 17:32:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!drux3!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: CRRL 30: CARF symposium
Message-ID: <291@houxp.UUCP>
Date: Tue, 18-Oct-83 20:32:22 EDT
Article-I.D.: houxp.291
Posted: Tue Oct 18 20:32:22 1983
Date-Received: Thu, 20-Oct-83 06:33:20 EDT
Lines: 13

qst de ad7i
hr crrl bulletin nr 30 from crrl headquarters
london ont october 18, 1983
to all radio amateurs bt

the 1983 carf amateur radio symposium was held in halifa on october
14 and 15. crrl was represented by ve1wf and ve1sh.

the crrl board of directors will meet by telephone conference call,
probably on november 20. if you have input for this meeting, contact
ve3cdm, ve3gro, or your crrl regional director ve7csd, ve6aw, ve3fn,
ve2ij or ve1asj ar

From 1893721781823945807
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69743203acac4929,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-20 07:30:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site tektronix.UUCP
Path: utzoo!linus!decvax!tektronix!robertj
From: robertj@tektronix.UUCP (Robert Jaquiss)
Newsgroups: net.ham-radio
Subject: Toll free time signal
Message-ID: <1474@tektronix.UUCP>
Date: Thu, 20-Oct-83 10:30:10 EDT
Article-I.D.: tektroni.1474
Posted: Thu Oct 20 10:30:10 1983
Date-Received: Sun, 23-Oct-83 08:56:31 EDT
Organization: Tektronix, Beaverton OR
Lines: 4

I just tried the number (800) 957-9999

from a 503 area code. It worked just fine.

Robert Jaquiss

From -5166453987846768676
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fe3bc45c1dc32de8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-20 09:59:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 10/6/83; site ihuxf.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP (Robert S. Parnass, AJ9S @ Bell Labs, Naperville, IL)
Newsgroups: net.ham-radio
Subject: Can you hear these Central American repeaters?
Message-ID: <1593@ihuxf.UUCP>
Date: Thu, 20-Oct-83 12:59:56 EDT
Article-I.D.: ihuxf.1593
Posted: Thu Oct 20 12:59:56 1983
Date-Received: Fri, 21-Oct-83 11:15:35 EDT
Organization: AT&T Bell Labs, Naperville, Il
Lines: 24

The "Low Band Skip" column in the October 1983 issue of the Radio Communications Monitoring Association (RCMA) Newsletter mentions 3 Central American repeaters which use the following frequencies during daylight business hours:

o+ 33.475 MHz

o+ 33.675

o+ 33.875

All transmissions are in Spanish. The 33.675 frequency is apparently a timber logging operation in Nicaragua.

With a poor antenna at 15 feet, I can hear the activity on 33.675 and 33.875, but haven't detected anything on 33.475. Can anyone else hear these stations?

--
Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From 2579016244682882023
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9f063ce46a6e5102,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-20 10:19:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site aluxe.UUCP
Path: utzoo!utcsrgv!decvax!harpo!eagle!mhuxi!aluxe!richah
From: richah@aluxe.UUCP
Newsgroups: net.ham-radio
Subject: OSCAR 10 APOGEE TIME/LONGITUDE, ALSO MESSAGE FOR KW7Y
Message-ID: <1169@aluxe.UUCP>
Date: Thu, 20-Oct-83 13:19:32 EDT
Article-I.D.: aluxe.1169
Posted: Thu Oct 20 13:19:32 1983
Date-Received: Fri, 21-Oct-83 17:27:53 EDT
Organization: AT&T Bell Laboratories, Allentown, PA
Lines: 58

****
Richard E. Ahrens, W3WJC, AT&T Bell Laboratories, aluxe!richah   (215)929-6174
     Room 30-130, 2525 N. 12th St., Reading, Pa. 19604   Cornet 8-234-6174
****

Hello Paul Oct. 20, 1983

Pleased to see that you rcvd the programs in the U.S. mail ok.....
The info you are looking for is available from ARRL each month
for a SASE. (time of apogee and west longitude at apogee). The data
I rcvd from ARRL for the balance of Oct. is:

AMSAT-OSCAR 10 APOGEE TIMES & WEST LONGITUDE POSITION

293	20 OCT	0013	109
		1153	284
		2332	98
294	21 OCT	1112	273
		2251	88
295	22 OCT	1031	263
		2210	78
296	23 OCT	0950	253
		2130	68
297	24 OCT	0909	243
		2049	57
298	25 OCT	0828	232
		2008	47

299	26	OCT	0747	222
			1927	37
300	27	OCT	0707	212
			1846	27
301	28	OCT	0626	202
			1805	17
302	29	OCT	0545	191
			1724	6
303	30	OCT	0504	181
			1643	356
304	31	OCT	0423	171
			1603	346
305	1	NOV	0342	161
			1522	336

****
Richard E. Ahrens, W3WJC, AT&T Bell Laboratories, aluxe!richah   (215)929-6174
     Room 30-130, 2525 N. 12th St., Reading, Pa. 19604   Cornet 8-234-6174
****

From 7871662600027446890
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,509cda82ad95a4a2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-20 15:36:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 98: RSGB bulletins
Message-ID: <292@houxp.UUCP>
Date: Thu, 20-Oct-83 18:36:49 EDT
Article-I.D.: houxp.292
Posted: Thu Oct 20 18:36:49 1983
Date-Received: Sat, 22-Oct-83 00:24:30 EDT
Lines: 12

qst de ad7i
hr arrl bulletin nr 98 from arrl headquarters
newington ct october 20, 1983
to all radio amateurs bt

the rsgb has initiated a new bulletin service on oscar 10. gb2auk
will transmit voice bulletins on 145.972 mhz at 1015 and 1800 utc
when the satellite is in range of london. with the fall time change,

they will be at 1115 and 1900 utc. reception reports and comments
will be welcomed. address them to ron broadbent, c/o amsat uk,
london e12 5eq england ar

From 3747616828050826833
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,848d888c2c739ab4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-20 19:31:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!grkermit!masscomp!clyde!ihnp4!houxm!mhuxi!eagle!
karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Orbital information
Message-ID: <1122@eagle.UUCP>
Date: Thu, 20-Oct-83 22:31:59 EDT
Article-I.D.: eagle.1122
Posted: Thu Oct 20 22:31:59 1983
Date-Received: Sat, 22-Oct-83 00:46:33 EDT
Lines: 8

I can supply orbital information to the net in several forms if people
are interested (in fact, the info that W1AW has been broadcasting
came from me.)

I can post keplerian elements for the tracking programs and/or
apogee times and positions.

Phil

From 8524793288012332165
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d53e7b6e5be09536,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-21 12:15:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxi!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: New DX-1000 rcvr
Message-ID: <4264@mgweed.UUCP>
Date: Fri, 21-Oct-83 15:15:55 EDT
Article-I.D.: mgweed.4264
Posted: Fri Oct 21 15:15:55 1983
Date-Received: Sun, 23-Oct-83 15:32:42 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 6

Does anyone know what the new Bearcat DX-1000 receiver is selling for
or has anyone seen or played with one yet???

Bob, K9EUI

From -6486993940167535911
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a6b7f45f7e246010,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-22 01:56:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site tektronix.UUCP
Path: utzoo!linus!decvax!tektronix!robertj
From: robertj@tektronix.UUCP (Robert Jaquiss)
Newsgroups: net.ham-radio
Subject: Help with interfacing micros to radio control chips
Message-ID: <1482@tektronix.UUCP>
Date: Sat, 22-Oct-83 04:56:51 EDT
Article-I.D.: tektroni.1482
Posted: Sat Oct 22 04:56:51 1983
Date-Received: Sun, 23-Oct-83 14:16:42 EDT
Organization: Tektronix, Beaverton OR
Lines: 9

    Has anyone had any experience interfacing micros to National
 Semiconductor's LM1871 and LM1872 radio receiver/transmiter chips?
 Please write and tell me of your experiences. Tank you.
 Robert Jaquiss

ucbvax!tektronix!robertj (uucp)
robert jaquiss@tektronix (csnet)
robert jaquiss.tektronix@rand-relay (arpanet)
(503) 627-6346 (audio phone at work)

From -2489080999699711524
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3cb878b72d54152d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-24 14:12:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!decwrl!amd70!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Satellite Information
Message-ID: <201@dsd.UUCP>
Date: Mon, 24-Oct-83 17:12:37 EDT
Article-I.D.: dsd.201
Posted: Mon Oct 24 17:12:37 1983
Date-Received: Tue, 25-Oct-83 23:39:51 EDT
Lines: 85

Oscar Users Index Guide for Background Information

+++ General Information +++

73 Magazine - July, 1975 - November, 1977 - September, 1981 - March, 1983
QST Magazine - December, 1979 - April & May, 1980
Orbit Magazine - All editions
ARRL Handbook - Satellite Communications

+++ Antenna Construction +++

+ Helicals +

AMSAT Newsletter - March, 1978, p. 8; June, 1979, p. 20.
Orbit - January/February, 1981, p. 8.
73 Magazine - July, August, September, 1975.

+ Quads +

AMSAT Newsletter - September, 1977, p. 26.
VHF Handbook
The ARRL Antenna Book

+ Quagis +

The ARRL Antenna Book
Satellite Communications - ARRL

+ Polarization - Switchable Sense +

AMSAT Newsletter - December, 1978, p. 9.

+ Turnstiles +

73 Magazine - November, 1977, p. 24.
AMSAT Newsletter - March, 1977, p. 3.

+ Yagis +

AMSAT Newsletter - March, 1975, p. 4.
VHF Antenna Handbook
The ARRL Antenna Handbook

+++ Tracking Devices +++

73 Magazine - June, 1977, p. 108. - January, 1979, p. 62.
- February, 1982, p. 34. - April, 1983, p. 84.
- May, 1983, p. 84

+++ Amplifiers +++

AMSAT Newsletter - March, 1977, p. 4
The Radio Amateur's Handbook - ARRL

+++ Preamplifiers +++

AMSAT Newsletter - March, 1973, p. 7 - June, 1978, p. 10.
The Radio Amateur's Handbook - ARRL

+++ Mode J Cavity/Transmitter Filter +++

AMSAT Newsletter - June, 1978, p. 4. (Filter)
Satellite Communications - ARRL (Cavity)

+++ Varactors and FM Conversions +++

AMSAT Newsletter - September, 1976, p. 25 (Tripler)
The Radio Amateur's Handbook - ARRL
AMSAT Newsletter - December, 1975, p. 10 (SSB/FM)

+++ Mode J Operation and Equipment +++

AMSAT Newsletter - September, 1979, p. 18.
Mode J Club - 3300 Fernwood, Alton, IL 62002.

Any additions to this list appreciated; especially if one could direct me to the article that describes using the Cromenco 7D/A to control Az-El.

73 de N6ECT, Curtis

From -722276511553884408
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3b50a42be3cb93f8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-24 14:18:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!decwrl!amd70!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Packet Radio Meeting
Message-ID: <202@dsd.UUCP>
Date: Mon, 24-Oct-83 17:18:50 EDT
Article-I.D.: dsd.202
Posted: Mon Oct 24 17:18:50 1983
Date-Received: Tue, 25-Oct-83 23:43:20 EDT
Lines: 38

To: All Persons Interested in Packet Radio
From: Hank Magnuski, KA6M
Date: October 21st, 1983

Subject: PPRS November Meeting

The next meeting of the Pacific Packet Radio Society will be held on:

Tuesday, November 1st, 8:00 pm

AMPEX Cafeteria
401 Broadway
Redwood City, California

On Route 84 at 101 or 280, proceed south on Broadway in Redwood City about 2 to 3 blocks. The cafeteria is glass enclosed and is adjacent to a small fountain area. It will be on your right as you travel south.

Our November meeting will be a discussion and tutorial on MODEMS, specifically, those types which could be used for packet radio service. We will discuss some of the constraints and requirements for a good radio modem, and review some of the modems currently in use. In particular, we will take a close look at the TAPR modem, as the circuitry used there has appeared in a number of other designs.

In addition, other current topics and the latest news will be discussed.

See you at the meeting --- 73, Hank

P. S. Mark your calendar for these future meetings of PPRS:

December 6th, 8 pm, AMPEX Cafeteria

From 5492062001508512014
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d0886519e97da602,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-24 16:34:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!ariel!houti!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: Propagation Bulletin 43
Message-ID: <294@houxp.UUCP>
Date: Mon, 24-Oct-83 19:34:11 EDT
Article-I.D.: houxp.294

Posted: Mon Oct 24 19:34:11 1983
Date-Received: Wed, 26-Oct-83 00:37:31 EDT
Lines: 30

qst de ad7i
hr propagation forecast bulletin nr 43 from arrl headquarters
newington ct october 24, 1983
to all ra io amateurs bt

the two sunspot groups mentioned in last weeks bulletin have gone
around the west limb. their activity was fallin off, and there have
been no new significant areas to replace them. after a high of 140
on october 18, the solar flux fell quickly to 88 on the 22. this was
the lowest flux value reading in nearly 6 years.

despite marked lower solar activity, propagation was generally good
on 28 mhz last week, especially october 19 through 21. this was
mainly because the sun was entering its most favorable position of
the year for hf propagation in the northern hemisphere.

there were traces of new east west activity october 23. the solar
flux rose only one point, but the trend should be toward higher
readings through early november. if there are no major flares, and
the flux rise is gradual, some of the best dx conditions of the
autumn will be enjoyed november 4 to 9. disturbances for low levels
and severe fading in the past two days should clear by october 5 and
propagation should peak october 27 to 29. disturbances and high
latitude propagation are likely again october 30 through november 3
before the longer period of generally good conditions begins about
november 4.

american sunspot numbers for october 13 through 19 were between 39
and 85 for a mean of 58.9 ar

From -3166178775576933179
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,61bcc1a337ecd0b2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-24 18:22:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!genrad!grkermit!masscomp!clyde!ihnp4!houxm!mhuxi!eagle!
karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Satellite Orbital Elements
Message-ID: <1127@eagle.UUCP>
Date: Mon, 24-Oct-83 21:22:33 EDT
Article-I.D.: eagle.1127
Posted: Mon Oct 24 21:22:33 1983
Date-Received: Wed, 26-Oct-83 02:07:15 EDT
Lines: 206

```
Satellite: oscar-10
Catalog number: 14129
Epoch time:      83285.50000000
   Wed Oct 12 12:00:00.000 1983 UTC
Element set:     MH 10-11-83
Inclination:       26.0050 deg
RA of node:       236.6270 deg
Eccentricity:    0.6049226
Arg of perigee:   210.5700 deg
Mean anomaly:      17.2220 deg
Mean motion:    2.05854010 rev/day
Decay rate:              0 rev/day^2
Epoch rev:             249
Semi major axis: 26105.707 km
Anom period:    699.524872 min
Apogee:          35520.558 km
Perigee:          3936.693 km
Translate freq:   581.0047 mhz
Invert:                  1
Beacon:           145.8100 mhz

Satellite: oscar-9
Catalog number: 12888
Epoch time:      83287.08040297
   Fri Oct 14 01:55:46.817 1983 UTC
Element set:     523
Inclination:       97.5569 deg
RA of node:       253.8344 deg
Eccentricity:    0.0001137
Arg of perigee:   236.6515 deg
Mean anomaly:     123.4644 deg
Mean motion:   15.23344898 rev/day
Decay rate:      6.486e-05 rev/day^2
Epoch rev:           11189
Semi major axis:  6870.864 km
Anom period:     94.528823 min
Apogee:            508.165 km
Perigee:           506.602 km
Beacon:           145.8250 mhz

Satellite: oscar-8
Catalog number: 10703
Epoch time:      83284.83733089
   Tue Oct 11 20:05:45.389 1983 UTC
Element set:     805
Inclination:       98.7580 deg
RA of node:       291.9257 deg
Eccentricity:    0.0008120
Arg of perigee:     7.0984 deg
Mean anomaly:     353.0321 deg
Mean motion:   13.96578109 rev/day
Decay rate:       -1.7e-07 rev/day^2
```

```
Epoch rev:           28552
Semi major axis:  7280.998 km
Anom period:    103.109163 min
Apogee:            909.084 km
Perigee:           897.260 km
Translate freq:   581.0974 mhz
Invert:                 1
Beacon:           435.0965 mhz

Satellite: rs-5
Catalog number: 12999
Epoch time:      83283.14307672
   Mon Oct 10 03:26:01.829 1983 UTC
Element set:     123
Inclination:       82.9551 deg
RA of node:       279.6636 deg
Eccentricity:    0.0009189
Arg of perigee:   257.4527 deg
Mean anomaly:     102.5470 deg
Mean motion:   12.05052030 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:            7970
Semi major axis:  8033.846 km
Anom period:    119.496915 min
Apogee:           1683.153 km
Perigee:          1668.388 km

Satellite: rs-6
Catalog number: 13002
Epoch time:      83281.06115721
   Sat Oct  8 01:28:03.983 1983 UTC
Element set:     65
Inclination:       82.9585 deg
RA of node:       274.8561 deg
Eccentricity:    0.0049822
Arg of perigee:   172.9858 deg
Mean anomaly:     187.1915 deg
Mean motion:   12.13556218 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:            8001
Semi major axis:  7996.245 km
Anom period:    118.659521 min
Apogee:           1658.253 km
Perigee:          1578.575 km

Satellite: rs-7
Catalog number: 13001
Epoch time:      83274.03818428
   Sat Oct  1 00:54:59.122 1983 UTC
Element set:     124
Inclination:       82.9582 deg
RA of node:       282.0638 deg
Eccentricity:    0.0021349
```

```
Arg of perigee:   204.5528 deg
Mean anomaly:     155.4546 deg
Mean motion:   12.08678651 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:            7884
Semi major axis:  8017.757 km
Anom period:    119.138366 min
Apogee:           1660.366 km
Perigee:          1626.132 km

Satellite: rs-8
Catalog number: 12998
Epoch time:      83286.04966178
   Thu Oct 13 01:11:30.778 1983 UTC
Element set:     247
Inclination:       82.9552 deg
RA of node:       279.4784 deg
Eccentricity:    0.0017295
Arg of perigee:   301.8725 deg
Mean anomaly:      58.0684 deg
Mean motion:   12.02940035 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:            7991
Semi major axis:  8043.253 km
Anom period:    119.706715 min
Apogee:           1694.209 km
Perigee:          1666.388 km

Satellite: rs-3
Catalog number: 12997
Epoch time:      83282.43160566
   Sun Oct  9 10:21:30.729 1983 UTC
Element set:     80
Inclination:       82.9556 deg
RA of node:       272.6532 deg
Eccentricity:    0.0059122
Arg of perigee:   153.1700 deg
Mean anomaly:     207.2443 deg
Mean motion:   12.15580726 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:            8032
Semi major axis:  7987.359 km
Anom period:    118.461898 min
Apogee:           1660.728 km
Perigee:          1566.282 km

Satellite: rs-4
Catalog number: 13000
Epoch time:      83283.16787147
   Mon Oct 10 04:01:44.950 1983 UTC
Element set:     145
Inclination:       82.9669 deg
RA of node:       278.6280 deg
```

```
Eccentricity:    0.0016879
Arg of perigee:   224.7168 deg
Mean anomaly:     135.2533 deg
Mean motion:   12.06666291 rev/day
Decay rate:          4e-08 rev/day^2
Epoch rev:            7981
Semi major axis:  8026.674 km
Anom period:    119.337054 min
Apogee:           1672.505 km
Perigee:          1645.409 km

Satellite: noaa-7
Catalog number: 12553
Epoch time:      83270.81463539
   Tue Sep 27 19:33:04.498 1983 UTC
Element set:     223
Inclination:       99.0087 deg
RA of node:       234.9254 deg
Eccentricity:    0.0013923
Arg of perigee:   115.4993 deg
Mean anomaly:     244.7631 deg
Mean motion:   14.12927711 rev/day
Decay rate:       1.44e-06 rev/day^2
Epoch rev:           11666
Semi major axis:  7224.689 km
Anom period:    101.916042 min
Apogee:            873.598 km
Perigee:           853.480 km
Beacon:           137.6200 mhz

Satellite: noaa-8
Catalog number: 13923
Epoch time:      83281.58488859
   Sat Oct  8 14:02:14.374 1983 UTC
Element set:     57
Inclination:       98.7385 deg
RA of node:       310.3123 deg
Eccentricity:    0.0017861
Arg of perigee:    65.2796 deg
Mean anomaly:     295.0227 deg
Mean motion:   14.22340763 rev/day
Decay rate:       1.21e-06 rev/day^2
Epoch rev:            2756
Semi major axis:  7192.741 km
Anom period:    101.241562 min
Apogee:            844.681 km
Perigee:           818.987 km
Beacon:           137.5000 mhz


From -1736914890720312902
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d3cfbc9cc2be1e3,start
```

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-26 09:41:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 10/6/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!harpo!eagle!hou5h!hou5g!hou5f!hou5e!hou5d!hogpc!drux3!
ihnp4!iwsl8!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: AT&T Bell Laboratories Club monitors emergency Grenadan communications
Message-ID: <1596@ihuxf.UUCP>
Date: Wed, 26-Oct-83 12:41:48 EDT
Article-I.D.: ihuxf.1596
Posted: Wed Oct 26 12:41:48 1983
Date-Received: Thu, 27-Oct-83 06:32:22 EDT
Organization: AT&T Bell Labs, Naperville, Il
Lines: 13

Members of the AT&T Bell Laboratories Indian Hill Amateur
Radio Club (WA9WSL), here in Naperville, IL, have been
monitoring the emergency radio traffic from KA2ORK/J2
in
Grenada. We have been listening on 14.351 MHz USB.

Apparently, the FCC has given a few designated amateurs
special permission to participate in this directed net,
outside the 20 meter amateur band.

--
==========
Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From 7227284814460687905
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,367a618c0ef89741,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-26 11:29:24 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxc.UUCP
Path: utzoo!linus!decvax!harpo!eagle!hou5h!hou5a!hou5d!hogpc!drux3!ihnp4!inuxc!
wheatley
From: wheatley@inuxc.UUCP
Newsgroups: net.ham-radio
Subject: CQ-WE Contest Nov 12 & 13
Message-ID: <814@inuxc.UUCP>
Date: Wed, 26-Oct-83 14:29:24 EDT
Article-I.D.: inuxc.814
Posted: Wed Oct 26 14:29:24 1983
Date-Received: Fri, 28-Oct-83 07:37:20 EDT
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 15

Has everyone received the contest info for the CQ-WE contest
coming up this November 12 & 13???? If not, or if your not
sure what the contest is, send me a note or call and I cann
fill you in on the details and let you know where to get further
information. Its a fun contest, and open to all Bell System
amateur radio operators.

See you on the air that weekend!!

Steve Wheatley, KU9C
inuxc!wheatley
cornet 8-356-2442
(317) 352-2442

AT&T Consumer Products - Indianapolis

From 383253071258351499
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cfd92b97e59fd523,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-28 17:53:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!mhuxm!pyuxi!pyuxnn!pyuxmm!cbdkc1!
cbosgd!ihnp4!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 105: Grenada
Message-ID: <296@houxp.UUCP>
Date: Fri, 28-Oct-83 19:53:08 EST
Article-I.D.: houxp.296
Posted: Fri Oct 28 19:53:08 1983
Date-Received: Thu, 3-Nov-83 03:07:06 EST
Lines: 17

qst de ad7i
hr arrl bulletin nr 105 from arrl headquarters
newington ct october 28, 1983
to all radio amateurs bt

in a news release dated october 28, the fcc has high praise for radio
amateurs and the role they played in the recent grenada situation.
the commission waived some of its rules to facilitate communication
by mark barettella, ka2ork, and other assisting operators. in the
commissions words, quote, at all times the paramount interest of this
agency was the safety and welfare of the medical students on the
grenada campuses. mr. barettella and the amateur operators assisting
him provided valuable services in relaying information as to the
safety of the medical students and their families and as to the
general situation existing at the grenada station, unquote ar

From 6669985071683071015
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f66e9343f1c42df,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-28 17:56:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!mhuxm!pyuxi!pyuxnn!pyuxmm!cbdkc1!
cbosgd!ihnp4!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: DX 42
Message-ID: <297@houxp.UUCP>
Date: Fri, 28-Oct-83 19:56:43 EST
Article-I.D.: houxp.297
Posted: Fri Oct 28 19:56:43 1983
Date-Received: Thu, 3-Nov-83 03:08:28 EST
Lines: 69

qst d ad7i
hr dx bulletin nr 42 from arrl headquarters
newington ct october 27, 1983
to all radio amateurs bt

thanks to w1trc and k1mm of the southern new england dx association
for the following dx information.

palmyra. look for ad1s/kh5 starting november 5 for the next five to
six days. time permitting, ad1s also plans a trip to t32, kiribati.

ivory coast. tu2nw, tom, has determined that 160 meter operation is
allowed for the ivory coast. plans are to put up a 160 meter
antenna within the next month. a license has been applied for
operation from j5 and plans are to make a trip between now and
february. more information to follow as plans develop. a license
was received for operation as 5t5nw, mauritania, and he is trying to
obtain a license to operate from tz.

lloyd and iris colvin, w6ql/hk3, plan to leave columbia november 1
for a one month stay in ecuador. following this they plan to travel
to peru about december 1. after that they will travel to chile and
plan to operate from ce0.

china. look for by4aa to be active again november 1 through 3 with
possible ssb operation. by8aa has been worked recently on 14016 khz
at 0200z.

belize. a group plans to use the call v30aa for the cq ww dx
contest. american operators using the calls v3ep, v3sl, v3es, v3cq,
v3dx and v3ee plan to be active through thursday, november 3. qsl
to n6adi.

nigeria. kc7uu/5n23 will use 5n23pdc during the cq ww dx context.
chuck is also active on 160 meters mondays and tuesdays. a trip is
planned to 5u7 december 9.

central african republic. tl8ck has been active on 21290 khz at
around 2200z. qsls to f6ewm.

kermadec island. rumor is that a ham on the latest scientific
expedition may become active after the first of the year.

mauritius. 3b8db has been active on 14220 khz at around 0215z.
qsls for taher go to k5bdx.

rwanda. 9x5mk has been active on 10 meters on 28540 khz at around
1900z. also has been heard around 21280 at 1930z.

hong kong. vs6do has been worked on 7002 khz at around 2315z.

rodrigues island. 3b9fk has been active on 80 cw at 0100z.

antarctica. four amateur radio operators are needed to help with
communications on a mountain expedition in antarctica. no climbing.
base station will be on king george island at the south shetland
islands. the expedition will leave november 28. for further
information, contact dave porter, k2bpp.

heard and worked.

a35jl 28575 khz at 2330z.
3x4ex 21345 khz at 2350z.
a82lc 21345 khz at 2345z.
fo8jp 28558 khz at 0000z.
xu1ss 14195 khz at 1100z.
a24jh 28575 khz at 1530z.
vp8qg 14203 khz at 0115z ar

From -345153099116424372
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d7949825d6ea512f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-31 14:39:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 100: teleconference
Message-ID: <298@houxp.UUCP>
Date: Mon, 31-Oct-83 17:39:08 EST
Article-I.D.: houxp.298
Posted: Mon Oct 31 17:39:08 1983
Date-Received: Thu, 3-Nov-83 07:59:43 EST
Lines: 13

qst de ad7i
hr arrl bulletin nr 100 from arrl headquarters
newington, ct october 25, 1983
to all radio amateurs bt

on sunday, november 14 at 0300z, november 13 at 10 pm est, steve
place, wb1eyi, manager of club and training at arrl headquarters will
discuss the volunteer exam program via a nationwide computer network.
the program will take place on the hamnet special interest group and
can be accessed through the compuserve information service. all
interested parties are invited to participate in this interactive
discussion. for further information contact ed raso at arrl hq ar

From -1964552508119953550
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eab326203aa87be5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-31 14:40:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: CRRL 31: 10 GHz record
Message-ID: <301@houxp.UUCP>
Date: Mon, 31-Oct-83 17:40:39 EST
Article-I.D.: houxp.301
Posted: Mon Oct 31 17:40:39 1983
Date-Received: Thu, 3-Nov-83 08:05:41 EST
Lines: 10

qst de ad7i
hr crrl bulletin nr 31 from crrl headquarters
london ont october 19, 1983
to all radio amateurs bt

on october 2, ve1bcz, ve2aqu, ve2dub, ve2dwg, ve2hak and ve2xl made a
possible first transborder contact and set a possible new canadian dx
record on 10 ghz. they worked over a 122 km path between mount
mansfield, vt, and the westmount lookout on mount royal, montreal ar

From -6376999004388164800
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,22bdba195a923ed0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-31 16:39:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!cbosgd!ihnp4!drux3!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP

Newsgroups: net.ham-radio
Subject: ARRL 103: rebroadcasts
Message-ID: <299@houxp.UUCP>
Date: Mon, 31-Oct-83 19:39:42 EST
Article-I.D.: houxp.299
Posted: Mon Oct 31 19:39:42 1983
Date-Received: Thu, 3-Nov-83 08:57:50 EST
Lines: 29

qst de ad7i
hr arrl bulletin nr 103 from arrl headquarters
newington, ct october 26, 1983
to all radio amateurs bt

the fcc released on october 26 the following pu lic notice regarding
rebroadcasts of amateur radio transmissions.

radio and television stations need not obtain prior authorization
from the federal communications commission before transmitting
amateur, ham, radio transmissions. broadcasters are free to air the
amateur radio transmissions which they have monitored. they may
broadcast such amateur radio transmissions on a live or delayed
basis, with or without the approval of the amateur operators
involved. broadcasters are cautioned, however, that in covering
amateur radio activity, they must not become actively involved in
the amateur transmissions. that is to say, the broadcaster may not
employ an amateur station as it would use a reporter or a translator
in order to convey, directly or indirectly, questions or subject
matter which the broadcast station desires to be addressed.

broadcast stations are asked to advise the secretary, federal
communications commission of the fact that retransmissions of
amateur radio transmissions have occurred, indicating only the date
and nature of the transmission which was covered.

for further information contact charles kelley at 202 632 6968 or
william a. russell, jr., at 202 254 7674 ar

From -1380349978989253251
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,56c763d07909f5dd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-31 16:40:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!cbosgd!ihnp4!drux3!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 102: grenada is QRT
Message-ID: <300@houxp.UUCP>
Date: Mon, 31-Oct-83 19:40:32 EST
Article-I.D.: houxp.300

Posted: Mon Oct 31 19:40:32 1983
Date-Received: Thu, 3-Nov-83 08:59:30 EST
Lines: 15

qst de ad7i
hr arrl bulletin nr 102 from arrl headquarters
newington, ct october 26, 1983
to all radio amateurs bt

the fcc has declared the urgency of the communications emergency
with the island of grenada, west indies, has subsided. therefore,
effective immediately, the fcc has cancelled, repeat cancelled,
emergency temporary third party traffic authorization for amateur
communications between gredada and the united states. fcc stated
further there are no longer any frequencies, either amateur or non
amateur, set aside for emergency communications by amateurs with
grenada. also, any previously authorized use of amateur cw subbands
for telephone use between the u.s. and grenada is now cancelled ar

From -5785945838349484012
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b29f25cb7dd04ea2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-31 18:48:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!sii!mem
From: mem@sii.UUCP (Mark Mallett)
Newsgroups: net.ham-radio
Subject: WWV format
Message-ID: <330@sii.UUCP>
Date: Mon, 31-Oct-83 21:48:58 EST
Article-I.D.: sii.330
Posted: Mon Oct 31 21:48:58 1983
Date-Received: Thu, 3-Nov-83 06:54:40 EST
Lines: 7

b
Where can I get a description of the WWV encoding? Somebody told me
that this had been brought up recently on the net, but I must have
missed it. Anybody want to mail me info?

Mark E. Mallett (KA1KES)
decvax!sii!mem

From -5031068550026144777
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,54e527106cc9a625,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-31 19:55:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Path: utzoo!linus!decvax!decwrl!sun!gnu
From: gnu@sun.UUCP (John Gilmore)
Newsgroups: net.ham-radio
Subject: Current status of no-code
Message-ID: <327@sun.UUCP>
Date: Mon, 31-Oct-83 23:55:57 EDT
Article-I.D.: sun.327
Posted: Mon Oct 31 23:55:57 1983
Date-Received: Wed, 26-Oct-83 00:46:34 EDT
Lines: 19

I spoke with John Botowski of the FCC Personal Radio Bureau today re
the status of the no-code license. He says that the comment period and
the comment reply period have ended, there are about 5000 comments in
16 volumes, and the commission will probably decide the matter toward
the end of this year or the start of '84.

I asked specifically about the CIA rumor; his response was that in
looking thru the comments he had not noticed any from the CIA. These
comments are available for public inspection if you're in DC, and there
is a commercial copy service which will copy them for you if not.
However, John warns that they will probably charge by the hour for
search time thru 16 volumes to find what you want and thus it could get
expensive. (The comments are not ordered in any particular fashion.)
The copy service is International Transcription Service, info at
202-296-7322, if anybody is interested.

     Sign me,
          No call (til after no-code)
          John Gilmore

From -8567785395321651937
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9fbb89721c2bb943,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-10-31 22:26:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: New hobby
Message-ID: <1133@eagle.UUCP>
Date: Tue, 1-Nov-83 01:26:50 EST
Article-I.D.: eagle.1133
Posted: Tue Nov 1 01:26:50 1983
Date-Received: Thu, 3-Nov-83 07:24:19 EST
Lines: 7

Q: What's the latest new facet to our hobby?

A: S.R.B. (Solar Ring Bounce), of course!

Apologies to vax135!martin, whom I stole this from.

Phil

From -9193820630229998190
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6c4e034dc73bdce5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-01 06:49:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site vax135.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!hpk
From: hpk@vax135.UUCP (mh3510)
Newsgroups: net.ham-radio
Subject: Request for comments on the Sony ICF-2002 SW receiver
Message-ID: <593@vax135.UUCP>
Date: Tue, 1-Nov-83 09:49:40 EST
Article-I.D.: vax135.593
Posted: Tue Nov 1 09:49:40 1983
Date-Received: Fri, 4-Nov-83 00:56:26 EST
Organization: Bell Labs, Holmdel, NJ
Lines: 10

I am considering the purchase of a Sony ICF-2002. It is a synthesized
PLL receiver. Like the ICF-2001 it has no tuning knobs, only a keyboard
for frequency entry and "up" and "down" scanning buttons. My intended
usage is for casual listening. The major difference between the 2001
and the 2002 is that the 2002 is tiny - about 1/3 the size of the 2001.

Has anybody have experience using this receiver, or its predecessor
the 2001?   Whats it like not having a tuning knob?

Howard

From 123055851706059679
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bc3360ce67b9154c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-01 09:19:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!floyd!whuxle!pyuxll!eisx!npoiv!npois!hogpc!
houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: Sony 2002
Message-ID: <302@houxp.UUCP>
Date: Tue, 1-Nov-83 12:19:26 EST
Article-I.D.: houxp.302
Posted: Tue Nov 1 12:19:26 1983
Date-Received: Fri, 4-Nov-83 03:01:08 EST
Lines: 8

I haven't heard of the Sony ICF-2002. Where can
I see and play with one and how much are they.
I have always liked to the 2001 but thought it
too large. The 2002 sounds very useful for
the traveling SWL or ham.

Paul

From -865890673680572571
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9ef2a902a5ee2679,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-01 13:37:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!eagle!mhuxl!mhuxm!pyuxi!pyuxnn!
pyuxmm!cbdkc1!cbosgd!ihnp4!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: Sony ICF2002
Message-ID: <303@houxp.UUCP>
Date: Tue, 1-Nov-83 16:37:52 EST
Article-I.D.: houxp.303
Posted: Tue Nov 1 16:37:52 1983
Date-Received: Sun, 6-Nov-83 03:51:39 EST
Lines: 7

For those interested, the sony ICF2002 is available
at monmmoutn stereo in shrewsbury. They have it in
stock (i.e., it can be played with). The list price
is $250 and they will probably discount it to $230.

Paul

From -1535918219366586859
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8ae60b2b62d82535,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-01 20:41:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!floyd!vax135!ariel!houti!hogpc!
houxm!mhuxl!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: New Scientist article on UoSAT-B
Message-ID: <1134@eagle.UUCP>
Date: Tue, 1-Nov-83 23:41:14 EST
Article-I.D.: eagle.1134
Posted: Tue Nov 1 23:41:14 1983

Date-Received: Sun, 6-Nov-83 02:49:53 EST
Lines: 44

The following is from the 1 Nov 1983 issue of the New Scientist, page 73. Note that this new satellite is *not* PACSAT; it is UoSAT-B, and will be called UoSAT-Oscar-11 if all goes well and it reaches orbit. The "mailbox in the sky" which is referred to here is actually just an engineering test experiment (various memories, etc.) The PACSAT people are flying it on UoSAT-B only because the Surrey people decided to take advantage of the last remaining polar Delta launch opportunity. The real PACSAT will still fly on the Shuttle in 1986.

Phil Karn, KA9Q

"Britain's mailbox heads for the skies"

"A British-built satellite that will act as a "mailbox in the sky" for radio amateurs should go into orbit early next year. The vehicle, the second in a series of cut-price satellites built at the University of Surrey, will contain an electronic memory that receives messages from the personal computers of radio enthusiasts. The memory will store the messages, transmitting them to receiving equipment only when the satellite is in the right position above the Earth.

"For a team of 20 engineers at the university, building the space vehicle will be a race against time. NASA in the US has told the group that its satellite can hitch a free lift into space on board a rocket due to leave the ground in March. The rocket's main mission will be to take into orbit a remote sensing satellite to replace the ailing Landsat 4. But the Surrey team will have to squeeze into six months work that would normally take up to three times as long.

"The university's first spacecraft, UOSAT-1, [actually, UoSAT-Oscar-9 -PK] is still circling the globe two years after it was launched. It gathers information about radiation levels and the Earth's magnetic field. The satellite also has a speech synthesiser with which it relays spoken messages to receiving station. Martin Sweeting, the leader of the university team, regularly tunes into the messages with a cheap radio in his back garden. He has even "listened in" while on holiday in the Himalayas.

"A second part of the project is to find cheaper ways of building satellites. The first Surrey vehicle cost &250 000. A comparable craft built by industry would cost some 40 times as much."

From -1206782215835580022
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ea137cc47ffd077f,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1983-11-02 07:57:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1exp 10/6/83; site ihuxe.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!floyd!clyde!ihnp4!ihuxe!parnass
From: parnass@ihuxe.UUCP (Robert S. Parnass, AJ9S @ Bell Labs, Naperville, IL)
Newsgroups: net.ham-radio
Subject: more Sony 2002 sources and prices
Message-ID: <404@ihuxe.UUCP>
Date: Wed, 2-Nov-83 10:57:42 EST
Article-I.D.: ihuxe.404
Posted: Wed Nov 2 10:57:42 1983
Date-Received: Sun, 6-Nov-83 05:27:56 EST
Organization: AT&T Bell Labs, Naperville, Il
Lines: 24

The Sony 2002 is available for $239 from:

Grove Enterprises, Inc.
140 Dog Branch Road
Brasstown, NC 28902

This price includes shipping via UPS. The AC-9W AC adapter is available for $12.

Grove's telephone numbers are (800)438-8155 and (704)837-9200.

Representatives from Spectronics (Oak Park, Illinois) demonstrated this radio at a recent hamfest in Grayslake, Illinois. Spectronics sells the 2002 for $224.95, not including shipping.

The telephone number for Spectronics is (312)848-6777.

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Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -2869158853744487502
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,92e200e17fed96f1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-03 10:06:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!eagle!hou5h!hou5g!hou5f!hou5e!hou5d!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio

Subject: Packet 10 meter tests
Message-ID: <306@houxp.UUCP>
Date: Thu, 3-Nov-83 13:06:41 EST
Article-I.D.: houxp.306
Posted: Thu Nov 3 13:06:41 1983
Date-Received: Sun, 6-Nov-83 16:59:33 EST
Lines: 12

********** NOTICE **********

The St. Louis Area Packet Repeater group (SLAPR) will
conduct 10 meter packet tests from Nov 17 to 27 during
the daylight hours on 28.310 USB using AT&T 202 modem
tones. The beacon will be on a 30 second cycle time.
Even if you don't have a packet board running AX.25
you should still be able to copy the CWID. Please
send all signal reports to KA9AKM.

Paul

From 8675393511168380842
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1845a64d331a841b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-03 15:43:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!floyd!vax135!ariel!houti!hogpc!
houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: CRRL 32: Doc question bank
Message-ID: <309@houxp.UUCP>
Date: Thu, 3-Nov-83 18:43:38 EST
Article-I.D.: houxp.309
Posted: Thu Nov 3 18:43:38 1983
Date-Received: Sat, 5-Nov-83 19:56:26 EST
Lines: 19

qst de ad7i
hr crrl bulletin nr 32 from crrl headquarters
london, ont november 2, 1983
to all radio amateurs bt

representatives from crrl and carf met in ottawa on october 28, and
with doc on october 29, to review the 400 questions in the doc
questions bank. all questions shou d now be in line with the new
trc24.

maritimes/newfoundland section manager ve1wf represented crrl at the

carf national symposium in halifax on october 15.

crrl discussions with cctva, the canadian cable television association, seem to be paying off. representatives of crrl, cctva and doc will soon meet in ottawa to discuss catvi problems, and crrl has invited carf to take part ar

From 8044264086016568483
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,79f5993a1332706a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-03 19:00:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: DX 43
Message-ID: <310@houxp.UUCP>
Date: Thu, 3-Nov-83 22:00:30 EST
Article-I.D.: houxp.310
Posted: Thu Nov 3 22:00:30 1983
Date-Received: Mon, 7-Nov-83 23:54:13 EST
Lines: 51

qst de ad7i
hr dx bulletin nr 43 from arrl headquarters
newington ct november 4, 1983
to all radio amateurs bt

thanks to k1xm, k1mm and w1trc of the southern new england dx association for the following dx information.

reunion. fr0flo has a daily schedule on 1825 khz at 0130 to 0145z and will be on 3790 khz after 0200z.

china. byipk will be operated on ssb by ja1bk for two or three days, looking for europe and the east coast of north america. watch 14145, 21245 and 21295 khz.

jarvis island. the ad1s expedition to jarvis island is on schedule. dj6si will not be going and the kingman reef expedition has been canceled.

taiwan. bv2a/0 is still keeping a wednesday schedule and has been reported working north america at 1200z on 14016 khz.

south shetland. 4k1gdw s still active on 80 through 10 meters. qsl to uq2gdw.

spain. an0anc is a special call for the world communications year. qsl via the ea bureau.

madeira. dl1rk and df7zh hav just arrived in ct3 and will be active for a week.

american samoa. ah8b has been worked at 0400z on 75 meter ssb.

160 meters. la2gv, sm7eic, uc2aa and many other russians have been worked from north america.

rodrigues island. 3b9fk is now active on 80 meter cw and is on 40 meter cw almost nightly from 0100 to 0200z.

yugoslavia. 4o1wcy, 4o2wcy and 4o3wcy are special callsigns for the wcy. 4o1wcy can be qsled via yu1fjk.

kampuchea. thanks to the dx bulletin, vernon, ct, we have the following address correction for ja1hqg, the qsl manager for xu1ss. the callbook address is incorrect. qsls for xu1ss should be sent to yoshio arisaka, ja1hqg, 4 dash 3 dash 9 yuigahama, kamakura, kanagawa 248, japan.

another correction. qsls for tu2nw, ivory coast, should go to ak3f, not to ak3t as stated in dx bulletin 41 ar

From 5645556090181910213
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2503837540bf5879,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-04 11:12:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site security.UUCP
Path: utzoo!linus!security!ksf
From: ksf@security.UUCP (Kieth S. Fung)
Newsgroups: net.ham-radio
Subject: Accident Hits Ham
Message-ID: <577@security.UUCP>
Date: Fri, 4-Nov-83 14:12:30 EST
Article-I.D.: security.577
Posted: Fri Nov 4 14:12:30 1983
Date-Received: Mon, 7-Nov-83 00:12:28 EST
Organization: MITRE Corp., Bedford MA
Lines: 58

This article was given to me by a friend, who got it from a guy at work, who is a ham oerator.

****

POOR PLANNING !!! (the following was taken from the MOBILE FLUTTER, May 83)

From western Carolina ARS to Birmingham ARC to Mobile ARC, an article entitled "ANTENNA RAISING ACCIDENT" (author unknown) is called to our

attention by WD40KY:

One HAM's letter to his insurance company:

I am writing in response to your request for additional information for block number three of the accident reporting form. I put "poor planning" as the cause of my accident. Your said in your letter that I should explain more fullly and I trust that the following detail will be sufficient.

I am an amateur operator and on the day of the accident, I was working alone on the top section of my new 80 foot tower. When I completed my work, I discovered that I had, over the course of several trips up the tower, brought up about 300 pounds of tools and spare hardware.

Rather than carry the now unneeded tools and material down by hand, I decided to lower the items in a small barrel by using a pully, which fortunely was attatched to the gin pole at the top of the tower. Securing a rope at ground level, I went to thr top of the tower and loaded the tools and material into the barrel. Then I went back to the ground and untied the rope, holding it tightly to insure a slow decent of the 300 pounds of tools. You will notice in block number eleven of the accident insurance reporting form, that I weigh only 155 pounds. Due to my surprise of being jerked off the ground so suddenly, I lost my presence of mind and forgot to let go of the rope.

Needless to say, I proceeded at a rather rapid rate of speed up the side of the tower. In the vacinity of the 40 foot level I met the barrel coming down. This explains my fractured skull and broken collar bone, Slowed up slightly, I continued my rapid ascent, not stopping until the digits of my right hand were two knuckles deep into the pulley. Fortunately, by this time, I had regained my presence of mind and was able to hold onto the rope in spite of my pain.

At approximately the same time, however, the barrel of tools hit the ground and the bottom fell out of the barrel. Devoid of the weight of the tools, the barrel now weighed approximately 20 pounds. I refer you again to my weight in block number eleven.

As you might imagine, I began a rapid descent down the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming up. This accounts for the two fractured ankles and the lacerations of my legs and lower body. The encounter with the barrel slowed me enough to lessen my injuries so that when I fell into the pile of tools, fortunately only three vertabrae were cracked.

I am sorry to report, however, that as I lay there on the tools, in pain, unable to stand and watching the empty barrel 80 feet above me ... I again lost my presence of mind.

I let go of the rope.

****

copied by Keith Fung
Mitre
Bedford, Mass.

From -6755454038322247454
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 15c702,d0fc38c087907d18,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,d0fc38c087907d18,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-04 13:38:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 (Tek) 9/26/83; site teklabs.UUCP
Path: utzoo!linus!security!genrad!decvax!tektronix!tekchips!teklabs!arnoldf
From: arnoldf@teklabs.UUCP (Arnold Frisch)
Newsgroups: net.audio,net.ham-radio
Subject: SUPER Contactors.
Message-ID: <2615@teklabs.UUCP>
Date: Fri, 4-Nov-83 16:38:02 EST
Article-I.D.: teklabs.2615
Posted: Fri Nov 4 16:38:02 1983
Date-Received: Mon, 7-Nov-83 23:25:43 EST
Organization: Tektronix, Beaverton OR
Lines: 6

For all you people with SUPER POWER rigs, here's how to turn everything
on and off without putting yourself into mortal jeopardy.

3 phase 30/40 ampere 600 volt AC contactors (use on 240 or 480 VAC 3 phase
line). Brand new. 120 v coil actuator. Rated to drive 3 phase, 3 pole 480
volt AC motors. Made by ELMWOOD SENSORS. Is it worth $10 to save your life?

From 5132920645565914628
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7eac12ec0d6837c7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-04 23:32:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: 800-957-9999
Message-ID: <1140@eagle.UUCP>
Date: Sat, 5-Nov-83 02:32:26 EST
Article-I.D.: eagle.1140
Posted: Sat Nov 5 02:32:26 1983
Date-Received: Mon, 7-Nov-83 23:05:35 EST
Lines: 7

It now seems to get Denver directory assistance!!

The operator told me tha they've been getting calls
intended for WWV all day. Looks like the service
is popular.

Phil

From 1936985152055570772
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3ad6990f64782cc,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,a3ad6990f64782cc,start
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1983-11-06 14:32:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site clyde.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!stan
From: stan@clyde.UUCP (Stan King)
Newsgroups: net.aviation,net.ham-radio
Subject: Defunct Radio Antennas
Message-ID: <233@clyde.UUCP>
Date: Sun, 6-Nov-83 17:32:03 EST
Article-I.D.: clyde.233
Posted: Sun Nov 6 17:32:03 1983
Date-Received: Tue, 8-Nov-83 03:48:55 EST
Organization: Bell Labs Whippany NJ
Lines: 6

If a radio station goes out of business, who pays for running the
blinking lights on it??

Stan King phone: 201-386-7433
Bell Labs, Whippany, NJ Cornet: 8+232-7433
room 2A-111 uucp: clyde!stan

From 5683970350588857644
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e7bbbfad3f679458,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-07 11:58:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: bulletin notice
Message-ID: <311@houxp.UUCP>
Date: Mon, 7-Nov-83 14:58:52 EST
Article-I.D.: houxp.311
Posted: Mon Nov 7 14:58:52 1983
Date-Received: Tue, 8-Nov-83 13:49:41 EST
Lines: 19

========== N O T I C E ==========

Several people have commented on the bulletins. Thanks to
all for the nice words. Bulletins are sent pretty much
as received. Fills are made where obvious, but I don't check

each transmission with a fine tooth comb.

The bulletins a placed on the net using all lower case rather
than upper case because lower case is easier to read. If someone
would be so kind as to provide me with a filter that will
convert the first letter in each sentence and all prosigns
to caps I would be happy to pass all data through it before posting
to the net. However, I am not willing to take to time to go
through it by hand. Finally, sending the bulletins using all
uppercase is out of the question.

..._._ paul

From -5477765517918430382
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7eac12ec0d6837c7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-07 14:00:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cbosgd.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxl!cbosgd!res
From: res@cbosgd.UUCP
Newsgroups: net.ham-radio
Subject: Re: 800-957-9999
Message-ID: <553@cbosgd.UUCP>
Date: Mon, 7-Nov-83 17:00:52 EST
Article-I.D.: cbosgd.553
Posted: Mon Nov 7 17:00:52 1983
Date-Received: Wed, 9-Nov-83 00:15:29 EST
References: <1140@eagle.UUCP>
Organization: AT&T Bell Laboratories, Columbus
Lines: 7

I called 800 directory assistance. They told me that the National Bureau
of Standards had an *unlisted* 800 number. They would not confirm that
the 800-957-9999 was it, or had been it. They would also not comment on
why when I dialed the above I got Boulder directory assistance.

--
                    - Robert Stampfli (cbosgd!res)

From -4051891345368612008
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fec9d959a8c89ddb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-07 21:00:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site whuxle.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!ihnp4!clyde!floyd!whuxle!mkg
From: mkg@whuxle.UUCP
Newsgroups: net.ham-radio

Subject: Re: 800-957-9999 - (nf)
Message-ID: <144@whuxle.UUCP>
Date: Tue, 8-Nov-83 00:00:35 EST
Article-I.D.: whuxle.144
Posted: Tue Nov 8 00:00:35 1983
Date-Received: Wed, 9-Nov-83 04:42:02 EST
Sender: mkg@whuxle.UUCP
Organization: Bell Labs, Whippany
Lines: 9

#R:eagle:-114000:whuxle:27500001:000:281
whuxle!mkg   Nov 8 00:00:00 1983

It seems that WWV's 800 number has ceased to function here in 201-land.
When I last tried it about a week ago, it was fine. Now, I get the
"your call cannot be completed as dialed" message. Have they changed
the number?
   Marsh Gosnell BTL Whippany (201) 386-7095 whuxlb!mkg

From 192023434942187904
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7eac12ec0d6837c7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-08 01:49:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Re: 800-957-9999
Message-ID: <1144@eagle.UUCP>
Date: Tue, 8-Nov-83 04:49:40 EST
Article-I.D.: eagle.1144
Posted: Tue Nov 8 04:49:40 1983
Date-Received: Wed, 9-Nov-83 03:41:54 EST
References: <1140@eagle.UUCP> cbosgd.553
Lines: 6

Oh well, it was nice while it lasted. I now get a local intercept
on that number. 800 directory assistance denied ANY listing for
"National Bureau of Standards" or "Radio Station WWV" in Boulder
or Fort Collins.

Phil

From 3237914872539498274
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d6e2444a1d0e9a86,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-08 05:27:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!sii!mem

From: mem@sii.UUCP (Mark Mallett)
Newsgroups: net.ham-radio
Subject: where callbook
Message-ID: <336@sii.UUCP>
Date: Tue, 8-Nov-83 08:27:14 EST
Article-I.D.: sii.336
Posted: Tue Nov 8 08:27:14 1983
Date-Received: Wed, 9-Nov-83 08:09:52 EST
Lines: 9

b
Back in the distant past (about as far back as my memory goes), somebody
used to post a net.ham-radio callbook monthly or so. I was never sure if
this was a list of people who had contributed since the last posting of
the list or a list of people known to be affiliated (actively) with the
newsgroup. Whatever happened to this practice? I rather liked it.

Mark Mallett (KA1KES)
decvax!sii!mem

From -8812504884666937138
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3ad6990f64782cc
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,a3ad6990f64782cc
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1983-11-08 08:15:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!hao!hplabs!hpda!fortune!dsd!avsdS!avsdT:roberts
From: avsdT:roberts@avsdS.UUCP
Newsgroups: net.aviation,net.ham-radio
Subject: Re: Defunct Radio Antennas
Message-ID: <594@avsdT.UUCP>
Date: Tue, 8-Nov-83 11:15:10 EST
Article-I.D.: avsdT.594
Posted: Tue Nov 8 11:15:10 1983
Date-Received: Fri, 11-Nov-83 01:07:56 EST
References: clyde.233
Lines: 3

I'll give you three blinking guesses as to WHO pays for those
blinking lignts on a blinking defunct radio station.

From 3338419159127266971
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eadea36530ca5de,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-08 10:08:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site mgweed.UUCP

Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP (Bob Roehrig)
Newsgroups: net.ham-radio
Subject: info wanted
Message-ID: <4562@mgweed.UUCP>
Date: Tue, 8-Nov-83 13:08:25 EST
Article-I.D.: mgweed.4562
Posted: Tue Nov 8 13:08:25 1983
Date-Received: Wed, 9-Nov-83 02:03:59 EST
Organization: AT&T Western Electric - Montgomery Illinois
Lines: 9

Does anyone out there have a Galaxy 530 receiver?

I am going to look at one a friend has that has been giving him
problems for some time (PLL not locking, reduced sensitivity, etc)
and wonder if anyone else has had experience with one...

Tnx, Bob K9EUI

From -2469448513558199303
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f54eda43c58f6991,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-08 13:15:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxc.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!ihnp4!inuxc!wheatley
From: wheatley@inuxc.UUCP
Newsgroups: net.ham-radio
Subject: IRC's for Sale
Message-ID: <822@inuxc.UUCP>
Date: Tue, 8-Nov-83 16:15:54 EST
Article-I.D.: inuxc.822
Posted: Tue Nov 8 16:15:54 1983
Date-Received: Wed, 9-Nov-83 02:30:48 EST
Organization: AT&T Consumer Products Div., Indianapolis
Lines: 16

I just received my card from Niue Island (ZK9RW), and he has
enclosed a note saying that he has IRC's for sale...$40 per
100, with proceeds helping future dxpeditions. He also
notes that his next dxpedition, ZL/K, is go for Feb/Mar 1984.

If you need the qsl for ZK9RW, or IRC's, write Ron
at

Ron Wright ZL1AMO
28 Chorley Ave
Massey AUCKLAND 8
NEW ZEALAND

P.S. I think a US check may be good to him, as his qsl cards come from
washington with a 20 cent us stamp when returned...obviously he has a friend
stateside. If in question, may help to drop him a line first.

From -3387906007321051511
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fec9d959a8c89ddb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-08 20:05:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!floyd!clyde!ihnp4!inuxc!pur-ee!
uiucdcs!parsec!rowan
From: rowan@parsec.UUCP
Newsgroups: net.ham-radio
Subject: Re: 800-957-9999 - (nf)
Message-ID: <3747@uiucdcs.UUCP>
Date: Tue, 8-Nov-83 23:05:41 EST
Article-I.D.: uiucdcs.3747
Posted: Tue Nov 8 23:05:41 1983
Date-Received: Fri, 11-Nov-83 22:52:27 EST
Lines: 10

#R:eagle:-114000:parsec:36200001:000:263
parsec!rowan   Nov 8 12:12:00 1983

>From Dallas I get a "Your call cannot be completed as dialed"
recording on 800-957-9999. It worked last week. I guess someone
has decided to discontinue the service.

Steve Rowan
Parsec Scientific Computer Corp.
(allegra|ihnp4|uiucdcs)!parsec!rowan

From 8986191109458244340
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,66dc4b4f52a9e0c2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-09 10:48:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site inuxd.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!ihnp4!inuxc!inuxd!rcf
From: rcf@inuxd.UUCP
Newsgroups: net.ham-radio
Subject: Tower Antenna Rotor For Sale
Message-ID: <384@inuxd.UUCP>
Date: Wed, 9-Nov-83 13:48:56 EST
Article-I.D.: inuxd.384
Posted: Wed Nov 9 13:48:56 1983
Date-Received: Thu, 10-Nov-83 12:26:22 EST
Organization: AT&T Consumer Products Div., Indianapolis

Lines: 10

Know a friend who is re-locating. He must sell his Wilson
61ft crank down tilt over tower, Wilson System 40 Tri-band
beam (10 element with 4 full sized elements on 20mtrs), Ham
IV Rotor, and 150ft rotor cable. U move!! Indianapolis area.

If you're interested, contact R. C. Fitch KN9K
ATT CP 8-338-6989
or 317-845-6989

From 3083394268139646120
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d6e2444a1d0e9a86
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-09 10:54:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!linus!decvax!harpo!eagle!hou5h!jak
From: jak@hou5h.UUCP
Newsgroups: net.ham-radio
Subject: Re: where callbook
Message-ID: <304@hou5h.UUCP>
Date: Wed, 9-Nov-83 13:54:37 EST
Article-I.D.: hou5h.304
Posted: Wed Nov 9 13:54:37 1983
Date-Received: Thu, 10-Nov-83 11:59:57 EST
References: <336@sii.UUCP>
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 14

When net.ham-radio was first created back in 1981, I posted a
"call book" of net.ham-radio readers/contributers with name, call, and
electronic mail address.
At first, this was weekly; later monthly.
I stopped doing it in Dec. 1982 for two reasons:
1) It was unclear if anyone found it useful; and
2) there was no easy way to know when to delete entries (if someone left
the net.)

I still have the last callbook (Dec 82) and could repost it and go from there.
but it probably needs a lot of revision.

What say? How many are interested?
73, Jim KY2D

From 7354926086443933033
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e96c5109542b8086,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1983-11-10 11:06:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!hou5f!hou5g!hou5h!jak
From: jak@hou5h.UUCP (Jim Kutsch)
Newsgroups: net.ham-radio
Subject: Nov. callbook (the callbook returns)
Message-ID: <305@hou5h.UUCP>
Date: Thu, 10-Nov-83 14:06:07 EST
Article-I.D.: hou5h.305
Posted: Thu Nov 10 14:06:07 1983
Date-Received: Fri, 11-Nov-83 06:43:33 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 140

The following is a list of net.ham-radio readers/contributers:
[NOTE: Those entries marked with '#' have not been updated since Dec. 1982.
I will delete them from the next month's callbook unless I get mail confirming
the accuracy of the entry. -jak]

call - name - mail address
#kb0yh - augie (gus) hansen - druxy!arh
ka1age - david kaufman - decvax!yale-comix!kaufman
#k1dk - dan kahn - alice!danny
#wb1exn/6 - keith muller - ucbvax!sdcsvax!muller
#ka1gng - rob wood - decvax!genradbolton!rob
#w1ui - jerry gann - ucbvax!lbl-unix!asgvax!gann
w1yu- the yale amateur radio club - decvax!yale-comix!w1yu
#wa1zvn - scott a. magnuson - houxi!hocsb!scott
#ki2a - steve gross - houxq!sg
#k2anc - lou - kohnen.wbst@parc-maxc
#k2art - mike pilla - houxi!u1100a!mp
#kb2bq - michel - denber.wbst@parc-maxc
#wb2cfv - rick spanbauer - rick@suny-sbcs | allegra!sbcs!rick
#n2chl - rich gopstein - allegra!gop
#ka2cuc - pete dusel - dusel.wbst@parc-maxc
#wa2cvu - karen schroeder - floyd!philabs!kis
ky2d - jim kutsch - hou5h!jak
#k2dm - george briggs - houxo!43351gw
#w2emf - al donkin - houxq!aed
#w2fpy - steve robinson - eagle!ajll11!robinson
#wb2fsi - mike - fayette.wbst@parc-maxc
#n2gh - dave - sewhuk.henr@parc-maxc
#ku2h - al morley - houxm!arm
#ad2h - marsh gosnell - npois!pyuxbb!mkg or whuxlb!mkg
#ka2haz - dusty kramer - vincent.wbst@parc-maxc
#wa2hsj - glenn golden - houxg!glenn
#k2hyd - ray albers - houxr!rayalb
#n2ic - steve london - druxm!n2ic or houxp!9535sml
#wa2ilb - mark ziegler - houxg!rmz | houxe!rmze
#w2iol - ron mcconnell - harpo!rcmcc
#w2iy - mike tortorella - houxi!w2iy
#ka2jdy - joel damiano - ucbvax!teklabs!joeld or decvax!teklabs!joeld

#kb2jg - joe massi - hogpc!4432jrm
#kb2jn - jeff - duntemann.wbst@parc-maxc
ka2jqh - adam buchsbaum - research!alb
#ka2kfg - ed mckenna - via copy from ironside. wbst@parc-maxc
#k2lyv - dave - birnbaum.henr@parc-maxc
#wa2mor - larry kaufman - nwuxc!lsk
#n2nd - dick maybach - houxm!4373rlm
#ka2omx - emerson ironside - ironside.wbst@parc-maxc
#w2ozh - jim - taylor.wbst@parc-maxc
k2ph - bob schreibmaier - houxb!3435ras
#wa2pme - azi heuman - houxo!3357ah
#wb2qoq - rick anderson - harpo!rja
#wa2qyn/2 - paul rubin - allegra!phr
#wb2rpc - mike sajor - harpo!zeppo!mes
#n2yk - bruce mcnair - houxg!bem or houxm!bem2
#n3agv, ron natalie, unc!brl-bmd!ron, ron@brl
#n3auc - doug kingston - unc!brl-bmd!dpk, dpk@brl
#n3ckf - joe pistritto - unc!brl-bmd!jcp, jcp@brl
#wa3irq - lee nackman - duke!unc!lrn
wa3mez - rod hart - burdvax!bpa!cp1!hart
#ve3qb/wa3zia - larry - kaysersri-unix!fortune!dsd!dna
#wa3thp/2 - stu brown - allegra!stu
#wa3vjs - scott e. garfinkle - princeton!scotteg
#df4ck/w9 - stephan bechtolsheim - decvax!pur-ee!purdue!svb
#g4ehl - anthony short - decvax!microsof!anthony
#k4eo - larry - stewart.pa@parc-maxc
k4frs - jack buchanan - duke!mcnc!ecsvax!jwb
#k4fum - jere sandidge - scbhq!jts
#wb4fwl - ned danieley - duke!ndd
#kb4gz- frank starmer - duke!unc!cfs or duke!cfs
#wa4ifa - chuck bennett - duke!unc!tucc!uchuck
#wb4ioj - mike kersenbrock - teklabs!tekmdp!michaelk
#ka4isf - joe - fusco.es@parc-maxc
#w4izi - lindsay cleveland - ihnss!ihuxi!lindsay
#k4qet - mike - rutkaus.lb@parc-maxc
#w4ri - paul rinaldo -
#ka4vxa - mike leuze - duke!mrl
#n5ahd - robert diersing -
#wd5bbt - kenneth ingham - floyd!cmcl2!lanl-a!unm-ivax!ingham
#ve5bel - peter hardie - utah-cs!sask!hardie
#wb5qds - denny rossbach - floyd!cmcl2!lanl-a!unm-ivax!ee5951aa
#wb5yfu jose sancho-dominguezja.dlos@parc-maxc
#n6afz - glenn - gmulligan.es@parc-maxc
#wa6azp - alan larson - ucbvax!larson@sri-kl
#kd6ba - ted lane - ucbvax!menlo70!sytek!zehntel!ted
#wa6bev - robert r. henry - ucbvax!rrh or research!rrh
#wb6bxw - lauren weinstein - ucbvax!ucla-s!lauren or lauren@ucla-security
#kd6cq - scott - gray.es@parc-maxc
#wa6faa - jim gillogly - randvax!jim
#n6fqr - bill - danielson.pa@parc-maxc
#ko6g - steven schoch - ucbvax!onyx:schoch
#kd6hr - pete - mcafee.es@parc-maxc
#ku6i - roger jollis - intelqa!gsp86!linden

#wa6igj - tony cardenas - ucbvax!cardenas.es@parc-maxc
#wa6jfz - ron - rbrown.pa@parc-maxc
#k6kly - russ bentson - ucbvax!atd!t:jon or sri-unix!fortune!dsd!atd!t:jon
#k6lb - ram - ronen.es@parc-maxc
#kb6lk - bill peters - peters.eos@parc-maxc
#ka6mcn - allen snethen -
#w6mik - dave - shalita.es@parc-maxc
#ka6nil - don - ahern.es@parc-maxc
#wa6oad - terry haney - haney.eos@parc- maxc
#no6q - trung - tnguyen.es@parc-maxc
#kb6qi - nick - nbarbieri.es @ parc-maxc
#wb6qms - don - duncan.es@parc-maxc
#ka6rcq - michael shiloh - ucbvax!shiloh
#wb6rpc - mike - harpo!zeppo!mes
#ka6soj - donovan - dghess.es@parc-maxc
#kc7ak - ed reuss - teklabs!edr
#wb7eel/1 - john woods - decvax!genradbo!mitccc!jfw
ad7i - paul newland - houxp!ad7i
#wa7kgx - chuck forsberg - cdi!caf
#wb7ubd - ed morin - teklabs!tekmdp!edm
#wa8ejh - larry meehan - pur-ee!iuvax!lwm
#wb8elk - bill brown - decvax!sytek!zehntel!varian!bilbo
#wb8fbm - dale dejager - cbosg!dale
#g8lhi - martin levy - lime!martin
#w8mfm - mailen kootsey - duke!phs!jmk
#k8nu - carl yaffey - rmas70!cly
#kq8p - jeff coleman - ihnss!ihuxo!jnc
#g8rdf - martin harriss - houxi!pyuxjj!martin
#w8sdz - keith petersen - w8sdz@mit-mc
#wb8wwv - greg ordy - ucbvax!decvax!cwruecmp!ordy
#wb9aax - phil gunsul - we13!prg
#kb9bo - jim krist - ihnss!ihuxs!jtkrist
ku9c - steve wheatley - inuxc!wheatley
w9cc - larry card - inuxc!lrcard
#ka9elg - mark yoder - ucbvax!pur-ee!yoder
#k9eui - bob roehrig - we13!rjr
#wd9hdr - jim erickson - ihuxs!erickson
#wd9icg - jim wiman -
#ka9kdc - larry schroeder - ihuxq!larrys
#ka9mhk - dan hoelker - ihnss!ihuxu!mstach
#wn9nbt - dave chasey - pur-ee!wn9nbt
ka9q - phil karn - eagle!karn
#wb9rin - dennis noonan - inuxc!wb9rin
#wb9vgw - john wrycza - ihuxu!johnw
kk9w - dave andersen - pur-ee!kk9w
#(no call) - david comay - ucbvax!arpavax:comay
(no call) - steven bellovin - ulysses!smb

Send additions/corrections to KY2D, Jim Kutsch -- hou5h!jak

From -8709171612268583543
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 132415,20e1dad99681bb8f,start
X-Google-Attributes: gid132415,public
X-Google-Thread: 151e61,20e1dad99681bb8f,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 105955,20e1dad99681bb8f,start
X-Google-Attributes: gid105955,public
X-Google-ArrivalTime: 1983-11-10 11:13:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!linus!decvax!harpo!eagle!hou5h!jak
From: jak@hou5h.UUCP
Newsgroups: net.ham-radio,att.ham-radio,bell.ham-radio
Subject: rca volt-ohmest manual needed
Message-ID: <306@hou5h.UUCP>
Date: Thu, 10-Nov-83 14:13:47 EST
Article-I.D.: hou5h.306
Posted: Thu Nov 10 14:13:47 1983
Date-Received: Sat, 12-Nov-83 05:53:44 EST
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 9

A member of the Holmdel Amateur Radio Club is looking for a
manual for an RCA Volt-Ohmest model 77E.
If you can help, please let me know.
73, KY2D Jim Kutsch
AT&T Information Systems Laboratories
Room 1G-308
Crawfords Corner Rd.
Holmdel, NJ 07733
(201) 834-3346 (cornet 8-264-3346)

From 2117723083786360344
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7660bc6d270ef1bf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-11-10 14:08:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxl!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: 2meter hand held for sale
Message-ID: <312@houxp.UUCP>
Date: Thu, 10-Nov-83 17:08:32 EST
Article-I.D.: houxp.312
Posted: Thu Nov 10 17:08:32 1983
Date-Received: Sat, 12-Nov-83 12:43:23 EST
Lines: 18

========== N O T I C E ==========

    handheld 2m rig for sale

COMPLETE Mint TR 2500 2 meter hand held system for sale.
The unit comes complete with speaker-mic, one alkaline
and two nicad battery packs, leather carrying case,
charger and antenna. See Nov QST page 134 for a complete
description. Price is $300 complete, shipping included
to the lower 48 states.

for more info, contact paul newland, ad7i
        POB 205
        Holmdel, NJ 07733
        201-834-2439 (w)
        201-741-1151 (h)
     ...!houxp!ad7i

From -6169243352458980314
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cc8dcaa84205f9df,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-14 23:54:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: New Oscar-10 bulletin
Message-ID: <1067@eagle.UUCP>
Date: Mon, 15-Aug-83 02:54:35 EDT
Article-I.D.: eagle.1067
Posted: Mon Aug 15 02:54:35 1983
Date-Received: Mon, 15-Aug-83 01:32:00 EDT
Lines: 23

The following is the new CW bulletin on the Amsat-Oscar-10 general beacon:
"Mode B is on hingain [sic] antennas and signals are normal
Do not use more than 500 W EIRP transponder AGC is 20 DB down so pse
QRP Mode L experiments will start in Septembre [sic] AMSAT OSCAR 10 HI HI"

With virtually no effort at all in the past few days (I've been content
to mostly listen) I've worked Ecuador, Netherlands, Germany, Finland,
France and England, not to mention plenty of US. Not bad for VHF/UHF!
I've heard many of the "famous" moonbounce stations on the satellite
(VE7BBG, K2UYH, PA0SSB, etc) and all seem to be complaining that they're
having a hard time cutting their transmitter powers so as to avoid
overdriving the satellite. With 1-5 watts to their 70cm EME arrays they're
still the strongest signals in the passband! If we can get everybody
down to more reasonable EIRP levels then everybody will benefit from not
having to run so much power.

The high gain antennas are still offpointed somewhat. They're in the
orbit plane, but rotated about 15 degrees toward the east. This results
in steady signals before and at apogee, followed by very noticeable spin
fading after apogee. The antennas will probably be correctly pointed by

the end of this coming week.

Phil Karn, KA9Q

From -6984110728422998649
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,315500a94730668d,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,315500a94730668d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-15 14:49:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site alice.UUCP
Path: utzoo!linus!decvax!harpo!eagle!alice!alb
From: alb@alice.UUCP
Newsgroups: net.columbia,net.ham-radio
Subject: W5RRR and STS-8
Message-ID: <2115@alice.UUCP>
Date: Mon, 15-Aug-83 17:49:36 EDT
Article-I.D.: alice.2115
Posted: Mon Aug 15 17:49:36 1983
Date-Received: Mon, 15-Aug-83 20:20:52 EDT
Organization: Bell Labs, Murray Hill
Lines: 4

Does anyone know whether or not W5RRR is planning to rebroadcast
STS-8 ground-shuttle and shuttle-ground transmissions like they
have done in the past, and, if so, which frequencies they plan
to use?

From 4786070795526470635
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,45d203719aae6230,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-16 05:25:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!hou5f!orion!houca!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: Propagation Bulletin 33
Message-ID: <276@houxp.UUCP>
Date: Tue, 16-Aug-83 08:25:27 EDT
Article-I.D.: houxp.276
Posted: Tue Aug 16 08:25:27 1983
Date-Received: Tue, 16-Aug-83 22:01:46 EDT
Lines: 29

qst de ad7i
holmdel, new jersey, u.s.a.

hr propagation forecast bulletin nr 33   from arrl headquarters
newington ct august 15, 1983
to all radio amateurs bt

after rising to 155 on august 12, the solar flux fell back again to
139 by the 14th. despite this drop the flux is running well above
its levels for the same points in the previous solar rotation.
     such
statistics emphasize an important point regarding the so called 11
year cycle. we still have periods of relatively good solar activity,
despite the statistical peak of cycle 21 having occurred nearly four
years ago. there were 189 days during the peak years, 1979 through
1981, when the flux was 155 or lower. twice in those years it
remained below 155 for a week or more at a stretch.

during the forecast week, the flux should go lower for another day or
two, then start back up again about the 18th. there was a mild
disturbed period just before bulletin time, but things are improving
and august 16 to 18 should bring good summer conditions. a recurrent
disturbance is expected about august 19 to 21. look for generally
good propagation and the first significant rise in muf of the fall
season beginning about august 31 and lasting through the first days
of september. vhf enthusiasts in the higher latitudes may have
auroral propagation around august 20 and 29.

american sunspot numbers for august 4 through 10 were between 58 and
90 with a mean of 69.9 ar

From -3387458652832260344
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13a109,55ee9aa147a11310,start
X-Google-Attributes: gid13a109,public
X-Google-Thread: 151e61,55ee9aa147a11310,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 16c08e,55ee9aa147a11310,start
X-Google-Attributes: gid16c08e,public
X-Google-ArrivalTime: 1983-08-16 05:53:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxj.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxt!mhuxi!mhuxa!houxm!ihnp4!ihuxj!gvw1
From: gvw1@ihuxj.UUCP
Newsgroups: btl.wanted,bell.wanted,net.ham-radio
Subject: Need Hitachi 6845S Enhanced CRT Controller Chip
Message-ID: <213@ihuxj.UUCP>
Date: Tue, 16-Aug-83 08:53:06 EDT
Article-I.D.: ihuxj.213
Posted: Tue Aug 16 08:53:06 1983
Date-Received: Tue, 16-Aug-83 22:42:18 EDT
Organization: BTL Naperville, Il.
Lines: 14

Does anyone have an idea where I could order an Hitachi 6845S enhanced CRT controller chip? I would really appreciate it.

George V. Wilder
ihnp4!ihuxj!gvw1
(312) 979-0817

p.s.

It's for a Cal-Tex Bigboard II--just in case this gets to someone that has one--I would be glad to share notes.

From 7065394118905098978
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f586f75c66ad2651,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-16 10:36:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxt!mhuxi!mhuxa!houxm!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ZAMTOR
Message-ID: <277@houxp.UUCP>
Date: Tue, 16-Aug-83 13:36:47 EDT
Article-I.D.: houxp.277
Posted: Tue Aug 16 13:36:47 1983
Date-Received: Wed, 17-Aug-83 05:45:44 EDT
Lines: 40

Below is a repeat of a previous message. Some folks on the net have wondered what the ZAMTOR hex code was that was posted earlier on the net. Well, here is a description.

All ZAMTOR users should be aware that rel 1.00 and 1.01 have serious bugs and should not be used. rel 1.02 and 1.03 both work fine (1.03 has some additional features over 1.02)
73, Paul, ad7i

Preliminary documentation and firmware are available for a stand-alone Z80 AMTOR system. The "Z-AMTOR" system operates with a home-brew (PC ready about 83.10.15) 4 MHz Z80 system and works with Baudot terminals at 45, 50, and 74 bps as well as ASCII terminals at 110 and 300 bps. This system runs modes A, B, S (selective B) and L (monitor mode A communicaitons). It is, if I say so myself, one of the best implementations of AMTOR available. It has been in the programming stage for over a year.

Anyone SERIOUSLY interested in building such a system is invited to send a $0.71, 9" x 12" SASE and a 250 nS 2764 EPROM to:

Paul Newland, ad7i
POB 205
Holmdel, NJ 07733

I will forward a copy of the documentation and program your EPROM.
Be sure the stamps are glued onto the envelope. Don't send
money, I'll just pocket it and claim I never got your letter!
NOTE: don't send an SASE without an EPROM. If you do, I'll return
your envelope without stuffing it. If you don't send an EPROM you
probably are not serious about building a system. I am looking for
people to help me test the code, not increase my xeroxing costs!

If you are not totally passionate about AMTOR but would like to get
the documentation, way till later this year; it will appear in one
of the major ham mags.

73, ad7i

From -5583780794342291354
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2cd833ead3c73808,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-18 19:45:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!sii!mem
From: mem@sii.UUCP (Mark Mallett)
Newsgroups: net.ham-radio
Subject: Hurricane net
Message-ID: <279@sii.UUCP>
Date: Thu, 18-Aug-83 22:45:33 EDT
Article-I.D.: sii.279
Posted: Thu Aug 18 22:45:33 1983
Date-Received: Fri, 19-Aug-83 04:37:51 EDT
Lines: 18

b
I stayed up all last night (aug 17-18) listening to the hurricane net
on 20 meters (14.325 usb). It was fascinating. I heard of other
frequencies carrying info on the hurricane (40 and 75 mtrs) but could
not pull in anything on any of them. At any rate the two apparent
net controllers K1WW (east) and esp. N7YL (west) were doing great
stuff.

The question is: I discovered this only by accident, listening to a
local 2-meter net (one of the participants mentioned it and i rushed
over and turned on the lf rig). Supposing that I hadn't heard this,
where else might I have found it out? Obviously the emergency was sort
of an immediate thing, and the net could not have been scheduled in
advance. Or perhaps there are allocated frequencies that everyone
(almost everyone..) knows about?

Mark E. Mallett KA1KES
decvax!sii!mem

From 8657636290944557193
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63a9d7436a85efbb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-19 09:06:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: New Radio Shack catalog is available
Message-ID: <650@ihuxf.UUCP>
Date: Fri, 19-Aug-83 12:06:18 EDT
Article-I.D.: ihuxf.650
Posted: Fri Aug 19 12:06:18 1983
Date-Received: Fri, 19-Aug-83 16:59:31 EDT
Organization: BTL Naperville, Il.
Lines: 32

The new 1984 Radio Shack catalog is out.

Page 76 shows two new synthesized scanners:

o+ PRO-30: 16 channel handheld for $300. Uses 6 "AA" batteries and 4 silver oxide batteries for memory (scanner available September 30).

o+ PRO-2003: 60 channel base/mobile for $350. Ten channels are dedicated for FM broadcast frequencies.

Page 78 shows a new crystal controlled scanner:

o+ PRO-25: 8 channel portable for $150 which covers VHF-LO, VHF-HI, UHF, and Aircraft bands.

Page 79 shows a Sony 2001 clone digital general coverage receiver with keypad entry for $300.

If you're interested in one of these radios, but think the price is too high, you can wait a few months. This stuff

will probably be on sale some time in the future.

--
==========
Robert S. Parnass, Bell Laboratories ihnp4!ihuxf!parnass (312)979-5760

From 3366960037617019616
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1a544d265939ac55,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-22 03:44:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Oscar-10 packet radio tests
Message-ID: <1072@eagle.UUCP>
Date: Mon, 22-Aug-83 06:44:16 EDT
Article-I.D.: eagle.1072
Posted: Mon Aug 22 06:44:16 1983
Date-Received: Mon, 22-Aug-83 10:11:59 EDT
Lines: 17

This morning between about 05:00 and 06:20, three stations took part in packet radio experiments via Amsat-Oscar-10: ZL1AOX in Auckland, New Zealand; W3IWI in Clarksville, MD; KA9Q in New Providence, NJ. Limited HDLC frames were successfully exchanged despite the use of non-optimal noncoherent FSK modems (namely the XR chips provided with the TAPR TNCs). A major problem was frequency errors between stations due to the doppler shift caused by the different relative velocities to the satellite. The signal-to-noise ratio was also marginal for this modulation technique.

It appears clear that simple FSK (F1) is certainly not very good for satellite use but that PSK modems now under development in AMSAT should work very well under the observed conditions. PSK modems will automatically track changes in carrier frequency due to doppler shift and work well with typical signal-to-noise ratios on Oscar-10.

Phil Karn, KA9Q

From 3607130498535774758
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,29903f65dc5bc8e3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-23 02:59:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio

Subject: Further A-O-10 Packet Experiments
Message-ID: <1074@eagle.UUCP>
Date: Tue, 23-Aug-83 05:59:48 EDT
Article-I.D.: eagle.1074
Posted: Tue Aug 23 05:59:48 1983
Date-Received: Tue, 23-Aug-83 15:10:19 EDT
Lines: 93

The following is by Tom Clark, W3IWI, AMSAT president, describing some of the further fun and games on Amsat-Oscar-10 this evening. Anybody who would like to join us is welcome!

Phil

Tonite was a remarkable nite -- multiple two-way packet radio tests were done by W3IWI, NK6K, ZL1AOX along with KA9Q and WA2LQQ as spectators. We used 1200 baud (and tried 600 baud) FSK on AMICON (L1) channel arount 145.830-835 downlink. The following is edited do to show some of the traffic copied at W3IWI:

First, I set up my beacon to transmit the following message:

W3IWI>BEACON:W3IWI Packet Radio Test -- Anybody Copy?
The quick brown fox jumped over the lazy dog's back 0123456789

Then I repeatedly called CQ:

W3IWI>CQ:
W3IWI>CQ:cq de w3iwi
W3IWI>CQ:is anybody there??
W3IWI>CQ:hello packets de w3iwi
W3IWI>CQ:w3iwi packet radio test
W3IWI>CQ:via amsat oscar-10
W3IWI>CQ:
W3IWI>CQ:
W3IWI>CQ: (etcetera)

Nobody was around, so I worked myself, going up to the satellite, back to myself, up to the satellite again, and then back down:

cmd:c w3iwi via w3iwi
cmd:*** CONNECTED to W3IWI
*** CONNECTED to W3IWI
test
test

now is the time for all good men to come and have a party
now is the time for all good men to come and have a party
cmd:d
cmd:***disconnected

Then, after a long time of sending to myself with KA9Q spectating, ZL1AOX showed up (he used CAP's, I used lower case):

cmd:c zl1aox
cmd:*** CONNECTED to ZL1AOX
hi ian -- how copy
OK I HAVE A CONNECT MSG TOM
ONLY OCCASIONALLY
ok, well I seem to copy u fb
DID U RX MY ACK?
yep
hi harold (NK6K called in on freq)
OK
RGR TOM IT'S NOT AS WELL AS IT SHOULD DOWN HERE
cmd:d
c nk6k
cmd:*** CONNECTED to NK6K
hi harold
Hello tom
seems pretty gud copy
Loks great
welcome to the wonderful world of racket radio !!!
Yep. am surprised,
1200 baud too
mebee we should tryy 600
Hot stuff!
etcetera

Then we tried a real first: I connected with myself, thru AO-10 to NK6K, who digipeated my packets back to me:

C W3IWI VIA NK6K
cmd:*** CONNECTED to W3IWI
TALK ABT DUMB THING TO DO
TALK ABT DUMB THING TO DO
cmd:D
cmd:***disconnected
C NK6K
cmd:*** CONNECTED to NK6K
DID U SEE WHAT I DID??
Copied 100%!!

Then we tried more experiments as NK6K and ZL1AOX tried to run my computer remotely.

The only question remaining -- where are all the other packeteers -- the AO-10 AMICON channel is now officially christened and operating well. Who will be the next to join us?

Tom

From -2930639724259396334
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6c9f3d327f00430,start

X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,6c9f3d327f00430,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1983-08-23 21:06:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site iwu1c.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
ihnp4!iwu1c!jgpo
From: jgpo@iwu1c.UUCP
Newsgroups: net.ham-radio,net.columbia
Subject: STS-9 Frequencies Announced
Message-ID: <126@iwu1c.UUCP>
Date: Wed, 24-Aug-83 00:06:45 EDT
Article-I.D.: iwu1c.126
Posted: Wed Aug 24 00:06:45 1983
Date-Received: Thu, 18-Aug-83 12:40:20 EDT
Organization: BTL Naperville, Il.
Lines: 30

According to Westlink, the frequencies which Dr. Owen Garriott, W5LFL,
will use on the historic STS-9 Shuttle mission have been announced.

Dr. Garriott will transmit, using mode F3, on 145.550 MHz.
He will monitor frequencies between 144.910 MHz and 145.090 MHz, in
20 kHz steps.

According to an article in the September issue of 73 Magazine, Dr. Garriott
will announce which call area(s) he will listen for. He will announce his
intentions for 60 seconds. For the next 60 seconds, he will monitor his
preprogrammed frequencies between 144.910 and 145.090. During the next
60 seconds, he will read back a list of the callsigns he has recognized.

It is recommended that earth stations limit their transmitter output
power to 10 watts.

Remember, that Dr. Garriott is in charge of the show and can easily bypass
any channel having excessive QRM caused by the high-power boys.

Use a good antenna; a 2M turnstile is recommended. Do not use a highly
directional antenna; the Shuttle will be moving way too fast to keep it
aimed properly.

Westlink's Hollywood number, (213)-465-5550, will be devoted entirely to
STS-9 information starting September 1. Be sure to listen to the W1AW
bulletins. Good luck!

73,
John Opalko KA9MNK

From 3149419245099191849
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,182c6f906c099ef9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-24 05:41:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site watmath.UUCP
Path: utzoo!linus!security!genrad!decvax!watmath!ljdickey
From: ljdickey@watmath.UUCP
Newsgroups: net.ham-radio
Subject: Re hayes modem and amateur radio
Message-ID: <5648@watmath.UUCP>
Date: Wed, 24-Aug-83 08:41:15 EDT
Article-I.D.: watmath.5648
Posted: Wed Aug 24 08:41:15 1983
Date-Received: Fri, 26-Aug-83 04:50:15 EDT
Sender: ljdickey@watmath.UUCP
Organization: U of Waterloo, Ontario
Lines: 11

Subject: Re hayes modem and amateur radio : net.ham-radio

I use a hayes smartmodem and tried that feature when i first
read the manual. i heard some dits and some dahs. i guess that
you could use them to turn your CW unit on and off. So you could
program your micro to turn ascii codes into Morse code.
I have not used the modem this way since.
Too bad it does not work the other way around too (Morse to ASCII)!
--
    Lee Dickey   (ljdickey@watmath)
                  University of Waterloo

From 4001152266414368653
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a13e5f92a38f37fe,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-24 12:14:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site houxr.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
houxr!4391aas
From: 4391aas@houxr.UUCP
Newsgroups: net.ham-radio
Subject: For Sale
Message-ID: <154@houxr.UUCP>
Date: Wed, 24-Aug-83 15:14:50 EDT
Article-I.D.: houxr.154
Posted: Wed Aug 24 15:14:50 1983
Date-Received: Fri, 26-Aug-83 01:19:59 EDT
Organization: Bell Labs, Holmdel NJ
Lines: 8

HQ-1 Miniquad with W2AU balun
up only 3 months for 90 bucks

Al Schwarz KC2XF

(201) 949-3337

From -7441447938520609988
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f60a1f5a66adbd05,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-26 08:38:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ad7i cleans the shack, cheap junk available
Message-ID: <278@houxp.UUCP>
Date: Fri, 26-Aug-83 11:38:28 EDT
Article-I.D.: houxp.278
Posted: Fri Aug 26 11:38:28 1983
Date-Received: Sat, 27-Aug-83 21:42:42 EDT
Lines: 32

==========
ad7i cleans the shack
cheap junk available
==========

All stuff is FOB red bank, new jersey, but I will ship COD if
you really want the something. Contact Paul Newland, 201-834-3473,
for more info.

$5) Weston 301 meter, 200 VDC full scale
$5) Triplet 421 meter, 5 ADC full scale
$5) Heath AC-1 antenna tuner
$5) Milton Bradley COMP IV electronic game
$10) keyboard (nice); might even be ASCII
$10) Heath HA201A CW/FM 2M amp 2 watts in, 10 watts out.
$10) Homebrew freq counter featured by 73 mag in early '70s
$15) WECo rotory 500 telephone (used, of course!)
$15) Heath Aircraft receiver 108-135 MHz GR98
$15) Pace CB 100-S 6 channel crystal AM; mint and VERY small
$20) Radio Shack AM/FM stereo receiver, 10 watts per channel
$20) VHF engineering 2M transmitter strip
$25) Heath IM-17 FET multi-meter (very nice!)
$30) WECo trimline (used, of course!)

$45) Hamtronics T51 transmitter for 220 MHz
$60) VHF engineering 2M receiver strip
$65) Novation CAT modem
$85) Hamtronics R75 receiver for 220 MHz
$150)   Ten-Tec Century 21 cw transceiver (very nice!)

From -4138025091248967778
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1bb9466ef08da3e0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-29 16:02:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site fluke.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!cornell!uw-beaver!ssc-vax!fluke!limey
From: limey@fluke.UUCP (Paul Baldock)
Newsgroups: net.ham-radio
Subject: Results of '73' SSB contest?
Message-ID: <680@vax2.fluke.UUCP>
Date: Mon, 29-Aug-83 19:02:29 EDT
Article-I.D.: vax2.680
Posted: Mon Aug 29 19:02:29 1983
Date-Received: Wed, 31-Aug-83 20:51:57 EDT
Organization: John Fluke Mfg. Co., Everett, Wash
Lines: 5

Does any reader of '73' Magazine know if the 40m SSB results
from last January have been published yet? If so what issue?

Paul kw7y

From -3408706860503428758
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a13e5f92a38f37fe
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-31 06:08:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site houxr.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
houxr!4391aas
From: 4391aas@houxr.UUCP
Newsgroups: net.ham-radio
Subject: For Sale
Message-ID: <156@houxr.UUCP>
Date: Wed, 31-Aug-83 09:08:16 EDT
Article-I.D.: houxr.156
Posted: Wed Aug 31 09:08:16 1983
Date-Received: Thu, 1-Sep-83 03:33:35 EDT
Organization: Bell Labs, Holmdel NJ
Lines: 11

For Sale

****
HQ-1 Mini-Quad with W2AU balun.
20-15-10-6 m.
Up only 3 months.
Asking 90 bucks.
Al Schwarz KC2XF
(201) 949-3337
****

From 4962510596006970618
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c1107d16215241c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-31 20:51:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site iwsl7.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
ihnp4!iwsl7!k9un
From: k9un@iwsl7.UUCP
Newsgroups: net.ham-radio
Subject: FOR SALE
Message-ID: <123@iwsl7.UUCP>
Date: Wed, 31-Aug-83 23:51:04 EDT
Article-I.D.: iwsl7.123
Posted: Wed Aug 31 23:51:04 1983
Date-Received: Thu, 1-Sep-83 19:48:09 EDT
Organization: BTL Naperville, Il.
Lines: 19

FOR SALE

Johnson Matchbox Antenna Tuner: "Low Power" model but works fine with
1kw. Adjust for best swr in low power & then run hi.
$50

Drake R4 Receiver: Real Clean. Spinner knob. extra xtals (160M, 9.5MHZ)
$150

Tempo S1T Syn. 2M Handi-Talki: with TTP, wall charger and home brew
12Vdc charger. Fully Synthesized. Motorola belt clip.
$165

Wes Ague - k9un
(312)979-7188 (work)
(815)436-6954 (home)

From 8410281488422090823
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c28e1a8fa3041440,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-01 13:20:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxt!mhuxi!mhuxa!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: ARRL BULLETINS
Message-ID: <3126@mgweed.UUCP>
Date: Thu, 1-Sep-83 16:20:16 EDT
Article-I.D.: mgweed.3126
Posted: Thu Sep 1 16:20:16 1983
Date-Received: Fri, 2-Sep-83 21:03:01 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 87

CRRL BULLETIN NR 25 FROM CRRL HEADQUARTERS LONDON ONT
AUGUST 27 1983 TO ALL RADIO AMATEURS

AMATEUR RADIO STATION VE3CNE...LOCATED AT TORONTO AT THE WORLD'S LARGEST ANNUAL EXPOSITION...THE CANADIAN NATIONAL EXHIBITION...IS LOOKING FOR WORLDWIDE CONTACTS ON ALL BANDS...80 THROUGH 10 METERS... AND WILL CONFIRM ALL QSOS WITH A SPECIAL CARD.

BULLETIN NR 73 FROM ARRL HEADQUARTERS NEWINGTON CT
AUGUST 25 1983 TO ALL RADIO AMATEURS

SENATOR BARRY GOLDWATER...K7UGA...WILL BE FEATURED ON THE SEPTEMBER 1 TELECONFERENCE RADIO NET AT 8.30 PM EDT. ROY NEAL...K6DUE...WILL BE A GUEST AND WILL PRESENT AN UPDATE ON THE STATUS OF OWEN GARRIOTT'S STS9 OPERATION.

OVER A HUNDRED REPEATERS IN THE U.S. AND CANADA WILL BE TIED INTO THE NET. A COMPLETE LISTING OF PARTICIPATING STATIONS IS CONTAINED IN THE COMPUSERVE HAMNET X10 DATABASE OR MAY BE OBTAINED FOR AN SASE FROM NET MANAGER...

RICK WHITING W0TN
4749 DIANE DRIVE
MINNETONKA MN 55343

BULLETIN NR 74 FROM ARRL HEADQUARTERS NEWINGTON CT
AUGUST 29 1983 TO ALL RADIO AMATEURS

ASTRONAUT OWEN GARRIOTT...W5LFL...WILL BE OPERATING AN AMATEUR RADIO STATION ABOARD THE STS9 SPACE SHUTTLE MISSION WHICH IS SCHEDULED TO LIFT OFF OCTOBER 28. THERE WILL BE NO AMATEUR RADIO OPERATION FROM STS8...WHICH IS LIFTING OFF THIS WEEK.

BULLETIN NR 75 FROM ARRL HEADQUARTERS NEWINGTON CT
AUGUST 30 1983 TO ALL RADIO AMATEURS

EFFECTIVE IMMEDIATELY...THE W1AW TELEPRINTER SCHEDULE WILL BE TRANSMITTED WITH 45.45 BAUDOT FIRST...110 BAUD ASCII SECOND AND 100 BAUD FEC AMTOR WHEN TIME PERMITS. 100 BAUD FEC AMTOR WILL USUALLY BE TRANSMITTED FOLLOWING THE FRIDAY UTC BAUDOT/ASCII DX BULLETIN.

BULLETIN NR 76 FROM ARRL HEADQUARTERS NEWINGTON CT
AUGUST 31 1983 TO ALL RADIO AMATEURS

THE SEPTEMBER 1ST TELECONFERENCE RADIO NETWORK...AT 830 EDT...FEATURING SENATOR BARRY GOLDWATER...K7UGA...WILL BE RETRANSMITTED TO OSCAR 10 BY JACK COLSON...W3OZ. AREAS WITHOUT TRN REPEATER COVERAGE MAY LISTEN TO THE NET ON THE SATELLITE DOWNLINK FREQUENCY...AROUND 145.957 MHZ.

PROPAGATION BULLETIN NR 35 FROM ARRL HEADQUARTERS NEWINGTON CT
AUGUST 29 1983 TO ALL RADIO AMATEURS

IN LATE AUGUST...AREAS OF THE SUN THAT PRODUCED HIGH FLUX LEVELS ON THE PREVIOUS SOLAR ROTATION HAVE COME AROUND ALMOST DEVOID OF ACTIVITY. THE RESULT IS THAT...IN THE SECOND HALF OF AUGUST...SOLAR FLUX LEVELS HAVE BEEN AS MUCH AS 50 POINTS LOWER THAN THEY WERE 4 WEEKS AGO. A LOW OF 101 ON AUGUST 28 WAS THE LOWEST SINCE EARLY MARCH...BUT READINGS IN THE 90S WERE RECORDED SEVERAL TIMES IN THE PEAK YEARS OF THIS SOLAR CYCLE.

THERE WAS NO VISIBLE EVIDENCE OF NEW ACTIVITY ON THE SUN AS THIS BULLETIN WAS IN PREPARATION...BUT SOLAR AREAS THAT PRODUCED THE MAJOR AUGUST RISE ARE COMING INTO VIEW AGAIN ABOUT SEPTEMBER 3. THEY COULD VERY WELL USHER IN THE AUTUMN DX SEASON OVER THE LABOR DAY WEEKEND.

THE PAST WEEK WAS MARKED BY SUDDEN INCREASES IN GEOMAGNETIC ACTIVITY... AND RESULTANT POOR HF PROPAGATION IN THE HIGHER LATITUDES. POOR CONDITIONS...LIKELY AUGUST 29 AND 30 WILL GIVE WAY TO MUCH BETTER PROPAGATION...AND HIGHER MUF...SEPTEMBER 1 TO 3. SEE QST PROPAGATION CHARTS FOR OPTIMUM TIMES FOR YOUR FAVORITE DX CIRCUITS AND FREQUENCIES. BEAR IN MIND THAT THE CHARTS ARE CONSERVATIVE AS TO MUF FOR THE BEST DAYS...BUT QUITE RELIABLE AS TO TIME AND PERIOD.

AMERICAN SUNSPOT NUMBERS FOR AUGUST 18 THROUGH 24 WERE BETWEEN 39 AND 64 FOR A MEAN OF 47.6.

From 7620741175598093715
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2767d399930cfda8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-02 07:20:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxt!mhuxi!cbosgd!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: non-standard crystals available from Radio Shack
Message-ID: <671@ihuxf.UUCP>
Date: Fri, 2-Sep-83 10:20:05 EDT
Article-I.D.: ihuxf.671
Posted: Fri Sep 2 10:20:05 1983
Date-Received: Sat, 3-Sep-83 06:08:51 EDT
Organization: BTL Naperville, Il.
Lines: 38

Radio Shack can supply crystals for scanners other than their own brand. Yesterday, I got a look at a chart in a local Radio Shack that listed:

- frequencies of crystals that may be ordered
- scanners that work with Radio Shack's conventional crystals
- scanners that won't work with conventional Radio Shack crystals, but for which special crystals may be ordered

Crystals for Bearcat scanners[1] may be ordered from your local Radio Shack.

I referred a friend with a Courier Cop-Scan to the Shack. His special crystal order took all of 1 week to be filled.

Crystals for other uses[2] may also be ordered.

---

1. Bearcat scanners, as well as some J. C. Penny's models manufactured by Bearcat, use less common 10.8 MHz IF's

2. microprocessor clocks and CB radios for example

--
Robert S. Parnass, Bell Laboratories ihnp4!ihuxf!parnass (312)979-5760

From -3106666222327273369
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4cafaa8100b8e7b5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-04 10:52:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site watmath.UUCP
Path: utzoo!linus!decvax!watmath!ljdickey
From: ljdickey@watmath.UUCP
Newsgroups: net.ham-radio
Subject: ZAMTOR
Message-ID: <5692@watmath.UUCP>
Date: Sun, 4-Sep-83 13:52:21 EDT
Article-I.D.: watmath.5692
Posted: Sun Sep 4 13:52:21 1983
Date-Received: Sun, 4-Sep-83 23:47:26 EDT
Sender: ljdickey@watmath.UUCP
Organization: U of Waterloo, Ontario
Lines: 7

A few weeks ago someone transmitted a 'very long' code
called ZAMTOR hex code. What is this stuff used for?
--
Lee Dickey (ljdickey@watmath.UUCP)
...!allegra!watmath!ljdickey
...!ucbvax/decvax!watmath!ljdickey
University of Waterloo

From -1436026477724761510
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de7aa51e35aa8b5c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-09 13:42:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!ihuxf!
parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: some Space Shuttle freq's
Message-ID: <680@ihuxf.UUCP>
Date: Fri, 9-Sep-83 16:42:28 EDT

Article-I.D.: ihuxf.680
Posted: Fri Sep 9 16:42:28 1983
Date-Received: Sat, 10-Sep-83 20:35:35 EDT
Organization: BTL Naperville, Il.
Lines: 19

On June 29, 1983 the Space Shuttle was carried from Texas to Florida, piggyback on a Boeing 747. The frequencies used during this exercise were:

o+ 15.021 MHz

o+ 13.227 MHz

o+ 10.780 MHz

This information appeared in the September 1983 issue of the RCMA Newsletter.

--
Robert S. Parnass, Bell Laboratories ihnp4!ihuxf!parnass (312)979-5760

From 1100281682120726385
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6b3384406cdcccc0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-10 19:39:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!hou5f!hou5g!hou5h!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: TAPR query reply
Message-ID: <1090@eagle.UUCP>
Date: Sat, 10-Sep-83 22:39:58 EDT
Article-I.D.: eagle.1090
Posted: Sat Sep 10 22:39:58 1983
Date-Received: Mon, 12-Sep-83 04:26:02 EDT
Lines: 20

I passed on iwu1c!jgpo's query about new TAPR boards to Lyle Johnson,
the president of TAPR. This is his response:

Posted: Sat Sep 10, 1983 11:39 AM EDT Msg: OGID-1622-1170
From: LJOHNSON
To: PKARN
Subj: RE: TAPR complaint

Phil,

I will try to get a series of postcards sent to the early group of kitters.
It turnso out we have had delays in getting the PC artwork done, but it is
done now and we are expecting to build up a prototype next week. We had a pass
one prototype two weeks back and found a very minor problem which is corrected
on the new stuff.

Sorry about that. As usual, things don't always happen the way you want when
the alligators are biting...

Lyle

From -2433836763941562106
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b0c18e3a98a2a38f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-10 19:46:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!hou5f!hou5g!hou5h!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Re: packet radio
Message-ID: <1091@eagle.UUCP>
Date: Sat, 10-Sep-83 22:46:41 EDT
Article-I.D.: eagle.1091
Posted: Sat Sep 10 22:46:41 1983
Date-Received: Mon, 12-Sep-83 04:26:59 EDT
References: cp1.292
Lines: 9

The best bet for obtaining the Vancouver implementation of AX.25 is to
write to Hank Magnuski, KA6M. He will send you a 8" CPM disk with source
in return for a modest donation to AMSAT.

The software may be distributed for noncommercial (i.e., amateur radio) use
but those receiving copies are also strongly urged to make a donation to
AMSAT.

Phil

From -1198536990353574631
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6ebf5fc7d63681c5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-11 11:46:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!hou5f!orion!houca!hogpc!houxm!
mhuxa!mhuxi!mhuxt!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio

Subject: Oscar-10 Freq Reference
Message-ID: <1092@eagle.UUCP>
Date: Sun, 11-Sep-83 14:46:18 EDT
Article-I.D.: eagle.1092
Posted: Sun Sep 11 14:46:18 1983
Date-Received: Mon, 12-Sep-83 19:31:46 EDT
Lines: 99

Revised Mode B Frequency Guide*
(Exclusive of Doppler Shift)

Uplink		Downlink	
		145.987 MHz	Engineering Beacon
435.0323	Scheduled Use	145.9720	SSC H1
435.0423	Scheduled Use	145.9620	SSC H2
435.0447		145.9600	GCB Upper Limit
435.0477		145.9570	ACNF
435.050		145.955	
.055		.950	
.060		.945	
.065		.940	
.070		.935	
.075		.930	
.080		.925	
.085		.920	
.090		.915	
.095		.910	
.100		.905	
435.1037	Passband Center	145.901	
.105		.900	
.110		.895	
.115		.890	
.120		.885	
.125		.880	
.130		.875	
.135		.870	
.140		.865	
.145		.860	
.150		.855	
.155		.850	
.160		.845	GCB Lower Limit
435.1647	Scheduled Use	145.8400	SSC L2
435.1747	Scheduled Use	145.8300	SSC L1
		145.810	General Beacon

* Based on conversion frequency of 581.0047 MHz
SSC= Special Service Channel
GCB= General Communications Band

ACNF=AMSAT Calling and Net Frequency

Preliminary Mode L Frequency Guide*
(Exclusive of Doppler Shift)

Uplink		Downlink	
1269.050		436.950	Upper Limit
.075		.925	
.100		.900	
.125		.875	
.150		.850	
.175		.825	
.200		.800	
.225		.775	
.250		.750	
.275		.725	
.300		.700	
.325		.675	
.350		.650	
.375		.625	
.400		.600	
.425		.575	
1269.450	Passband Center	436.550	
.475		.525	
.500		.500	
.525		.475	
.550		.450	
.575		.425	
.600		.400	
.625		.375	
.650		.350	
.675		.325	
.700		.300	
.725		.275	
.750		.250	
.775		.225	
.800		.200	
.825		.175	
1269.850		436.150	Lower Limit
		436.040	Engineering Beacon
		436.020	General Beacon

*Based on a translation frequency of 1706.00 MHz, estimated

From -6025110405540598803
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,83c70101c0791796,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-12 10:16:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site hplabsc.UUCP
Path: utzoo!linus!philabs!seismo!hao!hplabsc!labelle
From: labelle@hplabsc.UUCP (WB6YZZ)
Newsgroups: net.ham-radio
Subject: How do you locate phase III ?
Message-ID: <1355@hplabsc.UUCP>
Date: Mon, 12-Sep-83 13:16:18 EDT
Article-I.D.: hplabsc.1355
Posted: Mon Sep 12 13:16:18 1983
Date-Received: Wed, 14-Sep-83 20:15:55 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 4

Can someone give the neccessary information to locate OSCAR 10.
Preferably a basic program.

From 7766518245621076788
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6977dd306d0c93d2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-14 17:28:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!floyd!vax135!ariel!hou5f!orion!houca!
hogpc!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: ARRL (80/79/81, CRRL 25A, PFB 37, SB 248
Message-ID: <3455@mgweed.UUCP>
Date: Wed, 14-Sep-83 20:28:59 EDT
Article-I.D.: mgweed.3455
Posted: Wed Sep 14 20:28:59 1983
Date-Received: Thu, 15-Sep-83 08:29:13 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 170

QST DE W1AW
HR ARRL BULLETIN NR 80 FROM ARRL HEADQUARTERS NEWINGTON CT
SEPTEMBER 13, 1983
TO ALL RADIO AMATEURS BT

THE NEW EDITION OF THE ARRL NET DIRECTORY IS NOW AVAILABLE. LISTING OVER 1200 PUBLIC SERVICE NETS BY LOCATION AND FREQUENCY AS WELL AS MANY COMPUTER AND MARITIME SERVICE NETS, THIS NEWLY REVISED BOOKLET IS ALSO PACKED WITH INFORMATION ON ALL THE BASICS OF TRAFFIC HANDLING AND NET OPERATION. YOU MAY OBTAIN A COPY BY SENDING A SELF ADDRESSED NINE BY TWELVE INCH ENVELOPE WITH EIGHTY EIGHT CENTS U.S. POSTAGE TO ARRL NET DIRECTORY, 225 MAIN STREET, NEWINGTON CT 06111 AR

QST DE W1AW
HR ARRL BULLETIN NR 79 FROM ARRL HEADQUARTERS
NEWINGTON CT SEPTENBER 10, 1983
TO ALL RADIO AMATEURS BT

THE ARRL EXECUTIVE COMMITTEE MET SEPTEMBER 10 TO EXAMINE NOMINATING PETITIONS FILED BY MEMBERS IN EIGHT DIVISIONS FOR ARRL DIRECTOR AND VICE DIRECTOR FOR TWO YEAR TERMS OF OFFICE BEGINNING JANUARY 1. THE FOLLOWING CANDIDATES ARE UNOPPOSED AND SO WERE DECLARED ELECTED WITHOUT BALLOTING.

CANADIAN DIRECTOR THOMAS B. J. ATKINS, VE3VGX
ATLANTIC DIRECTOR HUGH TURNBULL, W3ABC
DAKOTA DIRECTOR TMD OLSON, K0TO
GREAT LAKES DIRECTOR LEONARD NATHANSON, W8RC

CANADIAN VICE DIRECTOR HARRY MACLEAN, VE3GRO
DAKOTA VICE DIRECTOR HOWARD MARK, W0OZC
DELTA VICE DIRECTOR ROBERT P. SCHMIDT, W5GHP
GREAT LAKES VICE DIRECTOR GEORGE WILSON, W4OYI
MIDWEST VICE DIRECTOR CLAIRE RICHARD DYAS, W0JCP.

BALLOTS WERE ORDERED MAILED TO FULL MEMBERS IN FIVE DIVISIONS, AS FOLLOWS:

ATLANTIC DIVISION
   FOR VICE DIRECTOR
      BARDSLEY, KB3OM
      GLUNT, W3OKN
      HIPPISLEY, K2KIR
      KUEBERT, K3KA

DELTA DIVISION
   FOR DIRECTOR
      HURLBERT, W5CH
      KEATON, WA4GLS

MIDWEST DIVISION
   FOR DIRECTOR
      GRAUER, W0FIR
      MCCAFFREY, K0CY
      SHEWART, K0SI

PACIFIC DIVISION
   FOR DIRECTOR
      HILL, W6RFF
      STEVENS, W6ZM
      VALLIO, W6RGG
   FOR VICE DIRECTOR
      BARRY, K6RTU
      EDWARDS, W6SZN
      KNOCHENHAUER, K6ITL
      MAXWELL, W6CF

SOUTHEASTERN DIVISION
   FOR DIRECTOR
      BUTLER, W4RH
      WOODWARD. K4SMX
   FOR VICE DIRECTOR
      GAUZENS, W4WYR
      GUNDRY, W4JM

BALLOTS MUST BE RECEIVED BY NOVEMBER 20, AND WILL BE COUNTED ON THE FOLLOWING DAY.

ELECTION RESULTS WILL BE ANNOUNCED BY SUBSEQUENT BULLETIN AR

QST DE W1AW
HR ARRL BULLETIN NR 81 FROM ARRL HEADQUARTERS
NEWINGTON CT SEPTEMBER 14, 1983
TO ALL RADIO AMATEURS BT

THE FCC HAS ISSUED A BLANKET WAIVER FOR THE DURATION OF ALL SPACE SHUTTLE FLIGHTS LAUNCHED UNDER THE AUSPICES OF NASA TO ALLOW ANY LICENSED AMATEUR RADIO OPERATOR TO RETRANSMIT AUDIO AND VIDEO COMMUNICATIONS FROM THE SPACE SHUTTLE PROVIDED THAT PERMISSION FOR THE RETRANSMISSION OF SPACE SHUTTLE COMMUNICATIONS IS OBTAINED FROM NASA PRIOR TO SUCH RETRANSMISSION, AND THE RETRANSMITTED COMMUNICATIONS ARE FOR THE EXCLUSIVE USE OF LICENSED AMATEUR RADIO OPERATORS AR

QST DE W1AW
HR CRRL BULLETIN NR 25A FROM CRRL HEADQUARTERS
LONDON ONT SEPTEMBER 13, 1983
TO ALL RADIO AMATEURS BT

DOC WILL CONDUCT AMATEUR RADIO EXAMINATIONS ACROSS CANADA ON OCTOBER 19. IF YOU PLAN TO WRITE, APPLY TO DOC BEFORE SEPTEMBER 21. THIS WILL BE THE LAST SET OF EXAMINATIONS BASED ON THE OLD TRC24.

DOC HAS SUPPLIED CRRL AND CARF WITH DRAFTS OF THE FINAL VERSION OF ITS NEW TRC24. THE TECHNICAL PORTIONS ARE NOW EXACTLY AS REQUESTED BY CRRL AND CARF IN THEIR JOINT SUBMISSION. THE NEXT TASK IS A REVIEW OF THE DOC QUESTION BANK.

REPRESENTATIVES OF CRRL AND THE CANADIAN CABLE TELEVISION ASSOCIATION HAVE BEEN MEETING IN OTTAWA TO TRY TO SOLVE AN INTERFERENCE PROBLEM IN VANCOUVER. THERE WILL SOON BE A JOINT MEETING WITH DOC, AND A STUDY OF FOUR CABLE SYSTEMS ACROSS CANADA, TO FIND OUT IF REGULATIONS GOVERNING CABLE TELEVISION RADIATION ARE REALISTIC AR

QST DE W1AW
HR PROPAGATION FORECAST BULLETIN NR 37 FROM ARRL HEADQUARTERS
NEWINGTON CT SEPTEMBER 12, 1983
TO ALL RADIO AMATEURS BT

BETWEEN AUGUST 19 AND SEPTEMBER 11 THE SOLAR FLUX APERAGED ONLY 109. THE MOST RECENT COMPARABLE LOW CAME BACK IN JWNUARY 1978. THIS INFORMATION HELPS TO EXPLAIN THE LESS THAN SPECTACULAR PERFORMANCE OF OUR HIGHER DX FREQUENCIES AT A TIME OF YEAR WHEN THEY ARE EXPECTED TO BE AT THEIR BEST. THIS LULL DOES NOT MEAN THAT THE 10 METER BAND WILL BE ONLY MARGINAL THIS AUTUMN. HIGHER SOLAR ACTIVITY CAN COME AT LEAST ANOTHER YEAR OF THIS SUNSPOT CYCLE, AND SEPTEMBER IS ONLY THE BEGINNING OF THE AUTUMN DX SEASON. EVEN 50 MHZ HAS BEEN OPEN FROM SOME SOUTHERN TIER STATES.

AREAS OF THE SUN RESPONSIBLE FOR THE LOW SOLAR FLUX WILL BE RETURNING TO VIEW LATE THIS WEEK. THERE IS SOME INDICATION THAT THEY WILL BE MORE ACTIVE THIS TIME AROUND. MORE ON THIS PROSPECT LATER THIS WEEK. WE WERE IN A PERIOD OF LOW GEOMAGNETIC ACTIVITY AT BULLETIN TIME. THIS SHOULD LAST THROUGH ABOUT THE 16TH, MAKING FOR GOOD SIGNALS ON ALL DX FREQUENCIES. HIGHER SIGNAL ABSORPTION AND POSSIBLE AURORAL EFFECTS ARE LIKELY THE 17TH THROUGH 23RD. BETTER OVERALL PROPAGATION AND HIGHER MUF ARE EXPECTED DURING THE FINAL WEEK OF SEPTEMBER AND MUCH OF OCTOBER AR

QST DE W1AW
HR SATELLITE BULLETIN NR 248 FROM ARRL HEADQUARTERS
NEWINGTON CT SEPTEMBER 14, 1983
TO ALL RADIO AMATEURS BT

OSCAR 10 APOGEE TIMES AND POSITIONS, SEPT 15 0040Z AT 10N 102W 1220Z AT 10N 277W SEPT 16 0001Z AT 10N H93W 1140Z AT 10N 268W 2320Z AT 10N 83W

OTHER AMATEUR SATELLITE REFERENCE ORBITS, SEPT 15 OSCAR 9 0106Z AT 148W RS5 0141Z AT 85W RS6 0126Z AT 88W RS7 0130Z AT 85W RS8 0031Z AT 67W

SEPT 16 OSCAR 9 0045Z AT 143W RS5 0136Z AT 86W RS6 0111Z AT 85W RS7 0121Z AT 84W RS8 0029Z AT 67W

NOAA 7 EQUATOR CROSSING TIMES AND LONGITUDES, SEPT 15 1655Z AT 25W 1837Z AT 51W 1944Z AT 76W FREQUENCY 137.50 MHZ

NOAA 8 EQUATOR CROSSING TIMES AND LONGITUDES, SEPT 15 1034Z AT
135W 1215Z AT 110W 1357Z AT 84W FREQUENCY 137.50 MHZ AR

GL DE W1AW

THIS IS ARRL HQ STATION W1AW NEWINGTON CT. U.S.A.

From -1100981624908617938
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a465bc78a1bad907,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-15 05:34:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: CIA and no-code
Message-ID: <3465@mgweed.UUCP>
Date: Thu, 15-Sep-83 08:34:59 EDT
Article-I.D.: mgweed.3465
Posted: Thu Sep 15 08:34:59 1983
Date-Received: Fri, 16-Sep-83 00:25:12 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 8

What John, KA9MNK said about the CIA opposing no-code could well
be true. The Aug or Sept issue of one of the Ham magazines has
a full page ad from the CIA wanting operators that can copy 12 wpm cw
and type 30 wpm. The starting salary was not very impressive......

     Bob K9EUI

From 8537431813987266561
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 139baf,a57bdd616cf64b8e,start
X-Google-Attributes: gid139baf,public
X-Google-Thread: 151e61,a57bdd616cf64b8e,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 132415,a57bdd616cf64b8e,start
X-Google-Attributes: gid132415,public
X-Google-ArrivalTime: 1983-09-19 11:30:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxq.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!clyde!burl!we13!ihnp4!ihuxq!hanson
From: hanson@ihuxq.UUCP (R. J. Hanson)
Newsgroups: net.ham-radio,bell.ham-radio,btl.ham-radio
Subject: Issues and NO Answers
Message-ID: <317@ihuxq.UUCP>

Date: Mon, 19-Sep-83 14:30:29 EDT
Article-I.D.: ihuxq.317
Posted: Mon Sep 19 14:30:29 1983
Date-Received: Tue, 20-Sep-83 20:38:00 EDT
Organization: BTL Naperville, Il.
Lines: 23

Issues and NO Answers:

1) Does anybody know what happened to the rumored Icom IC-35 220 MHz rig? Has anybody in Net-land gotten a new Santec-220uP ? If so, how is it ? Does anybody have anything to say about the Yaesu Memorizer ?
2) I have seen references before on the net to a CB allocation in VHF or UHF range. Where, pray tell, is that, (so I can avoid it...).
3) Is there any packet activity which does NOT use HDLC chips and strange NRZI encoding ? This would be like RTTY - asynchronous 1200 baud, but have the protocol and packet structure. In other words, why do I have to buy a TAPR board to do packet ? I have a home system and a both a 202 and 212 modem - plug into my serial port, add some software, and presto: packets ! Any other standards or groups working on non-TAPR approaches ?
4) Are there any 2-meter FM DX nuts like me around Chicagoland who can give advice on antenna setup, linears, etc. I have a Kenwood 7950 (45 watts) and a Butternut Super-Trombone (5 dbd omni) whose base is at the 30 foot level (therefore the tip at the 46 foot level). I am going to be putting up a Power-Pack A147-22 sometime. Do all you guys hang out on 52 ? I heard a so-called FM DX net once, called and was either ignored or just didn't make it. Any operating info for a newcomer ?

R. J. Hanson N9DZZ, ihuxq!hanson, BTL-Naperville, IW 1A-407, 312-979-7663

From -9118159200063929694
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7bc2254a91a98fdd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-20 01:29:01 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
ihnp4!ixn5c!inuxc!pur-ee!uiucdcs!uiuccsb!hall
From: hall@uiuccsb.UUCP
Newsgroups: net.ham-radio
Subject: ham radio contact with Space Shuttle - (nf)
Message-ID: <2894@uiucdcs.UUCP>
Date: Tue, 20-Sep-83 04:29:01 EDT
Article-I.D.: uiucdcs.2894
Posted: Tue Sep 20 04:29:01 1983
Date-Received: Wed, 21-Sep-83 02:04:37 EDT
Lines: 6

#N:uiuccsb:8400001:000:120
uiuccsb!hall   Sep 20 00:37:00 1983

Why isn't there any discussion here about the upcoming ham radio
contact with the Space Shuttle in October?
--John Hall

From -5873505834008704761
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58550e90ceada79d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-20 21:59:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site iwu1c.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!iwu1c!
jgpo
From: jgpo@iwu1c.UUCP
Newsgroups: net.ham-radio
Subject: CIA quashes no-code?
Message-ID: <148@iwu1c.UUCP>
Date: Wed, 21-Sep-83 00:59:52 EDT
Article-I.D.: iwu1c.148
Posted: Wed Sep 21 00:59:52 1983
Date-Received: Thu, 15-Sep-83 20:30:13 EDT
Organization: BTL Naperville, Il.
Lines: 17

According to Westlink, rumor has it the Central Intelligence Agency has
made it known to the FCC, in strong terms, that it feels the creation of
a no-code Amateur license would be detrimental to the public welfare.

The CIA apparently feels the Amateur population is a valuable source of already-
trained Morse-capable radio operators and, as such, is important to national
security.

Does anyone have any further information as to the truth of this rumor, or
details of exactly what the CIA told the FCC? Was this merely a recommendation
or was it an "offer they couldn't refuse?"

         73,
         John Opalko   KA9MNK

From 7450612394911408077
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,894606a5b8fbc025,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-21 09:55:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5h.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!clyde!ihnp4!houxm!mhuxi!eagle!hou5h!jak
From: jak@hou5h.UUCP
Newsgroups: net.ham-radio

Subject: W5LFL and STS9
Message-ID: <292@hou5h.UUCP>
Date: Wed, 21-Sep-83 12:55:13 EDT
Article-I.D.: hou5h.292
Posted: Wed Sep 21 12:55:13 1983
Date-Received: Thu, 22-Sep-83 05:47:32 EDT
Organization: AT&T Information Systems Laboratories, Holmdel, NJ
Lines: 43

STS9 is now scheduled for a 11:30 am EDT liftoff
Oct. 28. The schedule for the whole mission is based on elapsed time of the
mission, so if there is a delay in the launch, the scheduled operating
time [of day] will change. But, the schedule based on elapsed time will
remain the same.
The orbits in the table are the only official operating times scheduled for
the mission. However, we must offer a word of caution ...
In the overall picture, amateur radio plays a very minor role.
Therefore it is likely that there will be adjustments to this operating schedule
once STS9 is in orbit. W1AW, W5RRR, and other NASA club stations will carry
the latest information as available.
ARRL is establishing phone lines with recorded information. (203) 666 0688
is the predicted number, but it might change. Westlink will be updating
the Hollywood number at least daily (213) 465 5550.
Assuming an 11:30 launch, the times for AOS listed in the table should be
accurate for the first city area.

Orbit	Date	City/Area	Time
39	10/30	Spokane, Denver, Dallas New Orleans, S. America, Houston	2000CDT
40	10/30	N. California, down Pacific co E. of San Francisco & L.A., Mexico	2000CDt 1930PDT
47	10/31	W. Australia, S. America, Europe	1430 UTC
63	11/1	S. America, USSR, India, Australia	1330 UTC
64	11/1	Iran, Scandinavia, USSR	1555 UTC
77	11/2	NW Africa, E. Europe, Poland, China	0850 UTC
79	11/2	N. tip of S. America, Caribbean, N. Europe, USSR, India	1250 UTC
80	11/2	Caribbean, all E. Coast states, Newfoundlan, U.K. central Europe	0815EST

[reprinted from the Sept. 14 ARRL Letter.
Good luck ... 73, Jim KY2D]

From 2983266164049012634
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c6cde864323e6a5e,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,c6cde864323e6a5e,start
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1983-09-21 17:15:22 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!floyd!clyde!akgua!sb1!mb2c!uofm-cv!tom
From: tom@uofm-cv.UUCP (Tom Libert)
Newsgroups: net.ham-radio,net.dcom
Subject: Phone patches
Message-ID: <262@uofm-cv.UUCP>
Date: Wed, 21-Sep-83 20:15:22 EDT
Article-I.D.: uofm-cv.262
Posted: Wed Sep 21 20:15:22 1983
Date-Received: Fri, 23-Sep-83 03:50:46 EDT
Lines: 35

I'm interested in connecting a device directly to the telephone line. I know about FCC part 68, and I'm curious about what steps (if any) a ham/hobbyist must take in order to receive the phone company's blessing prior to installing a phone patch. In addition, I'd appreciate any pointers/references/ correspondence concerning the general design of phone patches (a.k.a. Direct Access Arrangements). Does it make any sense to design your own? If not, who makes good patches and how much do they cost?

My application involves a speech synthesizer together with a DTMF encoder and a decoder, controlled by a microprocessor. The chips are as follows:

Chip	Description	Manufacturer
SC01A	Phoneme-oriented speech synthesizer	Votrax
5089	DTMF encoder	Mostek (among others)
203-P	DTMF decoder	Silicon Systems, Inc.

I have discovered very few references so far; these have been helpful:

Kuecken, John A., "Talking Computers and Telecommunications", Van Nostrand Reinhold, New York NY, 1983

Members of the Technical Staff of Bell Laboratories, "Engineering and Operations in the Bell System", 1977

Eisenberg, Albert J., "Telephone Coupling Transformers for Interconnect of Voice/Data Modem Terminals", Engineering Application Bulletin F232, Microtran Company, Inc., 145 E. Mineola Ave., Valley Stream NY 11582, 1977.

Kuecken's book contains a wealth of useful information concerning recognition of ring signal, dial tone, busy signal, etc.

Finally, there are many direct-connect modems currently on the market. Each
one of them must contain an FCC-approved telephone interface. Does anyone
have a schematic for any of these modems?

From 1931810091132293678
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,27aff89b57d035fa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-22 08:19:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!ariel!houti!hogpc!
houxm!ihnp4!ixn5c!inuxc!pur-ee!ecn-ec:mahler
From: ecn-ec:mahler@pur-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: ham radio contact with Space Shuttle - (nf)
Message-ID: <1145@ecn-ec.UUCP>
Date: Thu, 22-Sep-83 11:19:14 EDT
Article-I.D.: ecn-ec.1145
Posted: Thu Sep 22 11:19:14 1983
Date-Received: Sat, 24-Sep-83 02:23:11 EDT
References: uiucdcs.2894
Lines: 2

No discussion about the shuttle? ... Well, its not coming to
Great Plains or the Great Lakes areas ... maybe thats why ... Steve N9DRR

From -8581613360021721338
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1b177b7dbe9f70c9,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11946d,1b177b7dbe9f70c9,start
X-Google-Attributes: gid11946d,public
X-Google-ArrivalTime: 1983-09-22 09:19:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version Vortex 1.1 8/4/83; site vortex.UUCP
Path: utzoo!linus!security!genrad!decvax!vortex!lauren
From: lauren@vortex.UUCP (Lauren Weinstein)
Newsgroups: net.ham-radio,net.dcom
Subject: Interfacing to the telephone network
Message-ID: <145@vortex.UUCP>
Date: Thu, 22-Sep-83 12:19:26 EDT
Article-I.D.: vortex.145
Posted: Thu Sep 22 12:19:26 1983
Date-Received: Fri, 23-Sep-83 21:59:50 EDT
Organization: Vortex Technology, Los Angeles
Lines: 14

Unfortunately, high fees and rather restrictive technical
requirements make it generally impractical for an individual
to have equipment certified for direct telephone interconnect,
and only equipment so certified may be legally connected.

However, there are firms who sell already certified "interface
modules" specifically designed for interfacing non-certified
circuits to the telephone network. I believe that the cheapest
of these costs somewhere around $60 or $70, which isn't too
bad considering that it makes you completely legal from an
interfacing standpoint. Contact "Cermetek" up in Silicon Valley
for more info: (408) 734-8150.

--Lauren--

From -4981320350052908932
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8a3c01f94e143dd4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-23 08:34:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site aluxe.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!hou5f!hou5g!hou5h!eagle!mhuxi!
mhuxj!mhuxl!mhuxm!mhuxr!mhuxt!mhuxv!aluxe!richah
From: richah@aluxe.UUCP
Newsgroups: net.ham-radio
Subject: TI-59 PROGRAM FOR OSCAR 10
Message-ID: <399@aluxe.UUCP>
Date: Fri, 23-Sep-83 11:34:13 EDT
Article-I.D.: aluxe.399
Posted: Fri Sep 23 11:34:13 1983
Date-Received: Mon, 26-Sep-83 06:25:19 EDT
Organization: Bell Labs, Allentown, PA
Lines: 13

Has anyone been successful in running the TI-59/OSCAR 10 program that
was published in Electronics?.....The article "TI-59 Program Tracks
Satellites In Elliptical Orbits" By: Janos Molnar, Siofok, Hungary was
published in the October 6, 1981 issue, pages 146 through 149..... The
program gives strange results....Any help appreciated.......73,

Rich Ahrens, W3WJC
Room 30-130
Bell Labs
2525 North 12th St.,
Reading, Pa. 19604   215-929-6174

Path: Mail ..!aluxe!richah

From -7007057044007730
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,617affeec9192b76,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-25 19:12:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10.1 6/24/83; site ucbvax.UUCP
Path: utzoo!linus!decvax!tektronix!ucbcad!ucbvax!woodson
From: woodson@ucbvax.UUCP
Newsgroups: net.ham-radio
Subject: Re: 2m handheld wanted
Message-ID: <949@ucbvax.UUCP>
Date: Sun, 25-Sep-83 22:12:02 EDT
Article-I.D.: ucbvax.949
Posted: Sun Sep 25 22:12:02 1983
Date-Received: Wed, 28-Sep-83 06:58:54 EDT
Organization: U. C. Berkeley Computer Science
Lines: 3

I am interested in a 2m handheld.
Any recommendations or offers?

From 2542057732314327960
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5f250939d6734f46,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-26 00:51:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!clyde!ihnp4!cbosgd!mhuxi!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Oscar-10 Motor Report
Message-ID: <1101@eagle.UUCP>
Date: Mon, 26-Sep-83 03:51:07 EDT
Article-I.D.: eagle.1101
Posted: Mon Sep 26 03:51:07 1983
Date-Received: Wed, 28-Sep-83 03:37:43 EDT
Lines: 160

DL Report Cites Failure Mechanism

After an extensive study of the circumstances surrounding the failure of
the AMSAT OSCAR 10 kick motor, AMSAT DL has released the following report.
The report is quoted verbatim except for minor editorial changes to
correct grammar, spelling, syntax, etc.

I. GENERAL
As a consequence of the collision of the third stage of Ariane L6 with
OSCAR 10, the orbit injection sequence had to be changed. This report
what has been accomplished and what problems were encountered.

II. PLANNED NOMINAL SEQUENCE
The spacecraft was designed to be separated from the launcher with a spin
rate of 10 RPM and an orientation such that a small motor-driven maneuver
could be performed on orbit 3. Following this maneuver, about four weeks were
scheduled for reorientation and calibration of the OSCAR 10 attitude

control system. When the correct attitude for a second spacecraft maneuver was attained, the spacecraft was to be injected into an orbit with 57 degree inclination and 1,500 km perigee.

III. ACTUAL SEQUENCE of EVENTS

After the collision with the launcher shortly after separation, OSCAR 10 was spinning at minus 2 RPM. The sun angle was approximately 70 degrees. This attitude resulted in the spacecraft temperatures being very much below specifications. Moreover, the power production was extremely low. The low spin rate in conjunction with the aerodynamic drag at perigee resulted in a daily improvement of sun-angle of about 3 to 4 degrees. It was thus decided to not adjust the attitude until the sun-angle had improved sufficiently to bring power production and temperatures again into specifications and until the sensors allowed unambiguous attitude determination.

These conditions were met one week after launch. At that time an emergency spin-up maneuver was intiated to allow the normal attitude control system to take over. The spin rate and attitude were adjusted to the first firing attitude until July 8. The first motor firing maneuver duration was increased because of the delay in first firing date and the consqential changes in sun-angle. The new post-first-firing values were to be 19 degrees inclination and 1,500 km perigee.

Local weather conditions at the primary control site prevented satisfactory telemetry reception on July 8 so the firing was moved to July 11. The first motor firin maneuver occured at 22:29 UTC. The motor performed flawlessly. However, it was later learned that the burn duration was 185 seconds rather than the planned 105.

The cause of the longer than planned burn was investigated and traced to a drawing error in the AMSAT-built Liquid Ignition Unit (LIU). The increased burn duration resulted in an orbital inclination of 25.9 degrees and a perigee height of 3,950 km. A secondary result of the extended burn was that the Helium bottle temperature dropped to minus 10 degrees C; again outside of its specifications.

One day later it was noticed that the low pressure Helium indication had dropped to one half of its nominal value while the high pressure reading remained about 200 Bars. Proceeding under the assumption the low pressure Helium gauge was at fault, we reoriented the spacecraft to the new firing attitude. On July 19 at 00:29 UTC the second firing was attempted. However, ever though the magnet activation was confirmed, no firing occured and ther were no changes in the indicated pressures.

Consequently, the spacecraft reorientation was initiated such that operations could commence August 6 at 18:00 UTC using the existing orbit.

IV. INVESTIGATION INTO the LOSS of HELIUM

Telemetry data from various control stations worldwide was collected until August 1 in order to recontruct the pressure history of the spacecraft. from the ddata collected it cn be unambiguously inferred that the Helium loss occured on the high pressure side of of the gas system and that the time

constant was 500 minutes. Furthermore, when the pressure fell below 7 Bars, the time constant changed to about 10 days. This finding rules out any leak in the motor or in the fluid tank system. An investigation with Messerschmitt-Boelkow-Blohm (MBB) on August 2 left only two candidate causes for the leak:

a) the seal of the Helium bottle
b) an "AN3" connection from the Helium pyrotechnic valve leading to a check point

Model Calculations and the observed behavior of the Helium seal in earlier tests led to discarding the "AN3" thoery as the causeof the leak. It is now concluded with a high degree of certainty that the Helium bottle seal caused the gas loss.

We believe the following conditions led to this gas loss:

1) The Helium bottle used in OSCAR 10 was developed by AMSAT DL with assistance from DFVLR [abreviation unknown- Ed] because the more conventional gas containers did not fit into the available physical space. The composite technology employed resulted in a bottle which could be specified for service only for temperatures above 0 degree C. Differential temperature expansion problems precluded hermeticity guarantees below 0 degrees C.

2) As a consequence of the poor sun angle subsequent to deployment, OSCAR 10 experienced a total of 14 cold cycles beyond its specifications early in its life. Some temperature excursions were to as low as minus 10 degrees C.

3) Shortly before the launch campaign, an error in the termal design was discovered. The error would have resulted in operating temperatures 10 degrees lower than the design target for OSCAR 10. Using the limited resources available at Kourou the design could be modified only to the extent that 5 degrees of the 10 degree error could be recovered. As a result, the spacecraft temperature is 5 degrees lower than originally planned.

4) The extended burn led to another low temperature cycle of the Helium bottle to minus 10 degrees C.

Each of these conditions would not, taken separately, resulted in a leak. However, the cumulative effect of the intial cold cycles probably reduced the tension of the hekium bottle seal to about one half of its design value. The temperature drop during the first burn plus the pressure change likely reduced the seal tension sufficiently to have causec the leak.

The following evidence supports this finding:

1) The Helium high pressure indicator exhibits a shift of the zero-line by about 200 Bars. This pressure gauge is a starin gauge affixed to the bottle. The observed shift evidences irreversible bottle dome material deformation.

2) The change in the leak time-constant at 7 bars can be explained by the fact that the bottle seal contains a Teflon O-ring which, from prior experience, is known to seal between between 5 to 10 Bars. (No such ring exists in the AN3 connection).

V. CONCLUSION FOR FUTURE PHASE 3 SPACECRAFT

a) The thermal design of the spacecraft will be changed to increase the temperature to a nominal design.

b) AMSAT will make every effort to replace the solid propellant motor planned for Phase 3C by the MBB liquid propulsion system. A solid propellant motor would not have survived the thermal abuse of OSCAR 10. The liquid propulsion system provided margins that were instrumental in saving the mission.

c) For Phase 3C, AMSAT will attempt to resdeign the Helium bottle such that its operating temperature can be specified to minus 10 degrees C.

VI. CONCLUSION REGARDING OPERATIONS of OSCAR 10

The present orbit of OSCAR 10 provides about 40 percent of the radio coverage compared to the originally planned 57 degree inclination orbit.

Furthermore, the low inclination forces antenna off-pointing and/or operational quiet times for about 40 percent of the time because of sun-angle constraints. Consequently, operational capability of OSCAR 10 is reduced to about one fourth of its planned value. Also, because of the 17 day periodicity of the satellite's footprint, unfortunate week-long interruptions in East-West traffic (e.g., over the North Atlantic) results.

On the positive side it may be noted that OSCAR 10 can meet all its scientific objectives and that the communications capability is so large that even one fourth of its nominal capability represents a very significant communication potential for amateur radio operators. This is all the more true since this is the first working spacecraft of this series and the users can take only previous OSCARs as basis for comparison. Plainly, OSCAR 10 presents a dramatic improvement.

From 2359909187564675193
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ce3e56d56590a9e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-26 09:30:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site fluke.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!ssc-vax!fluke!limey
From: limey@fluke.UUCP (Paul Baldock)
Newsgroups: net.ham-radio
Subject: OSCAR 10 Predictor Program
Message-ID: <1128@vax3.fluke.UUCP>
Date: Mon, 26-Sep-83 12:30:11 EDT
Article-I.D.: vax3.1128
Posted: Mon Sep 26 12:30:11 1983
Date-Received: Thu, 29-Sep-83 07:03:44 EDT

Organization: John Fluke Mfg. Co., Everett, Wash
Lines: 10

Could somebody give me the necessary geometric equations to write
a program for predicting OSCAR 10 (or tell me in what literature
to look)?

Does anybody have a program written for the HP41C Calculator?

Paul Baldock kw7y
John Fluke Mfg Co Inc
Everett, WA

From 4493157098358779105
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f5a507351ec2569,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-26 11:49:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!we13!
mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: TV distribution problems
Message-ID: <3731@mgweed.UUCP>
Date: Mon, 26-Sep-83 14:49:08 EDT
Article-I.D.: mgweed.3731
Posted: Mon Sep 26 14:49:08 1983
Date-Received: Wed, 28-Sep-83 04:36:48 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 52

I have some questions on TV components; 2 set couplers, splitters, etc:

I am trying to upgrade my TV antenna/distribution system in my house.
I believe I have adequate antennas. I use a midrange Radio Shack VHF
antenna and a separate UHF antenna, which is a 4-bay bow-tie. This
bow-tie has been cut to favor the part of the UHF band of interest,
which made a heck of a difference.

To combine the 2 antennas, I was told by an "expert" that I should use
a device called an "antenna coupler". It looks like the old 2 set couplers
with three sets of screws for the 2 inputs and output.

I originally thought that the best bet would be to use a VHF/UHF splitter
(backwards) but was told this did not work as well.

Does anyone know what this so-called "antenna coupler" is? I still think
the splitter is the way to go. A few years ago I helped a friend install
a new antenna and we borrowed a Jerrold field strength meter to find the

best spot on the roof. We also checked the loss thru the splitter at the set and found there was no noticable loss thru it. The signal on the UHF output port was the same as directly off the lead-in and it made no difference if the VHF port was properly terminated, open, or shorted. The same was true on the VHF port. So that is why I am inclined to think the splitter is best.

The "antenna coupler" does not distuingish between VHF and UHF inputs so it seems to me that it must be made like the ordinary 2 set coupler and would have 3 dB loss at each port......

Since I am trying to improve the signal level at each set (I need 3 locations) I can't stand the loss involved with ordinary passive multi-set couplers, however I have been reluctant to go to an amplifier since I know from other's experiences how badly they pick up undesired rf. (For example, All Radio Shack's antenna amps I have seen, oscillated and were really TVI prone). Any recomendations on antenna amplifiers would be appreciated.

(Yes, I could measure the loss of the antenna coupler, but I hate to tear into the system until I know what the final configuration will be).

Oh yes, another thing: I have always stuck with twinlead since (at least in dry weather) it is much less lossy than RG-59. All my sets have 300 ohm inputs anyway.

I live 40 miles west of Chicago and can almost see the Sears tower but am not impressed with the signal levels out here. Before stations went up there, signal levels on an average antenna system were only about 1000 uv on a 300 ohm antenna......

Bob, K9EUI

From -70330362157251645
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1d7b6228cb7ff9a7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-27 09:36:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!hou5f!hou5g!hou5h!eagle!mhuxi!
houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: ARRL BULLETINS
Message-ID: <3750@mgweed.UUCP>
Date: Tue, 27-Sep-83 12:36:56 EDT
Article-I.D.: mgweed.3750
Posted: Tue Sep 27 12:36:56 1983
Date-Received: Thu, 29-Sep-83 02:48:44 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 88

BULLETIN NR 84 FROM ARRL HEADQUARTERS NEWINGTON CT
SEPTEMBER 20 1983 TO ALL RADIO AMATEURS B
THE FOLLOWING HAVE BEEN ELECTED WITHOUT BALLOTING AS SMS FOR THEIR
RESPECTIVE SECTIONS...

ALASKA...KL7EB
KANSAS...K0BXF

THOSE ELECTED WILL BEGIN NEW TERMS JANUARY 1 1984. A

BULLETIN NR 85 FROM ARRL HEADQUARTERS NEWINGTON CT
SEPTEMBER 21 1983 TO ALL RADIO AMATEURS B
TO COMMEMORATE THE 23RD OLYMPIAD DURING 1984...AMATEUR RADIO STATIONS
LOCATED IN CALIFORNIA WHOSE CALL SIGNS CONTAIN THE DIGIT 6 WILL BE
ALLOWED TO USE EITHER 23 OR 84 IN LIEU OF THE DIGIT 6 FROM JULY 1 1984
TO AUGUST 31 1984. A

BULLETIN NR 87 FROM ARRL HEADQUARTERS NEWINGTON CT
SEPTEMBER 22 1983 TO ALL RADIO AMATEURS B
THE FOLLOWING HAVE BEEN ELECTED WITHOUT BALLOTING AS SMS FOR THEIR
RESPECTIVE SECTIONS...

SANTA BARBARA...WB6HJW
TENNESSEE...NO4Q

THOSE ELECTED WILL BEGIN NEW TERMS JANUARY 1 1984. A

DX BULLETIN NR 37 FROM ARRL HEADQUARTERS NEWINGTON CT
SEPTEMBER 23 1983 TO ALL RADIO AMATEURS B
THANKS TO N1AJO...W1TRC AND K1MM OF THE SOUTHERN NEW ENGLAND DX
ASSOCIATION FOR THE FOLLOWING DX INFORMATION.

ANTARCTICA. LOOK FOR VP8ANT AROUND 3795 KHZ AT 1030Z. 4K1GDW HAS BEEN
WORKED AT 2300Z ON 3503 KHZ.

TAIWAN. I2MQP/BV0 HAS BEEN EXTREMELY ACTIVE. CHECK 14195 KHZ AT 1100Z
AND 21295 KHZ AT 2400Z ON SSB. CW OPERATION IS BETWEEN 14020 AND 14030
KHZ AND BETWEEN 21025 AND 21030 KHZ.

MALAGASY REPUBLIC. 5R8AL CAN BE FOUND ON MONDAYS AND WEDNESDAYS AT
1900Z BETWEEN 21330 AND 21335 KHZ.

TOGO. ALI...5V7RE...IS ON 21335 KHZ BETWEEN 1700 AND 2000Z.

CONGO. ROGER...TN8EE...MAY ALSO BE FOUND ON 21335 KHZ AROUND 1700Z.

DEPARTURES. LEE...TJ1AF...HAS RETURNED TO THE STATES AND 9Y4RD/ST0 HAS
GONE BACK TO 4X4.

SIERRA LEONE. LOOK FOR LA2WW/9L1 AROUND 21330 KHZ.

SOUTHWEST PACIFIC. C21BD...NAURU...AND ZL4OY/C...CHATHAM ISLAND...CAN
BOTH BE FOUND ON 3795 KHZ AT 1100Z.

160 METERS. THE TOP BAND HAS HAD LITTLE QRN LATELY. LOOK FOR
4U1ITU...EA3VY...GS...DLS AND OTHER EUROPEANS OPERATING IN THE WINDOW
STARTING AROUND 0330Z. SV0AA HAS BEEN WORKED IN THE U.S. AT 0330Z.

CHINA. TOM...VE7BC...REPORTS THAT HE WILL ACTIVATE BY1PK ON SSB
BEGINNING OCTOBER 4. HE PLANS TO WORK U.S. AND CANADIAN STATIONS BY
CALL AREA. HE WILL BEGIN AT 2 P.M. PEKING TIME ON 14145 KHZ...
LISTENING BETWEEN 14180 AND 14220 KHZ.

ST. PAUL ISLAND. THE CALL FOR THE ST. PAUL OPERATION BETWEEN SEPTEMBER
23 AND OCTOBER 3 HAS BEEN CHANGED TO VY0SPI.   A

ARRL IL SECTION BULLETIN NR 8   FROM SECTION BULLETIN MANAGER
WHEATON IL   SEPTEMBER 24 1983   TO ALL RADIO AMATEURS B
THE FOLLOWING INFORMATION...OF PARTICULAR INTEREST TO TRAFFIC
HANDLERS...HAS BEEN RECEIVED FROM ILLINOIS STM KB9X.

BEGINNING OCTOBER 1 1983 A NEW TRAFFIC NET WILL BE INITIATED. THIS
NET...CALLED THE ILLINOIS SIDEBAND NET /ISN/...WILL MEET DAILY AT 6 PM
LOCAL ILLINOIS TIME ON 3905 KHZ. THE ISN IS AN NTS NET.

READERS OF QST/S SECTION NEWS FOR OCTOBER 1983 WILL NOTE A DISCREPANCY
BETWEEN THE ISN/S ACTUAL STARTING TIME...6 PM...AND WHAT APPEARS IN THE
QST COLUMN. THIS OCCURRED BECAUSE THE STARTING TIME WAS CHANGED BY NET
OFFICIALS AFTER THE QST PUBLICATION DEADLINE.

ALL AMATEURS INTERESTED IN THIS IMPORTANT ASPECT OF AMATEUR RADIO
PUBLIC SERVICE ARE URGED TO PARTICIPATE IN THE ISN.   A

From 9009642761767049335
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,68c6875a86e41656,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-27 13:03:44 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!ariel!hou5f!hou5g!
hou5h!eagle!mhuxi!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Morse punctuation
Message-ID: <3758@mgweed.UUCP>
Date: Tue, 27-Sep-83 16:03:44 EDT
Article-I.D.: mgweed.3758
Posted: Tue Sep 27 16:03:44 1983
Date-Received: Wed, 28-Sep-83 21:56:11 EDT

Organization: Western Electric - Montgomery Illinois
Lines: 12

OK Morse fans, I am working on a code converter and need to know the
Morse characters for the following punctuation:

    Exclamation
    Quote
    Apostrophe
    long dash and short dash

    Tnx in advance,
    Bob, K9EUI

From -6618112156227260823
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b52cf177434f2aeb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-27 13:10:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!ariel!hou5f!hou5g!
hou5h!eagle!mhuxi!houxm!ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: PEP RULE QUESTION
Message-ID: <3759@mgweed.UUCP>
Date: Tue, 27-Sep-83 16:10:45 EDT
Article-I.D.: mgweed.3759
Posted: Tue Sep 27 16:10:45 1983
Date-Received: Wed, 28-Sep-83 22:12:55 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 11

I have a question on the new FCC rule regarding PEP power measurement.
It seems to me the wording is aufully confusing on their definition
of what PEP is. I don't have the text of the Report & Order in front
of me, but in the same sentence they talk about "average", "crest"
and "peak". To me, PEP is not an average power but the instantaneous
peak at the crest (highest value) of the cycle. How does the word
"average" get into this??????????

Bob K9EUI

From -8000654137790229820
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d21af3d85766d05c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-28 08:06:53 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!ihuxf!
parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: Re: 2m HT recommendation
Message-ID: <703@ihuxf.UUCP>
Date: Wed, 28-Sep-83 11:06:53 EDT
Article-I.D.: ihuxf.703
Posted: Wed Sep 28 11:06:53 1983
Date-Received: Thu, 29-Sep-83 05:59:32 EDT
Organization: BTL Naperville, Il.
Lines: 173

A recent "net.ham-radio" reader asked for recommendations for 2 meter handie talkies1 (HT's) I recommend the Yaesu FT208R. I recommend this unit not NOT because I own it, rather I own it because I think it is one of the better units available.

It meets several of the criteria important to my needs:

o+ CTCSS - Ease of installing a synthesized CTCSS encoder. The FT208R has plenty of room set aside for just such an accessory, and a wiring harness that allows the encoder (or encoder/decoder) to plug right in.

o+ Battery replacement - The battery pack is a monolithic unit, and is easily replaceable. Flipping a lever on the bottom of the radio unlocks a battery compartment cover. This type of battery is used by several radios in the land mobile industry, hence replacement batteries are available from several battery manufacturers. Spectronics sells a replacement battery made by Alexander. It has 50 mah more capacity than the original Yaesu battery, and is a bit cheaper.

o+ Ruggedness - A heavy cast metal frame surrounds

the
radio. The top is metal, not plastic. The volume
and
squelch controls are of the conventional type, rather than type found in cheapie transistor radios which permit dust to enter the enclosure. The external appearance shows the designers paid attention
to details.
It's built "like a Swiss watch."

o+ Flexibility - For interface to the outside world, there are jacks for earphone, charger, external power (disconnects the internal battery)2, and external speaker/microphone. The antenna connector is a
BNC
type, rather than the 1/8" "earphone-type" jack on
the
Tempo units.

o+ Memory backup - The FT208R uses a lithium ("watch-type") battery to power the memory. By the time this battery needs replacement, I will have sold the HT!

---

1. handie talkie is a registered trademark of Motorola, Inc.

2. This is important. The batteries may be charged while powering the radio from an independent DC source.

Now for the negatives:

o+ The receiver does not provide sufficient audio output for use in noisy environments. The audio output on
the
Tempo S1/S5 is much more substantial.

o+ There is no memorization of transmit frequency offsets, as in the Santec ST144up. The user must make the proper selection via a rotary switch on the top of the radio.

o+ With ruggedness comes weight. This is not the lightest unit on the market.

o+ The scanning algorithm, like that found in most Japanese radios, could be better. There is no way to lock out channels from being scanned. The options for scanning for a clear channel, and scanning without stopping (even for a second!) are rather useless here. The priority scan feature acts differently than that of most scanning receivers3 and is not nearly as useful4.

Ten-Tec just announced their own, American made, 2 meter HT.
Shipments to stores are starting now. I saw this unit (serial number 8) at the Mid-Con show, and it looked promising. Some salient details:

o+ Its scanning algorithm resembles that used in the more traditional scanning receivers Americans have grown accustomed to.

o+ The case is entirely plastic.

---

3. The priority scan feature in the Bearcat 250, 20/20, 300, 350, 220, and the Regency K500, M100, and M400 samples the priority channel every 2 seconds. If there is activity on the priority channel, the radio locks onto it until the transmission is completed, then resumes listening on the channel that was interrupted.

4. The priority feature on the FT208R samples every 10 or 15 seconds, which is too infrequent. When activity is found on the priority channel, the radio locks onto it ... forever! The radio never resumes its normal activity.

o+ The battery pack is removable in the same manner as
that of the ICOM 2AT.

o+ There is almost no room for a CTCSS encoder, so Ten-Tec is designing one of their own.

As for future developments in this area, I think we will see:

o+ Improvements in battery technology, leading to longer times between recharging. Maybe we will see long life, throw away, battery packs.

o+ Multi band HT's for 146, 220, and 450 MHz.

o+ Multi mode HT's with SSB and FM.

o+ HT's with public service band receive capabilities built in, like the merging of an HT with a portable scanner.

I don't advise buying a used HT unless you have a comprehensive guarantee or trust the seller. Many amateur stores won't even take in used HT's on trade. They are difficult to service and suffer more physical abuse than base station and mobile radios.

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Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -2640541714066561567
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11e8b6,c6a740b988a9a14b,start
X-Google-Attributes: gid11e8b6,public
X-Google-Thread: 151e61,c6a740b988a9a14b,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-28 09:03:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!ihuxf!
parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.followup,net.ham-radio
Subject: Cordless phone repairmen need FCC licenses
Message-ID: <704@ihuxf.UUCP>
Date: Wed, 28-Sep-83 12:03:53 EDT
Article-I.D.: ihuxf.704
Posted: Wed Sep 28 12:03:53 1983
Date-Received: Thu, 29-Sep-83 06:00:48 EDT
Organization: BTL Naperville, Il.
Lines: 27

A recent submission pertaining to trouble in a cordless telephone suggests:

"..... BUT** don't fret! a tune up on your phone by the factory or someone who knows what the're doing will cure your problem."

Cordless telephones, CB radios, and marine radios contain radio transmitters. Their design must be type accepted by the Federal Communications Commission (FCC).

According to the FCC, service on these units, as well as other transmitting equipment (other than ham radio equipment), MUST be performed by, or under the direct supervision of the holder of an FCC Radiotelephone License 2nd Class or higher.

Holders of these licenses are required to pass FCC tests in communications, electronics, and radio regulations.

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Robert S. Parnass, AT&T Bell Laboratories, ihnp4!ihuxf!parnass (312)979-5760

From -5367669492625398708
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,617affeec9192b76
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-28 09:34:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cvl.UUCP
Path: utzoo!linus!philabs!seismo!rlgvax!cvl!louie
From: louie@cvl.UUCP (Louis A. Mamakos)
Newsgroups: net.ham-radio
Subject: mobile 2-meter rig
Message-ID: <632@cvl.UUCP>
Date: Wed, 28-Sep-83 12:34:29 EDT
Article-I.D.: cvl.632
Posted: Wed Sep 28 12:34:29 1983
Date-Received: Thu, 29-Sep-83 22:05:24 EDT
References: <949@ucbvax.UUCP>
Organization: U. of Md. Computer Vision Lab
Lines: 17

I'm looking for a mobile 2m rig for my car. I've got a Toyota Celica, and
my present rig (an IC-25A) is too large to fit. I think that I'm really
after a rig with a control head which is small, and the rest of the guts under
a seat or in the trunk. It should be synthesized (of course!), and about
25W or so. Oh, for the days when we had GE Prog-Lines with control heads!

        Louis A. Mamakos   WA3YMH

     Internet: louie@cvl.arpa
     CSNet: louie.cvl@umcp-cs
     uucp: ..!{seismo,we13,mcnc}!rlgvax!cvl!louie
        phone: (301) 454-2946
        Snail Mail:
                   Computer Science Center - Systems Staff
                   University of Maryland
                   College Park, MD   20742

From -5911550596938106141
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8435e113846f7a25,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-28 11:44:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!clyde!ihnp4!houxm!mhuxi!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: STS-9/W5LFL info
Message-ID: <1103@eagle.UUCP>
Date: Wed, 28-Sep-83 14:44:43 EDT
Article-I.D.: eagle.1103
Posted: Wed Sep 28 14:44:43 1983
Date-Received: Thu, 29-Sep-83 06:17:33 EDT
Lines: 52

Posted: Tue Sep 27, 1983 11:36 PM EDT Msg: UGID-1632-1156
From: RWALLIO
To: amsat
Subj: STS-9/W5LFL info

Following is info on STS-9/W5LFL received from W5RRR this PM:

W5LFL will be operational on a total of eight orbits (out of
a mission total of 145). Only three of these will serve the
continental U.S.

The following ascending node EQX info is based on a liftoff
at OCT28 1630UTC

Orbit 39	OCT 31	0103:42 UTC	241.50 W	(The midwest's only chance)
40	OCT 31	0233:04	264.20	(For the west coast)
47	OCT 31	1258:35	063.70	
63	NOV 1	1247:56	066.11	
64	NOV 1	1417:15	088.80	
77	NOV 2	0938:16	023.69	
79	NOV 2	1236:51	069.05	
80	NOV 2	1406:09	091.73	(For the east coast)

W5LFL will NOT be active during these entire passes, standby for
last minute scheduling. However, he WILL be active to provide
continental U.S. QSOs at the right times on orbits 39, 40 and 80.

Nodal period:	89.40 minutes
Long. Increment:	22.71 degrees/orbit
Average height:	249.5 Km
Inclination:	57 degrees

Keplerian elements (which have been checked through orbit 39
for reasonable accuracy using the W3IWI program)

EPOCH	1983 Day 302 1746:44.89 UTC
INCLINATION	57.0248 degrees
RAAN	178.60498 degrees
ECCENTRICITY	0.00083
ARG. of PERIGEE	001.86848 degrees
MEAN ANOMOLY	358.13682
MEAN MOTION	16.07142857 orbits per day
DRAG	0.030 (...a biggee!!)

SMA	6633.118215

These elements are for orbit 18. A nominal mission would include
only very minor maneuvering burns between orbits 18 and 80 which
means these elements may be useable without update (assuming
another FIRST CLASS NASA job).

That is (hopefully) all....

From 6133924497489133402
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b52cf177434f2aeb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-28 13:22:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!tektronix!tekmdp!michaelk
From: michaelk@tekmdp.UUCP (Michael Kersenbrock)
Newsgroups: net.ham-radio
Subject: Re: PEP RULE QUESTION
Message-ID: <2259@tekmdp.UUCP>
Date: Wed, 28-Sep-83 16:22:08 EDT
Article-I.D.: tekmdp.2259
Posted: Wed Sep 28 16:22:08 1983
Date-Received: Fri, 30-Sep-83 01:59:22 EDT
References: mgweed.3759
Lines: 15

The power rule, as I would interpret it (not necessarily the same way
as the FCC) is that they are talking about peak average power, NOT
peak-instantaneous power. The hint of this is the "E" in PEP. It is
peak ENVELOPE power. The envelope is in that viewpoint of the waveform
where the signal is going up-and-down at the *audio* rate, not the
14 Mhz up-and-downing. It is this envelope that is 4x carrier power on AM.
"At" the peak of the envelope, you have MANY 14 Mhz cycles, and it it
the average power of this level (not peak instantaneous) that is being
specified. So you have (Erms)(Erms)/(Rant) =< 1500 Watts where Erms is at
the peak of the *envelope*. In the case of cw, the "peak" of the envelope
is when the key is down.

Mike Kersenbrock WB4IOJ
Tektronix Microcomputer Development Products
Aloha, Oregon

From -1272707831028158380
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11e8b6,c6a740b988a9a14b
X-Google-Attributes: gid11e8b6,public
X-Google-Thread: 151e61,c6a740b988a9a14b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-29 06:30:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!ittvax!ittral!shacklet
From: shacklet@ittral.UUCP (Cliff Shackelton)
Newsgroups: net.followup,net.ham-radio
Subject: Re: Cordless phone repairmen need FCC licenses
Message-ID: <309@ittral.UUCP>
Date: Thu, 29-Sep-83 09:30:19 EDT
Article-I.D.: ittral.309
Posted: Thu Sep 29 09:30:19 1983

Date-Received: Fri, 30-Sep-83 11:39:37 EDT
References: ihuxf.704
Lines: 21

In regard to your statement that cordless phone repairmen need FCC
licenses, I was simply trying to help that person solve his problem.
However if you want to be that way, then since cordless phones are
also covered under FCC part 68, A FCC 2nd or 1st class license doesn't
mean diddly squat. Only the factory or it's authorized agent may repair
a phone. If you want to repair phones you need to send a repaired unit
in for FCC Part 68 testing and submit the data to the FCC and get
a FCC number to stick on the bottom of the phone.
Effective untill June 1985 a waiver has been issued
to cordless phone manufacturers allowing them a certain amount of
freedom to skirt around some of FCC part 15. This is why we are able
to pump so much power into the AC line (not antenna) and since an
antenna isn't used it is not strictly considered to be a radio
transmitter. It can generate interference an a label on the phone
says so (as per FCC part 15 subpart J). How would you like to have
to get a radiotelephone operators license to work on your computer?

FLAME OFF
Cliff Shackelton
ITT Telecom
(919)829-3110

From 4471095341963772168
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e36dfa7c9b7d3ef7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-29 12:25:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10.1 6/24/83; site aluxe.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!ariel!hou5f!hou5g!
hou5h!eagle!mhuxi!mhuxj!mhuxl!mhuxm!mhuxr!mhuxt!mhuxv!aluxe!richah
From: richah@aluxe.UUCP
Newsgroups: net.ham-radio
Subject: RESPONSE TO ARTICLE 851. HP41C OSCAR 10 PROGRAM...
Message-ID: <402@aluxe.UUCP>
Date: Thu, 29-Sep-83 15:25:06 EDT
Article-I.D.: aluxe.402
Posted: Thu Sep 29 15:25:06 1983
Date-Received: Sun, 2-Oct-83 19:42:22 EDT
Organization: Bell Labs, Allentown, PA
Lines: 16

An Oscar 10 program for the HP-41C was published in the March 1981
issue of Ham Radio, pages 46 through 50. "Tracking Satellites In
Elliptical Orbits", by Paul C. Bunnell, WA6VJR. I have not
tried this program. Has anyone had success???

The geometric equations were published in the article (ref. this newsnet

article 847) "TI-59 Program Tracks Satellites In Elliptical Orbits", by
Janos Molnar, Siofok, Hungary. This article was in the Oct. 6, 1981 issue
of Electronics, pages 146 through 149. I have not had total success with
this TI-59 program.

Rich Ahrens W3WJC
Room 30-130
AT&T Bell Laboratories
2525 North 12th St.
Reading, Pa. 19604   (215)929-6174   8-234-6174   !aluxe!richah

From -993320640221822128
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b831812bf9239bc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-29 16:22:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!floyd!whuxlb!pyuxll!
eisx!npoiv!npois!hogpc!houxm!ihnp4!ixn5c!inuxc!pur-ee!ecn-ec:mahler
From: ecn-ec:mahler@pur-ee.UUCP
Newsgroups: net.ham-radio
Subject: CQ chess - (nf)
Message-ID: <1168@ecn-ec.UUCP>
Date: Thu, 29-Sep-83 19:22:16 EDT
Article-I.D.: ecn-ec.1168
Posted: Thu Sep 29 19:22:16 1983
Date-Received: Sun, 2-Oct-83 20:23:57 EDT
Lines: 6

#N:ecn-ec:19900003:000:113
ecn-ec!mahler   Sep 29 09:39:00 1983

What nets/clubs are available on 40/20/15 meters
for playing chess with other hams ?? ... 73s ... Steve N9DRR

From -7291826230197411993
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d21af3d85766d05c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-09-29 16:24:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!cornell!uw-beaver!tektronix!tekmdp!
michaelk
From: michaelk@tekmdp.UUCP (Michael Kersenbrock)
Newsgroups: net.ham-radio
Subject: Re: 2m HT recommendation
Message-ID: <2261@tekmdp.UUCP>
Date: Thu, 29-Sep-83 19:24:11 EDT
Article-I.D.: tekmdp.2261
Posted: Thu Sep 29 19:24:11 1983

Date-Received: Sun, 2-Oct-83 15:02:08 EDT
References: ihuxf.703
Lines: 33

I bought a 2m HT recently, and it was a Kenwood TR2500. There were three major reasons for selecting it.

1. It had most all the whiz-bang microprocessor features that I wanted and was built nicely (bnc connector, mic./spkr extension plugs, etc). The only feature I wanted that it didn't have was that the ten channel memories didn't remember the split. This is not Kenwood's first HT, and unlike their older model, the split slide switch has -600 and +600 at opposite *ends* of travel, so the selection is easy. These little things are nice, but not necessary. Kenwood, at least on HF equipment seems (based on what stories I've heard)to have a good reputation for support when necessary.

2. Ergonomics. The thing you look at (LCD display) is at the top, and the thing I talk into (microphone) is at the bottom. My head is built in a manner that likes that arrangement.

3. The microphone is as far to the bottom as possible. This puts the antenna (which by the lightbulb & loop test radiates mostly from the bottom -- near the connector) as far away from my head as possible while transmitting. HT's with the microphone near the top put the antenna base much closer to the head, and in this "near-field" the field intensity is dropping off at least a cubed rate, and so the relative radiation through my head is much lower percentage wise with the microphone at the bottom. This might not be an ultra-important factor, but I am not inclined to be the top-microphone guinea pig to discover long term effects. Especially radiation to the head. I think speaker-mikes are not a bad idea.

Mike Kersenbrock WB4IOJ
Tektronix Microcomputer Development Products
Aloha, Oregon

From -3830607371230609138
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1e052f3881e0627a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-11 06:35:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!ixn5c!inuxc!pur-ee!kk9w
From: kk9w@pur-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: Radio Shack PRO-24 Pocket Scanner
Message-ID: <972@pur-ee.UUCP>
Date: Mon, 11-Jul-83 09:35:51 EDT
Article-I.D.: pur-ee.972

Posted: Mon Jul 11 09:35:51 1983
Date-Received: Wed, 13-Jul-83 04:56:09 EDT
References: ihuxf.573
Lines: 5

Do we need to form a net.scanner? Come on, guys, surely there's more to life than eavesdropping on the cops.

Dave Andersen, kk9w (not an arrl ta)

From 9164826430418099631
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 139baf,364b09bc97b7f3c9,start
X-Google-Attributes: gid139baf,public
X-Google-Thread: 151e61,364b09bc97b7f3c9,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 132415,364b09bc97b7f3c9,start
X-Google-Attributes: gid132415,public
X-Google-ArrivalTime: 1983-07-11 12:35:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio,bell.ham-radio,btl.ham-radio
Subject: Update on PRO-24 Pocket Scanner
Message-ID: <575@ihuxf.UUCP>
Date: Mon, 11-Jul-83 15:35:40 EDT
Article-I.D.: ihuxf.575
Posted: Mon Jul 11 15:35:40 1983
Date-Received: Tue, 12-Jul-83 20:52:12 EDT
Organization: BTL Naperville, Il.
Lines: 27

This submission updates my previous article concerning experiences with the new Radio Shack PRO-24 pocket scanner.

On July 9, I returned the PRO-24 to the dealer from which it was purchased and received another one in exchange. This new one has a later serial number (210852) and was packaged in a red and white box. The original unit was packaged in a blue and white box.

The sensitivity of the replacement scanner is much better than that of the original unit, although still not quite as good on UHF as a friend's Fanon 6 channel scanner.

The holes on the belt clip of the new scanner are the proper size, as contrasted to the improper molding job done on

the
first one.

The squelch hysteresis was a problem on both scanners,
but
my original news item detailed a fix for that.

Robert S. Parnass, AJ9S (ARRL Technical Advisor)
Bell Laboratories
Naperville, Illinois 60566

ihnp4!ihuxf!parnass

From -5068603624503556053
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3ebf9477f0935875,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-11 19:57:41 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!mhuxa!mhuxi!
mhuxt!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: First motor burn!
Message-ID: <1035@eagle.UUCP>
Date: Mon, 11-Jul-83 22:57:41 EDT
Article-I.D.: eagle.1035
Posted: Mon Jul 11 22:57:41 1983
Date-Received: Tue, 12-Jul-83 22:11:26 EDT
Lines: 21

At 22:30:48 UTC this evening (11 July 1983) the Amsat-Oscar-10 kick
motor was fired for the first time. Firing duration was
107.52 seconds, and all telemetry indicates that the burn was
successful. While actual elements are not yet available, a simulation
based on nominal motor performance yields the following elements:

```
Epoch time:      83192.93930000
   Mon Jul 11 22:32:36 1983 UTC
Inclination:       17.7766 deg
RA of node:       248.7150 deg
Eccentricity:    0.6824060
Arg of perigee:   188.8217 deg
Mean anomaly:     181.4370 deg
Mean motion:    2.21235225 rev/day
Semi major axis: 24882.879 km
Anom period:    650.890923 min
Apogee:          35485.006 km
Perigee:          1524.555 km
```

Phil Karn, KA9Q/2

From 4122663432372883780
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c9df48f452ae4aa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-12 16:27:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
mhuxa!mhuxi!cbosgd!ihnp4!ixn5c!inuxc!pur-ee!wn9nbt
From: wn9nbt@pur-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: Radio Shack PRO-24 Pocket Scanner - (nf)
Message-ID: <973@pur-ee.UUCP>
Date: Tue, 12-Jul-83 19:27:02 EDT
Article-I.D.: pur-ee.973
Posted: Tue Jul 12 19:27:02 1983
Date-Received: Thu, 14-Jul-83 04:43:18 EDT
Lines: 9

#R:ihuxf:-57300:ecn-ec:19900001:000:341
ecn-ec!wn9nbt   Jul 12 10:20:00 1983

There is more to scanners than listening to cops. An inexpensive
scanner can be used to monitor several ham bands at the cost of
only one receiver.
By the way, as soon as someone gets their hands on one of the new
Regency programable scanners I'd be most interested in seeing
comments and/or evaluations on it.....Dave Chasey -- WN9NBT

From -9211218293706738592
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,99a1035bed663f93,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-13 03:18:18 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
mhuxa!mhuxi!mhuxt!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: First burn results
Message-ID: <1036@eagle.UUCP>
Date: Wed, 13-Jul-83 06:18:18 EDT
Article-I.D.: eagle.1036
Posted: Wed Jul 13 06:18:18 1983
Date-Received: Thu, 14-Jul-83 05:37:54 EDT
Lines: 41

As I mentioned yesterday, we finally did our first motor burn.
Several hours afterwards, it became apparent that the burn had not gone
according to plan; loss-of-signal times were much later than expected,
indicating a burn that was too long.

This has been confirmed; the burn should have been 107 sec, while it was
in fact at least 190 sec. Why this happened is still a mystery;
telemetry shows the motor unit counting down from the larger number
even though a smaller number was supposedly loaded. The flight unit
had been extensively tested on the ground with no failures.

In any case, ranging over the last day has converged nicely into the
following set of elements:

```
Satellite: oscar-10
Catalog number: 14129
Epoch time:      83192.94024815
   Mon Jul 11 22:33:57 1983 UTC
Element set:         DC5
Inclination:       26.4198 deg
RA of node:       250.6344 deg
Eccentricity:    0.6055096
Arg of perigee:   185.6573 deg
Mean anomaly:     183.9066 deg
Mean motion:    2.05848339 rev/day
Semi major axis: 26106.161 km
Anom period:    699.544144 min
Apogee:          35535.588 km
Perigee:          3920.526 km
```

This is the FIRST time we have generated our own orbital elements
based totally on our own information and modelling; a lot of work
went into this part of the project and it has finally paid off.

As you can see from the elements, the perigee is much higher than
had been planned (1500 km); however, we still have more than half
of our "delta v" (kick motor capability) left, and we are now working
on a burn to bring us as close as we can to our desired final orbit.
Keep your fingers crossed.

Phil


```
From -6602535485507617101
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 139baf,771904641553ebdc,start
X-Google-Attributes: gid139baf,public
X-Google-Thread: 151e61,771904641553ebdc,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 132415,771904641553ebdc,start
X-Google-Attributes: gid132415,public
X-Google-ArrivalTime: 1983-07-13 05:08:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
```

Newsgroups: net.ham-radio,bell.ham-radio,btl.ham-radio
Subject: 2 New Synthesized Scanners from Radio Shack
Message-ID: <578@ihuxf.UUCP>
Date: Wed, 13-Jul-83 08:08:46 EDT
Article-I.D.: ihuxf.578
Posted: Wed Jul 13 08:08:46 1983
Date-Received: Thu, 14-Jul-83 05:42:22 EDT
Organization: BTL Naperville, Il.
Lines: 16

Later this summer, Radio Shack will announce two new synthesized scanners:

o+ 16 channel handheld (approx. $300)

o+ 60 channel base/mobile (approx $350 - $400)

Robert S. Parnass, AJ9S (ARRL Technical Advisor)
Bell Laboratories
Naperville, Illinois 60566

ihnp4!ihuxf!parnass

From -4024796908356345956
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1e052f3881e0627a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-13 06:19:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!cca!tread
From: tread@cca.UUCP (Russ Treadwell)
Newsgroups: net.ham-radio
Subject: Re: Radio Shack PRO-24 Pocket Scanner
Message-ID: <5140@cca.UUCP>
Date: Wed, 13-Jul-83 09:19:11 EDT
Article-I.D.: cca.5140
Posted: Wed Jul 13 09:19:11 1983
Date-Received: Wed, 13-Jul-83 13:08:23 EDT
References: ihuxf.573 pur-ee.972
Lines: 7

Since scanner generally cover some amateur frequencies, and since many of us use them for both hamming and eavesdropping, I think net.ham-radio is a great place for such articles. It's not as if we've been deluged with traffic on this net!

Russ Treadwell
WA1TRQ

From 7706815092147253008
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fdf26f059fc3a9cb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-14 09:05:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!ihuxf!
parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: Frequency Info. & a Propriety Question
Message-ID: <579@ihuxf.UUCP>
Date: Thu, 14-Jul-83 12:05:40 EDT
Article-I.D.: ihuxf.579
Posted: Thu Jul 14 12:05:40 1983
Date-Received: Fri, 15-Jul-83 13:23:50 EDT
Organization: BTL Naperville, Il.
Lines: 33

In a continuing effort to provide frequency information of interest, I am posting an excerpt from Tom Kneitel's "Top Secret Registry of U.S. Government Frequencies" book:

Defense Civil Prep Agency: 10.493
Rockwell International: 16.587, 17.965
Lockheed Company: 6.659, 8.917, 11.194
Smithsonian Astrophysical Inst: 20.608
NASA: 4.486
FAA: 7.477, 8.125, 13.626
NORAD: 4.435, 9.023, 14.894
Space & Missile Tact Communic Net: 10.305
Disaster Radio Service: 1.762, 1.769, 1.776, 1.783, 1.790, 1.797

NOTES: all frequencies are in mHz, mode is SSB.

There are some very interesting frequencies contained in this book and others for FBI, Secret Service, White House, U.S. Border Patrol, Army Security Agency, Federal Martials, munitions factories, arsenals, etc.

I am interested in your views about posting these to the net. Do you think this proper?

Robert S. Parnass, AJ9S (ARRL Technical Advisor)

Bell Laboratories
Naperville, Illinois 60566

ihnp4!ihuxf!parnass

From -512665324400557483
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fdf26f059fc3a9cb
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-14 09:48:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hound.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!hound!rwhw
From: rwhw@hound.UUCP
Newsgroups: net.ham-radio
Subject: Re: Frequency Info. & a Propriety Question
Message-ID: <208@hound.UUCP>
Date: Thu, 14-Jul-83 12:48:49 EDT
Article-I.D.: hound.208
Posted: Thu Jul 14 12:48:49 1983
Date-Received: Fri, 15-Jul-83 13:27:06 EDT
References: <579@ihuxf.UUCP>
Organization: Bell Labs, Holmdel NJ
Lines: 8

I never heard of "secret" frequencies. Any communications that are to be
confidential are normally scrambled and/or coded.

Publish away. If the book is available, no "secret" exists.

Roy.....WA2FVM

From 2871686742791915417
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ea220ae44e5c043c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-14 11:46:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxt!mhuxi!mhuxa!houxm!ihnp4!ihuxf!
parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: VHF frequencies the FCC uses
Message-ID: <580@ihuxf.UUCP>
Date: Thu, 14-Jul-83 14:46:08 EDT
Article-I.D.: ihuxf.580
Posted: Thu Jul 14 14:46:08 1983
Date-Received: Fri, 15-Jul-83 11:27:25 EDT
Organization: BTL Naperville, Il.

Lines: 21

According to Tom Kneitel's "Top Secret Registry of U.S. Government Radio Frequencies" book, the Federal Communications Commission (FCC) uses the following VHF frequencies:

o+ 41.060 - 100 watt mobile monitoring vans

o+ 127.125 - I presume AM is used on this frequency

o+ 167.05 - most field offices have repeaters on this frequency for use during inspections & investigations. Input frequencies are 172.05 and 172.80

NOTES: all frequencies are in mHz.

Robert S. Parnass, AJ9S ihnp4!ihuxf!parnass

From -1157132322333388197
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4cf137758e4d3359,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-14 12:14:00 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!wivax!decvax!harpo!eagle!mhuxt!mhuxi!mhuxa!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: Re: Help with car scanner
Message-ID: <581@ihuxf.UUCP>
Date: Thu, 14-Jul-83 15:14:00 EDT
Article-I.D.: ihuxf.581
Posted: Thu Jul 14 15:14:00 1983
Date-Received: Fri, 15-Jul-83 01:51:34 EDT
Organization: BTL Naperville, Il.
Lines: 135

I think other newcomers or casual readers of "net.ham-radio" may be interested in my response to Tim Sullivan, who submitted the following query recently:

I have recently bought an auto with a german radio. The radio has scanning capabilities

for
both short wave and long wave (I assume this
is
what "LW" on the button stands for.)

My question is what capabilities do both options
have ? From reading previous articles, it sounds
as if my short wave can pick up police radios
but
this has not been done yet. On one clear night I
listened to what appeared to be a german radio
station, as everything spoken was german. The long
wave option hasn't picked up anything yet.

I would appreciate any advice that net.world could
give me. please send mail and I will post a
response for others who are interested. Thanks
in
advance.

Listening to radio signals on the short wave and long wave
bands is a fascinating hobby to many. Although you cannot
receive local police transmissions on your automobile radio,
you may be able to receive many interesting signals in
the
long wave and short wave bands. Police transmitters
use
frequency modulation (FM) in the VHF and UHF bands of 30 -
50, 150 - 174, and 450 - 520 mHz.

The long wave (LW) band (also known as low frequency, LF) is
used in many European countries as a regular broadcast band,
just like the 535 - 1650 kHz. medium wave (MW) band is
in
the United States. It is not uncommon to find capabilities
for this band provided in radios of European origin. When I
was a child, I always got a thrill out of tuning those large
German Grundig radios, which had an "LW" band position.
My
reception on LW with these radios was limited by the lack of
a suitable antenna.

The dials of some European radios indicate wavelength
in
meters rather frequency in kHz or mHz. To determine a fre-
quency in mHz, divide 300 by the wavelength in meters.

In this country, the long wave band is used for several
types of broadcasting, none of which is intended for
the
entertainment of the general public. Some stations you

may find on long wave include:

- radio navigation beacons - these stations usually transmit their 2 or 3 letter call signs in Morse code continuously, and are used by aircraft for radio location purposes.

- weather reporting station - an announcer reads the weather forecast continuously. Often times, the station's Morse code identifier will be noted in the background.

- wireless intercoms - some wireless intercoms work by modulating a carrier frequency in the LW band with the user's voice and using the house AC wiring as a transmission line. Sometimes, a small amount of this radiation escapes and may be received on a nearby receiver. I noticed this when, at age 11 I built my first radio. Its lowest coverage included the 200 - 400 kHz LW band. I used a wireless intercom and was able to hear myself on the newly assembled radio!

- experimental - there is even a license-free band from 160 - 190 kHz. which experimenters may use. They are limited to antennas less than 50 feet in length, and transmitters with less than one watt output.

The very low frequencies (below the capabilities of most car radio receivers) are used for such things as:

- communications with submarines - usually using very narrow shift radioteletype

- time standard signals - the U.S. National Bureau of Standards maintains a standard time station, WWVL, which transmits the exact time in Binary Coded Decimal (BCD) on 60 kHz.

- utility company control signals - some electric companies transmit control signals at very low frequencies, using the power lines as transmission lines. The

length of these power lines makes them act like antennas.

o+ long range navigation (LORAN) - a pair of powerful transmitters emit synchronized, pulsed signals. Ships may determine their (ship) position by using special equipment which analyzes the timing of the signals reaching the ship from the two LORAN transmitters.

Short wave, on the other hand, contains a larger variety of stations. A typical car radio will only be able to detect those which use amplitude modulation (AM). Such stations include:

o+ foreign broadcast - Voice of America, Radio Moscow, Voice of the Andes, Kol Israel, etc.

o+ time signals - WWV at 2.5, 5, 10, 15, 20 mHz. CHU (Canada) at 3.330, 7.335, and 14.670 mHz.

There are may other stations on short wave. Some use Morse code telegraphy (CW), which may sound like "thumps" in an AM receiver. Some use single sideband (SSB) voice, which may sound like Donald Duck in an AM receiver. Others use radioteletype (RTTY). Weather pictures are sent using facsimile (FAX).

Ham radio operators use all of these modes and more. The FCC has allocated 6 short wave bands for amateur usage. The short wave spectrum is used by ship-to-shore telephone, off shore oil rig platforms, spy stations, the military, embassies, the FBI, cordless telephones, CB operators, etc.

The radio antenna found on the typical car is a rather poor performer on LW, and not that much better on short wave.

Robert S. Parnass, AJ9S (Technical Advisor to ARRL)
Bell Laboratories
Naperville, Illinois

ihnp4!ihuxf!parnass

From 2952175529443635063
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4e5794183ab950a3,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-14 12:55:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!wivax!decvax!harpo!eagle!mhuxt!mhuxi!mhuxa!houxm!ihnp4!ihuxf!
parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: source for frequency books
Message-ID: <582@ihuxf.UUCP>
Date: Thu, 14-Jul-83 15:55:54 EDT
Article-I.D.: ihuxf.582
Posted: Thu Jul 14 15:55:54 1983
Date-Received: Fri, 15-Jul-83 01:49:22 EDT
Organization: BTL Naperville, Il.
Lines: 34

The 4th edition of "The Top Secret Registry of U.S. Government Radio Frequencies", by Tom Kneitel (K2AES), sells for about $10 and is published by:

CRB Research
P. O. Box 56
Commack, N. Y. 11725

I've borrowed the 4th edition from the Bell Labs Indian Hill Technical Library. The new 5th edition, printed in about 3 weeks, will sell for $15, and I plan to order one.

CRB Research carries several other books, such as "Rail-Scan", "Air-Scan", "Confidential Frequency List", etc.

Many of these books are also available from Gilfer Associates, Park Ridge, N. J. (tel#: 201-391-7887). Gilfer also sells customized versions of general coverage receivers receivers (with special filters, modifications, etc.) and other hardware. I've done business with them before, and have received good service. You can order items through Gilfer over the phone using a charge card, if the order total is for more than $20.

Robert S. Parnass, AJ9S (ARRL Technical Advisor)
Bell Laboratories
Naperville, Illinois 60566

ihnp4!ihuxf!parnass

From 3382804944615667663
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,adaf1818b94c7a70,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-15 06:36:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!wivax!decvax!harpo!eagle!mhuxt!mhuxi!cbosgd!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: Tape Recorders aid Scanning
Message-ID: <583@ihuxf.UUCP>
Date: Fri, 15-Jul-83 09:36:04 EDT
Article-I.D.: ihuxf.583
Posted: Fri Jul 15 09:36:04 1983
Date-Received: Sat, 16-Jul-83 01:12:27 EDT
Organization: BTL Naperville, Il.
Lines: 133

WARNING: This article may not be of interest to electronic geniuses.

Have you ever used a tape recorder connected to your receiver to monitor those hidden frequencies? Hidden frequencies, to me, are those frequencies which may be used in an interesting way but are difficult to monitor because of infrequent usage.

Some of the higher quality scanners are equipped with tape recording interfaces. A few days ago, I connected a Panasonic cheapie cassette recorder, obtained by opening a savings account, to my Regency K500 synthesized scanner. The interface consisted of two parts:

1. audio - I installed a 1/8" jack on the rear of the scanner. I connected this jack, through a .01 ufd

disk capacitor to the high side of the volume control potentiometer. This provides a medium impedance audio output signal of constant level. That is, the level is independent of the volume control setting.

2. control - I installed a small relay in the scanner. The 12 VDC 1250 ohm relay coil is actuated by the carrier operated squelch signal.1 The contacts of this relay are brought out to a 3/16" jack on the rear of the scanner. These contacts control the power to the tape recorder.2

With this configuration, the recorder records only when a signal is being received on the scanner. Of course, if you had a fancier recorder, with voice actuated circuitry (VOX), you could just place the recorder's microphone near the scanner's speaker. With my particular configuration, I set the volume control on the scanner as low as it will go, pressed the record switch on the recorder, then went to sleep. When I awoke, I played back the tape.3 This is how I

---

1. A diode across the coil contacts protects the scanner's solid state circuitry against nasty reverse voltages.

2. As equipped from the factory, my K500 contained a control interface that could sink only 100 ma. I added the relay because my recorder used more current. I think the Bearcat 250's solid state control circuitry can sink 350 ma. The Bearcat 350 contains a relay which can handle 1 amp.

found some government stations mentioned in the Kneitel book.

It took a finite, but short, amount of time for the recorder's motor to come up to speed, so the first syllable of a transmission was missed occasionally. This produced a slight slurring sound on the tape in between transmissions, which helped separate one transmission from the next.

Scanners equipped with a "count" feature, such as the Regency K500 and Bearcat 250, contain a counter, the input of which is connected to the same signal that I used to activate the relay. One can get the scanner to display a count of the number of transmissions that took place on the frequency of interest since the last clearing of the counter. This counter provided me with more information. Needless to say, if it was zero after a long monitoring period, I didn't bother listening to the tape!

Try it and have some fun!

Robert S. Parnass, AJ9S ihnp4!ihuxf!parnass

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3. The control interface circuit must be disconnected, or shorted (in my case) to play back the tape.

From 5923060174818402000
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,abd4f85ce3702ebb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-15 21:25:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Too-long burn
Message-ID: <1043@eagle.UUCP>
Date: Sat, 16-Jul-83 00:25:59 EDT
Article-I.D.: eagle.1043
Posted: Sat Jul 16 00:25:59 1983
Date-Received: Sat, 16-Jul-83 01:58:51 EDT
Lines: 71

As I mentioned several days ago, the first motor firing which occurred on 11 July had been programmed for 107 seconds; the motor actually fired for 190 seconds. The reason for this has been determined to be a design error in the Liquid Ignition Unit (LIU) on the OSCAR-10 satellite which somehow escaped being detected during extensive testing.

The LIU is an autonomous hardware box which has direct control over the valves associated with the 400 Newton hypergolic liquid fuel kick motor. This motor burns a mixture of unsymmetrical dimethyl hydrazine (UDMH) and nitrogen tetroxide (N2O4), which are called "hypergolic" because they burn instantly on contact with each other without requiring a spark. The kick motor subsystem works as follows:

A high pressure bottle mounted in one of the arms was loaded with about 400 bar (1 bar ~= 1 atmosphere) of helium. The output from this tank goes through a pyrotechnic valve to a regulator which produces approximately 14.5 bar. From the regulator the lines split and pass to the two fuel tanks. Each pressurization line contains another pyro valve and a check valve, preventing fluid in one tank from backing up into the other. Pickup tubes in each tank lead to the engine firing valve, which is mounted on the engine itself. Another helium line runs to the engine, as the relatively large fuel valve is actuated by helium pressure controlled by a smaller electric solenoid.

The LIU functions (when its power has been turned on by computer command) by monitoring the computer-generated engineering beacon. Internal to the LIU are a set of PN (pseudo-random) sequence generators. In order to actually fire the valves or the motor, the computer must send the correct PN sequences, which are hundreds of bits long. These "keys"

are not present in the software at launch and were loaded only shortly before motor burn. This feature makes it virtually impossible for the computer to crash in such a way as to fire the motor accidentally.

The first job of the LIU is to fire the pyro valves (which can only be opened once and cannot subsequently be closed) thereby pressurizing the tanks. This was done successfully immediately before the first motor burn.

The second job of the LIU is to open the engine control valve (firing the engine) for precisely timed intervals. Again, this is done by decoding the proper PN sequence, which was followed immediately by an 8-bit quantity giving the burn duration in 2.56 second units. This byte is extracted from an 8-bit serial-in-parallel-out shift register and parallel loaded into a pair of 4-bit up/down counters. The engine valve is opened, a clock derived from the beacon bit rate counts the counter down to zero, and the valve is closed.

It turns out that an error in laying out the PC artwork in the LIU reversed the bit ordering between the shift register and the high order counter. I.e., instead of the bits being interpreted as 7 6 5 4 3 2 1 0, they were loaded as 4 5 6 7 3 2 1 0.

The programmed burn count was hex 2A (42 decimal, or 107.52 seconds at 2.56 sec/count). This was permuted into 4A hex, or 190 seconds.

We were quite lucky that a count with bit 4 high wasn't set, or the resulting burn would have depleted all our fuel. As it is, we can recover with the remaining fuel (about half) and attain an orbit fairly close to the originally planned one. Instead of an inclination of 57 degrees, we will be able to reach about 51, and the perigee height will probably be 2000-2200 km instead of 1500 km. We could bring the perigee back down to 1500 km "for free", but leaving it higher will help slow the precession of the apogee latitude which is otherwise increased by the low inclination. The net result of all this is that the apogee point will continue to occur in the northern hemisphere for only about 4-5 years instead of the originally planned 7.

Score: ESA 1, AMSAT 1!

Phil Karn, KA9Q
Asst VP Engineering, AMSAT

From -7191321777437175903
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,905dbd865d71ede6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-18 15:36:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!cca!ima!stevel
From: stevel@ima.UUCP
Newsgroups: net.ham-radio

Subject: Re: Frequency Info. & a Propriety Questi - (nf)
Message-ID: <357@ima.UUCP>
Date: Mon, 18-Jul-83 18:36:51 EDT
Article-I.D.: ima.357
Posted: Mon Jul 18 18:36:51 1983
Date-Received: Tue, 19-Jul-83 11:04:18 EDT
Lines: 16

#R:ihuxf:-57900:ima:23600001:000:495
ima!stevel   Jul 18 10:06:00 1983

1) You are violating copywrite laws by posting this information to the net.

2) It costs the net money that should be going to the author of the book.

3) Your plethora of short messages are a pain to pass by. One message a day is considered extremly excessive. There are exceptions for those offering us a current events news service.

Steve Ludlum decvax!yale-co!ima!stevel, {ihnp4|ucbvax}!cbosgd!ima!stevel,
decwrl!amd70!ima!stevel, {uscvax|ucla-vax|vortex}!ism780!stevel

From 4535176798077084686
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ceadfbc7dd00978f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-19 06:11:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!microsoft!fluke!ssc-vax!uw-beaver!cornell!vax135!ariel!
houti!hogpc!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: Tom Kneitel wrote for Electr. Illustrated
Message-ID: <586@ihuxf.UUCP>
Date: Tue, 19-Jul-83 09:11:13 EDT
Article-I.D.: ihuxf.586
Posted: Tue Jul 19 09:11:13 1983
Date-Received: Wed, 20-Jul-83 21:10:13 EDT
Organization: BTL Naperville, Il.
Lines: 44

Michel sent me this interesting background information:

"Tom Kneitel's "Top Secret Registry"

Does anyone remember this guy's column in Electronics Illustrated (does anyone remember Electronics Illustrated?)? Kneitel wrote a column called "Uncle Tom's Cabin" in which he gave wise-guy answers to legions of poor unsuspecting innocents who never seemed to catch on. Like Q: "Don't you believe in clubs to promote CB?" A: "Clubs, spears, dynamite - anything to silence the loudmouths who are ruining it for everybody else".

- Michel

Yep, I sure do remember reading Kneitel's column in "EI".

I don't know how to send electronic mail back to you directly. The heading on the mail you send me is a bit difficult to decipher. One interesting anamoly is that it came addressed to me @ BERKELEY! I have nothing to do with BERKELEY .... I'm here at BTL in Illinois! Please excuse the indiscretion of posting this to the net, but it may be of interest to others.

Robert S. Parnass, AJ9S ihnp4!ihuxf!parnass

P.S. - I don't know how to send electronic mail back to you directly. The heading on the mail you send me is a bit difficult to decipher. One interesting anamoly is that it came addressed to me @ BERKELEY! I have nothing to do with BERKELEY .... I'm here at BTL in Illinois! Please excuse the indiscretion of posting this to the net, but it may be of interest to others.

From -4118691262142267547
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d0a36f76a9756ea2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-19 08:26:37 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!ariel!hou5f!hou5e!

hou5d!hogpc!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: new Bearcat scanners!
Message-ID: <588@ihuxf.UUCP>
Date: Tue, 19-Jul-83 11:26:37 EDT
Article-I.D.: ihuxf.588
Posted: Tue Jul 19 11:26:37 1983
Date-Received: Wed, 20-Jul-83 10:57:44 EDT
Organization: BTL Naperville, Il.
Lines: 41

According to information printed in the July/August issue of "Monitoring Times" (vol 2, no. 4, published by Grove Enterprises, Brasstown, NC 28902), Electra Company demonstrated the following new scanners at the summer Consumer Electronics Show (CES) in Chicago:

o+ BASE - BC-151 synthesized 16 channel for 30-50, 138-174, 406-512 mHz. Features: vacuum fluorescent readout, delay, lockout. List: $250. (Looks like the same plastic cabinetry used on the recent BC-200 scanner. Nice to have coverage of the secret government and military frequencies between 406 and 420 mHz.)

o+ MOBILE - BC-260 synthesized 10 channel mobile unit, with all metal cabinet and mounting bracket. 3 watts audio output! Features: Memory backup, vacuum fluorescent display with dim switch, electro-luminescent keyboard backlighting, audible "chirp" keyboard feedback, priority, weather key (nice!), search, lockout. Cost: $400. (Low profile cabinet with front mounted controls ... a new breed from Bearcat.)

o+ PORTABLE - handheld BC-5/6 crystal controlled 6 channel unit. Features: low, high, aircraft, and UHF bands, 300 mw. audio output, individual LED channel indicators, scan delay, lockout, BNC terminated flexible antenna, belt clip. Comes with AC adapter and NiCd batteries. Cost: $180. (Nice to see a BNC connector on a handheld scanner!)

A free sample of "Monitoring Times" magazine is available by calling Grove Enterprises at (704)837-2216.

A one year
subscription to this bimonthly publication is $9.50.

Robert S. Parnass, AJ9S ihnp4!ihuxf!parnass

From 1526028762187214792
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ce660ae796830149,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-19 12:27:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!tektronix!uw-beaver!cornell!vax135!ariel!hou5f!hou5e!
hou5d!hogpc!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: new Bearcat DX1000 SWL receiver
Message-ID: <589@ihuxf.UUCP>
Date: Tue, 19-Jul-83 15:27:07 EDT
Article-I.D.: ihuxf.589
Posted: Tue Jul 19 15:27:07 1983
Date-Received: Wed, 20-Jul-83 11:38:20 EDT
Organization: BTL Naperville, Il.
Lines: 24

According to "Monitoring Times" Magazine, Electra
is
introducing the DX-1000, a new synthesized, general coverage
receiver, manufactured overseas for Electra.

It covers 10 kHz through 30 mHz, with direct keyboard entry
plus knob tuning. The receiving modes are AM, FM, USB, LSB,
and CW. Ten (10) memory channels are provided,
along with
selectable filters, 12/24 hour clock, multi-
frequency/multi-time automatic record control. Up/down
frequency step size is selectable in increments from 1 to 99
kHz (I guess one can't step in 100 or 10 Hz., pity).

The list price is about $600, and it sounds like a
competitor for the Kenwood R-2000.

I've sent for brochures on this new radio and other Bearcat
offerings.

Robert S. Parnass, AJ9S - Bell Labs - ihnp4!ihuxf!parnass

From -524507676152028459
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6c9383800952f695,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-20 05:16:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Those newer receivers
Message-ID: <2329@mgweed.UUCP>
Date: Wed, 20-Jul-83 08:16:49 EDT
Article-I.D.: mgweed.2329
Posted: Wed Jul 20 08:16:49 1983
Date-Received: Fri, 22-Jul-83 14:03:09 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 7

The DX-1000 at least has a vernier even though the "steps" are 1 kHz.
The R-2000 does not have a fine tune and the "steps" are 50 Hz, I think.
That makes the R-2000 a poor choice for anyone interested in RTTY!

K9EUI

From 4471170560045316670
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d366a4d80796e6a5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-20 10:19:16 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site hplabs.UUCP
Path: utzoo!linus!philabs!seismo!hao!hplabs!piety
From: piety@hplabs.UUCP
Newsgroups: net.ham-radio
Subject: HP Spectrum Analyzer Plugins wanted
Message-ID: <1611@hplabs.UUCP>
Date: Wed, 20-Jul-83 13:19:16 EDT
Article-I.D.: hplabs.1611
Posted: Wed Jul 20 13:19:16 1983
Date-Received: Thu, 21-Jul-83 21:48:18 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 15

Does anyone have any of the following for sale or trade?

     HP 8552 IF plug-in
     HP 8553 RF plug-in

HP 8554 RF plug-in
HP 8555 RF plug-in
HP 8556 RF plug-in

If so, please send me mail or call me at (415) 857-4759.

Thanks,
Bob

From 26098989850008679
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d84551825f8c8575,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-22 11:19:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site kpno.UUCP
Path: utzoo!linus!decvax!harpo!seismo!hao!kpno!downey
From: downey@kpno.UUCP
Newsgroups: net.ham-radio
Subject: more on Kneitel
Message-ID: <218@kpno.UUCP>
Date: Fri, 22-Jul-83 14:19:28 EDT
Article-I.D.: kpno.218
Posted: Fri Jul 22 14:19:28 1983
Date-Received: Sat, 23-Jul-83 05:05:18 EDT
Organization: Kitt Peak Natl. Obs. Tucson, AZ
Lines: 5

I have lots of old copies of Elec. Illustrated and enjoy reading Tom's
stuff. He had a long article once on a Quji (sp?? I mean WE-GEE) board
experience. What ever happened to him anyway?

(isn't this a ridiculous topic? fun though...)

From 4397027195682333745
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9870d6ce2c59badc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-23 02:13:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Oscar-10 status
Message-ID: <1048@eagle.UUCP>
Date: Sat, 23-Jul-83 05:13:34 EDT
Article-I.D.: eagle.1048
Posted: Sat Jul 23 05:13:34 1983
Date-Received: Sat, 23-Jul-83 17:31:55 EDT
Lines: 53

During the past week, AMSAT-Oscar-10 has been on "autopilot". That is, the onboard computer has continued to spin up the satellite and reorient it for the second kick motor firing. The target spin rate is about 50 rpm. This figure is high to provide enough centrifugal force to ensure that the fuels in the half-empty tanks are properly picked up by the engine feed tubes.

There is one worry having to do with telemetry readings of decreasing helium pressure. Several days after the first burn, a sudden drop from about 15 bar to 6 bar was seen on the output of the helium pressure regulator, followed by a slow decline to about 4 bar now. The reason for these readings is still not know for sure, but there are several plausible possibilities:

1. The readings are false and there is no leak.

2. There is an actual leak somewhere between the helium tank, the regulator output and the three-way check valves which lead to each fuel tank and the engine control valve.

3. There is a leak in the plumbing associated with one of the fuel tanks, or perhaps in the regenerative cooling jacket which passes UDMH fuel over the engine bell, possibly caused by the collision with the launcher.

There are problems with each of these theories. The pressure sensor is a high-reliability unit that cost something like $350. You'd expect something that expensive to work right! If there was an actual leak, you'd expect a smoother, exponentially decaying pressure curve instead of the sudden drops we've seen. If #3 were right, we would have lost much of our fuel immediately after the collision and the first motor burn shouldn't have worked.

#2 is considered the theoretically most likely possibility, considering the reliability and complexity of the various components. If this is the case then things aren't all that bad. The fuel and oxidizer tanks, which are 20 liters each, are currently half empty. Assuming that the check valves (which are safety rated) hold, the helium already in each tank should keep them pressurized at 15 bar. The engine could still be fired in a "blowdown mode", utilizing this trapped helium pressure. Emptying the tanks would only double the ullage (empty space), resulting in a tank pressure drop to only 7.5 bar, enough to keep the engine going although not at maximum efficiency.

The second burn is tentatively scheduled for 01:13:50 UTC on 25 July (Sunday evening USA time). Listen to 3850 khz for real-time information.

After the burn, whether it works or not, the spacecraft will be reoriented to an operational attitude and the transponder switched on for open use. The end is near!

73, Phil Karn, KA9Q

From -6265319510324729509
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31f33f85870fc57c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-25 06:36:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site inuxc.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!hou5f!hou5e!hou5d!hogpc!houxm!
ihnp4!ixn5c!inuxc!wheatley
From: wheatley@inuxc.UUCP
Newsgroups: net.ham-radio
Subject: ARRL DX BULLETIN
Message-ID: <719@inuxc.UUCP>
Date: Mon, 25-Jul-83 09:36:45 EDT
Article-I.D.: inuxc.719
Posted: Mon Jul 25 09:36:45 1983
Date-Received: Tue, 26-Jul-83 13:41:53 EDT
Organization: American Bell, Indianapolis
Lines: 70

_C_h_i_n_a_.

BY1PK was operated for one hour on July 7 by K1MM. Although many stations were worked, only one continental U.S. and one European were contacted. Bill hopes that with this break further operations will be allowed. He reports that BY1QH is at a university fifteen miles from Beijing and will soon be active. Without the city's high noise level, DX should be easier to work. Six thousand amateur operators are now qualified in China.

_K_e_r_m_a_d_e_c__I_s_l_a_n_d_.

VK9NS reports a very favorable letter received from the authorities. He has begun DXpedition planning.

_G_u_i_n_e_a_.

3X4EX is very active, including 3798 kHz at 0300Z. Arild also will be on 1835 kHz from 0645 to 0715Z on weekends. QSL to N4CID.

_M_a_r_k_e_t__R_e_e_f_.

OJ0/MA and others will be active from July 22 to August 1 on 160 through 10 meters, ssb and cw.

_F_e_r_n_a_n_d_o__d_e__N_o_r_o_n_h_a_.

PY0/FE has been very active on cw only. Look on 3504 kHz at 2300Z, 7004 kHz at 0100Z, 21025 kHz at 1700Z, 28025 kHz at 1300Z, and 1830 kHz at 0200Z. QSL via PY1BVY.

_M_a_l_i_.

TZ8DC will be active until July 24 on 3502 kHz at 0100 and 0300Z, 7002 kHz at 0000Z, and 14025 kHz at 0230Z. QSL to DL8DC.

_S_v_a_l_b_a_r_d_.

JX5DW can be found on 7008 kHz at 0130Z, 3503 kHz at 0200Z, and 14025 kHz at 0400Z. QSL via RSGB. (Editor's note: JX is the prefix for Jan Mayen, not Svalbard.)

_M_a_l_d_i_v_e_s_.

8Q7AV is on 14200 kHz at 1200Z almost every day.

_J_o_r_d_a_n_.

JY9TS is often on 14181 kHz at 0000Z. QSL to WA3HUP.

_G_u_e_r_n_s_e_y__I_s_l_a_n_d_.

GU3OQR can be found on 3799 kHz at 0030Z and promises to be on 1826 kHz at 0300Z over the weekend. QSL via GI3OQR.

_W_e_s_t__K_i_r_i_b_a_t_i_.

T30/BY is on 14265 kHz at 0730Z.

_N_a_u_r_u_.

C21BD is active on 14250 kHz at 0700Z.

_S_p_a_i_n_.

EA3VY may be found on 1835 kHz at 0400Z and on 3795 kHz at 0430Z.

From -5436008224950266355
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,31f33f85870fc57c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-25 07:35:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site inuxc.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!floyd!vax135!ariel!houti!hogpc!houxm!
ihnp4!ixn5c!inuxc!wheatley
From: wheatley@inuxc.UUCP

Newsgroups: net.ham-radio
Subject: ARRL DX BULLETIN
Message-ID: <720@inuxc.UUCP>
Date: Mon, 25-Jul-83 10:35:30 EDT
Article-I.D.: inuxc.720
Posted: Mon Jul 25 10:35:30 1983
Date-Received: Wed, 27-Jul-83 08:46:51 EDT
Organization: American Bell, Indianapolis
Lines: 70

_C_h_i_n_a_.

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_J_o_r_d_a_n_.

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_W_e_s_t__K_i_r_i_b_a_t_i_.

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_N_a_u_r_u_.

C21BD is active on 14250 kHz at 0700Z.

_S_p_a_i_n_.

EA3VY may be found on 1835 kHz at 0400Z and on 3795 kHz at
0430Z.

From -1858786919438056319
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bcfa14ccc6d695e7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-26 00:51:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Second non-burn
Message-ID: <1049@eagle.UUCP>
Date: Tue, 26-Jul-83 03:51:43 EDT
Article-I.D.: eagle.1049
Posted: Tue Jul 26 03:51:43 1983
Date-Received: Tue, 26-Jul-83 23:28:39 EDT
Lines: 84

At 00:32:00 UTC today, 26 July, an attempt was made to fire the motor on
Oscar-10 for the second time. This burn was planned to deplete our fuel,
raising inclination to 50 degrees and lowering perigee to about 2100 km.

At the proper time the electrically operated auxiliary valve was
opened, and this was confirmed by telemetry. However, no changes in

helium pressure or bottom surface temperature were seen, and the computer closed the valve one minute later as it was programmed to do in the event this happened.

It appears that the helium pressure readings we had been seeing in the past weeks since the first motor burn were valid and that there was insufficient helium to open the main engine valve, preventing us from firing the engine. The main valve is specified as requiring 5 bar of helium pressure to open, while the regulator output pressure reading at the time was about 3.6 bar.

The most likely cause according to MBB, the manufacturer of the engine, is damage to the welds on the engine's regenerative cooling jacket caused by the collision with the Ariane at separation. Either the leak did not form until after the first burn, or the small size of the leak combined with the relatively low vapor pressure of UDMH (the fuel) kept enough fuel in the tank to allow us to do the first motor burn. Once the tank had been pressurized to 15 bar, however, the leak rate increased to the point where either the fuel was expelled or helium escaped, depleting the helium tank.

My personal theory, although not widely held, is that the slow leak existed from the time of the collision. The nice thing about this theory is that it also explains why the delta-v (change in velocity) in the first burn was higher than even the longer burn duration should have given. If fuel had been leaked, this would result in a smaller spacecraft mass and therefore a larger velocity change for a given thrust and duration. The regulator pressure readings during the first burn, which were normal, would be explained by no gas being lost from the leak until most or all of the liquid had been expelled.

All is certainly not lost, however. The first burn put us in a very stable orbit in which atmospheric drag is negligible. The rest of the satellite appears perfectly functional, and it will now be reoriented to operating attitude. It will take perhaps a week to point the high gain antennas at earth, followed by another few days for transponder checkout, and the satellite will become available for general use.

There will be some side effects of this orbit that aren't particularly severe, but will have to be lived with:

1. The inclination (approx 26 deg) is low enough that at certain times of the year the high gain antennas will have to be off-pointed from the earth in order to maintain acceptable sun angles on the solar panels. This is likely to be more of a nuisance than a real problem, however, and would have had to be done for the first year even if we had reached the desired orbit until the apogee point had precessed far enough north to make this unnecessary.

2. There will be slightly more radiation in this orbit. It is not known exactly how long the satellite will survive, but it will still most likely be measured in years.

3. The argument of perigee will precess much faster, but this is mitigated by the fact that apogee will never move further north than 26N or further south than 26S. The rate of precession is about .272 deg/day, which means that the first northernmost apogee will occur in a little less than a year. After another year apogee will be back at the equator, a year later it will be at 26S, etc.

4. The long DX possibilities for high latitude stations will decrease. In the ideal "Molniya" orbit, long mutual 3-way visibility windows would exist between, say, Tokyo, London and New York. These windows will be shorter and less frequent in this orbit.

5. The southern hemisphere gets a much better deal. The low inclination will not penalize stations in the southern hemisphere as much as the apogee moves north.

6. There is still probably half a tank of corrosive nitrogen tetroxide on board. While the tanks were designed with considerable margins of safety, it is not known how well the N2O4 tank will hold up over a period of years.

In any event, the satellite should finally be operational soon, albeit in an unplanned orbit!

Phil Karn, KA9Q

From -6612235253434973070
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,81a8853d36d07ea6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-27 23:55:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Oscar-10 Start of Operations
Message-ID: <1051@eagle.UUCP>
Date: Thu, 28-Jul-83 02:55:36 EDT
Article-I.D.: eagle.1051
Posted: Thu Jul 28 02:55:36 1983
Date-Received: Thu, 28-Jul-83 20:11:43 EDT
Lines: 11

Immediately after the unsuccessful second kick motor firing attempt, the satellite was commanded to reorient to the operational attitude with the antennas pointing at the earth. To allow for reorientation and transponder checkout, a date of August 6 has been selected for the start of general operations. The initial schedule will favor the mode B (70cm->2m) transponder, with occasional operation of the mode L (23cm->70cm) transponder to be announced.

Watch this space or the CW message on the General Beacon at 145.810 mhz.

Phil Karn, KA9Q

From -3073265009216284441
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,97310bc6622facbb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-28 13:28:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site hplabs.UUCP
Path: utzoo!linus!decvax!harpo!seismo!hao!hplabs!paull
From: paull@hplabs.UUCP (Robert Paull)
Newsgroups: net.ham-radio
Subject: ICOM IC-730   (tvi query)
Message-ID: <1648@hplabs.UUCP>
Date: Thu, 28-Jul-83 16:28:45 EDT
Article-I.D.: hplabs.1648
Posted: Thu Jul 28 16:28:45 1983
Date-Received: Fri, 29-Jul-83 06:49:57 EDT
Organization: Hewlett Packard Labs, Palo Alto CA
Lines: 21

I would like to know if anybody has had TVI problems, specifically with the IC-730. I've had problems on 10 and 15 meters even though I used the standard methods of eliminating TVI. (lo-pass, grounds,etc.)

The only method which seemed to improve the problem was to enclose the rear of the rig and power supply in a metal box.

Anyway, I would like to hear from other hams who have had and solved or not solved TVI problems.

(I also would like to know how many hams are on the net. This is my first time posting an article)

Robert Paull , KA6SFV

From 8921038613348701576
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1b3a858f83f907b,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 132415,d1b3a858f83f907b,start
X-Google-Attributes: gid132415,public
X-Google-ArrivalTime: 1983-07-29 08:13:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxj.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!

ihnp4!ihuxj!gvw1
From: gvw1@ihuxj.UUCP
Newsgroups: bell.ham-radio,net.ham-radio
Subject: For Sale: ICOM 25A 2-meter transceiver & Transcom DIP switched PL
Message-ID: <199@ihuxj.UUCP>
Date: Fri, 29-Jul-83 11:13:36 EDT
Article-I.D.: ihuxj.199
Posted: Fri Jul 29 11:13:36 1983
Date-Received: Mon, 1-Aug-83 04:22:02 EDT
Organization: BTL Naperville, Il.
Lines: 10

For sale: ICOM 2-meter transceiver & Transcom DIP switched PL.
The radio is almost brand new. The PL deck has not been installed.

I am asking $300 for both.

I want to get some computer equipment.

George V. Wilder
ihnp4!ihuxj!gvw1

From 8910968349242772603
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4aea45a6c408fb87,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-01 20:22:20 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
hocda!spanky!burl!sb1!ll1!otuxa!we13!ihnp4!cbosgd!mhuxi!mhuxt!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT-B Launch Opportunity!
Message-ID: <1054@eagle.UUCP>
Date: Mon, 1-Aug-83 23:22:20 EDT
Article-I.D.: eagle.1054
Posted: Mon Aug 1 23:22:20 1983
Date-Received: Wed, 3-Aug-83 20:20:19 EDT
Lines: 44

An unexpected launch opportunity has occurred with NASA-DELTA due to the premature demise of NASA'S LANDSAT-4 spacecraft and their decision to advance the call-up replacement mission to early next year rather than in late 1985 as previously planned. The original launch date had made it appropriate to earmark this opportunity for the PACSAT mission, however the advanced date has brought the launch well in front of the earliest time that PACSAT could possibly be ready.

Discussions with the GSFC NASA DELTA Project Office indicate strongly that this is the last low, polar, earth-orbit launch currently scheduled using the DELTA vehicle and therefore it would seem a pity to let it pass unused. The only remaining tangible launch opportunities left after DELTA reside with the STS Get Away Special programme (using the Thiokol ejection mechanism based on the DELTA/UOSAT interface). The first likely launch of the Shuttle into a useful polar orbit is scheduled for August 1986.

The result is that there is a definite launch opportunity for a UOSAT class spacecraft on board a DELTA vehicle into a 854 km, 103 minute, sun-synchronous (9am-9pm), polar, earth orbit currently scheduled for March 1984.

In spite of the extremely tight timescale, and following discussions with AMSAT and the PACSAT project, a proposal to prepare a UOSAT-B spacecraft for this launch opportunity is being prepared by the UOSAT team at Surrey.

As will be understood, many hurdles stand in our way that impact the already short timescale - not least of all finance! It is not possible to release further details at this time as the project is under study and the proposal not yet prepared and submitted to NASA-HQ.

Details on the proposed mission (if all continues well) will be published as soon as possible.

Martin Sweeting G3YJO Univ. Surrey

From -2201661633533263084
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1bc596e796ea379,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-02 22:15:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!
houxm!hocda!spanky!burl!we13!ihnp4!cbosgd!mhuxi!mhuxt!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Oscar-10 operations schedule
Message-ID: <1057@eagle.UUCP>
Date: Wed, 3-Aug-83 01:15:19 EDT
Article-I.D.: eagle.1057
Posted: Wed Aug 3 01:15:19 1983
Date-Received: Mon, 8-Aug-83 02:51:37 EDT
Lines: 8

AMSAT Oscar-10 is still scheduled to begin mode B operations at 1800 UTC
on 6 August, 1983. The reorientation maneuver is somewhat behind the
simulations at this point, however the decision has been made to keep to
the turn on schedule. For this reason signals may be initially somewhat
lower than expected, but will improve quickly as the spacecraft
approaches the correct attitude.

Phil, KA9Q

From -7169765701679718748
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fccc0ec637f8849c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-04 06:59:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!utah-cs!sask!hardie
From: hardie@sask.UUCP (Peter Hardie)
Newsgroups: net.ham-radio
Subject: hayes modem and amateur radio
Message-ID: <280@sask.UUCP>
Date: Thu, 4-Aug-83 09:59:05 EDT
Article-I.D.: sask.280
Posted: Thu Aug 4 09:59:05 1983
Date-Received: Fri, 5-Aug-83 11:12:05 EDT
Lines: 6

The back of the manual for the Hayes Smartmodem shows that it can be connected
to amateur radio equipment. Has anyone tried it and if so was it successful?
mail to harpo!utah-cs!sask!hardie and I will summarize if necessary.
Tnx+73.
pete hardie
ve5bel

From -6761974168236750804
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,89dae0abea8b4391,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-05 11:29:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Oscar-10 CW msg
Message-ID: <1059@eagle.UUCP>
Date: Fri, 5-Aug-83 14:29:57 EDT
Article-I.D.: eagle.1059
Posted: Fri Aug 5 14:29:57 1983
Date-Received: Sat, 6-Aug-83 08:06:02 EDT
Lines: 6

This is the new CW message now being sent by the Oscar-10 general beacon

(145.810 mhz):

REORIENTATION TAKES LONGER THAN PREDICTED. MODE B BEGINS ON
AUG 6 AT 1430 UTC WITH OMNI ANTENNAS.   EXPECT WEAK SIGNALS
AND QSB FOR ONE WEEK UNTIL HI GAIN ANTENNAS ARE OPERATIONAL.

From -96580852422949736
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f1537e6055ee92a0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-06 08:51:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 62: FCC Power Limits
Message-ID: <269@houxp.UUCP>
Date: Sat, 6-Aug-83 11:51:47 EDT
Article-I.D.: houxp.269
Posted: Sat Aug 6 11:51:47 1983
Date-Received: Sat, 6-Aug-83 20:26:27 EDT
Lines: 23

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 64 from arrl headquarters
newington ct july 28, 1983
to all radio amateurs bt

the fcc has released a report and order terminating pr docket 82624
and amending the rules in parts 2 and 97 pertaining to amateur
transmitter power limitations. effective august 29, 1983, most
amateur power limits will be expressed in terms of peak envelope
power.   the new rules impose a 1500 watt peak envelope power output
limit on the majority of amateur transmissions. however, operators
employing am double sideband voice may continue to use the present
1000 watt dc input terms until 1990. the new rules also place a 200
watt pep output limit on transmitters operating in novice subbands,
replacing the present 250 watt dc input limit. additionally,
effective radiated power has been redefined in terms of pep output
from the transmitter. the special power limits at 1900 to 2000 khz
have been specified in pep output figures, and power limits for 450
mhz transmitters located around certain military installations have
been redesignated in pep output terms.   details to appear in
september and october 1983 qst   ar

From 3204182276505357483
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9699fa8a24a912e7,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-06 08:52:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 65: Oscar 10
Message-ID: <270@houxp.UUCP>
Date: Sat, 6-Aug-83 11:52:14 EDT
Article-I.D.: houxp.270
Posted: Sat Aug 6 11:52:14 1983
Date-Received: Sat, 6-Aug-83 20:23:20 EDT
Lines: 20

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 65 from arrl headquarters
newington ct july 28, 1983
to all radio amateurs bt

amsat oscar 10 mode b transponder will be turned on for the first
time at 1800 utc on saturday, august 6. for the first two hours
north american stations will not have access. west coast stations
will acquire the satellite first and the acquisition line will
gradually move eastward. on the east coast the satellite should be
available a little before 0000 utc on sunday, august 7, and should
stay in range for eight to nine hours.   listen for the general beacon
at 145.810 mhz. the center of the downlink passband is 145.903 mhz
and the center of the uplink passband is 435.100 mhz. to track oscar
10 listen for its signals, peak the signal strength by mmving your
antennas first in azimuth, then in elevation, and adjust periodically
to repeak the signals. the mode l transponder has not yet been
scheduled for operation. good hunting   ar

From 1118409751705683246
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,25a7a8bc35d9ad47,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-06 08:52:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 66: Oscar 10
Message-ID: <271@houxp.UUCP>
Date: Sat, 6-Aug-83 11:52:36 EDT
Article-I.D.: houxp.271
Posted: Sat Aug 6 11:52:36 1983
Date-Received: Sat, 6-Aug-83 20:21:22 EDT

Lines: 28

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 66 from arrl headquarters
newington ct july 28, 1983
to all radio amateurs bt

amsat attempted to fire the oscar 10 onboard kick motor for the final orbit adjustment at 0032 utc on july 26. the firing command was transmitted and received but the motor did not fire. amsat speculates that when the ariane 3rd stage collided with oscar 10 about 53 seconds after separation back on the june 16 launch day, helium pressurization plumbing was damaged. helium under pressure is used to operate the engine valves and to mix the hydrazine fuel oxidant. without pressure, the motor was unable to fire. therefore, amsat oscar 10 is in its final orbit.

though not the orbit intended by amsat, oscar 10s present orbit is a very useful one that will provide long distance and long duration communication for many years. arrl congratulates amsat on its tremendous achievement and its professionalism in circumventing many obstacles in reaching this final orbit. we wish them many years of continued success as oscar 10 becomes operational.

orbital parameters. inclination 25.87 degrees, eccentricity 0.60434, 2.06 orbits per day, 699.546 minutes per orbit, 35500 km apogee and 3951 km perigee. typical access time in north america is ten to eleven hours per day ar

From -5752840393678723981
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aa383b164c6e7b47,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-06 08:53:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ARRL 67: Space Shuttle Delayed
Message-ID: <272@houxp.UUCP>
Date: Sat, 6-Aug-83 11:53:02 EDT
Article-I.D.: houxp.272
Posted: Sat Aug 6 11:53:02 1983
Date-Received: Sat, 6-Aug-83 20:24:17 EDT
Lines: 14

qst de ad7i
holmdel, new jersey, u.s.a.

hr arrl bulletin nr 67 from arrl headquarters
newington ct july 29, 1983
to all radio amateurs bt

nasa hq announced friday afternoon, july 29, that the sts9 space
shuttle mission has been postponed from september 30 to october 28.
the 9 day mission will include 2 meter fm operation by mission
specialist owen garriott, w5lfl, as scheduled. the four week slip is
caused by a postponement of the intervening sts8 mission now slated
for mid august. details of the sts9 amateur radio operation appear
in july, august and september 1983 qst   ar

From -4454145901254462880
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,47960843e6fec43,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-06 08:53:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: CRRL 24: DOC drops logging
Message-ID: <273@houxp.UUCP>
Date: Sat, 6-Aug-83 11:53:28 EDT
Article-I.D.: houxp.273
Posted: Sat Aug 6 11:53:28 1983
Date-Received: Sat, 6-Aug-83 20:22:21 EDT
Lines: 21

qst de ad7i
holmdel, new jersey, u.s.a.
hr crrl bulletin nr 24 from crrl headquarters
london ont august 2, 1983
to all radio amateurs bt

in a surprise move, doc revoked section 33 of the general radio
regulations, part 2, eliminating the need for most canadian amateurs
to keep a log.   the doc will also give the holder of an amateur
certificate temporary advanced amateur privileges for one year if he
lives in a place remote from a doc examination center.

representatives of crrl and carf met to work out a final revision of
trc 24.

the crrl saskatchewan qsl bureau has a new manager, ve5ae.

amateur participation in the 1983 world scout jamboree near calgary
was a huge success. in ten days of operation, ve6wsj made over 1500
contacts ar

From -1273373221015927798
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,535dc052df619f7e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-06 08:53:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxp!
ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: PFB 31
Message-ID: <274@houxp.UUCP>
Date: Sat, 6-Aug-83 11:53:45 EDT
Article-I.D.: houxp.274
Posted: Sat Aug 6 11:53:45 1983
Date-Received: Sat, 6-Aug-83 20:20:29 EDT
Lines: 24

qst de ad7i
holmdel, new jersey, u.s.a.
hr propagation forecast bulletin nr 31   from arrl headquarters
newington ct august 1, 1983
to all radio amateurs bt

the solar flux dipped to a low of 119 on july 27, but then began to
rise rapidly. by july 31 it was up to 153, its highest level since
early june. it appears likely to go higter, and remain above recent
levels through the first two days of august. as has been stated in
recent bulletins, this rise is unlikely to make a marked difference
in our summertime dx conditions.

the condition of the earths magnetic field is of more importance at
this season. it has been erratic in the past week, and propagation
has been more than normally variable. a more calm period is due
august 1 and 2, but erratic propagation is expected again august 3 to
6. sporadic e skip is still with us, but it will become less common
in early august. high latitude f layer propagation will improve and
the muf will be moving higher after mid august.

american sunspot numbers for july 21 through 27 were between 61 and
124 with a mean of 90.7 ar

From -1370089893245763308
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bb268fb581e2a24b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-07 23:41:27 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)

Newsgroups: net.ham-radio
Subject: Oscar-10 operations: the first 2 days
Message-ID: <1062@eagle.UUCP>
Date: Mon, 8-Aug-83 02:41:27 EDT
Article-I.D.: eagle.1062
Posted: Mon Aug 8 02:41:27 1983
Date-Received: Mon, 8-Aug-83 10:25:28 EDT
Lines: 26

The Mode B (70cm up, 2m down) transponder was turned on for general use
yesterday as scheduled. The spacecraft is using the omnidirectional
antennas as the attitude is not yet correct for the high gain arrays.

The satellite is performing quite well, despite the expected weak
signals and QSB. Quite a lot of DX has been worked: ZL, PY2, KL7,
H44, etc. The omni is quite "deaf" and best results are being had by
those running on the order of 500 watts out on 70cm. When the satellite
came back down from apogee late last night (and shortly after AOS this
evening) signals were very strong due to the reduced path loss and
favorable antenna angles. KA9Q even made his first SSB contact running
only about 40-50 watts to a KLM 18C antenna. We expect that the
satellite will perform this well at apogee once the high gain antennas
are turned on.

The most interesting phenomenon has been the quarter-second round trip
delay. It makes sending CW tricky; you have to turn up the keyer
sidetone and concentrate on it lest you be fooled by your own delayed
downlink. I've found it hilarious listening to the newcomers on SSB
monitoring their own downlinks ("Hellllloooooooooo Seeeeeeeeeka...
kaaa.... kewwwwwwwwwwww.....") and sounding just like the "drunk" victims
of the old tape-delayed-speech parlor trick!

See you on the satellite!

Phil Karn, KA9Q

From 7400230539072181815
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8daa33a595897d60,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-09 11:39:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!vax135!ariel!hou5f!hou5e!hou5d!hogpc!houxm!
hocda!spanky!burl!sb1!ll1!otuxa!we13!ihnp4!cbosgd!mhuxi!mhuxt!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: A-O-10 Downlink Interference
Message-ID: <1064@eagle.UUCP>
Date: Tue, 9-Aug-83 14:39:10 EDT
Article-I.D.: eagle.1064
Posted: Tue Aug 9 14:39:10 1983
Date-Received: Wed, 10-Aug-83 19:03:51 EDT

Lines: 54

With the launch of Amsat Oscar-10, problems have arisen with terrestrial interference to the Mode B (145.8-146.0) downlink. Many hams have become accustomed to operating FM simplex in this range. However, the ARRL 2-meter bandplan designates the 145.8-146.0 mhz range for Amateur Satellite use only.

Most amateurs gladly move to different frequencies once they are informed about the satellite and why the segment needs to be kept clear. In my own case, the local radio club had its simplex net frequency on 145.800 mhz. After I announced that Oscar-10 was operational, the club eventually moved to a new frequency. Not only that, I was invited to give a talk on AMSAT at a special club meeting!

However, there do seem to be a small number of amateurs who, despite having been politely informed that they are interfering with satellite communications, refuse to move out of the downlink passband. For this minority, there may be legal recourse.

On page 63 of the August QST, the Washington Mailbox column quotes an April 27, 1983 letter from the FCC to a repeater council:

"The only national planning for Amateur Radio Service frequencies that has come to our attention is that done by the American Radio Relay League. The 1982-83 edition of the ARRL Repeater Directory lists over 5600 stations in repeater operation all over the United States and Canada. In view of this widespread acceptance of their band plans, we conclude that any amateur who selects a station transmitting frequency not in harmony with those plans is not operating in accord with good amateur practice. [For example] The ARRL Repeater Directory lists the frequency pair 144.83/145.43 MHz as a repeater channel. Therefore, designation of the channel by the regional frequency coordinator in [an] area is in accord with the ARRL national band plan."

The article goes on to state:

"The bottom line is that if stations transmit on frequencies 144.83 or 145.43 (to use the Commission's example above), in a manner that creates interference to coordinated repeaters, then sufficient cause would exist for issuance of an Official Notice of Violation of Section 97.78. And, such operation could mean an additional Notice for deliberate and malicious interference (97.125)."

If you are having problems with local interference to Oscar-10 in your area, I would recommend that you first try the diplomatic approach. If you're lucky (as I apparently have been) and get a chance to explain what's going on, you might even find a few of the people asking furtive questions about 70cm antennas, amplifiers, etc! Only when all else fails should you bring up the fact that the FCC appears willing to back up the ARRL band plans.

Good luck.

Phil Karn, KA9Q
AMSAT Asst VP, Engineering

From 7903565585905196320
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 12f221,31ed025930a5976b,start
X-Google-Attributes: gid12f221,public
X-Google-Thread: 151e61,31ed025930a5976b,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 134694,31ed025930a5976b,start
X-Google-Attributes: gid134694,public
X-Google-ArrivalTime: 1983-08-09 21:19:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version Vortex 1.0 6/6/83; site vortex.UUCP
Path: utzoo!linus!decvax!vortex!lauren
From: Lauren Weinstein <lauren@vortex.UUCP>
Newsgroups: net.misc,net.ham-radio,net.video
Subject: satellite equipment
Message-ID: <88@vortex.UUCP>
Date: Wed, 10-Aug-83 00:19:04 EDT
Article-I.D.: vortex.88
Posted: Wed Aug 10 00:19:04 1983
Date-Received: Thu, 4-Aug-83 08:47:07 EDT
Organization: Vortex Technology, Los Angeles
Lines: 39

Greetings. I'm not completely sure that I'm hitting the correct
newsgroups with this message... but it's the closest I can come!

Originally I wasn't going to post this information to the net, but
I've been encouraged to do so by several individuals who felt there
might be general interest.

I have recently been offered what I consider to be a ridiculously low
purchase price for standard 4 Ghz (C-band) video satellite earth station
equipment. I follow prices in this area closely, and I have reason to
believe that the price I'm now seeing will not go lower for similar
equipment for a long time, if ever.

However, to take advantage of this opportunity, I need to find
a number of individuals or companies (the more the better) who would
be interested in the same equipment, so that a reasonable group purchase
can be made. However, the purchases must be on file before August 15
or the opportunity is lost.

I've been considering the purchase of such equipment (for general
experimentation, mostly) for quite some time, but felt that the cost
of a decent system was still too high. The current system, though
by no means "deluxe", appears to be a damn good compromise at an excellent
price, and I'd hate to let this chance slide by.

Anyway, the basic system includes an 11 foot aluminum dish (12 petals
for easy transport), 80 degree LNA (much better than the usual 120 or
(rarely) 100 degree units that are typical), dish-mounted downcoverter,
electronic polarizer (no moving parts), receiver, polar mount, cable, etc.

The basic price being offered to me is around $1150 for this package,
but I can't afford to move on this by myself. So... if you know anybody
who has been considering a similar purchase but didn't want to spend
$3K-$4K+ for most commercial units, please let me know by direct
mail as soon as possible -- maybe we can all get together and make
something happen. Thanks much.

--Lauren--
{decvax,ihnp4,harpo,allegra,ucbvax!lbl-csam,randvax}!vortex!lauren

From -267149036917047288
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ad02120618b6df0f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-09 23:27:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!karn
From: karn@eagle.UUCP (Phil Karn)
Newsgroups: net.ham-radio
Subject: Simulcast AMSAT net
Message-ID: <1065@eagle.UUCP>
Date: Wed, 10-Aug-83 02:27:07 EDT
Article-I.D.: eagle.1065
Posted: Wed Aug 10 02:27:07 1983
Date-Received: Wed, 10-Aug-83 04:43:36 EDT
Lines: 11

For the first time tonight, the regular weekly AMSAT net held on 3.850
mhz was "simulcast" on Amsat-Oscar-10 at a frequency of 145.957 mhz.
Signals were good despite the high gain antennas still not being
oriented for optimal performance; the reorientation still has about 50
degrees to go. I made a tape with the net control station WA2LQQ
"direct" on 75m on one channel and the satellite downlink with its
quarter second delay on the other; it makes for an interesting effect!

Antenna reorientation is expected to be complete on Thursday.

73, Phil KA9Q

From -3748725177476768937
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,35e0ada6901bb7fd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-10 11:29:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP

Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
hocda!spanky!burl!sb1!ll1!otuxa!we13!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: Kenwood TR7800 notes (bad final, scan rate modification)
Message-ID: <624@ihuxf.UUCP>
Date: Wed, 10-Aug-83 14:29:06 EDT
Article-I.D.: ihuxf.624
Posted: Wed Aug 10 14:29:06 1983
Date-Received: Fri, 12-Aug-83 04:58:40 EDT
Organization: BTL Naperville, Il.
Lines: 63

This news item concerns Kenwood 2 meter transceivers. It:

- Describes a problem with the final amplifier in a Kenwood 2 meter rig.
- Solicits comments from other Kenwood users.
- Mentions a modification to increase the scanning rate in the Kenwood TR7800.

I have been using a Kenwood TR7800 2 meter transceiver since September 1980. It has given good, reliable service up until yesterday, when the RF output of the transmitter began to disappear.

The transmitter works fine for about a minute, then the output goes flat. If the rig is turned off, and allowed to cool, I can repeat the cycle over again. The culprit appears to be the large, unserviceable, rectangular module, designated M57733. This module contains the driver and final amplifier transistors, and bolts to the rear heat sink. Four wires emanate from this module:

- RF input
- RF output
- DC power for driver stage
- DC power for final stage

Kenwood quotes a price of $55 + $2.50 shipping for a replacement part. I believe a similar module was used in the earlier Kenwood TR7625, which has a bad reputation for failure of this component. Has anyone had similar experiences with TR7800's, TR7850's, TR7625's, etc?

The August 1983 issue of 73 Magazine contains an article outlining a TR7800 modification which speeds up the scanning rate. Most control functions in the TR7800 are handled by a microprocessor. The clock for the microprocessor consists of an LC circuit. The author doubled the clock frequency by removing the slug in the clock inductor.

I applied this simple modification to my TR7800. It works, and as a side effect, all the other operations controlled by the micro are sped up also!

Robert S. Parnass, AJ9S (ARRL TA)
Bell Laboratories
Naperville, Illinois 60566
(312)979-5760
ihnp4!ihuxf!parnass

From -2606652484708423635
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ca4c66fa44a61f48,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-10 15:27:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxt!mhuxi!cbosgd!ihnp4!ixn5c!inuxc!pur-ee!ecn-ec:wn9nbt
From: ecn-ec:wn9nbt@pur-ee.UUCP
Newsgroups: net.ham-radio
Subject: Re: Orphaned Response - (nf)
Message-ID: <1061@pur-ee.UUCP>
Date: Wed, 10-Aug-83 18:27:13 EDT
Article-I.D.: pur-ee.1061
Posted: Wed Aug 10 18:27:13 1983
Date-Received: Thu, 11-Aug-83 05:24:55 EDT
Lines: 9

#R:ihuxf:-57300:ecn-ec:19900001:37777777600:341
ecn-ec!wn9nbt Jul 12 10:20:00 1983

There is more to scanners than listening to cops. An inexpensive scanner can be used to monitor several ham bands at the cost of only one receiver.

By the way, as soon as someone gets their hands on one of the new
Regency programable scanners I'd be most interested in seeing
comments and/or evaluations on it.....Dave Chasey -- WN9NBT

From 5721812285454659627
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9add91d039790a5b,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 129c11,9add91d039790a5b,start
X-Google-Attributes: gid129c11,public
X-Google-ArrivalTime: 1983-08-10 18:48:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site grkermit.UUCP
Path: utzoo!linus!decvax!genrad!grkermit!jim
From: jim@grkermit.UUCP (Jim Morton)
Newsgroups: net.micro,net.ham-radio
Subject: electronics
Message-ID: <556@grkermit.UUCP>
Date: Wed, 10-Aug-83 21:48:59 EDT
Article-I.D.: grkermit.556
Posted: Wed Aug 10 21:48:59 1983
Date-Received: Thu, 11-Aug-83 04:59:12 EDT
Organization: GenRad Inc., Concord, MA
Lines: 10

    I recently wanted to post an article about some hobbyist
 electronic parts I was in need of, and was surprised to be
 at a loss as to what newsgroup to use. Would anyone be in
 favor of some type of "net.electronics" ??

    Or if not, a suggestion to which group to use for something
 like this?? Thanks.

 Jim Morton, GenRad Inc., Concord, MA   ...decvax!genrad!grkermit!jim

From -6263909283254208548
X-Google-Language: GERMAN,ASCII-7-bit
X-Google-Thread: 151e61,b433ee26646720ee,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-11 05:10:19 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!security!genrad!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!
npois!hogpc!houxp!ad7i
From: ad7i@houxp.UUCP (Paul Newland)
Newsgroups: net.ham-radio
Subject: ZAMTOR hex code (1.02); very long
Message-ID: <275@houxp.UUCP>
Date: Thu, 11-Aug-83 08:10:19 EDT
Article-I.D.: houxp.275
Posted: Thu Aug 11 08:10:19 1983

Date-Received: Fri, 12-Aug-83 05:48:49 EDT
Lines: 264

ZAMTOR 1.02 83.08.08, this code is available for individual use
by radio amateurs only. Please send all comments and suggestions
to Paul Newland, ad7i, POB 205, Holmdel, NJ 07733.

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:2016C000B914CDC114C93A02F9875FAF5721011719CDB9147EC9CDC616E5211B17195EE145
:2016E000347EBBF83600C900000000000035173F17431749174D175117551759175D1761AD
:20170000170DF90DF90DF903F904F905F906F907F908F909F90AF90BF90CF9010001000198
:2017200000050002000300020002000200020002000200020065176C1773177A1781178857
:20174000179117991 7A517B017BB17C817D417DC17E317EC17F417FD17051812181F182A44
:20176000183418 3D1853652B5C362D0053652B5C362E0053652B5C36270053652B5C365604
:20178000005365 2B5C365500561D69715C711B1B00561D69715C715900474E74715C596528
:2017A0005C711B1B00474E74715C59655C1D5500474E74715C59655C651B00555674552BB5
:2017C0005C1B565C711B1B00555674552B5C1B565C71590072553A5C711B1B0072553A5C46
:2017E000715900722759655C711B1B00722759655C715900275374555C711B1B0027537414
:20180000555C715900724B5C4B2D5656535C36557400724B5C4B2D5656535C36742D004B54
:20182000553A4765655C711B1B004B553A4765655C715900474765745C711B1B0047476597
:20184000745C715900CD1219300ACD8218CD8D18CDF214C93AED1FB72818CD871438133A1D
:20186000EC1F3201F9CD8218CD8D18CD0319CDF214C9CDAB15CD8D18CD0319CD6116CDF2E8
:2018800014C93A01F9875F1600CDE215C9CD0E1621A618CDC114CD0E1621C218CDC114CDE1
:2018A0000E16CD0E16C96336475A47397471555C362E392D275A5C5C364D56392D4D392D05
:2018C0002B001D712D2B554D3569745C361E5A1D36655A5C362E714D565A5C2D474E655C1A
:2018E000595627654759533639 5A5C5C4765655C554D3569744B5C55564B56553C565336B5
:20190000395A0021B01F013C001102F9EDB0CD2819C9CD87143FD02100F9063EAF8623104A
:20192000FCFE96CD44143FC9CD12192F37CE962100F98677C9F5218EF9118DF9010E00ED18
```

```
:20194000B036002B77F1C9219CF9060F7EFE5C280DFE782809FE6C28052B10F0B7C923045D
:20196000FA82197EFE7828F6FE6C28F2FE5C28EEFE5A28EAFE3628E62B7EFE5A2806FE36BD
:201980002802B7C978FE0C373FF037C9CD331ACDE010CD4F14300BCD0E16CD0E16CD281983
:2019A00037C9CD57143009CDBB19CDA216373FC9CD5F1430DACDBB19373FC93A02F9FE00F4
:2019C0002005CDD719180CFE012005CDEA191803CDFD19CDF214C9CD4719D0110EF9D5CDBC
:2019E0000B1AE1CD131ACD281AC9CD4719D0111EF9D5CD0B1AE1CD131ACD281AC9CD471943
:201A0000D0112EF9CD0B1ACD281AC97EEDA0FE0020F9C97EFE362807FE5A28043600C92382
:201A200006052310FD3600C9218DF906103600231 0FBC9CD0E163A02F9FE002019218C1A5E
:201A4000CDC11421A31ACDC114210EF9CDC11421A31ACDC114C9FE01201921941ACDC114A8
:201A600021A31ACDC114211EF9CDC11421A31ACDC114C9219C1ACDC11421A31ACDC11421A9
:201A80002EF9CDC11421A31ACDC114C94B56651D476565004765741D476565001D271D470A
:201AA0006565005C361D5A5C00DDCB035EC8CDE81BE5D5CD3810CB27E5D11B1B1B0603CDB8
:201AC000CF1BD1E1D5B7DDCB006EC27A1B0603CD001CD1300F0603CD0C1C21FBFE380336E6
:201AE00000C934C921FBFE7E3600FE07F81B1BEBCB3F3E053262F9DDCB00662815237E2B43
:201B0000FE66280EFE0F280ADDCB039E3E003266F9C946234E233E0FB82016BE20133E6661
:201B2000B9200EDDCB00D6DDCB039E3E003267F9C92B2BCD5C0B3006DDCB05C6181ECD63C5
:201B40000B3006DDCB05CE1813CD6A0B3006DDCB05D61808CD710BD0DDCB05DEDDCB00CE69
:201B6000DDCB039EDDCB04AE3E003266F93264F93A62F93263F9CD450EC91B1B2B2B0601C5
:201B8000CD001CD130112B2B0601CD0C1C21FBFE38033600C934C921FBFE7E3600FE07F8DC
:201BA0001B1BEB477EFE652809FE6A2805FE592801C9328AF93E053262F9DDCB039EDDCB57
:201BC00004AE3E003266F9CD450EDDCB0286C93007CBFEEB34EB1804B6200112CB3E300320
:201BE000EB35EB2B1B10E8C92162F95E1600CB23CB2321D01C195E2356D5235E2356E1C991
:201C00001ABE2802B7C91B2B10F637C93E04BE2802B7C92B10F837C92101FF11FEFECD38E6
:201C200010CB270603CDCF1BC93721A8F906033002CBFECB3E2B10F7C9DDCB0BE6CD38106A
:201C4000DDAE19C82168F93A62F9FE05F2521C34180135FE07F25B1CFE03F0DDCB04EEC95A
:201C60003A69F9472168F97EB8FA721C3600CD7C1CC9ED44B8F83600CDC81CC92162F9349C
:201C80007EFE092006DDCB0BEE1804DDCB0BAEFE0AF836002166F9347EFE2DFAA01C3600FC
:201CA00023347EFE0EF83600C92163F9347EFE0AF836002164F9347EFE2DFABF1C3600235E
:201CC000347EFE0EF83600C92162F935F03609C901FF37FF07FF01FF0DFF07FF13FF0DFF3A
:201CE00019FF13FF1FFF19FF25FF1FFF2BFF25FF31FF2BFF37FF31FF000000000000000034
:201D0000000000000000000000000000000000000000000000000000000000000000C3
:201D2000000000000000000000000000000000000000000000000000000000000000A3
:201D4000000000000000000000000000000000000000000000000000000000000083
:201D6000000000000000000000000000000000000000000000000000000000000063
:201D8000000000000000000000000000000000000000000000000000000000000043
:201DA000000000000000000000000000000000000000000000000000000000000023
:201DC000000000000000000000000000000000000000000000000000000000000003
:201DE000000000000000000000000000000000000000000000000000000000000000E3
:201E000000000000000000000000000000000000000000000000000000000000000C2
:201E2000000000000000000000000000000000000000000000000000000000000000A2
:201E4000000000000000000000000000000000000000000000000000000000000082
:201E6000000000000000000000000000000000000000000000000000000000000062
:201E8000000000000000000000000000000000000000000000000000000000000042
:201EA000000000000000000000000000000000000000000000000000000000000022
:201EC000000000000000000000000000000000000000000000000000000000000002
:201EE000000000000000000000000000000000000000000000000000000000000000E2
:201F000000000000000000000000000000000000000000000000000000000000000C1
:201F2000000000000000000000000000000000000000000000000000000000000000A1
:201F4000000000000000000000000000000000000000000000000000000000000081
:201F6000000000000000000000000000000000000000000000000000000000000061
:201F8000000000000000000000000000000000000000000000000000000000000041
:201FA00000000000000000000A89C00FE699493D500020101000100000001000000000074
:201FC000000000000000000000000000000000000000000000000000000000000001
```

```
:201FE0000000000000000000000000000000000000000000000000000000000000000000000000E1
:00000001FF
```

```
From 1982340205616088418
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9add91d039790a5b
X-Google-Attributes: gid151e61,public
X-Google-Thread: 129c11,9add91d039790a5b
X-Google-Attributes: gid129c11,public
X-Google-ArrivalTime: 1983-08-11 06:15:23 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site tty3b.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
hocda!spanky!burl!sb1!ll1!otuxa!tty3b!tag
From: tag@tty3b.UUCP
Newsgroups: net.micro,net.ham-radio
Subject: Re: electronics
Message-ID: <169@tty3b.UUCP>
Date: Thu, 11-Aug-83 09:15:23 EDT
Article-I.D.: tty3b.169
Posted: Thu Aug 11 09:15:23 1983
Date-Received: Sat, 13-Aug-83 02:26:05 EDT
References: <556@grkermit.UUCP>
Organization: Teletype Corp., Skokie, Ill
Lines: 3

I vote YES on net.electronics.  I have been looking for a slide pot (1-10Kohm)
for several weeks, and was about to post to net.wanted.
Tom Gloger, Teletype Corporation, Skokie, IL 60077
```

```
From -1928240774018430386
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,738b237ca39df2eb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-12 06:19:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!gummo!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
hocda!spanky!burl!sb1!ll1!otuxa!we13!ihnp4!ixn5c!inuxc!pur-ee!CSvax:svb
From: CSvax:svb@pur-ee.UUCP
Newsgroups: net.ham-radio
Subject: Verticals
Message-ID: <562@purdue.UUCP>
Date: Fri, 12-Aug-83 09:19:17 EDT
Article-I.D.: purdue.562
Posted: Fri Aug 12 09:19:17 1983
Date-Received: Sat, 13-Aug-83 05:16:34 EDT
Lines: 10


Having only limited space and money available I thought about
putting up a (80)-40-20-15-10 vertical.
```

Does anybody have experience with such a set up?
Please drop me a note. Then I can ask more detailled
questions.

     Stephan v. Bechtolsheim, KX 9 G, DF 4 CK
     Purdue CS

From -5967185501237811065
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,237cac58c0cf832e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-14 16:09:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
ihnp4!ixn5c!inuxc!pur-ee!CSvax:svb
From: CSvax:svb@pur-ee.UUCP
Newsgroups: net.ham-radio
Subject: Need UNIX satellite software
Message-ID: <563@purdue.UUCP>
Date: Sun, 14-Aug-83 19:09:38 EDT
Article-I.D.: purdue.563
Posted: Sun Aug 14 19:09:38 1983
Date-Received: Mon, 15-Aug-83 01:24:09 EDT
Lines: 7

Need some programs for orbital calculation of satellites (OSCAR etc.),
reasonable size, reasonable complexity, to run under UNIX on the VAX.
Preferably written in C.

     Stephan v. Bechtolsheim, KX 9 G, DF 4 CK
     Purdue CS

From -7149799966290870073
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5b215063b9fb89f1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-08-14 19:27:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
ihnp4!ixn5c!inuxc!pur-ee!ecn-ec:mahler
From: ecn-ec:mahler@pur-ee.UUCP
Newsgroups: net.ham-radio
Subject: Software List Offer - (nf)
Message-ID: <1080@pur-ee.UUCP>
Date: Sun, 14-Aug-83 22:27:04 EDT
Article-I.D.: pur-ee.1080
Posted: Sun Aug 14 22:27:04 1983
Date-Received: Mon, 15-Aug-83 10:23:31 EDT
Lines: 22

#N:ecn-ec:19900002:000:541
ecn-ec!mahler   Aug 14 19:43:00 1983

Please send information on PUBLIC DOMAIN software packages
to support ham radio operations (logging, code teaching,
code copy/send, rtty, oscar support, etc) ... I'll package
and post to the whole group

Please include the following information:

Your Name and a way to get ahold of you (electronic methods
if possible)

What the software does (be brief but complete)

What machine/language/os is required for operation

How will you distribute the software if requested

Tnxs! & 73s   Steve N9DRR
     {decvax|ucbvax|inuxc}!pur-ee!mahler

From 2272628824426399589
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a8fa2c5fe2b3d5de,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-21 05:50:12 PST
Message-ID: <bnews.houxp.234>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!lime!houxe!hogpc!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!lime!houxe!hogpc!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Apr 21 08:50:07 1983
Subject: ARRL 30: 2 Metre Shuttle Communications
X-Google-Info: Converted from the original B-News header
Posted: Wed Apr 20 08:13:13 1983
Received: Thu Apr 21 08:50:07 1983

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 30 from arrl headquarters
newington ct april 18, 1983
to all radio amateurs bt

astronaut owen garriott, w5lfl, will operate an amateur radio station
aboard the next space shuttle mission, scheduled for september 1983.
on april 16, nasa officially approved a joint arrl/amsat proposal to
include an amateur station aboard the sts 9/spacelab flight. the
joint arrl/amsat proposal calls for arrl to furnish the special

amateur radio equipment for use on the shuttle, and to organize and
coach amateurs in procedures for rapid and efficient communications
with the shuttle. this operation, which will be on 2 meter fm, will
mark the first time in the history of space exploration that the
general public will be able to communicate directly with an astronaut
in orbit. details will be forthcoming in qst ar

From -3131106260550273215
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,111e067e9a972e8d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-21 05:56:13 PST
Message-ID: <bnews.houxp.232>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!lime!houxe!hogpc!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!lime!houxe!hogpc!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Apr 21 08:56:01 1983
Subject: CRRL 14: Syllabus
X-Google-Info: Converted from the original B-News header
Posted: Wed Apr 20 08:12:12 1983
Received: Thu Apr 21 08:56:01 1983

qst de w1aw
hr crrl bulletin nr 14 from crrl headquarters
london ont april 12, 1983
to all radio amateurs bt

doc has released its new trc24, the syllabus for all canadian amateur
radio examinations. it does not take effect until february 1, 1984,
and there will be two more sets of exams based on the old syllabus.
the new trc24 explains the theory requirements in great detail and
reinstates the code sending test.

crrl has asked doc to permit a limited number of beacon stations in
what will be the 18 and 24.5 mhz bands. the beacons would be used
for propagation studies ar

From 3669174617471080186
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c47314d44de0c5e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-23 01:43:16 PST
Message-ID: <bnews.alice.1771>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!alb
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!alb
From: alice!alb
Date: Sat Apr 23 04:43:12 1983
Subject: ARRL to Oppose the Nocode

X-Google-Info: Converted from the original B-News header
Posted: Fri Apr 22 19:39:26 1983
Received: Sat Apr 23 04:43:12 1983

I just heard over the local traffic net that the ARRL Board
of Directors last night instructed the General Manager to
write to the FCC and oppose the no code in the ''strongest
possible language''

From 5703004199196293574
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5a872d4c53954dda,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-23 03:35:04 PST
Message-ID: <bnews.eagle.917>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sat Apr 23 06:35:03 1983
Subject: ARRL directors & no-code
X-Google-Info: Converted from the original B-News header
Posted: Fri Apr 22 23:33:18 1983
Received: Sat Apr 23 06:35:03 1983

Adam's message regarding the ARRL directors voting to "oppose the
no-code license in the strongest terms" is exactly what I needed to get
me to polish off my comments and drop them in the mail.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
) PR Docket No. 83-28
Establishment of a Class of)
Amateur Operator License Not)
Requiring a Demonstration of)
Proficiency in the International)
Morse Code.)

COMMENTS OF MR. PHILIP KARN, KA9Q

I have been a licensed amateur for 12 years, 10 as an Amateur Extra Class licensee. During this time, I graduated from high school, obtained Bachelor's and Master's degrees in Electrical and Computer Engineering, and obtained a professional position with Bell Telephone Laboratories. I consider the technical knowledge and motivation for learning gained through amateur radio to have been a strong factor in my choice of a career in the communications and computer industry.

During my years as an amateur, although I have contributed to public service (e.g., Civil Defense) activities, my primary interests have always been technical: new communications modes, techniques, and higher frequencies. I am currently involved in two new technologies: packet radio and amateur satellites, as an Assistant Vice President for Engineering with the Radio Amateur Satellite Corporation (AMSAT).

This is an exciting time to be involved in such activities. As technology advances, distinctions between formerly separate disciplines become ill-defined. A whole new range of interdisciplinary opportunities (e.g., the proposed PACSAT store-and-forward packet radio satellite) are only now beginning to appear. The realization of these potentially substantial contributions to the state of the art depends almost entirely on the availability of motivated and technically knowledgeable amateurs, and the voluntary financial support of a large user population.

As one who has both professional and amateur interests

in
communications, I am constantly struck by the contrast between the people in my two environments. On the one hand, a disturbingly large fraction of radio amateurs with access to the spectrum appear relatively uninterested in advancing the state of the art. On the other, many of my non-amateur colleagues also have a personal interest in radio communications. While they certainly have the capability to make significant contributions to low-cost implementations of advanced technologies, they are barred from the spectrum by even the 5 wpm code requirement associated with the Technician Class license.

I have often tried to encourage interested colleagues to obtain amateur licenses. The replies are often along these lines:

1. "I don't need or want to learn the code; I just want to experiment with packet radio". [or, satellites, microwaves, etc]

2. "Why should I want to be part of a service that's snobbish enough to insist that everyone learn the code?"

3. "Nobody does anything technically innovative in the Amateur Service. I wouldn't have anybody to work with."

These three reasons reinforce each other. Opportunities for innovation are often missed because many "technical types" aren't hams. They resist what they perceive as an arbitrary requirement kept in place by an elite group more intent on maintaining their "exclusive rights" than in advancing the state of the art. While I usually point out that CW is still a useful mode in many situations, even in advanced systems such as OSCAR satellites, I cannot help but agree that the code should not be a mandatory entrance requirement.

I therefore strongly support the Commission's desire to create a form of "code free" license and am deeply disappointed that the ARRL and the majority of my fellow amateurs appear to disagree with this position. My only concerns are practical: while there is general agreement that the "microwave bands" (1215 Mhz and up) could easily

support many more amateurs, it is not as clear with regard to the 50-450 Mhz bands.

For this reason, I feel that if the Commission adopts any code-free proposal, it should also do the following to

alleviate congestion if at all possible:

1. Grant no new services access to the 220 Mhz band.

2. Maintain the use of 420-430 Mhz by the Amateur Service.

3. Expedite the allocation of additional VHF/UHF spectrum to the Amateur Service, particularly the 902 Mhz WARC-79 band.

Even with additional VHF/UHF frequencies, simply removing the code test from the Technician license would likely result in severe overcrowding on the popular 144 Mhz band. Overcrowding, such as that in Southern California, not a lack of code proficiency, is the major cause of accidental and intentional interference. It therefore unfortunately becomes necessary to limit access to 144 Mhz, but I cannot justify the code requirement on its own merits for that band any more than I can for the less crowded higher frequencies.

The best way to limit crowding on 144 Mhz while still encouraging talented newcomers and the use of the higher amateur bands would be through two types of code free license. The lower grade would require only the theory test associated with the Technician license and provide all

privileges on 220 Mhz and up. The higher grade would grant all privileges above 50 Mhz to licensees who demonstrate a knowledge of theory equivalent to that required of Advanced or Extra Class licensees. I would recommend that the Commission reserve the option to later modify requirements for this grade of license, based on actual experience.

While a "digital" specialty license would undoubtedly appeal to a number of potential amateurs, I feel that it would be too restrictive. Such a license would ignore the needs of potential amateurs interested in other areas, such as microwaves and satellites, and isolate those who do obtain the "digital" license from the rest of the amateur community.

Summarizing my suggestions, I would create two classes of code free license as follows:

Class	Privileges	Theory Test
"second"	all on 220 MHz and up	Existing Technician/General
"first"	all on 50 MHz and up	Existing Advanced (or Extra)

Respectfully submitted,

Philip R. Karn, Jr, KA9Q/2
61 Greenbrook Road
Berkeley Heights, NJ 07922
201-322-4724

cc:
American Radio Relay League
Radio Amateur Satellite Corporation
Amateur Research and Development Corporation
USENET computer network

From 5811452268581821599
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,17e5427875304bdc,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,17e5427875304bdc,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1983-04-25 01:46:24 PST
Message-ID: <bnews.eagle.918>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!floyd!vax135!ariel!hou5f!npois!npoiv!alice!mhtsa!eagle!
karn
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!hou5f!npois!npoiv!alice!mhtsa!eagle!
karn
From: eagle!karn
Date: Mon Apr 25 01:46:24 1983
Subject: Phase 3-B Launch Campaign Status
X-Google-Info: Converted from the original B-News header
Posted: Sat Apr 23 15:23:31 1983
Received: Mon Apr 25 01:46:24 1983

The following is a status report on the AMSAT Phase 3-B/Ariane L-6
launch campaign:

Report from Kourou 17:30 UTC 23 Apr 83
{De Gordon and Jan via FY0ESE, 21.360 MHz, to WA2LQQ}

1. Preparations of the s/c are going well.
2. A slip in the launch appears inevitable. The magnitude of the slip
   is indeterminate at this moment. Could be 1 week to 5 weeks or more
   pushing launch date into August.
3. There are two significant problems:
   a. Turbo pumps [no elaboration given on the air]
   b. Inertial nav system [likewise no elaboration]
4. Our crew will complete all preparations up to s/c fueling. They will
   then return home for an indeterminate period. About one week's work
   will be needed upon return to Kourou.
5. A major review/meeting will be held tomorrow, Sunday.
6. The next major decision point is 16 May 83 [launch day set then?]
7. Jan would like to QSO with both KA9Q and W0PN on Sunday, 24 Apr.
   Suggest they tune 21.360 o/a 1700 UTC.
8. Jan will call [LL] WA2LQQ on Monday.

This info is suitable for public dissemination for release now.

From -9151418891026706253
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ea0ab62dc5f37789,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-25 04:39:27 PST
Message-ID: <bnews.inuxc.647>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!lime!houxe!hogpc!houxm!ihnp4!ixn5c!
inuxc!wheatley
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!lime!houxe!hogpc!houxm!ihnp4!ixn5c!
inuxc!wheatley
From: inuxc!wheatley
Date: Mon Apr 25 04:39:27 1983
Subject: ARRL DX BULLETIN de K2PH
X-Google-Info: Converted from the original B-News header
Posted: Fri Apr 22 08:57:05 1983
Received: Mon Apr 25 04:39:27 1983

_S_p_r_a_t_l_y__I_s_l_a_n_d_s_. It has been reported from Hong Kong that DJ6SI and DF6FK, along with the skipper and one other crew member, were rescued at sea by a Panamanian ship, the Linden. The four were discovered in a lifeboat, approximately 100 miles west of the Spratly Islands. They are expected to arrive in Hong Kong Friday or Saturday. Tragically, the two other amateurs on the DXpedition, DJ3NG and DJ4EI, have died, one in the initial attack and the other at sea a few days later. Actual details of the attack are still not known at this time.

_D_e_s_e_c_h_e_o__I_s_l_a_n_d_. The FCC has changed the prefix of Desecheo Island from KP4 to KP5.

_T_u_r_k_e_y_. ARRL Headquarters has received word from the Turkish Amateur Radio Club that the government has passed legislation officially recognizing amateur radio once again. The process will take about six months, at which time amateur radio will be legal by government standards.

_B_r_u_n_e_i_. VS5MS can be found on 14210 kHz at 1430Z.

_G_a_b_o_n_. TR8JD operates around 21300 kHz at 2130Z. QSLs are being handled by F6AJA.

_S_t_.__M_a_r_t_i_n_. K6GXO/PJ7 is active on 21290 kHz at 2100Z. QSLs go to his home QTH.

_W_e_s_t__M_a_l_a_y_s_i_a_. Look for 9M2SQ on Sunday mornings at 1030Z around 14210 kHz.

_A_f_r_i_c_a_/_S_o_u_t_h__A_t_l_a_n_t_i_c_. An informal group meets on 21335 kHz between 1700 and 2000Z. ZD9, ZD8, ZD7, TJ, TQ, TU, and 7Q7 stations are available regularly.

_U_z_b_e_k_. An extremely active station is UI8OAA, whose QSL manager is I8YGZ.

_S_t_.__V_i_n_c_e_n_t_. J88AQ may be found on Saturdays on 21300 kHz around 1700Z.

From -1472385160715647719
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,73f528ba964b36f7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-05-01 19:04:25 PST
Message-ID: <bnews.eagle.925>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Mon May 2 06:28:50 1983
Subject: Dayton 1983
X-Google-Info: Converted from the original B-News header
Posted: Sun May 1 22:04:25 1983
Received: Mon May 2 06:28:50 1983

Did anybody else go out there and brave the floods?

Just returned from an exhausting weekend. The outside flea markets were only open on Saturday and Sunday, while the commerical exhibits (inside) were open all three days. It also rained two out of the three days; guess which ones? Parking was a disaster; because of the rain, the usually spacious unpaved fields behind the arena were closed, and people were parking anywhere and everywhere. Tow trucks were out in

force, and I'm sure the local auto pound made plenty of money.

A lot of new amateur transceivers are coming out with provisions for computer control. The cheaper rigs provide only for frequency control, while the more expensive ones allow you to get to more of the knobs from the interface. Yaesu has the TS-980 and the FT-757GX with their "CAT" (Computer Assisted Tuning), while a number of Icom transceivers have had accessory connectors allowing external frequency control for some time. Seems to me that shared club HF "remote base" stations should become quite common.

Multiband VHF/UHF rigs (some supporting full duplex cross banding, e.g., for satellites) are starting to appear; both Yaesu (FT-726R) and Kenwood (TS-780) have them. The Yaesu looks especially nice because you can choose the three bands segments you want as plug-ins. More and more 70cm multimode rigs are also appearing, but most seem to restrict you to only a 10 mhz segment of the band (440-450 mhz, or, more commonly, 430-440 mhz). 1.2 Ghz stuff is just now starting to appear; Icom has a 1.2 Ghz mobile FM transceiver, and more 1.2 Ghz transverters and transmitting converters are coming out, many especially designed for the 1269 mhz Phase 3B Mode L uplink. Technology moves on!

Phil

From -2296590451711885674
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c01f9d933876f253,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,c01f9d933876f253,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1983-05-02 19:02:31 PST
Message-ID: <bnews.ihuxf.364>
Newsgroups: net.ham-radio,net.wanted
Path: utzoo!decvax!microsof!uw-beaver!cornell!vax135!ariel!hou5f!npois!npoiv!
houxm!ihnp4!ihuxf!parnass
X-Path: utzoo!decvax!microsof!uw-beaver!cornell!vax135!ariel!hou5f!npois!npoiv!
houxm!ihnp4!ihuxf!parnass
From: ihuxf!parnass
Date: Mon May 2 19:02:31 1983
Subject: source for scanner crystals wanted
X-Google-Info: Converted from the original B-News header
Posted: Thu Apr 28 15:30:14 1983
Received: Mon May 2 19:02:31 1983

Does anyone in the Naperville, Illinois area know of a local store that stocks and sells scanner crystals for Bearcat scanners for Naperville Police and Fire Departments frequen-

cies?

The radio stores in Chicago only stock crystals for towns close to the city, and Radio Shack stores stock crystals for their scanners only.

Thanks,

Bob Parnass, AJ9S
Bell Laboratories
Naperville, IL 60566

(312)979-5760
ihnp4!ihuxf!parnass

From 8173598664787169288
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c6692e1bb9b3307f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-05-05 04:16:53 PST
Message-ID: <bnews.inuxc.658>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!houxm!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!houxm!ihnp4!ixn5c!inuxc!
wheatley
From: inuxc!wheatley
Date: Thu May 5 04:16:53 1983
Subject: ARRL DX BULLETIN
X-Google-Info: Converted from the original B-News header
Posted: Sun May 1 16:30:19 1983
Received: Thu May 5 04:16:53 1983

_S_o_u_t_h__C_o_o_k__I_s_l_a_n_d_s_. ZK1CG, Victor, is again active and is providing a new country for many on 160 meter ssb. Watch 1812 kHz at 0730Z.

_T_a_h_i_t_i_. FO8JP is active daily on 40 cw as well as 20 and 15 meter ssb.

_A_m_s_t_e_r_d_a_m__a_n_d__S_t_.__P_a_u_l__I_s_l_a_n_d_s_. FB8ZQ can be found on 7003 kHz at 0030Z and will also make skeds for 80 meters. QSL to F6GXB.

_B_r_u_n_e_i_. VS5MS is on 14210 kHz at 1200Z. QSL via N2OO.

_N_a_m_i_b_i_a_,__S_o_u_t_h_w_e_s_t__A_f_r_i_c_a_. ZS6BPJ/ZS3, Karel, can be found on 7005 kHz at 0530Z. He is also active on 28030 kHz and

has been looking for contacts on 160 meters.

_G_a_b_o_n_. TR8JD can be found on 14044 kHz at 0045Z.

_C_h_i_n_a_. BY1PK and BY8AA have been heard in QSO with each other on 14058 kHz at 0050Z. The operators at BY8AA are Lml and Xxan.

From 2481021200460817128
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6656020de924c067,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-05-17 20:34:34 PST
Message-ID: <bnews.whuxlb.1090>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!whuxlb!mkg
X-Path: utzoo!decvax!harpo!floyd!whuxlb!mkg
From: whuxlb!mkg
Date: Tue May 17 20:34:34 1983
Subject: CBS does In the News on ham radio - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Sun May 8 00:45:27 1983
Received: Tue May 17 20:34:34 1983

#N:whuxlb:6200001:000:700
whuxlb!mkg May 8 00:06:00 1983

While watching the cartoons this morning, I was suprised and pleased to see CBS news do one of their "In the News" spots on ham-radio. They couldn't say much in 60 seconds but they touched upon public service (showing shots of a ham in Hawaii next to the lava flow with an HT), the Dayton hamfest (a shot of your 'typical' hamfest visitor decked out with radio gear), talked about AMSAT and the station that Garriott will bring on his future shuttle flight, and a brief but adequate description of the hobby while showing somebody making contacts from Dayton.

All in all, it was an oustanding display of ham radio. If only we could get more publicity like that!!!
Marsh Gosnell AD2H whuxlb!mkg

From -7727418287459625941
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ac496f95ec297054,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-05-17 23:11:15 PST
Message-ID: <bnews.csu-cs.2197>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!seismo!hao!csu-cs!kelly
X-Path: utzoo!decvax!harpo!seismo!hao!csu-cs!kelly
From: csu-cs!kelly

Date: Tue May 17 23:11:15 1983
Subject: TV Propagation
X-Google-Info: Converted from the original B-News header
Posted: Sun May 8 15:08:26 1983
Received: Tue May 17 23:11:15 1983

Did anyone in the area notice a VHF opening this weekend?
Sunday morning several of the higher TV stations had some
high-quality skip here (Ft Collins, Colo). I have 2 reasons
for asking, one that I enjoyed VHF right up until grad school
(now almost over, Praise the Lord!) and I will be back into it soon.
Secondly, if I heard of/discover how reliable TV is as an
indicator, I may be able to note the prime skip later on when
I am active again. Any notes and observations are welcome..
                  73's, Chris, WD5IBS/0

From -3432838160653877529
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c1d08dbc3a5945dc,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,c1d08dbc3a5945dc,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1983-05-17 23:43:01 PST
Message-ID: <bnews.eagle.932>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Tue May 17 23:43:01 1983
Subject: UoSAT Telemetry Equations
X-Google-Info: Converted from the original B-News header
Posted: Mon May 9 15:50:38 1983
Received: Tue May 17 23:43:01 1983

The following is a recent set of telemetry decoding formulas for the
UoSAT-OSCAR-9 satellite, courtesy of the UoSAT group at the University
of Surrey, England.

    Telemetry sensor allocation:
    ---------------------------   update: 26 Apr 1983

Channel	Parameter	Cal. Equation
*******	*********	**********
00	Secondary S/C computer (F100L)	1.2N mA (0.125A <I< 1A)
01	Solar array current +X	200 + 1.12N mA
02	Battery half voltage	N/100 *(1.01)
03	Radiation detector A O/P	40N *(1.04) Counts/S
04	Radiation detector B O/P	40N *(1.04) Counts/S
05	Magnetometer expt. HY-coarse	INT(Nyc/63.5+0.689)*8054-Fy
06	Magnetometer expt. HX-coarse	INT(Nxc/63.5+0.689)*8103-Fx

07	Magnetometer expt. HZ-coarse	-INT(Nzc/63.5+0.689)*8009+Fz
08	Battery pack-A temperature	(474-N)/5 *(1.01) Degrees C
09	Spacecraft facet temperature +X	(474-N)/5 *(1.01) Degrees C
10	Visual display expt. CCD current	1.2*(N-30) mA (0.15A <I< 1A)
11	Solar array current -Y	200 + 1.12N mA
12	2.4 GHz beacon expt. power O/P	(N-145)*0.45 mW
13	Radiation expt. EHT volts	N volts
14	Radiation detectors expt. current	(N+20)/8 *(0.983) mA
15	Magnetometer expt. HY-fine	Fy=18.55*(Nfy-495.7) See Ch 05
16	Magnetometer expt. HX-fine	Fx=18.53*(Nfx-496.45) See Ch 06
17	Magnetometer expt. HZ-fine	Fz=18.34*(Nfz-493.55) See Ch 07
18	Battery pack-B temperature	(474-N)/5 *(1.01) Degrees C
19	Spacecraft facet temperature -X	(474-N)/5 *(1.01) Degrees C
20	Spacecraft computer current	1.2*(N-25) mA (0.125A <I< 1A)
21	Solar array current -X	200 + 1.12N mA
22	Battery / BCR +14V bus	N/50 *(1.056)
23	Sun sensor +Z axis	N/200 *(1.01)
24	10.4 GHz beacon expt. current	(N-40)/4 * 0.97
25	Magnetometer expt. temperature	(467-N)/6.85 Degrees C
26	Magnetometer expt. current	(N/8)*0.9945
27	Telecommand receiver current	(N-16)/8 *(0.952) mA
28	Radiation expt. temperature +X1	(474-N)/5 *(1.01) Degrees C
29	Spacecraft facet temperature -Y	(474-N)/5 *(1.01) Degrees C
30	Battery charge current	2.9N mA
31	Solar array current +Y	200 + 1.12N mA
32	Power conditioning module +10V	N/60 *(0.93)
33	Telemetry system current	(N-16)/30 *(1.084) mA
34	2.4 GHz beacon expt. current	0.4*(N-11) *(1.072) mA
35	145 MHz data beacon power O/P	(N-82)*1.67
36	145 MHz data beacon current	(N-7)/4 *1.014
37	145 MHz data beacon temperature	(474-N)/5 *(1.01) Degrees C
38	Pri.S/C computer temperature -X1	(474-N)/5 *(1.01) Degrees C
39	Spacecraft facet temperature +Y	(474-N)/5 *(1.01) Degrees C
40	+14V line current	2.86N mA
41	+5V line current	1.28(N-50) mA (0.075A <I< 1A)
42	Power conditioning module +5V	2N/300 *(1.12)
43	Sun sensor -Z axis	N/200 *(1.01)
44	HF beacons expt. current	(N-36)/3 *1.038 mA
45	435 MHz data beacon power O/P	(N-102)*1.792
46	435 MHz data beacon current	(N-34)/3 *1.053 mA
47	435 MHz beacon temperature	(474-N)/5 *(1.01) Degrees C
48	Sec.S/C computer temperature -Y1	(474-N)/5 *(1.01) Degrees C
49	Spacecraft facet temperature +Z	(474-N)/5 *(1.01) Degrees C
50	+10V line current	3N mA
51	-10V line current	1.3*(N-60) mA
52	Power conditioning module -10V	0.0158N - 0.0224'N' ('N'=Ch 32)
53	Navigation magnetometer Y-axis	(N-663.44)*183.486 (nT)
54	Navigation magnetometer Z-axis	-(N-336.55)*189.54 (nT)
55	Navigation magnetometer X-axis	-(N-496.5)*194.55 (nT)
56	Speech synthesiser current	(N-16)/10 *1.009 mA
57	CCD imager temperature	(474-N)/5 *(1.01) Degrees C
58	Telemetry system temperature +Y1	(474-N)/5 *(1.01) Degrees C
59	Spacecraft facet temperature -Z	(474-N)/5 *(1.01) Degrees C

The navigation magnetometer is subject to temperature drift which can cause clipping of the output.
NOTE: The axis labelling now employed is right-handed for all sub-systems.

Status points		'0' '1'
01	145 MHz general data beacon	off/on
02	435 MHz engineering data beacon	off/on
03	Primary Spacecraft computer	off/on
04	CCD camera module	off/on
05	Radiation detector - A	off/on
06	Magnetometer expt.	off/on
07	7 MHz beacon expt.	off/on
08	14 MHz beacon expt.	off/on
09	28 MHz beacon expt.	off/on
10	21 MHz beacon expt.	off/on
11	2.4 GHz beacon expt.	off/on
12	10.47 GHz beacon expt.	off/on
13	145 MHz command RX	Squelch 0= signal present
14	435 MHz command RX	Squelch 0= signal present
15	Status calibrate	
16	BCR status	A/B
17	H.F. beacons expt. synthesisers	off/on
18	Telecommand decoder status	ground/primary computer
19	Magnetorquer	off/on
20	Primary S/C computer block load port	disable/enable
21	Secondary S/C computer data O/P	active/inactive
22	Secondary S/C computer clock	interrupt failure/clock OK
23	Secondary S/C computer processor	running/halted
24	Secondary S/C computer power-down	high/low power
25	14MHz H.F. beacon synthesiser lock	out/in
26	28MHz H.F. beacon synthesiser lock	OUT/IN
27	21MHz H.F. beacon synthesiser lock	OUT/IN
28	Radiation detector - B	off/on
29	Tip mass uncaging Confirmation	no/yes
30	Speech synthesiser power	off/on
31	Visual data display memory	off/on
32	Gravity gradient boom motor power	off/on
33	Secondary S/C computer power	off/on
34	HF beacons expt. power	off/on
35	Navigation magnetometer power	off/on
36	S/C computer memory error bit -1	
37	S/C computer memory error bit -2	
38	S/C computer memory error bit -3	
39	Status calibrate	
40	primary S/C computer data UART O/P	inactive/active
41	Gravity gradient boom motor	forward/reverse
42	Magnetorquer power	forward/reverse

```
43     Magnetometer expt.                    measure/calibrate
44     Navigation magnetorquer               safe/arm
45     Gravity gradient boom motor           safe/arm


From 9140687618422146322
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,612aea9328e27535,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,612aea9328e27535,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1983-05-17 23:45:42 PST
Message-ID: <bnews.eagle.933>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Tue May 17 23:45:42 1983
Subject: Phase 3-B Telemetry Equations
X-Google-Info: Converted from the original B-News header
Posted: Mon May  9 15:52:36 1983
Received: Tue May 17 23:45:42 1983

The following are AMSAT Phase 3-B Telemetry Equations received
from Jan King , W3GEY,  dated May 1, 1983:

Ch.No.          Function             Equations / Comments
================================================================
00   BCR Input Voltage  V= 0.150 * N      (Volts)
01   L-Xponder Power out    P=(253-N)^2 /2000 (Watts-avg)
02   U-Xponder Rcvr Temp.   T=(N-127) / 1.82  (deg. C)
03      -------------------    ----------------------------
04   BCR Output Voltage     V=0.075 * (N-10)  (Volts)
05   Special Function
06   U-Xponder TX Temp.     T=(N-127) / 1.82  (deg. C)
07   +14V Separated Current I=(N-15) * 20.64  (mA)
        (to transponders)
08   +10V Regulator Voltage  V=(N-12) * 0.050  (Volts)
09   Helium Tank Pressure    P=(N-34) * 44.44  (Bar) 1 Bar=1 Atmos.
0A   IHU Module Temp.   T=(N-127) / 1.82  (deg. C)
0B   +14V Separated Current I=(N-15) * 4.128  (mA)
     (to other loads)
0C   BCR Osc. #1 Status Status  N=0=OFF ,  N=90=ON (at avg.load)
0D   Helium Reg.Output Pres. P=(N-37) * 0.8    (Bar)
0E   BCR Module Temp.   T=(N-127) / 1.82  (deg. C)
0F   +10V Regulator Current  I=(N-15) * 4.128  (mA)
================================================================
10   BCR Osc #2 Status  Status  N=0=OFF , N=92=ON (at avg.load)
11   Spare Pressure Channel  Not Used
12   SEU Module Temp.   T=(N-127) / 1.82  (deg. C)
13   Battery Charge Current  I=(N-15) * 10.32  (mA)
                  for I<=0 ; N=0
14   +Z Sensor     N=65=sun perpendicular to sensor surface
```

```
                  N=20 to 30 : typical
15   Special Function
16   Main Battery #1 Temp.   T=(N-127) / 1.82  (deg. C)
17   BCR Output Current I=(N-15) * 20.64  (mA)
18   -Z Sensor          N=65=sun perpendicular to sensor surface
                  N=20 to 30 : typical
19   Kick Motor Support      T=(N-12) * 4.0    (deg. C)
       Truss Temp.      delta T above Ch.# 2E Temp.
1A   Main Battery #2 Temp.   T=(N-127) / 1.82  (deg. C)
1B   BCR Input Current  I=(N-15) * 10.32  (mA)
1C   Spin Rate     Wz=0 < N < 139     : Wz=(508/(N-116))-2
                     Wz=139 <= N <= 255 : Wz=0.8 * (139-N)+20
1D   L-Xponder A.G.C.   N <=100 : 0 dB gain reduction
                  N > 100 : gain red.(dB)=(N-100)^2 / -189
1E   Aux. Battery Temp. T=(N-127) / 1.82  (deg. C)
1F   Array #6 Current   I=(N-15) * 4.128  (mA)
        (Arm 3 ; Panel b)
================================================================================
20   U-Xponder Power Out    P=(200-N)^2 / 2000 (Watts avg.)
21   Helium Tank Temp.  T=(N-127) / 1.82  (deg. C)
22   Solar Array #1 Temp.    T=(N-127) / 1.82  (deg. C)
     (Arm 1 ; Panel a)
23   Array #5 Current   I=(N-15) * 4.128  (mA)
     (Arm 3 ; Panel a)
24      U-Xponder A.G.C.    N <=83 : 0 dB gain reduction
                  N > 83 : gain red.(dB)= -(N-83)^2 / 1000
25   L-Xponder Xmtr Temp.    T=(N-127) / 1.82  (deg. C)
26   Solar Array #3 Temp.    T=(N-127) / 1.82  (deg. C)
     (Arm 2 ; Panel a)
27   Array #4 Current   T=(N-15) * 4.128  (mA)
     (Arm 2 ; Panel b)
28   Special Function
29   L-Xponder Rcvr.Temp.    T=(N-127) / 1.82  (deg. C)
2A   Solar Array #5 Temp.    T=(N-127) / 1.82  (deg. C)
     (Arm 3 ; Panel a)
2B   Array #3 Current   I=(N-15) * 4.128  (mA)
2C   Separated 14V Bus Volt. V=0.0615 * (N-10) (Volts)
2D   Central Support Wall   T=(N-127) / 1.82  (deg. C)
     Temp. (Arm 3)
2E   +Z Skin Temp.  (Arm 1)  T=(N-127) / 1.82  (deg. C)
2F      Array #2 Current    I=(N-15) * 4.128  (mA)
================================================================================
30   U-Xponder +9V Reg.Volt. V=(N-10) * 0.050  (Volts)
31   Central Support Wall   T=(N-127) / 1.82  (deg. C)
     Temp (Arm 2)
32   -Z Skin Temp. (Arm 1)  T=(N-127) / 1.82  (deg. C)
33   Array #1 Current   I=(N-15) * 4.128  (mA)
     (Arm 1 ; Panel a)
34   Special Function
35   Central Support Wall   T=(N-127) / 1.82  (deg. C)
     Temp. (Arm 1)
36   Nitrogen Tetroxide     T=(N-127) / 1.82  (deg. C)
     Tank Temperature
```

```
37   ----------------------  ---------------------------
38   Aux. Battery Voltage    V=(N-10) * 0.075  (Volts)
39   Cent.Support Cylinder   T=(N-127) / 1.82  (deg. C)
     Temp. (In Arm 1)
3A   Earth Sensor Temp. T=(N-127) / 1.82  (deg. C)
3B   ----------------------  ---------------------------
3C   L-Xpnder +9V Reg. Volt. V=(N-10) * 0.044  (Volts)
3D   UDMH Tank Temperature   T=(N-127) / 1.82  (deg. C)
3E   Nutation Damper Temp.   T=(N-127) / 1.82  (deg. C)
3F   ----------------------  ---------------------------
================================================================================
```

Channel 1C Spin Rate vs TLM Counts

N (counts)	Spin Rate (wZ) RPM
235	2
210	3
190	4
179	5
167	7
155	10
150	12
144	15
136	20
130	25
124	30
118	35
113	40
107	45
100	50


```
From -4393049354030362699
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a6b7ee823f72b6eb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-05-21 04:01:51 PST
Message-ID: <bnews.mgweed.21>
Newsgroups: net.ham-radio
Path: utzoo!decvax!wivax!linus!allegra!eagle!mhuxt!mhuxj!mhuxa!houxm!ihnp4!we13!
mgweed!rjk
X-Path: utzoo!decvax!wivax!linus!allegra!eagle!mhuxt!mhuxj!mhuxa!houxm!ihnp4!we13!
mgweed!rjk
From: mgweed!rjk
Date: Sat May 21 04:01:51 1983
Subject: Chicago Area Hams
X-Google-Info: Converted from the original B-News header
Posted: Thu May 19 16:57:38 1983
Received: Sat May 21 04:01:51 1983

Relay-Version:version B 2.10 gamma 4/3/83; site mhuxt.UUCP
Posting-Version:version B 2.10 5/3/83; site mgweed.UUCP
```

Message-ID:<21@mgweed.UUCP>
Date:Thu, 19-May-83 16:57:38 EDT
Organization:Western Electric - Montgomery Illinois

There is an item of minor interest to Chicago area hams with
respect to weather transmissions in chi.general.....

From 4528687779696821145
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1e22b5cf7700cfd9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-05-27 09:39:05 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3-B Insurance
Message-ID: <968@eagle.UUCP>
Date: Fri, 27-May-83 12:39:05 EDT
Article-I.D.: eagle.968
Posted: Fri May 27 12:39:05 1983
Date-Received: Sun, 29-May-83 03:27:57 EDT
Lines: 17

By the way, for those of you doubtful of our second try on "that damn
French rocket", I have learned that we are carrying insurance this time.
The provisions (as I remember them, I might be slightly off) state that
we reach a final orbit with an inclination greater than 30 degrees,
apogee between about 35,000 and 40,000 km, perigee greater than about
1,000km, within 60 days of launch. Since it will require the kick motor
to give us this kind of orbit, the insurance has the effect of also
guaranteeing that our spacecraft is functional and commandable, and the
kick motor firings have the desired effect. The price? The insurance
"leverage" is 8:1, i.e., $1 of insurance buys $8 of coverage. I believe
we are insured to about $250,000, roughly the actual out-of-pocket
expenses (but not the value of volunteer time) required to build the
spacecraft.

Keep your fingers crossed.

Phil Karn, KA9Q

From 2744230759490402649
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a06f98b745f26f18,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-05-28 21:44:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio

Subject: DX Packet Radio
Message-ID: <969@eagle.UUCP>
Date: Sun, 29-May-83 00:44:58 EDT
Article-I.D.: eagle.969
Posted: Sun May 29 00:44:58 1983
Date-Received: Fri, 3-Jun-83 04:52:19 EDT
Lines: 32

28 MAY 83

INTERCONTINENTAL PACKET RADIO TESTS SUCCESSFUL

At approximately 23:00 UTC on 27 May, a successful digital packet radio QSO was held between Tom Clark, W3IWI in Maryland and Ian Ashley, ZL1AOX near Auckland, New Zealand on 28 MHz. This 13850 km path represents the longest distance yet bridged using packet radio. Both stations were using the Terminal Node Controller (TNC) developed by the Tucson Amateur Packet Radio group in conjunction with home built S-100 computers. The QSO used Freq uency Shift Keying (FSK) techniques at a data rate of 1200 baud.

Although propogation conditions were marginal, data exchanges consisted of "beacon" transmissions and two-way connection ack nowledgements using the amateur AX.25 HDLC protocol; with this protocol messages are sent repeatedly until they are successfully acknowledged by the other station.

Also participating in the test was Bob Diersing, N5AHD in Corpus Christi, Texas; W3IWI and N5AHD have held several successful packet radio QSO's. N5AHD monitored the beacon and text transmissions from both W3IWI and ZL1AOX.

All three stations involved are affiliated with AMSAT and have been experimenting with high speed digital transmissions in anticipation of conducting similar activities with AMSAT's Phase-3B satellite due to be launched in the near future, and with AMSAT's PACSAT packet radio satellite now being designed.

From 2956089221985752012
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,12e5d2422c2c8990,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-01 05:54:06 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!decwrl!leonard!beesvax!utah-cs!harpo!floyd!vax135!ariel!houti!
hogpc!houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: CRRL 20: Survey

Message-ID: <245@houxp.UUCP>
Date: Wed, 1-Jun-83 08:54:06 EDT
Article-I.D.: houxp.245
Posted: Wed Jun 1 08:54:06 1983
Date-Received: Sat, 4-Jun-83 06:25:00 EDT
Lines: 14

qst de ad7i
holmdel, new jersey, u.s.a.
hr crrl bulletin nr 20 from crrl headquarters
london, ont may 25, 1983
to all radio amateurs bt

all data from the crrl survey has been entered into a computer and
tabulated. in all, 3016 surveys were returned.

in connection with the world communication year, until july 17
canadian amateurs are permitted to use the special prefixes ci in
newfoundland and labrador, ck in the yukon and cy in the rest of
canada   ar

From -6308499207245961959
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb7015b1fe7fe855,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-01 05:54:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!harpo!floyd!vax135!ariel!houti!hogpc!
houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 37: Teleconference
Message-ID: <246@houxp.UUCP>
Date: Wed, 1-Jun-83 08:54:34 EDT
Article-I.D.: houxp.246
Posted: Wed Jun 1 08:54:34 1983
Date-Received: Sat, 4-Jun-83 06:21:15 EDT
Lines: 15

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 37 from arrl headquarters
newington ct may 24, 1983
to all radio amateurs bt

on june 2 at 7.30 pm cdt, 0030 utc june 3, the teleconference radio
net will feature joe reisert, w1jr, in a discussion on antennas.
over a hundred repeaters in the u.s. and canada will be tied into the
net, and 16 of them will be able to participate directly in the
discussion. for a complete list of participating repeaters, send an

sase to w0tn. on september 1 the speaker will be senator barry
goldwater, k7uga, and on december 1 vern riportella, wa2lqq, will
discuss the amateur space program ar

From -813785317846806462
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e46bbeaf707983f8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-01 05:54:53 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!mhuxt!mhuxi!mhuxa!houxm!hogpc!houxq!
houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 38: RACES
Message-ID: <247@houxp.UUCP>
Date: Wed, 1-Jun-83 08:54:53 EDT
Article-I.D.: houxp.247
Posted: Wed Jun 1 08:54:53 1983
Date-Received: Sat, 4-Jun-83 07:41:59 EDT
Lines: 16

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 38 from arrl headquarters
newington ct may 26, 1983
to all radio amateurs bt

at the fcc open meeting may 26, the commission adopted a notice of
proposed rulemaking outlining minor changes to the hf races segments
and proposing the adjustment of 2 meter races frequencies to conform
to regular amateur practice. the comment deadline for this nprm has
not been announced as yet. at the same meeting, fcc adopted a report
and order deleting most logging requirements, including those for
third party traffic. the effective date will be announced in a
further bulletin. details on these fcc actions will be forthcoming
in qst   ar

From 3105593593900194907
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,435570334facd08b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-01 05:55:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!harpo!floyd!vax135!ariel!houti!hogpc!
houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 39: Phase 3B
Message-ID: <248@houxp.UUCP>

Date: Wed, 1-Jun-83 08:55:33 EDT
Article-I.D.: houxp.248
Posted: Wed Jun 1 08:55:33 1983
Date-Received: Sat, 4-Jun-83 06:27:19 EDT
Lines: 18

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 39 from arrl headquarters
newington ct may 27, 1983
to all radio amateurs bt

the european space agency has announced that the launch of amsat phase 3b is now scheduled for june 16 from esa launch site in kourou, french guiana. the launch window is 1200z to 1345z. w1aw will transmit the amsat launch information network service on all bulletin frequencies beginning about 1130z on june 16. the live coverage of the countdown and launch will continue until phase 3b achieves initial orbit. regular morse code practice sessions and bulletins will be suspended for the duration of the alins coverage. several other stations throughout the world will provide alins and will be found operating near 14270 to 14300 khz. monitor w1aw for latest information and news of any further schedule changes ar

From -4039383196125443378
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d73ea3cb2bceced7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-01 11:30:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3B Bulletin #1
Message-ID: <975@eagle.UUCP>
Date: Wed, 1-Jun-83 14:30:54 EDT
Article-I.D.: eagle.975
Posted: Wed Jun 1 14:30:54 1983
Date-Received: Sat, 4-Jun-83 06:40:38 EDT
Lines: 20

Official P3B Bulletin #001
DTG 1 Jun 83 1545 UTC
FT 1 Jun 83 1720 UTC
RLSD WA2LQQ

TO: QST (For general dissemination)
FM AMSAT HQ

Per W3GEY this date: Launch date may still be 15 Jun 83. However, according to F8ZS (CNES IG) and NASA Tracking (per W3IWI), 16 Jun 83 is planned date.

Clearly, either date looks possible now. Decision point arrives 6 Jun 83.

Flight readiness review 31 May affirmed launcher readiness without exception.

P3B S/C is fully fueled with propellant. Electrical systems A-OK too.
S/C will be mated to Sylda tomorrow (Thursday). Fully fueled (wet) weight
was measured as 128.83 kg according to W3GEY.

Reminder to listen to Honeywell net on repeaters nationwide 2 Jun. W1JR
is featured. AMSAT bulletin will be included by W0RPK.

From 9023258456709393803
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,88ade62463341245,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-01 19:35:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT memory non-problem
Message-ID: <976@eagle.UUCP>
Date: Wed, 1-Jun-83 22:35:14 EDT
Article-I.D.: eagle.976
Posted: Wed Jun 1 22:35:14 1983
Date-Received: Tue, 7-Jun-83 12:26:13 EDT
Lines: 30

A message from the UoSAT folks at the University of Surrey:

> The bulletin/telemetry/digitalker program which showed memory error correction on UoSAT during the weekend has been re-run today and displays no further problems, at a preliminary glance. It seems that a byte became corrupted during the program execution and this was continually accessed, toggling the error counter, until successfully re-written at the re-load. Further telemetry on Thursday morning (GMT) will confirm this diagnosis.
>
> G8NEF, G8NOB, University of Surrey.

Note from KA9Q:
This message refers to an apparent primary computer memory problem that
appeared last week. The 16K byte primary computer memory, which consists
of twelve 4116 dynamic rams, uses a Hamming error-detection coding scheme.
Whenever a read cycle is done, the hardware checks the redundant bits
and produces a correct data byte even in the event of a single bit
error. The computer continues to work normally, except that a three bit
hardware counter (displayed in the telemetry) is incremented. There
should have been a software routine periodically scanning memory, rewriting
any bad locations, but it had apparently not been loaded. The cause of the
"continuous errors" was probably due to either the memory being commanded

off and not being reinitialized, or to a single soft error perhaps due to a radiation particle. The Phase 3-B onboard computer uses an identical memory system design and UoSAT is serving as the first flight application of this technique.

Phil Karn, KA9Q

From -4501058669992834827
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d2d2c2321738637f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-02 15:06:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3-B Bulletin #2
Message-ID: <977@eagle.UUCP>
Date: Thu, 2-Jun-83 18:06:11 EDT
Article-I.D.: eagle.977
Posted: Thu Jun 2 18:06:11 1983
Date-Received: Wed, 8-Jun-83 09:09:14 EDT
Lines: 33

Official AMSAT Bulletin #002
DTG 2 Jun 83 1830 UTC
FT 2 Jun 83 1842 UTC
RLSD WA2LQQ

TO: QST
FM: AMSAT HQ

Per W4PUJ at Kourou. P3B S/C is complete. All preparations have been successfully accomplished and the S/C is in excellent health.

The S/C has been mounted in the Sylda and AMSAT can no longer touch P3B.

The Sylda gets "put together tomorrow" according to W4PUJ. It will be rolled out to the pad on Monday.

In sum, AMSAT's job is complete.

Lots of picture taking is going on says W4PUJ.

"The spacecraft is beautiful," sys Dick, W4PUJ.

The launch is scheduled for 16 June according to W4PUJ. This conforms to AMSAT HQ assessment made from various sources including NASA and CNES. (Cf P3B #001)

Further bulletins as available.

R E M I N D E R Don't miss the Honeywell net tonite. W4PUJ will report via tape (to W0RPK) on the launch status Listen on your 2 meter repeater for the report as part of the main program featuring W1JR.

P3B is 14 days away!

From 2977656021249023580
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c220293396221967,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-02 15:10:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!mhuxt!mhuxi!mhuxa!houxm!hogpc!houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 40: No more CW id with AMTOR, BAUDOT, or ASCII!!!
Message-ID: <249@houxp.UUCP>
Date: Thu, 2-Jun-83 18:10:55 EDT
Article-I.D.: houxp.249
Posted: Thu Jun 2 18:10:55 1983
Date-Received: Tue, 7-Jun-83 14:15:49 EDT
Lines: 27

[here is one that makes me so happy I want to write my congressman
and tell him or her how great a job the FCC is doing!!!! -- ad7i]

QST DE ad7i
holmdel, new jersey, u.s.a.
HR ARRL BULLETIN NR 40 FROM ARRL HEADQUARTERS
NEWINGTON CT JUNE 2, 1983
TO ALL RADIO AMATEURS BT

THE FCC HAS LIFTED CERTAIN AMATEUR RULE RESTRICTIONS. EFFECTIVE JUNE 15, 1983, AMATEURS USING RADIOTELEPRINTER CODES OR FAST SCAN TV WILL NO LONGER BE REQUIRED TO IDENTIFY IN INTERNATIONAL MORSE CODE OR PLAIN LANGUAGE VOICE. IF USING BAUDOT, ASCII OR AMTOR, STATIONS MAY IDENTIFY USING THE PARTICULAR DIGITAL CODE BEING USED FOR THE COMMUNICATION. IF USING OTHER DIGITAL CODES ABOVE 50 MHZ, STATIONS MAY IDENTIFY USING BAUDOT, ASCII OR AMTOR. FAST SCAN TV TRANSMISSIONS MAY BE IDENTIFIED IN VIDEO USING THE U.S. 525 SCAN LINE STANDARD DESCRIBED IN PART 73 OF THE FCC RULES. THE CW OR PLAIN LANGUAGE VOICE IDENTIFICATION REQUIREMENT WILL STILL APPLY TO FACSIMILE AND SSTV TRANSMISSIONS. AMATEURS WILL HAVE THE OPTION TO CONTINUE USING CW OR VOICE ID AS AT PRESENT FOR RADIOTELEPRINTER OR FAST SCAN TV. ALSO, THE MAXIMUM FREQUENCY SHIFT FOR DIGITAL COMMUNICATION WILL BE RAISED FROM 900 TO 1000 HZ IN THE HF BANDS. ABOVE 50 MHZ THE MAXIMUM SHIFT WILL DEPEND OF THE SIGNALLING RATE USED. THESE CHANGES DO NOT BECOME EFFECTIVE BEFORE JUNE 15. DETAILS WILL APPEAR IN THE LEAGUE LINES FOR JULY QST AR

From -8708642455589609532
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,513a7d248c0ac35f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-02 15:15:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 40: here it is again because it makes me feel so good!
Message-ID: <250@houxp.UUCP>
Date: Thu, 2-Jun-83 18:15:30 EDT
Article-I.D.: houxp.250
Posted: Thu Jun 2 18:15:30 1983
Date-Received: Thu, 9-Jun-83 09:33:17 EDT
Lines: 27

[here is one that makes me so happy i want to write my congressman
 and tell him or her how great a job the fcc is doing!!!! -- ad7i]

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 40 from arrl headquarters
newington ct june 2, 1983
to all radio amateurs bt

the fcc has lifted certain amateur rule restrictions. effective june
15, 1983, amateurs using radioteleprinter codes or fast scan tv will
no longer be required to identify in international morse code or
plain language voice. if using baudot, ascii or amtor, stations may
identify using the particular digital code being used for the
communication.   if using other digital codes above 50 mhz, stations
may identify using baudot, ascii or amtor. fast scan tv
transmissions may be identified in video using the u.s. 525 scan line
standard described in part 73 of the fcc rules. the cw or plain
language voice identification requirement will still apply to
facsimile and sstv transmissions. amateurs will have the option to
continue using cw or voice id as at present for radioteleprinter or
fast scan tv. also, the maximum frequency shift for digital
communication will be raised from 900 to 1000 hz in the hf bands.
above 50 mhz the maximum shift will depend of the signalling rate
used. these changes do not become effective before june 15. details
will appear in the league lines for july qst ar

From -84286717295653220
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11e8b6,c683d6562eec305a,start
X-Google-Attributes: gid11e8b6,public
X-Google-Thread: 16aac1,5626765dcf5cf794
X-Google-Attributes: gid16aac1,public

X-Google-Thread: 151e61,c683d6562eec305a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-02 19:57:51 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site rlgvax.UUCP
Path: utzoo!decvax!harpo!seismo!rlgvax!guy
From: guy@rlgvax.UUCP
Newsgroups: net.physics,net.ham-radio,net.followup
Subject: Re: faster than light
Message-ID: <559@rlgvax.UUCP>
Date: Thu, 2-Jun-83 22:57:51 EDT
Article-I.D.: rlgvax.559
Posted: Thu Jun 2 22:57:51 1983
Date-Received: Thu, 9-Jun-83 22:01:09 EDT
References: <742@tekid.UUCP>
Organization: RLG Corp., Reston, VA
Lines: 25

No, if I remember correctly, Bell's Theorem merely states that no theory which is:

1) local - i.e., if any thing happening at point A is to affect something at point B, any "signal" must pass through all the intermediate points at a finite speed.

2) realistic - i.e., says that the underlying variables of the theory (position, momentum, field strengths, etc.) must have values independent of the observer.

can NOT exactly reproduce the predictions of quantum mechanics. Therefore, if somebody concocts a local, realistic theory, there must be an experimental test to tell whether it or quantum mechanics is correct. In fact, there have been several such tests; all but one validated quantum mechanics, and the other one is in doubt.

This does NOT mean that "nature is not local", i.e. you can send "signals" at infinite speed or via "action at a distance". It merely says "nature is either local or realistic, not both". I'm not familiar with the mechanics of the theorem, so I'm sure I'm leaving out other conditions (i.e., "nature is not local, realistic, and ... all together").

Guy Harris
RLG Corporation
{seismo,mcnc,we13,brl-bmd,allegra}!rlgvax!guy

From -2461864879413447594
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4c80e80cb53e64ff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-03 02:04:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!decwrl!leonard!beesvax!utah-cs!harpo!eagle!karn
From: karn@eagle.UUCP

Newsgroups: net.ham-radio
Subject: CWID rules: the whole story
Message-ID: <978@eagle.UUCP>
Date: Fri, 3-Jun-83 05:04:21 EDT
Article-I.D.: eagle.978
Posted: Fri Jun 3 05:04:21 1983
Date-Received: Thu, 9-Jun-83 02:44:19 EDT
Lines: 274

To   : All Packeteers
>From   : Paul Rinaldo, W4RI (ARRL HQ)
Subject: FCC Relaxes Rules -- No need to cw i-d on packet

We received the verbatim text of an FCC release of yesterday. Although individual packet stations are relieved of the need to send cw i-d, I would certainly encourage the retention of cw i-d for all packet repeaters and packet beacons. That would help packeteers tell which repeaters are available to them and would help propagate the faith to current non-packeteers.

Here it is:

Before the
Federal Communications Commission FCC 83-247
Washington, DC 20554 33301

In the Matter of)
)
Amendment of Part 97 of the)
Commission's Rules Pursuant to the)
Commission Regulatory Review)
Program.)

ORDER

Adopted: May 26, 1983 Released: June 1, 1983

By the Commission: Commissioner Fogarty not participating;
Commissioner Sharp absent.

1. Pursuant to the Commission's Regulatory Review program, the rules addressed herein are being amended or deleted, as appropriate, in order to eliminate unnecessary restrictions and rules, codify requirements of the Communications Act of 1934, as amended, or make editorial corrections necessary for simplifiction or clarification of the rules. The affected rule sections are: ~ 97.13, 97.32, 97.61, 97.69, 97.81, 97.84, 97.99 and 97.173.

2. We are deleting ~ 97.32(f), which currently prohi-

bits the renewal of Interim Amateur Permits, since renewals may be justified in circumstances where there is an extraordinary delay in the issuance of permanent amateur operator and station licenses.

3. We are revising ~ 97.13(c) and ~ 97.13(d) to correct an omission in order that amateur operator license renewal applicants may submit a photocopy of their license in place of the original document. We are deleting ~ 97.67(a)(3), and revising ~~ 97.61(e), 97.69(a)(2) and 97.67(b)(3) in order to rectify certain unintentional inconsistencies in our recent Order authorizing the use of the digital code "AMTOR" on Amateur Radio Service frequencies below 50 MHz. /1/ We are revising ~ 97.99 to delete the reference to the obsolete Form 452-C. We are also revising ~ 97.173(d) to change the incorrect reference to ~ 97.41 to the correct reference, ~ 97.42.

4. We are adding a new paragraph to ~ 97.81 which codifies into the rules the existing requirements of the Communications Act of 1934, as amended, that specify that the Commission has the "...authority to inspect all radio installations ... which are subject to the provisions of any Act, treaty, or convention...." /2/ This amendment also codifies longstanding Commission policy in that the authority to inspect amateur radio stations is a general condition of grant of all amateur licenses.

5. Finally, we are revising ~ 97.84 to allow station identification for amateur stations to be made by video when specific transmission standards are used, or, under some circumstances, by using certain common digital codes. This will relieve a number of burdens amateur operators have faced when required to identify "packet radio" transmissions, television transmissions where audio cannot be practically transmitted on the same operating frequencies, and transmissions where international third party traffic is exchanged and identification of the station being communicated with is required. /3/

6. We are dispensing with the prior notice and comment procedure provisions of the Administrative Procedure Act (APA) in this proceeding since the subject rule changes are either interpretative (~~ 97.13, 97.69, 97.81, 97.99) or relate to agency procedure (~ 97.32), or since it is unlikely that any objections would be received in view of the obvious benefits which are being conferred and we, therefore, find it unnecessary (~~ 97.61, 97.69, 97.84, 97.99). /4/ The APA's effective date requirements are also not applicable to these rule amendments because they either relieve a restriction, or are interpretative. /5/ Certain rule changes also addressed merely make editorial corrections and the APA, therefore, does not apply (~ 97.173).

7. Inasmuch as general notice of proposed rule making is not required, the Regulatory Flexibility Act of 1980 does not apply.

8. Accordingly, IT IS ORDERED That, effective June 15, 1983, Part 97 of the Commission's Rules and Regulations, 47 CFR Part 97, IS AMENDED as set forth in the attached Appendix. This action is taken pursuant to authority contained in Sections 4(i) and 303 of the Communications Act of 1934, as amended. Further information on this matter may be obtained by contacting: Maurice J. DePont, (202) 632-4964, Federal Communications Commission, Private Radio Bureau, Washington, DC 20554.

FEDERAL COMMUNICATIONS COMMISSION

William J. Tricarico
Secretary

Attachment: Appendix

/1/ 48 FR 7457 (February 22, 1983).

/2/ See Section 303(n) of the Communications Act of 1934, as amended.

/3/ Article 25, ~ 5 of the International Radio Regulations (Geneva, 1979) permits identification signals in the form of, among others, "a telegraph code compatible with conventional printing equipment." Furthermore, the television emissions which we are authorizing to be identified by video are those which can only take place on frequencies where international propagation is unlikely.

/4/ See 5 U.S.C. 553(b)(3).

/5/ See 5 U.S.C. 553(d).

APPENDIX

Part 97 of the Commission's Rules and Regulations, 47 CFR Part 97, is amended as follows:

1. In Section 97.13, paragraphs (c) and (d) are revised to read as follows:

~ 97.13 Renewal or modification of operator license.

(c) Application for renewal and/or modification of an amateur operator license shall be submitted on FCC Form 610 and shall be accompanied by the applicant's license or a

photocopy thereof. Application for renewal of unexpired licenses must be made during the license term and should be filed within 90 days, but not later than 30 days, prior to the end of the license term. In any case in which the licensee has, in accordance with the provisions of this chapter, made timely and sufficient application for renewal of an unexpired license, no license with reference to any activity of a continuing nature shall expire until such application shall have been finally determined.

(d) If a license is allowed to expire, application for renewal may be made during a period of grace of five years after the expiration date. During this five-year period of grace, an expired license is not valid. A license renewed during the grace period will be dated currently and will not be backdated to the date of its expiration. Application for renewal shall be submitted on FCC Form 610 and shall be accompanied by the applicant license or a photocopy thereof.

2. In Section 97.32, paragraph (f) is deleted in its entirety.

3. In Section 97.61, the parenthetical phrase in paragraph (e) is revised to read as follows:

(when type F1 or A2J emissions are employed in these bands, the radio or audio frequency shift, as appropriate, shall not exceed 1000 Hz)

4. In Section 97.69, paragraph (a)(3) is deleted in its entirety and paragraphs (a)(2) and (b)(3) are revised to read as follows:

~ 97.69 Digital communications.

(a) * * *

(2) When type A2, F1 or F2 emissions are used on frequencies below 50 MHz, the radio or audio frequency shift (the difference between the frequency for the "mark" signal and that for the "space" signal), as appropriate, shall not exceed 1000 Hz. When these emissions are used on frequencies above 50 MHz, the frequency shift, in hertz, shall not exceed the sending speed, in baud, of the transmission, or 1000 Hz, whichever is greater.

(b) * * *

(3) The International Radio Consultative Committee (CCIR) Recommendations 476-2 and 476-3 (commonly known as AMTOR); provided that the code, baud rate and emission timing shall conform to the specifications of CCIR 476-2 (1978) or CCIR 476-3 (1982), Mode A or Mode B.

5. Section 97.81 is revised to read as follows:

~ 97.81 Authorized apparatus.

(a) An amateur station license authorizes the use, under control of the licensee, of all transmitting apparatus at the fixed location specified in the station license which is operated on any frequency or frequencies allocated to the Amateur Radio Service, and, in addition, authorizes the use, under control of the licensee, of portable and mobile transmitting apparatus operated at other locations.

(b) The apparatus authorized for use by paragraph (a) of this section shall be available for inspection upon request by an authorized Commission representative.

6. In Section 97.84, paragraph (g) is revised to read as follows:

~ 97.84 Station identification.

(g) The identification required by this section shall be given on each frequency being utilized for transmission and shall be made in one of the following manners:

(1) By telegraphy using the international Morse code (if this identification is made by an automatic device used only for identification, the code speed shall not exceed 20 words per minute);

(2) By telephony using the English language (the Commission encourages the use of a nationally or internationally recognized standard phonetic alphabet as an aid for correct telephone identification);

(3) By telegraphy using any code authorized by ~ 97.69(b), when the particular code is used for transmission of all or part of the communication or when the communication is transmitted in any digital code on frequencies above 50 MHz; or

(4) By video using readily legible characters when A5 emissions are used, the monochrome portions of which conform, at a minimum, to the monochrome transmission standards of ~ 73.682(a)(6) through ~ 73.682(a)(13), inclusive (with the exception of ~ 73.682(a)(9)(iii) and ~ 73.682 (a)(9)(iv)).

7. In Section 97.99, the introductory paragraph is revised to read as follows:

~ 97.99 Stations used only for radio control of remote model

crafts and vehicles.

    An amateur radio station in radio control operation with a mean output power not exceeding one watt may, when used for the control of a remote model craft or vehicle, be operated under the special provisions of this section, provided that a writing indicating the station call sign and the licensee's name and address is affixed to the transmitter.

     8. In Section 97.173, paragraph (d) is revised to read as follows:

~ 97.173 Application for RACES station license.

    (d) If the application is for a RACES station to be in any special manner covered by ~ 97.42, those showings specified for non-RACES stations shall also be submitted.

From 3047585605585805636
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e5eb1fe3ec2250d3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-03 07:29:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!harpo!floyd!vax135!ariel!hou5f!jak
From: jak@hou5f.UUCP
Newsgroups: net.ham-radio
Subject: computer readable copy of fcc part 97 wanted
Message-ID: <277@hou5f.UUCP>
Date: Fri, 3-Jun-83 10:29:08 EDT
Article-I.D.: hou5f.277
Posted: Fri Jun 3 10:29:08 1983
Date-Received: Thu, 9-Jun-83 00:31:08 EDT
Lines: 6

The recent posting of the complete text of the changes to part 97 regarding
cw id regulations prompts me to ask if anyone has a computer readable
copy of the entire text of part 97.

Thanks in advance,
73, Jim KY2D ABI Holmdel ...!hou5f!jak

From -925962119691155548
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 14b8a3,59f1c3367e9b862a,start
X-Google-Attributes: gid14b8a3,public
X-Google-Thread: 151e61,59f1c3367e9b862a,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11aab4,59f1c3367e9b862a,start
X-Google-Attributes: gid11aab4,public

X-Google-ArrivalTime: 1983-06-03 10:17:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxm!houxf!5941ux!rwhw
From: rwhw@5941ux.UUCP
Newsgroups: net.ham-radio,net.lang,net.nlang
Subject: meaning?
Message-ID: <268@5941ux.UUCP>
Date: Fri, 3-Jun-83 13:17:32 EDT
Article-I.D.: 5941ux.268
Posted: Fri Jun 3 13:17:32 1983
Date-Received: Wed, 8-Jun-83 23:36:25 EDT
Lines: 3

What does the phrase "computer readable" mean?

From 1150930997276809828
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c29921a1dc651ce8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-03 11:39:21 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!mhuxt!mhuxi!mhuxa!houxm!hocda!spanky!
burl!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Amateur chart revised
Message-ID: <1157@mgweed.UUCP>
Date: Fri, 3-Jun-83 14:39:21 EDT
Article-I.D.: mgweed.1157
Posted: Fri Jun 3 14:39:21 1983
Date-Received: Thu, 9-Jun-83 00:51:08 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 130

TABLE OF AUTHORIZED EMISSIONS IN THE AMATEUR SERVICE

** 20 meter phone band expansion effective May 22, 1983
*** New FSK, shift, and ID rules effective June 15, 1983

Novice/Technician	General/Advanced	Extra
A1 emission only	A1 and F1	A1 and F1
3700 - 3750	3525 - 3775	3500 - 3775
7100 - 7150	7025 - 7150	7000 - 7150
21100 - 21200	10100 - 10109	10100 - 10109
28100 - 28200	10115 - 10150	10115 - 10150
	14025 - 14150	14000 - 14150
	21025 - 21250	21000 - 21250

	28000 - 28500	28000 - 28500

NOTE: 250 watts max input in Novice subbands and 30 meters.

General	Advanced	Extra
	A1, A3, A4, A5, F3, F4, F5	
3890 - 4000	3800 - 4000	3775 - 4000
7225 - 7300	7150 - 7300	7150 - 7300
14225 - 14350	14175 - 14350	14150 - 14350
21350 - 21450	21270 - 21450	21250 - 21450
28500 - 29700	28500 - 29700	28500 - 29700

160 Meters (Illinois) A1 and A3 only

KHz	Day power	Night power
1800 - 1900	1000	1000
1900 - 1925	500	100
1925 - 1975	100	25
1975 - 2000	500	100

6 and 2 Meters:

50.0 - 50.1	A1 only
51.0 - 54.0	A0, A1, A2, A3, A4, A5, F1, F2, F3, F4, F5
50.1 - 54.0	A1, A2, A3, A4, A5, F1, F2, F3, F4, F5
144.0 - 144.1	A1 only
144.1 - 148.0	A0, A1, A2, A3, A4, A5, F0, F1, F2, F3, F4, F5

The bandwidth of an F3 emission below 29 MHz shall not exceed that of an A3 emission.

The "Considerate Operators Frequency Guide"
(Frequencies generally recognized for certain activities)

1800 - 1825	cw only	14.08 - 14.10	RTTY
1825 - 1830	dx window	14.23	SSTV
1850 - 1855	dx window	21.09 - 21.10	RTTY
3610 - 1630	RTTY	21.34	SSTV
3637.5	AMTOR	28.09 - 28.10	RTTY
3845	SSTV	28.68	SSTV
7090 - 7100	RTTY	29.30 - 29.50	SATELLITES
7171	SSTV	29.52 - 29.58	RPTR inputs
10.14-10.15	RTTY	29.60	FM simplex
14.075	AMTOR	29.62 - 29.68	RPTR outputs

DIGITAL COMMUNICATIONS: (F1, 3.5-28 MHz)(A2, F1, F2 above 28 MHz)

BAUDOT: (International Alphabet #2)
A2, F1, F2: Maximum frequency shift = 1000 Hz.***
A2, F2: Highest modulating frequency = 3000 Hz.
Maximum speed = 100 wpm (75 baud).

ASCII: Maximum baud rates:
3.5 - 28 MHz = 300 baud
28 - 50 MHz = 1200 baud
50 - 220 MHz = 19600 baud
220 - up = 56000 baud

AMTOR: TOR specifications are found in CCIR Rec. 476-2.
(100 baud, Block rep rate 2.222/sec.)

NOTE: Above 50 Mhz, the frequency shift in Hz shall not exceed the sending speed, in baud, or 1000 Hz, whichever is greater. ***

OTHER DIGITAL CODES: (ABOVE 50 MHZ ONLY):
Any other digital code may be used above 50 MHz in the domestic U.S. (Except where A1 only is permitted). A description of the code and modulation technique must be kept in the log.

Bandwidth limitations:
50 - 220 MHz = 20 kHz max.
220 - 1215 MHz = 100 kHz max.
1215 and up = any Bw if in accordance with 97.63(b) and 97.73(c).

NOTE: When using digital communications, CW or phone ID is no longer required after June 15, 1983. The ID may be given using Baudot, ASCII, or AMTOR.

FACSIMILIE and TELEVISION:

Below 50 MHz the bandwidth of A4, A5, F4, F5 must not exceed that of an A3 SSB signal.

50 to 225 MHz:
The bandwidth of A4 and A5 SSB emissions must not exceed that of A3 SSB emissions.

The bandwidth of A4 and A5 DSB emissions must not exceed that of A3 DSB emissions.

Type F4 and F5 emissions shall be limited to a peak deviation of 5 KHz with a maximum modulating frequency of 3 KHz. Alternatively, the bandwidth shall be no greater than 20 KHz.

Below 225 MHz, type A4 and A3 or type A5 and A3
emissions are allowed simultaneously on the same
frequency if the bandwidth is no greater than type
A3 DSB.

Note: Fast Scan television transmissions may be
identified using "readily legible characters
when A5 emissions are used". ***

From -6993151938611979827
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 14b8a3,59f1c3367e9b862a
X-Google-Attributes: gid14b8a3,public
X-Google-Thread: 151e61,59f1c3367e9b862a
X-Google-Attributes: gid151e61,public
X-Google-Thread: 11aab4,59f1c3367e9b862a
X-Google-Attributes: gid11aab4,public
X-Google-ArrivalTime: 1983-06-03 14:04:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!mhuxt!mhuxi!mhuxa!houxm!hogpc!houti!
ariel!hou5f!jak
From: jak@hou5f.UUCP
Newsgroups: net.ham-radio,net.lang,net.nlang
Subject: Re: meaning?
Message-ID: <278@hou5f.UUCP>
Date: Fri, 3-Jun-83 17:04:45 EDT
Article-I.D.: hou5f.278
Posted: Fri Jun 3 17:04:45 1983
Date-Received: Thu, 9-Jun-83 01:25:38 EDT
References: 5941ux.268
Lines: 7

As the poster of the article containing the phrase "computer readable",
I meant an "electronic" rather than "hard copy" form.
That is, something that could be sent to me via electronic mail, uucp , or
on 9 track tape.

Cheers, Jim ABI Holmdel, NJ ...!hou5f!jak
to my system.

From -6722923557298384563
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1867307e975ea31,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-04 07:50:34 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3-B Bulletin #3

Message-ID: <979@eagle.UUCP>
Date: Sat, 4-Jun-83 10:50:34 EDT
Article-I.D.: eagle.979
Posted: Sat Jun 4 10:50:34 1983
Date-Received: Thu, 9-Jun-83 04:03:11 EDT
Lines: 40

Official AMSAT P3B Bulletin #003
Date Time Group 0100 UTC 04 Jun 83
(File Time omitted henceforth; use "Posted" time above for reference)

TO: QST
FM: AMSAT HQ
RLSD: WA2LQQ

According to the schedule briefed 2 Jun by W4PUJ, the P3B S/C should have been buttoned up in the Sylda and the ECS-1 mated to same on Friday, 3 Jun. On Monday the payload will be rolled out and mated to the launcher.

All is going extremely well and hopes are high. The 16 Jun schedule is holding now but the REAL decision date is 6 Jun. On 6 Jun ESA will decide if 16 Jun is viable.

The support crew will be returning to their respective homes today, Saturday. W3GEY and W4PUJ are expected Saturday evening. ZS1FE left Friday (?). DJ4ZC and all but two of the DL crew will leave today as well. Jan speculates that Ulrich (DK4VW) and Wolfgang Schaefer (call ?) will remain to babysit the S/C until launch.

The AMSAT Launch Information Network Service (ALINS) is shaping up very nicely under the leadership of W0RPK. ALINS for P3B launch may be the most widely heard amateur radio event ever with stations from England to Hawaii retransmitting the launch day, real-time coverage orginating at Goddard. Target areas for these transmissions cover virtually the entire globe. Pre-launch and post-launch nets are well-staffed too.

All nets prior to P3B launch should heavily stress P3B-related info such as beacon frequencies, recommended station equipment capabilities, where to get more info (ASR, ORBIT, P.O. Boc 27, etc), and especially to NOT use the P3B transponder(s) until officially released for general use.

W3IWI and WA2LQQ will be on travel (both to California but on separate missions) soon. K1HTV will provide daily bulletins via this media to keep all posted. If nothing changes, a "Status Quo" notice will be issued. WA2LQQ will be back o/a 8 Jun. W3IWI ETR late Jun.

From 5528835351833515243
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 11e8b6,b253b79f4d1c3dd8,start
X-Google-Attributes: gid11e8b6,public

X-Google-Thread: 16aac1,b253b79f4d1c3dd8,start
X-Google-Attributes: gid16aac1,public
X-Google-Thread: 151e61,b253b79f4d1c3dd8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-04 08:42:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 beta 3/9/83; site sdcrdcf.UUCP
Path: utzoo!linus!philabs!sdcsvax!sdcrdcf!markb
From: markb@sdcrdcf.UUCP
Newsgroups: net.physics,net.ham-radio,net.followup
Subject: Re: faster than light
Message-ID: <304@sdcrdcf.UUCP>
Date: Sat, 4-Jun-83 11:42:57 EDT
Article-I.D.: sdcrdcf.304
Posted: Sat Jun 4 11:42:57 1983
Date-Received: Mon, 6-Jun-83 22:31:27 EDT
References: <742@tekid.UUCP>
Reply-To: markb@sdcrdcf.UUCP (Mark Biggar)
Organization: System Development Corporation--a Burroughs Company
Lines: 11

Bell's theorm syas that due to weird quantum effects an event can cause
changes in another event via what appears to be faster-then-light messages.
But, due to the random nature of the changes the only way to determine
the what actually happened to to compare the sequence of events at one
place with the sequence of events at the other which need non-random
messages which must travel slower then light. This is the same problem
observed in the famous twin paradox where as long a constant velocities
are maintained the you can never get the twins together to compare there
aging and determine which is really older.

                    Mark Biggar

From 3889715362002902395
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ff81e6237d55d16c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-04 12:57:40 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!decvax!wivax!linus!allegra!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3-B Event Schedule
Message-ID: <980@eagle.UUCP>
Date: Sat, 4-Jun-83 15:57:40 EDT
Article-I.D.: eagle.980
Posted: Sat Jun 4 15:57:40 1983
Date-Received: Thu, 9-Jun-83 22:52:34 EDT
Lines: 55

The following is an updated time line for certain events in the Phase 3-B
mission, starting with Ariane first stage ignition (H0) and ending

with the first motor firing at fourth apogee. The clock time entries are based on a launch at the opening of the window on 16 June; a delay in the launch would of course not affect the elapsed time column.

The "AOS/LOS" times early in the mission are only of academic interest, since the transmitter will most likely be kept off for five hours after launch to allow outgassing to hard vacuum. Times of various events during launch are approximate, as I do not yet have ESA final values for these (most of the entries in the ESA manual say "TBD".)

Elapsed time	Clock time	Event
+00:00:00	Thu Jun 16 11:59:00 1983 UTC	Elapsed time zero (H0)
+00:00:03.4	Thu Jun 16 11:59:03 1983 UTC	Liftoff
+00:01:25	Thu Jun 16 12:00:25 1983 UTC	Maximum dynamic pressure
+00:02:18	Thu Jun 16 12:01:18 1983 UTC	First stage separation
+00:04:08	Thu Jun 16 12:03:08 1983 UTC	Fairing jettison
+00:04:32	Thu Jun 16 12:03:32 1983 UTC	Second stage separation
+00:14:03	Thu Jun 16 12:13:03 1983 UTC	Perigee
+00:14:05	Thu Jun 16 12:13:05 1983 UTC	Third stage shutdown
+00:15:44	Thu Jun 16 12:14:44 1983 UTC	ECS-1 separation
+00:17:24	Thu Jun 16 12:16:24 1983 UTC	Phase 3-B separation
+00:21:54	Thu Jun 16 12:20:54 1983 UTC	AOS zs1fe
+01:01:25	Thu Jun 16 13:00:25 1983 UTC	AOS jr1swb
+01:18:58	Thu Jun 16 13:17:58 1983 UTC	LOS zs1fe
+01:58:05	Thu Jun 16 13:57:05 1983 UTC	AOS zl1aox
+02:31:45	Thu Jun 16 14:30:45 1983 UTC	AOS zs1fe
+03:18:41	Thu Jun 16 15:17:41 1983 UTC	LOS zl1aox
+05:00:00	Thu Jun 16 16:59:00 1983 UTC	Transmitter turns on
+05:03:18	Thu Jun 16 17:02:18 1983 UTC	AOS dj4zc
+05:30:22	Thu Jun 16 17:29:22 1983 UTC	Apogee #1
+09:55:03	Thu Jun 16 21:54:03 1983 UTC	LOS dj4zc
+09:58:07	Thu Jun 16 21:57:07 1983 UTC	LOS zs1fe
+10:38:20	Thu Jun 16 22:37:20 1983 UTC	LOS jr1swb
+10:46:40	Thu Jun 16 22:45:40 1983 UTC	Perigee
+11:11:36	Thu Jun 16 23:10:36 1983 UTC	AOS w0pn
+11:11:44	Thu Jun 16 23:10:44 1983 UTC	AOS w1hdx
+16:02:58	Fri Jun 17 04:01:58 1983 UTC	Apogee #2
+20:58:37	Fri Jun 17 08:57:37 1983 UTC	LOS w0pn
+21:03:43	Fri Jun 17 09:02:43 1983 UTC	LOS w1hdx
+21:19:16	Fri Jun 17 09:18:16 1983 UTC	Perigee
+21:43:43	Fri Jun 17 09:42:43 1983 UTC	AOS jr1swb
+21:51:15	Fri Jun 17 09:50:15 1983 UTC	AOS zl1aox
+26:35:34	Fri Jun 17 14:34:34 1983 UTC	Apogee #3
+30:22:12	Fri Jun 17 18:21:12 1983 UTC	LOS zl1aox
+31:11:24	Fri Jun 17 19:10:24 1983 UTC	AOS zl1aox
+31:30:09	Fri Jun 17 19:29:09 1983 UTC	LOS zl1aox
+31:39:05	Fri Jun 17 19:38:05 1983 UTC	LOS jr1swb
+31:51:52	Fri Jun 17 19:50:52 1983 UTC	Perigee
+32:13:45	Fri Jun 17 20:12:45 1983 UTC	AOS w1hdx
+32:24:41	Fri Jun 17 20:23:41 1983 UTC	AOS zs1fe
+32:39:16	Fri Jun 17 20:38:16 1983 UTC	AOS dj4zc
+34:53:49	Fri Jun 17 22:52:49 1983 UTC	AOS w0pn
+37:08:10	Sat Jun 18 01:07:10 1983 UTC	Apogee #4 - first burn

From -379965235470244750
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69551105580b1421,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-04 13:08:47 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT Bulletin #27
Message-ID: <981@eagle.UUCP>
Date: Sat, 4-Jun-83 16:08:47 EDT
Article-I.D.: eagle.981
Posted: Sat Jun 4 16:08:47 1983
Date-Received: Mon, 6-Jun-83 20:16:55 EDT
Lines: 211

UOSAT SPACECRAFT CONTROL CENTRE
UNIVERSITY OF SURREY, GUILDFORD, SURREY, ENGLAND
****

**** UOSAT BULLETIN-27   1200 GMT 3 JUNE 1983 ****

** OSCAR-8 NEWS **

THE AMSAT-OSCAR-8 SPACECRAFT WAS ACTIVATED IN MODE-J ON 2 JUNE FOLLOWING A BATTERY RECHARGE PERIOD. THE TRANSPONDER OPERATED CORRECTLY ON THE FIRST ORBIT WITH AN INITIAL BATTERY TELEMETRY COUNT OF 364. BY THE NEXT ORBIT THE BATTERY COUNT HAD FALLEN TO 329 AND AO-8 WAS SUBSEQUENTLY COMMANDED TO MODE-D (RECHARGE). THE MODE-A TRANSPONDER HAS BEEN ACTIVATED FOR SHORT PERIODS TO GATHER TELEMETRY, BUT AS THE BATTERY COUNT WAS STILL LOW THE SPACECRAFT WILL REMAIN IN MODE-D RECHARGE, EXCEPT FOR SHORT PERIODS WHEN THE MODE-A TRANSPONDER WILL BE ACTIVATED TO GATHER TELEMETRY.

IT IS ESSENTIAL THAT YOU DO NOT USE OSCAR-8 IF YOU SHOULD HEAR IT ON DURING THIS PERIOD

** UOSAT NEWS **

AS REPORTED BY A NUMBER OF CORRESPONDENTS DURING THE WEEK, THE MEMORY ERROR RECOVERY COUNTER BITS IN THE TELEMETRY FRAME COULD BE SEEN COUNTING RAPIDLY WHILE THE BULLETIN WAS RUNNING LAST WEEKEND. THE BULLETIN PROGRAM (WITH A 19 HOUR TIMING LOOP) WAS RE-RUN ON WEDNESDAY 1/6/83, AND THE COUNTING DID NOT RECUR. OUR ANALYSIS OF THE SITUATION IS THAT A SOFT ERROR OCCURRED IN A BYTE WHICH WAS ACCESSED VERY FREQUENTLY BY THE BULLETIN PROGRAM AND THIS WAS HAMMING-CORRECTED EACH TIME IT WAS READ DURING THE WEEKEND. THE NON-RECURRENCE DURING A RERUN OF THE

PROGRAM INDICATES NO PERMANENT MEMORY FAULT. THANKS FOR THE REPORTS ABOUT THIS EVENT.

THE SPACECRAFT REMAINS STABLE IN A FLAT (END OVER END) SPIN WITH A +Y/-Y FACET TEMPERATURE GRADIENT OF AROUND 65C. ANALYSIS OF THE SCIENTIFIC AND NAVIGATION MAGNETOMETER DATA HAS SHOWN THAT THE TIP MASS Z-AXIS IS ORIENTED AT 93 DEGREES TO THE SPACECRAFT Z-AXIS. THE OFFSET BOOM DEPLOYMENT HAS CAUSED THE EFFECTIVE Z-SPIN AXIS TO SHIFT 6 DEGREES FROM THE SPACECRAFT Z-AXIS.

INVESTIGATION OF THE BENT BOOM SITUATION HAS INVOLVED A NUMBER OF DEPLOYMENTS AND RETRACTIONS OF THE BOOM TO ESTIMATE THE CHANGE IN POSITION OF THE TIP MASS. THE EFFECTS OF TWO 25CM EXTENSIONS OF THE BOOM HAVE BEEN MINIMAL, AND A FURTHER DEPLOYMENT OF 50CM WAS PERFORMED ON 02/06/83. THE RESULTS OF THIS ARE STILL BEING ANALYSED, BUT NO CHANGE WILL LEAD TO RETRACTION TESTS BEFORE ABANDONING FURTHER RECOVERY ATTEMPTS.

DETAILS OF THE WHOLE-ORBIT TELEMETRY RECORDING PROGRAM ARE REPEATED BELOW. THIS PROGRAM CAN STORE 7 CHANNELS OF TELEMETRY OVER A PERIOD OF UP TO 100 MINUTES (OR 1 CHANNEL FOR APPROX. 700 MINUTES) FOR LATER TRANSMISSION. PLOTS OF THE TELEMETRY CHANNELS RECORDED BY THE SPACECRAFT THROUGHOUT A WHOLE ORBIT (INCLUDING ECLIPSE, ETC) ARE USEFUL INDICATORS TO THE CONDITION OF THE VARIOUS INTERNAL SYSTEMS. THE PROGRAM PRODUCES CHECKSUMMED LINES OF DATA, WITH SERIAL NUMBERS AND A VARIABLE NUMBER OF TELEMETRY DATA VALUES. EACH LINE HAS BEEN RECORDED FROM THE STANDARD TELEMETRY FRAME (5.28 SECONDS DURATION, EACH CHANNEL DIGITISED AT THE TIME IT WOULD BE TRANSMITTED IN THE STANDARD TELEMETRY FORMAT). THE DOWNLINK FORMAT IS:

NNNNXYZXYZXYZXYZCC

WHERE NNNN IS 4-HEX DIGIT SERIAL NUMBER (UP TO 046DH LINES ARE SENT AS DATA IS ACCUMULATED)

XYZ ARE BCD TELEMETRY CHANNEL VALUES AS IN ORDINARY TELEMETRY

CC IS 1 BYTE CHECKSUM (ADD NN, NN, 0X, YZ, CC BYTES USING 8-BIT BINARY ADDITION - RESULT SHOULD BE 0AAH).

NNNN=0000 GIVES CHANNEL NUMBERS RECORDED IN 0YZ POSITIONS.

THE LINE WITH SERIAL NUMBER 0001 WAS RECORDED AT THE PROGRAM LOAD TIME. NO COMPUTER-READABLE TIMESTAMP IS AVAILABLE, BUT WE WILL ATTEMPT TO GIVE THE PROGRAM LOAD TIME AND TELEMETRY CHANNEL NUMBERS IN FUTURE BULLETINS. DISPLAYING WHOLE-ORBIT DATA IN REAL TIME (OR FROM A TAPE RECORDING) IS AN IDEAL DEMONSTRATION FOR EXHIBITIONS, ETC.

** S/C OPERATIONS SCHEDULE **

FRI 03/6/83 TO MON 06/6/83	1200 TELEMETRY, 1200 BULLETIN, DIGITALKER, 2.4GHZ BEACON
MON 06/6/83 TO FRI 10/6/83	VARIOUS DATA FORMATS (145 & 435

MHZ) TO FURTHER INVESTIGATE THE
BOOM SITUATION.

AN 1802 PROGRAM TO STORE AND RE-TRANSMIT RADIATION COUNTER DATA TOGETHER WITH THE TELEMETRY CHANNELS NECESSARY TO ANALYSE THE SPACECRAFT ATTITUDE HAS BEEN DEVELOPED - TESTING HAS BEEN DELAYED BUT SHOULD BE DONE NEXT WEEK. DOWNLINK FORMAT WILL BE SIMILAR TO THE WHOLE-ORBIT TELEMETRY DATA AND WILL BE DESCRIBED FULLY WHEN TESTING IS COMPLETE

** THANKS FOR REPORTS ** WB8OTH, K1KSY, JA2GSD, B.LINDHOLM, K2AR, K1KSY, ON6UG, KA9Q, F1GRR, G3UMF, JA7IEL, JA7IE

WE WOULD APPRECIATE REPORTS FROM STATIONS ABLE TO DECODE DATA FROM THE 435MHZ AND 2.4GHZ BEACONS - RELIABILITY AND BURST LENGTH AT CURRENT ATTITUDE & SPIN - THIS INFORMATION FOR FUTURE PACKET DEMONSTRATIONS.

*** UOSAT MISSION PLANNING ***

A UOSAT MISSION PLANNING MEETING WAS HELD AT SURREY ON 23/05/83 TO FORMULATE A FORWARD-LOOK FOR THE NEXT THREE MONTH PERIOD OF UOSAT OPERATIONS. THE PLAN REPRESENTS THE OVERALL MISSION DIRECTION RATHER THAN A SPECIFIC OPERATIONS SCHEDULE AND REMAINS FLEXIBLE TO OPERATIONAL EVOLUTION.

* STABILISATION/ATTITUDE CONTROL:

DETAILED ANALYSIS OF SPACECRAFT DATA HAS LOCATED THE POSITION OF THE TIP-MASS AND BOOM FOLLOWING DEPLOYMENT AND SUBSEQUENT CABLE SNAG. ATTEMPTS TO STRAIGHTEN THE BOOM WILL RESUME, BUT IF UNSUCCESSFUL OR WITHOUT SPECIFIC PROMISE AFTER 10/06/83, ATTEMPTS WILL BE TERMINATED AND NO FURTHER SPACECRAFT TIME ALLOCATED TO THIS PROGRAMME. THE BOOM PROBLEM DOES NOT AFFECT THE USER SPACECRAFT OPERATIONS DRAMATICALLY AND THE FINITE SPACECRAFT RESOURCES SHOULD BE DIRECTED TO OTHER PROFITABLE EXPERIMENTS NOT YET FULLY EXPLOITED. THE SPACECRAFT CAN BE ALLOWED TO REMAIN IN A NATURAL SPIN STATE WHICH IS QUITE ACCEPTABLE, WHILST THE POSSIBILITIES (& DESIRABILITY) OF CONTROLLED SPIN OR WEAK GRAVITY CAPTURE ARE ASSESSED.

* H.F.BEACONS EXPT:

FOLLOWING THE TERMINATION OF THE STABILISATION PROGRAMME, THE H.F. ANTENNAS WILL BE DEPLOYED AND THE BEACONS ACTIVATED.

* PARTICLE EXPERIMENT:

ADVANCED SOFTWARE HAS BEEN RECENTLY DEVELOPED TO ENHANCE THE

VALUE OF THE EXPERIMENT DATA. WHEN COMMISSIONED, THE NUMBER OF WHOLE ORBIT OBSERVATIONS WILL BE INCREASED.

* 2.4GHZ BEACON:

THE BEACON HAS BEEN ACTIVATED RECENTLY AND SUCCESSFULLY RECEIVED IN THE UK AND BELGIUM. THIS BEACON CARRIES THE SAME DATA AS THE 145MHZ DOWNLINK, AND WILL BE ACTIVATED ROUTINELY AT WEEKENDS, POWER BUDGET PERMITTING, AND FOR OTHER SPECIFIC EXPERIMENTS.

* CCD CAMERA & VIDEO EXPT:

THE OPERATIONAL IMPLICATIONS OF CLOSING THE LINK BETWEEN THE 1802 COMPUTER AND THE VIDEO DISPLAY EXPT. WILL BE ANALYSED IN DETAIL WITH A VIEW TO POSSIBLE IMAGE PROCESSING OF THE CCD DATA AND, PARTICULARLY, UP-LOADING IMAGES AND GRAPHICS FROM THE GROUND. (IN ADDITION, THIS LINK PROVIDES ACCESS TO A FURTHER 32K OF MEMORY FOR THE 1802 FOR USE IN DATA COLLECTION AND BULLETINS ETC.)

THIS ACTIVITY IS HIGHLY DESIRABLE TO STIMULATE INTEREST IN THE CCD & VIDEO EXPERIMENTS AND TO EVALUATE THE SYSTEM FOR FUTURE SPACECRAFT EXPERIMENTS.

* DIGITALKER:

THE DIGITALKER EXPT. HAS BEEN HIGHLY SUCCESSFUL AND GENERATED A GREAT DEAL OF INTEREST WHILST, AT TIMES, PROVING OPERATIONALLY VALUABLE. EFFORTS WILL BE MADE TO EXPAND THE SCOPE OF THIS EXPT.

* SCIENTIFIC MAGNETOMETER:

THIS INSTRUMENT HAS, THUS FAR, BEEN UTILISED PRIMARILY FOR SPACECRAFT NAVIGATION HOWEVER IT IS PROPOSED TO DEVELOP SOFTWARE TO ALLOW THE STUDY OF THE SHORT-TERM, LOW-LEVEL PERTURBATIONS TO THE GEOMAGNETIC FIELD AND THEIR RELATIONSHIP TO RADIOWAVE PROPAGATION PHENOMENA.

* DIGITAL PACKET RADIO COMMUNICATIONS:

IN PREPARATION FOR THE PROPOSED PACSAT SPACECRAFT, PACKET RADIO EXPERIMENTS SHOULD BE INITIATED BETWEEN UOS AND AMSAT-USA DEVELOPING FURTHER THE EXISTING PACKET COMMUNICATIONS USED IN THE CONTROL AND DATA TRANSFER ON UOSAT.

SPACECRAFT ORBITAL DATA

ORBITS FOR 3RD JUNE

	UOSAT	OSCAR-8	NOAA-7	
ORBIT NO :	9171	26733	10026	
EQX TIME :	14:23:43	14:08:00	14:12:07	GMT
EQX LONG :	346.9	292.6	347.5	DEG.W
MEAN HGT :	502.6	904.0	850.0	KM
PERIOD :	94.6665898	103.1663189	101.9030050	MINS
P-DRAG :	5.194E-05	8.277E-07	7.500E-06	*N-REF
LONG INC :	23.6657635	25.7899720	25.4879948	DEGS
L-DRAG :	1.307E-05	.000E+00	2.000E-07	*N-REF

RECEPTION REPORTS AND UOSAT DATA IS MUCH APPRECIATED
SEND TO: UOSAT TEAM, UNIVERSITY OF SURREY, GUILDFORD, SURREY,
ENGLAND - THANK YOU

From -514463454706549733
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,349878c55b9bfe31,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-05 03:53:04 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3-B Bulletin #4
Message-ID: <982@eagle.UUCP>
Date: Sun, 5-Jun-83 06:53:04 EDT
Article-I.D.: eagle.982
Posted: Sun Jun 5 06:53:04 1983
Date-Received: Mon, 6-Jun-83 21:11:16 EDT
Lines: 27

Official AMSAT P3B Bulletin #004
0530 UTC 05 June 83

TO:QST
FM:AMSAT HQ
RLSD:K1HTV

The AMSAT Phase III-B launch support team from the U.S.A. ,
Dick Daniels, W4PUJ and Jan King, W3GEY arrived home safely
from Kourou, French Guiana saturday afternoon. Gordon Hardman,
ZS1FE left the site Thursday for his South African QTH while
part of the German-DL crew including Karl Meinzer,DJ4ZC, Werner
Haas,DJ5KQ and Wolfgang Mueller (no call) of MBB will leave for

Germany on monday, June the 6th. Staying with the spacecraft at the launch site will be Ulrich Mueller,DK4VW and Connie Mueller (no call). They will be joined later by another AMSAT-DL crew member Wolfgang Schaefer, who first will pass through the Washington area on his way to Kourou.

The AMSAT Phase III-B spacecraft , now enclosed in the Sylda, and the European Communications Satellite, ECS-1 will be mated to the Ariane launcher monday June 6th. On that day ESA should make the decision if the earlier announced June 16 launch is a viable one.

From -5496816461944465425
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e75c02b1c61b61a0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-05 20:18:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Ariane L-6/Phase 3-B Launch Sequence
Message-ID: <983@eagle.UUCP>
Date: Sun, 5-Jun-83 23:18:13 EDT
Article-I.D.: eagle.983
Posted: Sun Jun 5 23:18:13 1983
Date-Received: Tue, 7-Jun-83 00:57:55 EDT
Lines: 49

This is a launch event sequence for Ariane 6, carrying AMSAT Phase 3-B and ECS-1. All times are nominal and are in seconds relative to H0 (first stage ignition.)

-9   Inertial guidance platform uncaging
-4   Third stage cryo arm unlock
-.2 Third stage cryo arms retract
0   First stage ignition
+3.4   Liftoff (release launch table jaws)
13   10 sec roll to orient Y axis for correct launch azimuth
23   End of vertical ascent; start 1.8 deg/sec yaw towards initial launch azimuth of 78 deg from north
145.6   First stage tailoff - half thrust; ascent angle at 45 deg
148 Ignition 2nd stage ullage rockets
150.48   Stage 1/2 separation, ignition 1st stage retro rockets
150.5   Telemetry format change
151.25   Second stage ignition
153.7   Second stage up to nominal thrust
158.0   Second stage ullage rocket jettison
160.6   Guidance start; flight azimuth dogleg from 78 deg to 105.5 deg at 2 deg/sec
254 Fairing jettison
286.9   Second stage tailoff - half thrust

287.7   Ignition 3rd stage ullage rockets
291.85   Stage 2/3 separation, ignition 2nd stage retro rockets
296.9   Third stage up to nominal thrust
297.2   Second stage retro rocket burnout
307.7   Third stage ullage rocket jettison
854 Third stage shutdown sequence start
856.4   Attitude reorientation for ECS-1
918.4   10 RPM spinup start
939.4   End of spinup; ECS-1 separation
941.4   Sylda upper structure separation
945.4   Despin start
964.4   Roll angle at 90 deg
983.4   Attitude orientation for AMSAT Phase 3-B
1015.4   End of attitude reorientation; start 10 RPM spinup
1040.4   End of spinup; AMSAT Phase 3-B separation & powerup
1043.4   Despin start
1071.0   Roll angle at 0 deg
1095.9   Pitch angle at 90 deg
1144.9   Start spin 18 deg/sec

The last maneuver is to start the spent third stage tumbling, so
as to make it re-enter more quickly.

As you can see, a LOT happens in just a few minutes! I have not
listed several roll maneuvers intended to keep ground tracking
stations out of launcher telemetry antenna nulls.

From -1264190806554690789
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8cec15a8678c63de,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-06 13:58:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxq!houxp!
ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ad7i's Z-AMTOR firmware available
Message-ID: <251@houxp.UUCP>
Date: Mon, 6-Jun-83 16:58:42 EDT
Article-I.D.: houxp.251
Posted: Mon Jun 6 16:58:42 1983
Date-Received: Wed, 8-Jun-83 03:09:39 EDT
Lines: 32

Preliminary documentation and firmware are available for a stand-alone
Z80 AMTOR system. The "Z-AMTOR" system operates with a home-brew
(no PC yet available) 4 MHz Z80 system and works with Baudot terminals
at 45, 50, and 74 bps as well as ASCII terminals at 110 and 300 bps.

This system runs modes A, B, S (selective B) and L (monitor mode A communicaitons). It is, if I say so myself, one of the best implementations of AMTOR available. It has been in the programming stage for over a year.

Anyone SERIOUSLY interested in building such a system is invited to send a $0.71, 9" x 12" SASE and a 250 nS 2764 EPROM to:

Paul Newland, ad7i
POB 205
Holmdel, NJ 07733

I will forward a copy of the documentation and program your EPROM. Be sure the stamps are glued onto the envelope. Don't send money, I'll just pocket it and claim I never got your letter! NOTE: don't send an SASE without an EPROM. If you do, I'll return your envelope without stuffing it. If you don't send an EPROM you probably are not serious about building a system. I am looking for people to help me test the code, not increase my xeroxing costs!

If you are not totally passionate about AMTOR but would like to get the documentation, way till later this year; it will appear in one of the major ham mags.

73, ad7i

From -5325511374343907164
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d7f2c1df8b66335,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-07 10:43:08 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!cca!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3B Bulletin #5
Message-ID: <988@eagle.UUCP>
Date: Tue, 7-Jun-83 13:43:08 EDT
Article-I.D.: eagle.988
Posted: Tue Jun 7 13:43:08 1983
Date-Received: Wed, 8-Jun-83 03:59:36 EDT
Lines: 26

Official AMSAT P3B Bulletin #005
0300 UTC 7 June 83

TO: QST
FM: AMSAT HQ
RLSD: K1HTV

A spokesperson from the Washington offices of the European Space Agency said that a Telex received from their Paris

headquarters on Monday June 6th indicated that the Ariane LO6 launch campaign continues on schedule. The main payload, ECS-1, is scheduled to be put in place on top the Sylda, in which the AMSAT Phase 3-B spacecraft is now enclosed.

Testing of the European Communications Satellite will take place at the Kourou launch site this Wednesday followed by the assembling of the ferring on Thursday the 9th of June. Next comes the turpo pump lubrication procedure followed by the calibration of the inertial guidance system on Saturday.

If all goes well, there will be a launch rehearsal Monday June 13. The launch readiness review and the arming of the launcher paylaod are both planned for Tuesday the 14th. The countdown procedure will begin on the 15th, with liftoff of the ECS-1 and Phase III-B spacecraft now scheduled for 11:59 UTC on Thursday June the sixteenth (16th).

From -1873185339557302604
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2c3938066283bc2f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-07 23:51:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Oscar-8 Battery Trouble
Message-ID: <990@eagle.UUCP>
Date: Wed, 8-Jun-83 02:51:57 EDT
Article-I.D.: eagle.990
Posted: Wed Jun 8 02:51:57 1983
Date-Received: Wed, 8-Jun-83 07:38:18 EDT
Lines: 22

The following is a message from Bernie Glassmeyer, W9KDR, at ARRL Headquarters. Amsat-Oscar-8, which has been operated by the ARRL since its launch over 5 years ago, has just recently developed serious battery trouble (it probably knows it is about to be replaced!)

DO NOT ATTEMPT COMMUNICATION THROUGH THE OSCAR 8 TRANSPONDERS DURING THIS LOW VOLTAGE EMERGENCY. PRESENTLY OSCAR 8 IS IN MODE A AND COMMAND STATIONS HAVE BEEN INSTRUCTED TO
RETURN TO MODE D, RECHARGE WHEN TELEMETRY TESTS ARE COMPLETE. TELEMETRY RECEIVED IN MODE A INDICATES THE BATTERY VOLTAGE HAS DROPPED TO A POINT THAT HAS CAUSED THE TELEMETRY TO "HANG UP". THE PRESENT FRAME OF 180 252 324 496 568 696, EVEN AFTER SEVERAL DAYS OF RECHARGE, INDICATES THAT THE BATTERY IS NOT CHARGING. COMMAND STATIONS REQUEST THAT ANYONE MONITORING ANY VARIATION IN THE PRESENT FRAME REPORT THE READINGS TO ARRL HQ.
OBSERVATIONS SO FAR INDICATE THAT OSCAR 8 IS FOLLOWING A SIMILAR BATTERY PROBLEM THAT OSCAR 7 SUFFERED. IT IS QUITE POSSIBLE THAT

ANY FUTURE OPERATION OF OSCAR 8 WILL BE DURING TIMES THAT THE
SPACECRAFT IS IN SUNLIGHT. PRESENTLY WE ARE AT A MINIMUM OF
IN A MINIMUM SUNLIGHT
PERIOD WHICH COMPLICATES MATTERS EVEN MORE. REMEMBER NO OPERATION
UNTIL FURTHER NOTICE. 73 BERNIE W9KDR.

From -4376265259583454268
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b551a26b8d9a56de,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-08 21:55:36 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!cca!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3B Bulletin #6
Message-ID: <991@eagle.UUCP>
Date: Thu, 9-Jun-83 00:55:36 EDT
Article-I.D.: eagle.991
Posted: Thu Jun 9 00:55:36 1983
Date-Received: Fri, 10-Jun-83 01:23:58 EDT
Lines: 37

Official AMSAT P3B Bulletin #006
2300 UTC 8 June 83

TO:QST
FM:AMSAT HQ
RLSD:K1HTV

The Washington office of ESA was called today regarding the
upcoming Ariane LO-6 mission and indicated that there was no
change in the earlier released information. The launch of Phase
3-B is still scheduled for 11:59 UTC on Thursday, June 16th
with the launch window extending until 12:28 UTC.

Preparations continue for ALINS, The AMSAT Launch Information
Network System . W4OWA has notified AMSAT that arrangements
have been completed with American Bell for use of their
conference bridge for ALINS. A brief prelaunch test of the
system will be held at 0000 UTC June 16, about 12 hours before
the scheduled liftoff.

Jan King, W3GEY, recently back from the Kourou launch site has
indicated that five minute bulletin transmissions originating
from the 145.81 MHz General Beacon of Phase III-B scheduled for
on the hour and thirty minutes past the hour will only be sent
in CW in the earlier orbits. RTTY will be added at a later
date. It appears now that in order to reduce battery drain
during the early orbits when the solar panels are not yet
properly oriented , the 145.987 MHz Engineering beacon will be
kept off most of the time.

In the early phase of the mission, Phase III-B 2 meter
transmissions will be made on the omni antenna. The effects
noticed during these early orbits are that downlink signals
will appear to be at least 10 DB weaker and that more fading
will be noted on the downlink signals.

More information will follow in the days to come.

From 7896829530659613821
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6f20eb447ec52b4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-10 03:04:26 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!cca!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3-B Bulletin #7
Message-ID: <992@eagle.UUCP>
Date: Fri, 10-Jun-83 06:04:26 EDT
Article-I.D.: eagle.992
Posted: Fri Jun 10 06:04:26 1983
Date-Received: Sat, 11-Jun-83 08:41:25 EDT
Lines: 49

Official AMSAT P3B Bulletin #007
2300 UTC 9 Jun 83

TO: QST
FM: AMSAT HQ
RLSD: WA2LQQ

All conditions for launch 16 Jun 83 continue to appear
very favorable.

Preparations withing AMSAT for launch support from the
Engineering, Operations and Public Relations communities
are generally nearing completion and are close to schedule.

A potential risk is possible interruption to Telemail
to the command/tracking teams should the scheduled outage
(15 Jun 0900 - 1100 UTC) slip into the next day. Telemail
will be used to transmit tracking data between command
stations and the compuational facilities interfaced at KA9Q.

ALINS preparations are nearly complete. A brief
test of the conference bridge will be conducted
0000 UTC 16 Jun 83. Check with K1HTV for details
and/or instructions.

Prelaunch bulletins from W2LV, W2BXA and WA6GFY
are scheduled to commence 11 Jun. See schedules
transmitted by RWALLIO, May 30, 1983, 3:48 GMT.

Bulletin text for use by these stations will be
posted to the PR bulletin board with vectors from
the AMSAT BB. Prelaunch bulletin text will comprise
an especially prepared version of the Official
AMSAT bulletin summarizing the launch progress/
status for the time covered by the bulletin.

Amateur Satellite Report will publish a special
edition shortly after launch. The special ASR
will contain a compilation of info necessary
and (Hopefully) sufficient to get many
novitiates started on P3B. It will be sent to
all regular subscribers and be available to
others on a limited offer basis for $3 ppd
to U.S., Canada, Mex; $4 elsewhere.

To put things in perspective, think of it THIS way:
we are now at T-157 HOURS...and counting!

From -8084604834732298046
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,32935f1c6528ee91,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-10 04:45:32 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mhuxt.UUCP
Path: utzoo!linus!wivax!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxm!mhuxa!
mhuxi!mhuxt!evans
From: evans@mhuxt.UUCP
Newsgroups: net.ham-radio
Subject: Short Wave Receiver Advice Sought
Message-ID: <212@mhuxt.UUCP>
Date: Fri, 10-Jun-83 07:45:32 EDT
Article-I.D.: mhuxt.212
Posted: Fri Jun 10 07:45:32 1983
Date-Received: Tue, 14-Jun-83 06:28:31 EDT
Organization: Bell Labs, Murray Hill
Lines: 7

    Can anyone give me recommendations on a good PLL communications
receiver in the less than $500 class? Are units other than Sony & the
other huge Japanese outfits discounted anywhere?

                thanks in advance
                Steve Crandall
                mhuxt!evans

From -2053596009959312246
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e65185021eb9fa44,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 163b79,e65185021eb9fa44,start
X-Google-Attributes: gid163b79,public
X-Google-ArrivalTime: 1983-06-10 06:54:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxm!houxf!
5941ux!rwhw
From: rwhw@5941ux.UUCP
Newsgroups: net.ham-radio,net.general
Subject: cordless telephones
Message-ID: <281@5941ux.UUCP>
Date: Fri, 10-Jun-83 09:54:25 EDT
Article-I.D.: 5941ux.281
Posted: Fri Jun 10 09:54:25 1983
Date-Received: Tue, 14-Jun-83 07:16:16 EDT
Lines: 3

What are the frequencies used in the cordless telephones.

From 5304162386467758328
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,557fa992608a3651,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-11 02:07:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!floyd!vax135!ariel!houti!hogpc!houxm!mhuxa!
mhuxi!mhuxt!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3-B ALINS coverage
Message-ID: <994@eagle.UUCP>
Date: Sat, 11-Jun-83 05:07:03 EDT
Article-I.D.: eagle.994
Posted: Sat Jun 11 05:07:03 1983
Date-Received: Sun, 12-Jun-83 04:31:12 EDT
Lines: 38

By WA2LQQ

AMSAT's Phase 3B satellite is now fully prepared for launch.
The satellite is mounted on its Ariane launcher in Kourou, French
Guiana. The launch window is on 16 Jun from 1159 to 1328 UTC. Repeat.
The launch window is Jun 16, 1159 to 1328 UTC.

The AMSAT Launch Information Network Service will transmit live

reports of the progress of the launch as they occur on launch day. Many stations around the world will carry the audio feed originating at AMSAT's primary command station at the Goddard Space Flight Center in Maryland. Stations carrying the Launch Network include W1AW. W1AW will transmit will relay the audio on all of its normal single sideband frequencies. They are: 1890, 3990, 7290, 14,290, 21,390, 28,590 kHz and 50.190 and 147.555 MHz FM. Additionally, other HF stations will be on 3780, 3850, 7080, 7170, 7180, 7182, 14250, 14260, 14265, 14280, 21265, 21280 and 21285 kHz. Tune to the station you hear best.

Subsequent to launch monitor AMSAT net frequencies including 3850 and 14282 for latest progress reports.

Initial spacecraft testing will commence five hours after launch. First AOS will be in Europe and East Africa when the Mode B beacon is activated exactly five hours after launch. Monitor the Mode B General Beacon on 145.810 MHz. Five minutes of CW and 25 minutes of PSK telemetry will be sent each half hour. Telemetry equations are available in Amateur Satellite Report.

In summary, all is in readiness for the launch of Phase 3B on Jun 16th with the launch window opening at 0800 AM Eastern Daylight Time. The launch net will commence operations beginning approximately one half hour prior to launch.

If all goes well the new OSCAR will be available for general use in 3 to 6 weeks. Announcements will be made. Standby for further news.

From -4017188286882260675
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 14b8a3,67331cbc008541a4,start
X-Google-Attributes: gid14b8a3,public
X-Google-Thread: 11aab4,67331cbc008541a4,start
X-Google-Attributes: gid11aab4,public
X-Google-Thread: 151e61,67331cbc008541a4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-12 16:56:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxm!hocda!
spanky!burl!rcj
From: rcj@burl.UUCP
Newsgroups: net.ham-radio,net.lang,net.nlang
Subject: Re: meaning?
Message-ID: <174@burl.UUCP>
Date: Sun, 12-Jun-83 19:56:15 EDT
Article-I.D.: burl.174
Posted: Sun Jun 12 19:56:15 1983
Date-Received: Tue, 14-Jun-83 02:42:32 EDT
Lines: 20

The phrase "computer readable" means that a computer can put the
information in question onto one or more of its standard memory
devices with minimal human intervention. The term is really no
longer simply a function of the material that you are trying to
classify as "computer readable" or "non-computer readable".
It is also a function (these days) of the peripherals available
at the site trying to do the reading. If you have the proper
optical scanners and software, newspapers are "computer readable" --
all the operator has to do is turn the pages and set the scanner
at the beginning of the page. On my computer, however, without
the optical scanner, the same document would not be computer
readable -- to get the information into my computer I would have
to type it in by hand. In general these days, magnetic tape and magnetic
discs are considered computer readable. Depending on an individual
site's peripherals, one might selectively include paper tape, laser
discs, audio recording media, cleanly legible printed materials, etc.
--

The MAD Programmer -- 919-228-3814 (Cornet 291)
alias: Curtis Jackson ...![floyd sb1 mhuxv]!burl!rcj

From 8515721010270944622
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5ee186afd7c9e321,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-12 22:19:07 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3-B Bulletin #9
Message-ID: <995@eagle.UUCP>
Date: Mon, 13-Jun-83 01:19:07 EDT
Article-I.D.: eagle.995
Posted: Mon Jun 13 01:19:07 1983
Date-Received: Mon, 13-Jun-83 12:20:41 EDT
Lines: 34

Official AMSAT P3B Bulletin #009
1830 UTC 12 Jun 83

TO: QST
FM: AMSAT HQ
RLSD: WA2LQQ

All conditions for launch as planned 16 June appear excellent.

So reports F8ZS from FY7KRU at the launch facility in Kourou.
Jon reports that all problems with the turbopump lubrication
and the inertial platform have been overcome.

A preflight review meeting will be held Tuesday. If no new
problems are uncovered the countdown will begin Wednesday.

The preparations are one full day ahead of schedule now so the
several launch crews are taking the day off from work.

Some additional work remains to be done in connection with the
interface between the blockhouse and the station FY7KRU. The
"interfphone" [intercom] line must be finalized and some
problems with TVI from the HF linear used at the station must
be eliminated, Jon said.

In another domain, KA9Q relates that first AOS may occur for
ZS1FE as soon as T+2:30; a full two and one half hours
earlier than previously reported (cf PreLaunch #001, 002).
The correct time, Phil points out, should be corroborated
by W3GEY who was out of town as this bulletin was composed.
Further detail on this as it becomes available.
[This time refers to when the general beacon will be first commanded
on; it is my understanding that this will be done in time for
AOS at ZS1FE in South Africa at T + 2hours 30 minutes - KA9Q]

From 6002594084241773067
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,350870822f052e89,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-13 10:44:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: TO: Jose, WB5YFU
Message-ID: <252@houxp.UUCP>
Date: Mon, 13-Jun-83 13:44:25 EDT
Article-I.D.: houxp.252
Posted: Mon Jun 13 13:44:25 1983
Date-Received: Wed, 15-Jun-83 11:01:18 EDT
Lines: 5

TO Jose A. Sancho, WB5YFU

How did you ever figure out that path! Yes, the 450 nS rom will be
OK. I look forward to your getting on the air. 73, Paul, ad7i

From 7810090927899696450
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ea6c9a40c87891e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-13 11:09:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Path: utzoo!linus!genrad!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!
ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: cordless telephone frequencies
Message-ID: <510@ihuxf.UUCP>
Date: Mon, 13-Jun-83 14:09:28 EDT
Article-I.D.: ihuxf.510
Posted: Mon Jun 13 14:09:28 1983
Date-Received: Wed, 15-Jun-83 03:44:20 EDT
Lines: 52

Most cordless phones fall into one of two categories:

o+ Base to handset frequencies between 1700 and 1850 kHz.
Handset to base frequency in VHF region.

o+ Base to handset and handset to base frequencies both in
VHF region.

The VHF frequencies used by cordless phones are:

49.83 mHz.
49.845
49.86
49.875
49.89

These VHF frequencies are shared by other devices, such as:

o+ low power walkie-talkies (Radio Shack's Archer Space
Patrol (TM), Sony's Talkman (TM)

o+ wireless microphones (Radio Shack's Realistic 32-1220
and 33-1076)

o+ radio controlled toys

Owners of scanners or general coverage short wave receivers
may listen in on these phone conversations, so privacy is
not assured.

These cordless phones use frequency modulated emission.
I
don't recall the lower frequency channels. The owners of
these cordless phones must accept any interference they
may
receive and must correct any interference they may cause. A
label to this effect must be attached to newer cordless
phones.

Other frequencies may be allocated for this use in the future by the FCC. For more information, refer to the June 1983 issue of Popular Communications magazine (Cowan Publishing).

Robert S. Parnass, AJ9S (ARRL TA)
Bell Laboratories
Naperville-Wheaton Road
Naperville, Illinois 60566

room IH 1B-414
(312)979-5760

From 2344205825696752121
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b8e14297d3ab726b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-13 13:44:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: No more bulletins
Message-ID: <253@houxp.UUCP>
Date: Mon, 13-Jun-83 16:44:14 EDT
Article-I.D.: houxp.253
Posted: Mon Jun 13 16:44:14 1983
Date-Received: Wed, 15-Jun-83 11:05:09 EDT
Lines: 23

QST de ad7i

Sorry folks, but I will have to discontinue bulletin service
for the net. My station will be going AMTOR ONLY in a week
or so. I have tried to get the ARRL to send bulletins on W1AW
using AMTOR but I have not had much luck. They seem interested
but perhaps I am the only one who wants to have them send
AMTOR stuff.

This being summer time, I am now having enough ++hits++ in the copy
here in jersey to render the BAUDOT and ASCII bulletins unusable.
I don't know what it will take to get the League moving, but if
you would like to see consistent posting of ARRL bulletins to the net,
you might send HQ in Newington (and/or your director) a card
asking them (NICELY -- don't make a big deal of it) when W1AW will
broadcast AMTOR bulletins on a regularly scheduled basis. You
don't need to mention me (they are probably so tired of hearing
from me on this issue!), just ask the question. If the general
membership makes the request, rather than just one individual,

perhaps that will prompt them to get things moving.

73, Paul, ad7i

From -4088832973833511612
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,41bce5bd4a220933,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-14 03:38:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: TAPR Board Availability
Message-ID: <1000@eagle.UUCP>
Date: Tue, 14-Jun-83 06:38:17 EDT
Article-I.D.: eagle.1000
Posted: Tue Jun 14 06:38:17 1983
Date-Received: Wed, 15-Jun-83 14:56:40 EDT
Lines: 212

A N N O U N C E M E N T

TNC AVAILABILITY

Tucson Amateur Packet Radio Corporation has conducted extensive testing of a Terminal Node Controller (TNC) design over the last several months. 172 TAPR TNCs are in the field, and the "Beta" design has been in continuous testing since early November, 1982.

In order to more fully discharge our charter in developing and refining packet radio communications, TAPR is on the brink of releasing the TAPR TNC to the general Amateur community. The TNC will be provided as a kit that includes all parts; comprehensive manual including detailed kit assembly instructions; custom power transformer with multitap primary for those in low- or high-voltage areas; electrically pre-tested printed circuit board with silk screened parts locations; built-in modem, power supply, RS232 interface and radio interface.

REFINED DESIGN

For those familiar with the Beta design, the following

improvements have been implemented in the hardware design:

1) 32 k bytes of EPROM (vs Beta's 24 k).

2) 8k bytes of RAM (vs Beta's 6 k).

3) Two 512-bit banks of NOVRAM (vs Beta's single 256-bits).

4) Modem disconnect, with all applicable HDLC connections.

5) Improved modem design, with lower noise floor, greater input signal range, greater mic audio adjustment range, improved signal level indicator circuitry, LED monitoring of additional signal lines (such as Data Carrier Detect), configuration of modem parameters via DIP carrier.

6) Serial I/O port access is via a right angle pc mount DB25S connector at the edge of the board.

7) Parallel port access is via a right angle pc mount DB25P connecter at the edge of the board.

8) Radio I/O port access is via a right angle pc mount DB9S connector at the

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edge of the board.

9) Power connection is via an 8-pin "Molex" style power connector.

10) The +5 volt supply uses 3 amp diodes instead of the 1N4001s found on the Beta board.

11) The +5 volt supply has a jumper, along with additional power supply

connector pins, to support an off-board 5 volt regulator.

12) The power transformer has been redesigned with 105/115/125 volt ac primary taps and corrected secondary windings.

13) The serial I/O port uses pullup resistors so no jumpers are needed to support partial RS232 interfaces (such as "three-wire" terminals).

14) Revised circuitry for calibrating the 1700 Hz PLL demodulator.

TAPR is currently generating the updated manual and the board layout is being revised. At the conclusion of board layout, a trial run of 25 kits will be supplied to a limited number of Beta sites for testing. This is anticipated in the late-July to mid-August time frame. We are limiting this initial release to a few boards per selected existing site to ensure a rapid turnaround in the testing. It is not our intent during this initial test to bring more sites up. Once we have determined that the revised design is working properly and the documentation is adequate for a reasonably adept Amateur to properly assemble, calibrate, interface and place the TNC into operation, the kits will be made available to all on a more-or-less first-come, first-served basis.

DISTRIBUTION, SCHEDULING and COST

The mechanism for distribution is simple. The orders will be handled based on the order in which they are received. TAPR members will have a degree of priority. Orders for multiple units will be spaced out somewhat so no one can order a huge block and tie up distribution.

How do you get on the list? Send your order to:

Tucson Amateur Packet Radio Corporation
PO Box 22888
Tucson AZ 85734-2888

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and include your name, shipping address, etc., along with a deposit of $25. Upon receipt of your deposit (including 16 days for clearing of non-cashier's checks), you will be placed in the queue. You will be advised by return mail of your expected shipping date. Balance of payment is due at least one week before scheduled ship date (or you may get bumped!).

TAPR will attempt to have a daytime telephone number where Visa/MasterCard orders can be placed (with an approximate 3% adder for such orders).

The price of the complete kit is $240 plus $7 shipping and handling. This is $29 more than the Beta boards, and the increase is for the following reasons:

1) There is more memory on the board.

2) We are having the pc boards electrically tested.

3) There is a 30 days-after-shipment warranty on the parts (and we have to make this good, not the chip manufacturer).

4) We lost thousands of dollars on Beta.

5) We need money to launch our R & D effort for high-speed UHF linking systems.

6) We are having a commercial firm do the kitting for us to conserve our time for technical work.

Since many of the parts on the TNC are now on allocation, we have taken the steps to schedule a number of kits. However, we need IMMEDIATE feedback on your expected needs, as well as deposits, so we can better plan. Our present schedule calls for general kit deliveries starting in late August/early September. We are planning on 25 kits the first month, followed by 50 kits for each of the following three months. That is only 175 kits, so if you are interested, act promptly! If we get sufficient orders, we will modify the schedule to take care of things as expeditiously as possible.

PRODUCT SUPPORT

Please note that support of the TNC, including such things as service bulletins, modifications for improved performance, announcements of software and hardware updates, etc., will be done via the Packet Status Register, TAPR's official newsletter. Thus, it is suggested that purchasers of the TNC consider becoming members of TAPR.

Thank you for your interest...

Lyle Johnson, WA7GXD
President - TAPR

From 9046966951316326749
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ea02b621b7792108,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-14 05:41:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: Propagation Bulletin 24
Message-ID: <254@houxp.UUCP>
Date: Tue, 14-Jun-83 08:41:30 EDT
Article-I.D.: houxp.254
Posted: Tue Jun 14 08:41:30 1983
Date-Received: Wed, 15-Jun-83 16:27:52 EDT
Lines: 27

qst de ad7i
hr propagation forecast bulletin nr 24 from arrl headquarters
newington ct june 13, 1983
to all radio amateurs bt

the solar flux rose to its high for the year, 174 on june 7. since
then it has been falling steadily and was down to 131 on the 12th.
it may drop further, but an upturn is expected soon. present solar
indications are that this will be a major rise.

geomagnetic activity was fair last week, making for mostly below

normal propagation. geomagnetic indices are expected to be lower, and propagation mostly better, june 15 through 17. conditions for the higher latitudes will be fair to poor june 18 through 21. june 22 through 30 will be fair to good, but propagation on all frequencies will be modified frequently by intense sporadic ionization in the e region.

precise prediction of sporadic e is not practical as yet, but its major season is centered on the longest day of the year. it brings short skip on 28 and 50 mhz very frequently in early summer and there is some chance of its happening on 144 mhz as well, at distances of 1000 to 1400 miles.

american sunspot numbers for june 2 through 8 were between 66 and 127 with a mean of 95.0 ar

From 852871069154191669
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,77869dde7d0ac9b7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-14 05:41:48 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 42: Oscar 8
Message-ID: <255@houxp.UUCP>
Date: Tue, 14-Jun-83 08:41:48 EDT
Article-I.D.: houxp.255
Posted: Tue Jun 14 08:41:48 1983
Date-Received: Wed, 15-Jun-83 16:12:51 EDT
Lines: 18

qst de ad7i
hr arrl bulletin nr 42 from arrl headquarters
newington ct june 8, 1983
to all radio amateurs bt

amsat oscar 8 is in an emergency low voltage battery condition and the transponders are not to be used. the satellite battery has not been able to hold a charge after several days of recharge. the satellite is in mode a and the telemetry is hung up with readings of 180 252 324 496 568 696. if anyone reads any other variation, please contact arrl hq. observations so far indicate that oscar 8 is following the same battery failure pattern as oscar 7. if this present condition continues the satellite will only be heard when it is in sunlight. oscar 8 is in a minimum sunlight period at the present time but it is expected to gradually increase its exposure so that the battery charging time will be increased. any status change will be announced on w1aw ar

From 2451699787154054559
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f3650da52c696a45,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-14 05:42:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxq!houxo!houxp!
ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 43: Phase 3B
Message-ID: <256@houxp.UUCP>
Date: Tue, 14-Jun-83 08:42:03 EDT
Article-I.D.: houxp.256
Posted: Tue Jun 14 08:42:03 1983
Date-Received: Wed, 15-Jun-83 16:24:53 EDT
Lines: 21

qst de ad7i
hr arrl bulletin nr 43 from arrl headquarters
newington ct june 13, 1983
to all radio amateurs bt

amsats phase 3b satellite is now fully prepared for launch. the
launch is scheduled for thursday, june 16, with the launch window
from 1159 to 1328 utc. the amsat launch information network will
transmit live reports of the launch, with many stations around the
world relaying the audio originating at the amsat command facility in
maryland. in addition to w1aw on its regular voice frequencies,
other stations will be on 3780, 3850, 7080, 7170, 7180, 7182, 14250,
14260, 14265, 14280, 21265, 21280 and 21285 khz. launch net
operations will begin about 1130 utc.

spacecraft testing will begin shortly after launch. the mode b
beacon will be on 145.810 mhz with 5 minutes of cw and 25 minutes of
psk telemetry each half hour. the new oscar should be available for
general use between 3 and 6 weeks after launch. check the amsat nets
and w1aw for information ar

From 3254973413725071796
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,38752b3a27629be1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-14 15:20:25 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3B Bulletin #10
Message-ID: <1001@eagle.UUCP>

Date: Tue, 14-Jun-83 18:20:25 EDT
Article-I.D.: eagle.1001
Posted: Tue Jun 14 18:20:25 1983
Date-Received: Thu, 16-Jun-83 04:06:42 EDT
Lines: 18

Official AMSAT P3B Bulletin #010
0300 UTC 14 Jun 83

TO: QST
FM: AMSAT HQ
RLSD: WA2LQQ

All is well. The mission continues to be scheduled
for launch between 1159 and 1328 UTC on the 16th.

No anomalous conditions are known to exist that
could conceiveably affect the launch.

A preflight review will be held today, Tuesday.
If all is well, the countdown to launch will
commence Wednesday.

Now we're really getting close!

From -1916396320303379534
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ff6f60b510ba20cc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-14 19:26:03 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!
ixn5c!inuxc!pur-ee!wn9nbt
From: wn9nbt@pur-ee.UUCP
Newsgroups: net.ham-radio
Subject: antenna party humor - (nf)
Message-ID: <925@pur-ee.UUCP>
Date: Tue, 14-Jun-83 22:26:03 EDT
Article-I.D.: pur-ee.925
Posted: Tue Jun 14 22:26:03 1983
Date-Received: Thu, 16-Jun-83 00:18:50 EDT
Lines: 62

#N:ecn-ec:5600011:000:2939
ecn-ec!wn9nbt   Jun 14 22:18:00 1983

I probably should have posted this to net.jokes, but I thought
it would be appreciated more here. It was passed around at one
of the local club's antenna parties recently and I couldn't resist
typing it in. I am not sure of its origin, but it is many photo-
copy generations old.

Antenna Raising Incident

I'm writing in response to your request for additional information for block number 3 of the Accident Report Form. I put "poor planning" as the cause of my accident. You said in your letter that I should explain in more detail. I trust that the following will be sufficient.

I am an Amateur Radio Operator and on the day of the accident I was working alone on the top section of my new 80' tower. When I had completed my work I discovered that I had, over the course of several trips up the tower, brought up about 300 pounds of tools and hardware. Rather than carry the now un-needed tools and materials down by hand, I decided to lower the items down in a small barrel by using a pulley, which fortunately was attached to the gin pole at the top of the tower.

Securing the rope at ground level, I went to the top of the tower and loaded the tools and hardware into the barrel. I went back to the ground and untied the rope holding it tightly to insure a slow descent of the 300 lbs of tools. You will note in block number 11 of the Accident Report Form that I weigh only 155 lbs.

Due to my surprise at being jerked off the ground so suddenly, I lost my presence of mind and forgot to let go of the rope. Needless to say, I proceeded at a rather rapid rate of speed up the side of the tower. In the vicinity of the 40' level, I met the barrel comming down. This explains my fractured skull and collarbone. Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley.

Fortunately, by this time, I had regained my presence of mind and was able to hold on to the rope in spite of the pain. At approximately the same time however, the barrel of tools hit the ground and the bottom fell out of the barrel. Devoid of the weight of the tools, the barrel now weighed 20 lbs. I refer you again to my weight in block number 11. As you might imagine, I began a rapid descent down the side of the tower. In the vicinity of the 40' level I met the barrel comming up. This accounts for my two fractured ankles and the lacerations on my legs and lower body.

The encounter with the barrel slowed me enough to lessen my injuries when I fell on the pile of tools, and fortunately only 3 vertebra were cracked. I'm sorry to report however, that as I lay there on the tools, in extreme pain, unable to stand, and watching the empty barrel 80' above me, I again lost my presence of mind. I let go of the rope.

Dave Chasey - wn9nbt
pur-ee!wn9nbt

From -6465553947664490031
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f21f6b00521660be,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-14 22:17:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Phase 3-B Bulletin #11
Message-ID: <1002@eagle.UUCP>
Date: Wed, 15-Jun-83 01:17:45 EDT
Article-I.D.: eagle.1002
Posted: Wed Jun 15 01:17:45 1983
Date-Received: Wed, 15-Jun-83 20:58:52 EDT
Lines: 36

0300 UTC 15 Jun 83

TO: QST
FROM: AMSAT HQ
RLSD:WA2LQQ/3

Conditions for launch as scheduled 16 JUN 83 continue to
be excellent. No known anomalies exist.

The launch window is 1159 thru 1328 UTC on Thursday, 16 Jun.

First AOS is expected to be at about T + 2.5 hrs at JA, ZL and
ZS. First AOS over US will be at about T + 11:00 on
145.810 MHz.

Special commemorative certificates (or QSLs) will be issued
to all stations which report reception of any PreLaunch,
Launch Day or Post Launch ALINS transmission. Simply
report station heard (callsign) time and frequency. Send
with an SASE (SAE with 3 IRCs for overseas QTHs) to:
  ALINS Award, AMSAT HQ, P.O. Box 27, Washington, D.C., 20044
Please pass the word widely on this so we can generate as many
leads for new members as possible as soon as possible. The
addresses on the SASEs will be entered in a data base and all
respondents will receive an AMSAT membership application along
with their certificate (card).

A test of the ALINS network will be accomplished at 0000 UTC
on 16 Jun 83. This is Wednesday evening local time (US).
All ALINS participants are urged to phone in. If you are an
ALINS station and do not yet have the number, you should call
W0RPK NOW!!

If propagation conditions prevent access to ALINS on launch

day, please feel free to call AMSAT HQ for a brief update on
the progress of the launch. The number is: 301-589-6062

From 3540771050776877901
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,904bbc89d5602be8,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,904bbc89d5602be8,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1983-06-16 10:59:12 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio,net.space
Subject: AMSAT-OSCAR-10 IS BORN!!
Message-ID: <1003@eagle.UUCP>
Date: Thu, 16-Jun-83 13:59:12 EDT
Article-I.D.: eagle.1003
Posted: Thu Jun 16 13:59:12 1983
Date-Received: Thu, 16-Jun-83 23:11:02 EDT
Lines: 23

As reported earlier via a different system (the telco was having network
problems) AMSAT-OSCAR-10 was successfully launched this morning from
Kourou, French Guiana. Liftoff time, launcher trajectory and the
resulting orbit were all very close to nominal.

Follows is an initial element set:

International designator: 1983 058B
Satellite: oscar-10
Epoch time: 83167.50924769
   Thu Jun 16 12:13:19 1983 UTC
Inclination: 8.6010 deg
RA of node: 249.3110 deg
Eccentricity: 0.7308180
Arg of perigee: 177.8730 deg
Mean anomaly: 0.1941 deg
Mean motion: 2.27337623 rev/day
Epoch rev: 0
Semi major axis: 24437.225 km
Anom period: 633.419132 min
Apogee: 35918.245 km
Perigee: 199.917 km
Beacon: 145.8100 mhz

From -686055255831200172
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7435778bdf84d317,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-16 12:30:10 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Further Oscar-10 info
Message-ID: <1004@eagle.UUCP>
Date: Thu, 16-Jun-83 15:30:10 EDT
Article-I.D.: eagle.1004
Posted: Thu Jun 16 15:30:10 1983
Date-Received: Thu, 16-Jun-83 23:17:39 EDT
Lines: 13

Reports of telemetry beacon reception should be coming shortly from
Japan. NORAD deep space radar has seen two objects so far; there are a
total of 5 pieces (the two payloads, the rocket body, the upper half
of the SYLDA cannister, and the clamp band that held Oscar-10 to the
launcher). It is not clear which objects they've seen, but we had expected
that they'd have trouble seeing us at such a distance (we're too small.)

First AOS over the northeastern USA will be at 23:11 UTC this evening,
coming from the southwest. It will be up until about 09:00 UTC. The
general beacon should be on, with a frequency of 145.81 mhz. Reception
reports would be appreciated.

Phil Karn, KA9Q/1

From -526295763222694511
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d04608eb00242869,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-16 13:09:42 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Oscar-10 Reception Confirmed!!
Message-ID: <1005@eagle.UUCP>
Date: Thu, 16-Jun-83 16:09:42 EDT
Article-I.D.: eagle.1005
Posted: Thu Jun 16 16:09:42 1983
Date-Received: Thu, 16-Jun-83 23:33:53 EDT
Lines: 28

Approximately at 14:45:30 UTC, signals from OSCAR 10 were re-
ceived by dozens of JAMSAT guys.

14:45:22   by JH4PBQ
14:45:30   by JA5XPN
14:45:33   by JA7IE
14:45:40   by JR4BRS
14:45:52   by JR1SWB
14:45:55   by JA8DXB

Signals were quite weak, and reports from number of stations were
required to "compose" following telemetry blocks. (It was impos-
sible to get "lock" for PSK demod.)

HI HI AMSAT OSCAR 10 AT 15:00:00 UTC
ORBIT 0 MA 65/256
UBATT 13.7 VOLTS TBATT 7.1 C IARRAY 0.2 A
SA -/+ ?1 DG SPIN 2? RPM

HI HI AMSAT OSCAT 10 AT 15:30:00 UTC
ORBIT 0 MA 77/256
UBATT 13.4 VOLTS TBATT 7.1 C IARRAY 0.1 A
SA -/+ ?1 DEG SPIN 2 RPM

Miki JR1SWB

From -5770361188658604502
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bae2bf5fc89e69a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-16 14:38:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: NORAD radar/optical tracking
Message-ID: <1006@eagle.UUCP>
Date: Thu, 16-Jun-83 17:38:45 EDT
Article-I.D.: eagle.1006
Posted: Thu Jun 16 17:38:45 1983
Date-Received: Thu, 16-Jun-83 23:56:52 EDT
Lines: 17

NORAD radar and optical tracking of the Ariane L-6 launch from sites in
Korea and Kwajalein Island has produced two sets of elements. They
apparently see the rocket body and either ECS-1 by itself, or ECS-1 in a
"clump" with the other pieces. They give the following elements for the
"clump". Note that these disagree slightly with the earlier elements,
which were obtained by launcher transponder ranging from Ascension
Island at third stage shutdown. I would continue to use those earlier
(NASA/Goddard) elements, but these may be of interest.

Satellite: Oscar-10/ECS-1/Sylda
Epoch time: 83167.7
Inclination: 8.593
RA of node: 249.270
Eccentricity: .7291188
Arg of perigee: 178.052

Mean anomaly: 157.681
Semi major axis: 24289.919

From -8685550234394556130
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e2b903ef80a71a8b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-16 17:10:57 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Severe orientation problem
Message-ID: <1007@eagle.UUCP>
Date: Thu, 16-Jun-83 20:10:57 EDT
Article-I.D.: eagle.1007
Posted: Thu Jun 16 20:10:57 1983
Date-Received: Fri, 17-Jun-83 00:15:45 EDT
Lines: 27

A report from Karl indicates that we have a serious problem with the attitude of the spacecraft. Apparently, our spin axis is very near the sun, which has created a spacecraft emergency. The sun angle is beyond the range of the sun sensor, but is estimated to be ~+70 from the solar array current, +Z axis sensor, and the 40C temperature gradient between the top and bottom of the spacecraft. Karl reports that we have a breakeven or slightly negative power budget with the GB on, a NEGATIVE budget with the EB on, and positive budget with both beacons off. We are therefore going to be keeping the GB off most of the time except for short intervals to check telemetry. Battery charging current is currently 540 ma; load with beacons off approximately 235 ma.

It is not yet known why the attitude is so far off (nearly 90 deg from where it was supposed to be put by the launcher); we have also ruled out the possibility of the launcher having put us in the same attitude as ECS-1. We are currently brainstorming ways around this problem, and hope to have a corrective strategy soon. Since the spin axis is so close to the sun, almost any direction you move it should be an improvement. It therefore might be possible to command the spacecraft to reorient "blind" to improve the sun angle, with the computer monitoring the array current to halt the maneuver if it gets worse.

We'll keep you advised. The beacons will be kept off for long periods of time to aid in battery charging, so don't be alarmed if you don't hear it.

Phil Karn, KA9Q/1

From -5892116448975110934
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,83c275713f9f8529,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-16 20:11:54 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: AOS at W1HDX
Message-ID: <1008@eagle.UUCP>
Date: Thu, 16-Jun-83 23:11:54 EDT
Article-I.D.: eagle.1008
Posted: Thu Jun 16 23:11:54 1983
Date-Received: Fri, 17-Jun-83 00:52:59 EDT
Lines: 4

We just had first AOS at W1HDX. Good signal, more details to follow.

Phil

From 878863048803110859
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,44e7f2ff03c8f814,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-16 23:02:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: New elements for Oscar-10
Message-ID: <1009@eagle.UUCP>
Date: Fri, 17-Jun-83 02:02:46 EDT
Article-I.D.: eagle.1009
Posted: Fri Jun 17 02:02:46 1983
Date-Received: Fri, 17-Jun-83 05:45:56 EDT
Lines: 28

Here's a new element set via Millstone Hill. I now tend to believe
these elements, as they predicted an AOS here 6 minutes earlier than the
Goddard set. We did indeed get AOS earlier.

Satellite: oscar-10
Catalog number: 0
Epoch time: 83168.05000000
   Fri Jun 17 01:12:00 1983 UTC
Element set: 1
Inclination: 8.6080 deg
RA of node: 249.1370 deg
Eccentricity: 0.7290751
Arg of perigee: 178.3420 deg
Mean anomaly: 86.8220 deg
Mean motion: 2.29579060 rev/day
Decay rate: 0.0023431 rev/day^2

```
Epoch rev:               2
Semi major axis: 24277.706 km
Anom period:    627.234905 min
Apogee:          35599.832 km
Perigee:           199.290 km
Beacon:           145.8100 mhz
```

If anyone knows which catalog # and international designator have been assigned, I'd like to know (for convenience only.)

Phil

```
From 5822007479840506350
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cf81435975cd01f8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-17 05:29:10 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!floyd!vax135!ariel!hou5f!orion!houca!hogpc!
houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 44: Pigs in Space
Message-ID: <258@houxp.UUCP>
Date: Fri, 17-Jun-83 08:29:10 EDT
Article-I.D.: houxp.258
Posted: Fri Jun 17 08:29:10 1983
Date-Received: Sat, 18-Jun-83 19:36:37 EDT
Lines: 12
```

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 44 from arrl headquarters
newington ct june 14, 1983
to all radio amateurs bt

dr. owen garriott, w5lfl, is still scheduled to operate an amateur radio station onboard sts9, which is scheduled to lift off september 30. there is no change in these plans. sts10, a mission not having any amateur radio activity, has been postponed. sts7 and sts8 also will not have any amateur radio activity ar

```
From -2132391889439758079
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,df94e86daf4e6a2a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-17 05:29:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!floyd!vax135!ariel!hou5f!orion!houca!hogpc!
```

houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 45: Logging, or lack of
Message-ID: <259@houxp.UUCP>
Date: Fri, 17-Jun-83 08:29:52 EDT
Article-I.D.: houxp.259
Posted: Fri Jun 17 08:29:52 1983
Date-Received: Sat, 18-Jun-83 19:39:43 EDT
Lines: 17

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 45 from arrl headquarters
newington ct june 14, 1983
to all radio amateurs bt

effective immediately, the fcc has eliminated the requirement that amatzurs keep logs of routine operating activities. repeater station trustees no longer need to tape record autopatch and other third party messages. amateurs may, if they desire, continue to keep voluntary logs, and fcc engineers in charge may still mandate log keeping in specific cases. details of non routine operations, such as repeater data when certain power limits are exceeded, auxiliary and remote control operations, and names and call signs of guest control operators are still required to be kept as part of the station records ar

From 2960098510031647961
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fb4785f103933244,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-17 05:30:45 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!floyd!vax135!ariel!hou5f!orion!houca!hogpc!houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 46: Section Managers
Message-ID: <260@houxp.UUCP>
Date: Fri, 17-Jun-83 08:30:45 EDT
Article-I.D.: houxp.260
Posted: Fri Jun 17 08:30:45 1983
Date-Received: Sat, 18-Jun-83 19:33:38 EDT
Lines: 12

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 46 from arrl headquarters
newington ct june 15, 1983

to all radio amateurs bt

the following have been elected without balloting as sms for their
respective sections, british columbia ve7fb, colorado kq0j, georgia
k4jnl, los angeles n2yq, sacramento valle n6aub, san francisco na6t
and southern texas w5kr. those elected will begin new terms october
1, 1983 ar

From -3641407648101539526
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e3b3ccc8a543805e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-17 05:31:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!floyd!vax135!ariel!hou5f!orion!houca!hogpc!
houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 47: Oscar 10
Message-ID: <261@houxp.UUCP>
Date: Fri, 17-Jun-83 08:31:11 EDT
Article-I.D.: houxp.261
Posted: Fri Jun 17 08:31:11 1983
Date-Received: Sat, 18-Jun-83 19:35:08 EDT
Lines: 44

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 48 from arrl headquarters
newington ct june 16, 1983
to all radio amateurs bt

amsat phase 3b was successfully launched at 1159 utc on june 16. its
general beacon will transmit on about 145.812 mhz on cw or 170 hz
shift 50 baud fsk. the spacecraft achieved an unfavorable attitude,
and the control motors will not be fired tomorrow. the beacon can
only be heard from 0000 to 0020 utc and will be turned off the
remainder of the day to conserve power. users are requested to
retain telemetry data for use on amsat nets. minimum sa readings
should be 20. the approximate format during early orbits follows.

hi hi amsat oscar 10 at xx.xx.xx utc

orbit xxx ma xxx/256 ubat xx.x volts

tbatt xx.x c iarray x.x a sa xx dg spin xx rpm

satellite status first motor firing and orbit change expected during
orbit 3

transponder is off until about orbit 10

listen daily to this bulletin for latest operating news at the hours
and plus 30

amsat oscar 10 hi hi

time will be in hours, minutes and seconds as calculated by the
onboard computer. orbit number will change at perigee. ma is mean
anomaly with 0 being perigee and 128 being apogee. ubat is primary
battery voltage. tbatt is battery temperature in degrees celsius.
iarray is solar array current in amperes. sa is sun angle reference
to spacecraft z axis. spin is spin rate of the spacecraft about its
spin axis in revolutions per minute. listen for fiveiminutes on the
hour and half hour. this format may vary slightlzlm

stations hearing the first telemetry signals from the new amsat oscar
10 satellite were zl1aox, jh4pbq, ja5xpn, ja7ie, jr4brs, jr1swb and
ja8dxb. this occurred between 1444 and 1445 utc 16 june 83 ar

From 1790940199726930559
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e9ffdbb18b7296f3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-17 05:31:52 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!floyd!vax135!ariel!hou5f!orion!houca!hogpc!
houxq!houxp!ad7i
From: ad7i@houxp.UUCP
Newsgroups: net.ham-radio
Subject: ARRL 47: Novice Licenses
Message-ID: <262@houxp.UUCP>
Date: Fri, 17-Jun-83 08:31:52 EDT
Article-I.D.: houxp.262
Posted: Fri Jun 17 08:31:52 1983
Date-Received: Sat, 18-Jun-83 19:41:54 EDT
Lines: 13

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 47 from arrl headquarters
newington ct june 15, 1983
to all radio amateurs bt

because of delays in mailing new novice licenses, the fcc office in
gettysburg, pa, is providing applicants who have passed the novice
exam with call signs and permission to commence operations
immediately if the call sign has been issued by the fcc computer. if
you, or someone you know, has been waiting five or more weeks for a
new novice license, call the fcc in gettysburg at 717 337 1212
     ar

From -1935729238915213209
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bc958de7e197630f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-17 06:49:46 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site hou5f.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!hou5f!jak
From: jak@hou5f.UUCP
Newsgroups: net.ham-radio
Subject: congratulations
Message-ID: <304@hou5f.UUCP>
Date: Fri, 17-Jun-83 09:49:46 EDT
Article-I.D.: hou5f.304
Posted: Fri Jun 17 09:49:46 1983
Date-Received: Sat, 18-Jun-83 17:32:46 EDT
Organization: American Bell ED&D, Holmdel, NJ
Lines: 2

Congratulations to all the hard working volunteers of the OSCAR program!!!
73, Jim KY2D

From -8755537543900969647
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e85e8886bcafbd6a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-17 11:57:39 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: More OSCAR 10
Message-ID: <178@dsd.UUCP>
Date: Fri, 17-Jun-83 14:57:39 EDT
Article-I.D.: dsd.178
Posted: Fri Jun 17 14:57:39 1983
Date-Received: Sun, 19-Jun-83 15:24:04 EDT
Lines: 206

AOS CLI   REV 03.40   17-JUN-83   3:01:11

Posted: Thu Jun 16, 1983   4:09 PM PDT   Msg: HGEL-1581-7835
From: JFAIL
To: amsat
Subj: aos oscar 10

AOS OSCAR 10 23:00 GMT EXCELLENT SIGNAL. TELEMETRY TO FOLLOW

Posted: Thu Jun 16, 1983   4:10 PM PDT   Msg: MGEL-1581-7840
From: HPRICE
To: PKARN

CC: AMSAT
Subj: TLM

OSCAR 10 right on time, unfortunately 23:00 TLM was right on the horizon. Didn't get good copy till the boilerplate bulliten. Nice strong sigs into klm14c, no preamp. Good LUck.
Harold.

Posted: Thu Jun 16, 1983 4:23 PM PDT Msg: PGEL-1581-7869
From: PKARN
To: amsat
Subj: AOS at W1HDX

We have AOS at W1HDX. Good data, more to follow.

Phil

Posted: Thu Jun 16, 1983 4:30 PM PDT Msg: NGEL-1581-7893
From: IASHLEY
To: AMSAT
CC: ARRL
Subj: First psk TLM from ZL

This is what appeared on my screen at 14.54 UTC. 16th June 83.

00	1.20 v	10	179 #	20	0.0 w	30	9.36 v
01	9.61 w	11	154 #	21	68.6 c	31	-2.8 c
02	59.3 c	12	24.1 c	22	0.4 c	32	-45.7 c
03	13 #	13	1.44 a	23	98 ma	33	192 ma
04	16.28 v	14	18 dg	24	-999dbw	34	17 #
05	74 #	15	SHUT	25	-70.10 c	35	30.1 c
06	3.7 c	16	15.3 c	26	-7.2 c	36	2.1 c
07	1.38 a	17	3.4 a Q	27	231 ma	37	158 #
08	11.0 v	18	68 dg	28	203 #	38	17.16 v
09	251 lb	19	211 c	29	14.2 c	39	-17.6 c
0A	40.6 c	1A	33.4 c	2A	-10.5 c	3A	56.5 c
0B	745 ma	1B	1.29 a	2B	435 ma	3B	64 #
0C	212 #	1C	3 rpm	2C	15.99 v	3C	2.7 v
0D	35 lb	1D	6.0 v	2D	57.1 c	3D	27.9 c
0E	51.6 c	1E	11.4 c	2E	8.1 c	3E	-23.1 c
0F	553 ma	1F	706 ma	2F	874 ma	3F	1454:1s

Followed by

00	15.0 v	10	52 #	20	0.9 w	30	3.47 v
01	7.84 w	11	223 #	21	20.8 c	31	0.4 c
02	67.0 c	12	54.9 c	22	-1.7 c	32	-8.8 c
03	48 #	13	2.50 a	23	933 ma	33	623 ma
04	11.63 v	14	55 dg	24	-140dbw	34	72 #
05	55 #	15	SHUT	25	39.5 c	35	60.9 c
06	-14.3 c	16	-63.8 c	26	-10.10 c	36	-31.9 c
07	2.85 a	17	799 ma Q	27	494 ma	37	52 #
08	1.10 v	18	75 dg	28	126 #	38	15.62 v

```
09  603 lb      19  587 c       29  -15.10 c    39  10.3 c
0A  -15.10 c    1A  30.7 c      2A  -14.9 c     3A  -55.6 c
0B  784 ma      1B  1.16 a      2B  474 ma      3B  162 #
0C  25 #        1C  2 rpm       2C  17.1 v      3C  8.93 v
0D  46 lb       1D  34.5 v      2D  63.1 c      3D  -64.9 c
0E  44.4 c      1E  35.1 c      2E  15.8 c      3E  -27.5 c
0F  110 ma      1F  55 ma       2F  623 ma      3F  1458:30

next frame which was stored on disk

00  7.50 v      10  221 #       20  0.81 w      30  9.40 v
01  40.53 w     11  180 #       21  36.2 c      31  -52.3 c
02  -22.6 c     12  -17.6 c     22  -63.8 c     32  30.7 c
03  214 #       13 205 ma       23  35 ma       33  82 ma
04  1.88 v      14  44 dg       24 -130dbw      34  104 #
05  141 #       15  SHUT        25  36.2 c      35  6.5 c
06  -50.6 c     16  35.1 c      26  9.8 c       36  28.5 c
07  2.30 a      17  4.68 a   Q  27  753 ma      37 156 #
08  11.95 v     18  12 dg       28  163 #       38  13.7 v
09  176 lb      19 187 c        29  -10.5 c     39  -8.3 c
0A  62.6 c      1A  -54.5 c     2A  -53.4 c     3A  52.1 c
0B  447 ma      1B  1.86 a      2B  925 ma      3B  225 #
0C  125 #       1C  65 rpm      2C  8.18 v      3C  6.8 v
0D  13 lb       1D  29.40 v     2D  -2.8 c      3D  -42.9 c
0E  19.1 c      1E  -60.5 c     2E  -12.1 c     3E  51.6 c
0F  404 ma      1F  839 ma      2F  980 ma      3F  1459:47

The above were all done using tlm ver 1.5 (830606-1) as I had just
received the latest info. The signal popped up out of the noise
at 14.45 UTC and was heard by ZL3MG in CHRISTCHRCH at the same
time and by other ZL's. The signal was very weak and faded into
the noise at times so some of the tlm data should be read with
caution. I will send the last frame separetly as it is a hex dump.
The above was typed in by hand at 4am local time so there may be
some operator errors too.!!!
Looks like a "good bird" to me.
VY best wishes from all in ZL.  73 Ian ZL1AOX.

Posted: Thu  Jun 16, 1983   6:01 PM PDT              Msg: EGEL-1581-8040
From:   TCLARK
To:     amsat
Subj:   Let's congratulate ourselves!

Thanks to all for your support over the past three years.
Today's success meant a lot to me personally, as I know it did
to the others who have have spent a lot of long hours to bring
"Phoenix from the ashes".

The messages of congratulations were most appreciated, but you
really should be congratulating yourselves -- it was you who
did it.

AMSAT had to mortgage its future in order to make Phase-3
```

"happen" today. We still have a lot of hard work to make the spacecraft operational.

But we also have a lot of hard work in front of us in order to capitalize on our successes if we want more spacecraft to happen -- Prosthelize the masses of amateur radio in order to get them into the fold as dues-paying members and donors.

If you need any help on preparing programs for meetings and conventions, PLEASE contact Bill Lazarro at AMSAT HQ for support.

Again -- thanks for all the help and lets keep the momentum going full-bore.

Vy 73, Tom

Posted: Thu Jun 16, 1983 7:07 PM PDT Msg: WGEL-1581-8292
From: PKARN
To: amsat
Subj: New elements

Here's a new element set via Millstone Hill. I now tend to believe these elements, as they predicted an AOS here 6 minutes earlier than the Goddard set. We did indeed get AOS earlier.

```
Satellite: oscar-10
Catalog number: 0
Epoch time:      83168.05000000
   Fri Jun 17 01:12:00 1983 UTC
Element set:             1
Inclination:        8.6080 deg
RA of node:       249.1370 deg
Eccentricity:    0.7290751
Arg of perigee:   178.3420 deg
Mean anomaly:      86.8220 deg
Mean motion:    2.29579060 rev/day
Decay rate:      0.0023431 rev/day^2
Epoch rev:               2
Semi major axis: 24277.706 km
Anom period:    627.234905 min
Apogee:          35599.832 km
Perigee:           199.290 km
Beacon:           145.8100 mhz
```

If anyone knows which catalog # and international designator have been assigned, I'd like to know (for convenience only.)

Phil

Posted: Thu Jun 16, 1983 7:16 PM PDT Msg: HGEL-1581-8329

From: RDUNBAR
To: amsat
Subj: 6/17/83 0200 CW Telemetry

Pretty weak, but got the following:

Orbit 1   MA 79/256
UBAT 14.7 V   TBAT------- C ARRAY 0.3 A S.A. 0.0

Ron

Posted: Thu Jun 16, 1983   7:24 PM PDT   Msg: VGEL-1581-8395
From: RWALLIO
To: pkarn
CC: amsat
Subj: tracking error

Phil,

Here in the midwest we are noting a potential significant tracking
error using the current set of Keplerian elements. This error is
noted with AMS-81, W3IWI and HP-41 systems all of which generate
very similar tracking data.

We noted AOS at 2259-2300 (exact time not noticed in the excitement
and due to the fact we thought we still were 7-minutes away from
AOS) while all three systems predicted 2307. If this was a true
AOS then there is a 7-minute error. If the beacon had already been
commanded into the 20-on 40-off mode then what we heard was the
beacon firing-up and actual AOS was even earlier.

Would all of the above indicate the Keplerian elements are suspect?
Thanks for your part in today's fantastic events!! 73, Ralph

AOS CLI   TERMINATING   17-JUN-83   3:10:59

From -6929370208181840978
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cc36abcc44cf561a,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,cc36abcc44cf561a,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 13372f,cc36abcc44cf561a,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1983-06-17 16:51:11 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!harpo!floyd!vax135!cornell!uw-beaver!tektronix!
tekecs!philb
From: philb@tekecs.UUCP
Newsgroups: net.ham-radio,net.space,net.columbia
Subject: Challenger QSO Schedules
Message-ID: <1437@tekecs.UUCP>

Date: Fri, 17-Jun-83 19:51:11 EDT
Article-I.D.: tekecs.1437
Posted: Fri Jun 17 19:51:11 1983
Date-Received: Sat, 25-Jun-83 22:16:47 EDT
Lines: 17

I would be very interested in finding out the information necessary to make a contact with the astronaut/ham on the next orbiter flight. Would some one please post the times, areas covered, protocol, and callsigns necessary to do this??? I would very much like to make a contact with the orbiter during this flight. Maybe make a date with Ms. Ride......

How about shuttle audio rebroadcasts on hf or 2m. Any one know about that (2m in Portland area)?

Congrats on the sucessful Phase 3B launch!!!

73`s and tnx
Phil Biehl, KA6YEP
tekecs!philb

From -5035990127624748131
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c4fd93e724e10e19,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-18 10:41:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Oscar-10 Status Summary
Message-ID: <1011@eagle.UUCP>
Date: Sat, 18-Jun-83 13:41:35 EDT
Article-I.D.: eagle.1011
Posted: Sat Jun 18 13:41:35 1983
Date-Received: Sun, 19-Jun-83 02:09:26 EDT
Lines: 124

Here is a summary status report from Jan King, W3GEY, Phase 3-B project manager, along with Phil Karn, KA9Q and John DuBois, W1HDX, who are at the primary US command station for Amsat-Oscar-10.

On the first pass visible from the European command station in Marburg (orbit #1), Karl Meinzer, DJ4ZC, determined for the first time that we had the bad sun angle problem. At that time, solar array current was about 100 ma; Karl increased it to approximately 280 ma by adjusting the operating point of the solar arrays. At that time, there were already many pieces of information all indicating that the antenna side of the spacecraft was pointing very near the sun: the low solar array current,

the large temperature gradient between the top and bottom surfaces, the +Z axis sensor reading very high, and no sun pulses from the side-arm sun sensors, which have a limit of +- 45 degrees.

At all times, the command links have been 100% solid. PSK telemetry quality has been improving due to both a "learning curve" in the various stations equipped to receive this signal, and a change to the high gain antenna which was commanded yesterday during orbit 4 [the spacecraft called this orbit 3 because it numbers from zero].

Due to the high sun angle (estimated to be near 70 degrees), average spacecraft temperatures are running very cold. Various readings at apogee are:

Nitrogen Tetroxide tank: -4C
UDMH tank: -7C (the UDMH tank is nearer the cold bottom)
Top battery: -9C
Bottom battery: -17C
Bottom surface: -29C

During perigee, heating effects due to the albedo (reflectivity) of the earth are being observed. These increase the battery temperature to -4 to -5C with some lag due to thermal inertia.

Total solar array current has increased by about 95 ma between orbits 1 and 4 indicate that the sun angle is improving. We believe that the sun angle is improving due to two favorable effects:

1. The motion of the sun, which is increasing in right ascension (celestial longitude) as the earth moves around the sun.

2. A northward precession of the spacecraft spin axis due to slight drag effects on the spacecraft during perigee passages. Since the spacecraft is rotating clockwise as viewed from the rear, with the kick motor pointing almost straight at the center of the earth at perigee, the east-to-west drag force on the large engine bell results in a net south-to-north precession which increases the declination (celestial latitude) of the spin axis.

These two effects are at approximately right angles to each other, and are estimated to be about 1 to 1.5 degrees per day each. This should result in a net improvement in sun angle of about 1.8 degrees per day, and the increases observed so far in solar array current are consistent with this value.

The memory error counter (the onboard computer has a 16K memory with Hamming error-correction circuitry) is counting approximately 4 errors per orbit, two during each pass through the Van Allen radiation belts. This is less than had been expected. The error correction circuitry is working perfectly and so is the onboard computer.

Signal strength from the GB (power about 2 watts) are now quite good.

The EB (engineering beacon) signal is fantastic, but so is the power drain when it is own. This beacon may be switched on between 10 and 15 minutes past the hour; if you hear the GB suddenly switch off before 20 minutes past the hour, look around for the EB.

The regular fade pattern on the beacon is due to "spin modulation" from the hi-gain antenna. We would like to measure the precise interval between fades as a means of determining if the spin rate is slowly decreasing; we would like to gather readings from other stations to help with this. Simply write down the seconds reading from your clock at each fade null over a one or two minute interval, and then go back and compute the average inter-fade interval. We observed an average of 8.9 seconds during the 6/18 04:00 UT transmission and would like any accurate measurements for transmissions either before or after that time.

At this time, we have still not been able to obtain any indication from ESA as to our separation attitude from the launcher; we DO now know, however, that the ECS-1 spacecraft did receive their correct attitude.

Keep those telemetry reports coming. We've had to take time off to get sleep (!) so numbers during the late night (east coast USA time), as well as for passes not visible over the eastern US, are especially helpful.

Keep your fingers crossed. We're confident that we'll get out of this mess, but it will take time and careful planning.

The best set of orbital elements I have been able to obtain from the Millstone Hill L-band deep space radar site about 10 miles from here are as follows:

```
Satellite: oscar-10
Epoch time:      83168.36000000
   Fri Jun 17 08:38:24 1983 UTC
Inclination:        8.5900 deg
RA of node:       249.1010 deg
Eccentricity:    0.7290171
Arg of perigee:   178.4960 deg
Mean anomaly:     343.1210 deg
Mean motion:    2.29630240 rev/day
Decay rate:         8.1e-06 rev/day^2
Epoch rev:                3
Semi major axis: 24274.330 km
Anom period:    627.095107 min
Apogee:          35592.587 km
Perigee:           199.784 km
```

Millstone has not been able to positively identify the various separate pieces of this launch except for the spent third stage of the Ariane which is now quite some distance away. Therefore, these elements could actually be those for ECS-1, although predictions based on these elements have been pretty accurate. It is now clear that we achieved a lower apogee than had been initially indicated, which is why first AOS over the USA came early on Thursday evening. This also explains why the "mean anomaly" counter in

the telemetry, which counts off regularly-spaced 1/256 period time increments over each orbit, was running "slow". Yesterday evening, this count was commanded to step forward 20 counts, but since the rate has not yet been changed it will continue to "lose time".

73,
Phil Karn, KA9Q/1

From 8325683450434379534
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,201f6195d2235738,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15c702,201f6195d2235738,start
X-Google-Attributes: gid15c702,public
X-Google-ArrivalTime: 1983-06-20 07:27:43 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!seismo!harpo!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio,net.audio
Subject: new Regency scanners announced
Message-ID: <523@ihuxf.UUCP>
Date: Mon, 20-Jun-83 10:27:43 EDT
Article-I.D.: ihuxf.523
Posted: Mon Jun 20 10:27:43 1983
Date-Received: Thu, 23-Jun-83 22:37:37 EDT
Organization: BTL Naperville, Il.
Lines: 46

I just received some new product literature from Regency Electronics, Inc. (Indianapolis, IN) describing their new scanner product line. Some new scanners of interest are:

o+ HX3000 - Handheld 20 channel synthesized scanner that covers 25 mHz through 550 mHz continuously. This includes CB, 10 meters, 220 mHz, military aircraft band (300 mHz range), TV audio, FM broadcast, etc. The modes included are AM, wide band FM, and narrow band FM. A priority channel is included. This scanner uses 5 AA batteries.

o+ HX1000 - Handheld 20 channel synthesized scanner covering 6 bands. This scanner has a priority channel feature and is rated at 2 watts of audio output! The display is LCD. It looks like it's built into a 2

meter handie-talkie case, with a die-cast aluminum frame. It's powered from NiCd batteries and uses a lithium battery for memory retention.

o+ MX7000 - 20 channel base/mobile scanner with coverage from 25 mHz to 1.2 gHz! Modes are AM, wide band FM, and narrow band FM. The display is blue/green vacuum fluorescent. I think the list price for this is about $599.

There were 4 other new scanners announced which were of a more traditional nature. One looks like a table radio. Two new crystal controlled handhelds were also announced.

Apparently, Regency is the only company remaining that manufactures scanners in the USA. Bearcat scanners are now made overseas. Are there any other scanner enthusiasts out there?

Robert S. Parnass, AJ9S (ARRL TA)
Bell Laboratories
Room IH 1B-414
Naperville-Wheaton Rd.
Naperville, IL 60566

(312)979-5760 ... ihnp4!ihuxf!parnass

From 1110164739542251089
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e7e22a8d7eb38ed5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-20 10:17:58 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!harpo!floyd!vax135!ariel!houti!hogpc!4432jrm
From: 4432jrm@hogpc.UUCP
Newsgroups: net.ham-radio
Subject: 440 FM in NJ?
Message-ID: <184@hogpc.UUCP>
Date: Mon, 20-Jun-83 13:17:58 EDT
Article-I.D.: hogpc.184
Posted: Mon Jun 20 13:17:58 1983
Date-Received: Wed, 22-Jun-83 15:23:46 EDT
Lines: 10

Can anyone provide info on active repeaters or other activity on
440 FM in the Monmouth Co. area of NJ. (or the NY Metro area).
Info on nets (NTS, ARES, RACES, etc) would also be appreciated.

Reply by UN*X mail to hogpc!4432jrm, and I will summarize the responses
and post them to the net.

73 and TNX in advance.
Joe KB2JG
hogpc!4432jrm

From -86235384821986991
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7948346f4629eb32,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-20 14:09:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Oscar-10 update
Message-ID: <1012@eagle.UUCP>
Date: Mon, 20-Jun-83 17:09:30 EDT
Article-I.D.: eagle.1012
Posted: Mon Jun 20 17:09:30 1983
Date-Received: Tue, 21-Jun-83 00:24:41 EDT
Lines: 20

Things are definitely looking better up there. It is now believed that a
combination of factors is causing the sun angle to improve at about 3
degrees per day; at this rate, the sun sensor should become operational
only about a week from now. Average temperatures are also improving;
the latest report from Tokyo is that the battery is bottoming out at
about -3.9 C, when it had been considerably colder just a few days ago.

I am doing some research to determine how long we can safely remain in
our current orbit. While I do not yet have access to an analytical
model for solar and lunar perturbations, we can take heart in the fact
that the pieces from previous Ariane launches left in the transfer orbit
are still up there. This even includes Ariane L-1, which was launched
on 24 Dec 1979. The only effect on us will probably be a drop in apogee
height due to perigee drag, which will have a noticeable effect on orbital
period but isn't likely to be serious.

Keep your fingers crossed; the patient is still in guarded condition,
but the trends are all positive.

Phil

From 8926231873971200874
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1896eeac6fab719d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-21 04:15:59 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: UoSAT-OSCAR-9 HF Beacons On
Message-ID: <1013@eagle.UUCP>
Date: Tue, 21-Jun-83 07:15:59 EDT
Article-I.D.: eagle.1013
Posted: Tue Jun 21 07:15:59 1983
Date-Received: Tue, 21-Jun-83 17:18:01 EDT
Lines: 23

** UOSAT HF BEACONS EXPT. **

The UOSAT spacecraft HF antennas release pyros were fired at 02:37 gmt June 21 and the 7,14,21 & 29 MHz beacon activated under on-board computer control. Strong signals were received at UoS on 21.002 MHz with the beacon in alternating morse/carrier transmission mode. The morse speed was switched from 20 wpm to 10 wpm after second 2 minute test.

No signals on 7 & 14 MHz heard - heavy qrm. Signals on 29.510 MHz expected but not received at UoS.

Due to minimal power drain, it is anticipated that the 21 & 28 MHz beacons will be now be left on permanently.

The synthesiser system will be checked out next orbit - 0539 gmt June 21.

Reports of reception of the beacons most useful.

Martin Sweeting G3YJO UOSAT Project Manager

From 1773994918416329212
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b6d1e94192044fb4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-21 08:53:38 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!cornell!uw-beaver!tektronix!zehntel!
ihnp4!we13!mgweed!rjr
From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: more.no.code.alliance
Message-ID: <1511@mgweed.UUCP>
Date: Tue, 21-Jun-83 11:53:38 EDT
Article-I.D.: mgweed.1511
Posted: Tue Jun 21 11:53:38 1983

Date-Received: Tue, 28-Jun-83 12:39:31 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 18

Yes, John, I am afraid that group is serious. I have heard of them before.
I wish that article was satire but am afraid it is not.

That sounds typical of the type of animal that we have been having on
our repeater lately; a potty mouth that uses every 4 letter word you ever
heard and using a false call sign, and another chap that has set up a
receiver above the citizen's band that repeats what it hears on our input!

Yes, we have been tracking these guys down and have been in contact with the
FCC (it will be interesting to see what the FCC will really do).

Our biggest problem is keeping our guys from talking about it on the air.
These clowns have scanners and have heard chatter about them on other
frequencies, and we don't want to scare them away til we find them.

K9EUI

From -7315408635536601 89
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1904a7a6c5676ded,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-21 22:13:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Oscar-10 Beacon On Continuously
Message-ID: <1016@eagle.UUCP>
Date: Wed, 22-Jun-83 01:13:28 EDT
Article-I.D.: eagle.1016
Posted: Wed Jun 22 01:13:28 1983
Date-Received: Wed, 22-Jun-83 12:26:27 EDT
Lines: 26

The AMSAT-OSCAR-10 General Beacon was commanded to transmit
continuosly today. The command apparently was made on orbit 12
and its effects were heard for the first time in the Wash., DC
area shortly after the 22:10 UTC AOS of the 145.810 MHz beacon.
Instead of going silent at 22:20 UTC the GB continued to send
mostly PSK telemetry and CW telemetry / satellite status report
bulletins (0-5 & 30-35 min past hour). A-O-X , for the next
couple of hours was in simultaneous view of all of Africa, most
of South America and Europe as well as the eastern part of the
North America.

CW telemetry copied June 21/22 read as follows:

TIME UTC	MA N/256	UBAT V	TBAT C	IARRAY A	SA DG	SPIN RPM
22:30	126	14.8	N1.7	0.4	0.1	2
23:00	138	14.8	N1.7	0.5	0.1	2
00:00	163	14.8	N1.7	0.4	0.1	2
00:30	175	14.8	N2.3	0.5	0.1	2

Please note that Karl has changed the software per our
request to convert the minus sign from a period (.) to the
letter (N) .

73, Rich K1HTV

From -4050986898748030529
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7948346f4629eb32
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-22 12:50:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!mhuxa!mhuxi!
mhuxt!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Oscar-10 update
Message-ID: <1017@eagle.UUCP>
Date: Wed, 22-Jun-83 15:50:31 EDT
Article-I.D.: eagle.1017
Posted: Wed Jun 22 15:50:31 1983
Date-Received: Fri, 24-Jun-83 10:43:02 EDT
Lines: 28

Things continue to improve more rapidly than expected aboard
Amsat-Oscar-10. The sun angle is coming down so rapidly that the sun
sensor pulses are expected back by Friday. Battery temperatures are now
spending much of their time above 0 C. In addition, the combined
effects of spin axis and orbit plane precession appear to be moving the
spin axis toward the orientation it will need for the first motor firing!
Once the sun pulses are back, it will then be possible to command the
onboard computer to do spinup and attitude maneuvers for the first
firing.

The General Beacon is now on full time, since the solar array currents
have come up enough to support it.

Some initial ranging has been done, but not enough to well determine
the orbit yet. We're continuing to use elements provided by NORAD
last week but they seem to be slightly off.

A special software routine was written to dwell on a single solar array
in order to determine the spin rate - approximately 6.2 RPM and apparently
INCREASING by itself.

The current orbit has been analyzed and there is no need to worry over
the short term (1 month) about orbit decay.

In short, we seem to have "pulled a TDRS" (to coin a phrase); the
satellite is surviving like a real cat, always landing on its feet.

Phil Karn

From -2951243138487183690
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eb2bbce0846064c8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-22 18:33:50 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!harpo!floyd!vax135!ariel!hou5f!orion!houca!hogpc!
houxm!mhuxa!mhuxi!mhuxt!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: AMSAT-OSCAR-10 Orbital Elements
Message-ID: <1018@eagle.UUCP>
Date: Wed, 22-Jun-83 21:33:50 EDT
Article-I.D.: eagle.1018
Posted: Wed Jun 22 21:33:50 1983
Date-Received: Fri, 24-Jun-83 20:15:05 EDT
Lines: 27

This is the latest element set for what is in all probability
Amsat-Oscar-10. There is very little radar data on this object,
primarily because it is so small. However, it gave a good LOS
prediction time for Tokyo earlier today, so it is probably good for
tracking.

Object 14129 - probably Oscar-10:
Epoch time: 83170.50000000
   Sun Jun 19 12:00:00 1983 UTC
Element set: MH 6-22-83
Inclination: 8.5590 deg
RA of node: 248.1490 deg
Eccentricity: 0.7288272
Arg of perigee: 180.3280 deg
Mean anomaly: 313.5510 deg
Mean motion: 2.29924800 rev/day
Decay rate: 0.001 rev/day^2 (poorly determined, probably too large)
Semi major axis: 24253.381 km
Anom period: 626.291727 min
Apogee: 35551.760 km
Perigee: 198.712 km

One AMSAT command station has done some ranging, but there is not yet
enough data to properly define the orbit.

Phil

From -3769654200570948362
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,38d601740b8457f8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-23 12:37:31 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!wivax!decvax!harpo!floyd!vax135!ariel!hou5f!orion!houca!hogpc!
houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: Any scanner freaks or SWL's out there?
Message-ID: <537@ihuxf.UUCP>
Date: Thu, 23-Jun-83 15:37:31 EDT
Article-I.D.: ihuxf.537
Posted: Thu Jun 23 15:37:31 1983
Date-Received: Sat, 25-Jun-83 17:51:59 EDT
Organization: BTL Naperville, Il.
Lines: 61

Are there any other scanner enthusiasts or short wave listeners in the Northeastern Illinois area who care to exchange information as to frequencies of interest?

USENET seems like a good place to exchange this information.

My first contributions in this endeavor are:

o+ The Drug Enforcement Agency of the U.S. Justice Department has a few repeaters in the Chicago area. The one on 418.9 mHz is used for undercover surveillance operations. It makes for good listening.

o+ If you're into listening on the short wave bands, tune to 11.249 mHz USB to hear Air Force 1 (the president's plane) and Air Force 2 (the vice president's plane).

Robert S. Parnass, AJ9S (ARRL TA)

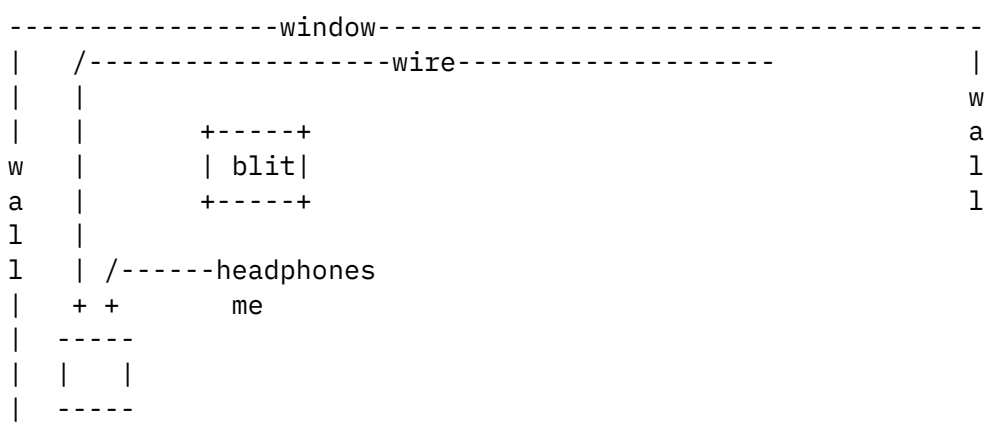
BTL IH 1B414 Naperville, IL 60566
(312)979-5760 ... ihnp4!ihuxf!parnass

From -3095689597936982226
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 15c702,fae287563b7ba61f,start
X-Google-Attributes: gid15c702,public
X-Google-Thread: 151e61,fae287563b7ba61f,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 132415,fae287563b7ba61f,start
X-Google-Attributes: gid132415,public
X-Google-Thread: 15f443,fae287563b7ba61f,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1983-06-23 14:19:55 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site cbosgd.UUCP
Path: utzoo!linus!wivax!decvax!harpo!floyd!vax135!cornell!uw-beaver!tektronix!
ucbcad!ucbvax!cbosgd!mark
From: mark@cbosgd.UUCP
Newsgroups: net.audio,net.ham-radio,net.wanted,bell.ham-radio
Subject: walkman radio reception info wanted
Message-ID: <56@cbosgd.UUCP>
Date: Thu, 23-Jun-83 17:19:55 EDT
Article-I.D.: cbosgd.56
Posted: Thu Jun 23 17:19:55 1983
Date-Received: Mon, 27-Jun-83 12:12:41 EDT
Organization: Bell Labs, Columbus
Lines: 42

I have a walkman-style radio (specifically, it's a Rhapsody
Stereo-to-go RY-90 with AM-FM-Cassette play/record) I use in
my office, so as not to annoy others around me. Trouble is,
the FM reception is terrible, because (a) the walls are metal
(I do have a window, but the window doesn't open so I can't run
an antenna out it) and (b) the terminal I use, a Blit, puts out
considerable RFI. (Not only does distance from the Blit matter,
but when the screen clears the RFI becomes much less of a problem.
Too bad I can't work with the screen clear.) Cassettes sound fine,
but you get tired of them after a while.

I would appreciate any hints as to how to either shield my radio
or construct an antenna that will bring in good reception. The
unit has two earphone jacks, and apparently the FM antenna is the
headphone cord. I made a brief attempt to make an antenna like this:



|

The wire was wrapped around a stereo mini-plug which was plugged
into the other earphone jack. The reception was considerably worse
with the extra antenna plugged in.

Any hints gladly accepted.

--
Mark Horton
CB 4276
614-860-4276
cbosgd!mark

From 5922912045747183480
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,935022c334c00ebb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-24 08:54:59 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site iwu1c.UUCP
Path: utzoo!linus!philabs!seismo!harpo!floyd!vax135!ariel!hou5f!orion!houca!hogpc!
houxm!ihnp4!iwu1c!jgpo
From: jgpo@iwu1c.UUCP
Newsgroups: net.ham-radio
Subject: New emissions symbols
Message-ID: <114@iwu1c.UUCP>
Date: Fri, 24-Jun-83 11:54:59 EDT
Article-I.D.: iwu1c.114
Posted: Fri Jun 24 11:54:59 1983
Date-Received: Sat, 25-Jun-83 20:18:42 EDT
Organization: BTL Naperville, Il.
Lines: 63

As a result of WARC 79, the very familiar signals of the emissions modes
will be changed. The FCC will be implementing the following new symbols
over the next several years.

Old Symbol	New Symbol	Old Symbol	New Symbol
A0	N0N	F0	N0N
A1	A1A	F1	F1B
A2	A2A	F2	F2A
	A2D		F2D
A2J	J2A	F3	F3E
	J2D	F4	F3C
A3	A3E	F5	F3F
A3J	J3E	P	P1B
A4	A3C		
A5	C3F		
	A3F		

Symbol Explanation:
  First character indicates emission type
  Second character indicates the nature of the signal
  Third character indicates the type of information transmitted

First Character
  N = Unmodulated carrier
  A = Double sideband AM
  J = Single sideband, suppressed carrier
  F = Frequency modulation
  P = Sequence of unmodulated pulses
  C = Vestigial sidebands

Second Character
  0 = No modulating signal
  1 = Single channel containing digital information without the use
      of a modulating subcarrier
  2 = Same as above, except using a modulating subcarrier
  3 = Single channel containing analog information

Third Character
  N = No information transmitted
  A = Telegraphy -- aural reception
  B = Telegraphy -- automatic reception
  C = Facsimile
  D = Data transmission, telemetry, telecommand
  E = Telephony
  F = Television

Example: A1A is double sideband, single channel containing digital
information without the use of a modulating subcarrier, telegraphy
for aural reception. In other words, CW!

Tnx to Bill, WD9BBI for the above information. Isn't progress wonderful?

73,
John, KA9MNK

From -4736294228659351412
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,23e1829ec41a7daf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-24 10:23:17 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP

Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!seismo!harpo!floyd!vax135!ariel!hou5f!orion!houca!hogpc!
houxm!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: SWL frequencies
Message-ID: <542@ihuxf.UUCP>
Date: Fri, 24-Jun-83 13:23:17 EDT
Article-I.D.: ihuxf.542
Posted: Fri Jun 24 13:23:17 1983
Date-Received: Sat, 25-Jun-83 20:27:20 EDT
Organization: BTL Naperville, Il.
Lines: 180

In response to my request for interesting frequencies, Bob K9EUI
was kind enough to respond with the following:

Here are a couple spectrum charts and some of the Air Force freqs.
8989 is also a good one for AF-1/2.

Bob, K9EUI

FREQUENCY ALLOCATIONS 4 thru 28 MHz

FIXED SERVICE	MARITIME	AERONAUTICAL	BROADCAST
4000 - 4063	4063 - 4438	4650 - 4750	4750 - 4850 (62 mtrs)
4438 - 4650	6200 - 6525	5450 - 5730	5005 - 5060 (60 mtrs)
4750 - 4995	8195 - 8815	6525 - 6765	5950 - 6200 (49 mtrs)
5005 - 5450	12330 - 13200	8815 - 9040	9500 - 9775 (31 mtrs)
5730 - 5950	16460 - 17360	10005 - 10100	11700 - 11975 (25 mtrs)
6765 - 7000	22000 - 22720	11175 - 11400	15100 - 15450 (19 mtrs)
7300 - 8195	25070 - 25110	13200 - 13360	17700 - 17900 (16 mtrs)
9040 - 9500		15010 - 15100	21450 - 21750 (14 mtrs)
9775 - 9995		17900 - 18030	25600 - 26100 (11 mtrs)
10100 - 11175		21850 - 22000	
11400 - 11700		23200 - 23350	
11975 - 12330			
13360 - 14000			
14350 - 14990			
15450 - 16460			
17360 - 17700			
18030 - 19990			
20100 - 21000			
21750 - 21850			
22720 - 23200			

23350 - 24990
25010 - 25070
25110 - 15600
26100 - 28000

VLF, LF, MF, HF FREQUENCY ALLOCATIONS 12/15/82

kHz RANGE		SVC	kHz RANGE		SVC	kHz RANGE		SVC
0	10	0	5250	5480	1 8	21750	21850	1
10	14	2 3	5480	5730	8	21850	22000	8
14	19.95	1 4	5730	5950	1	22000	22720	4
19.95	20.05	5	5950	6200	11	22720	23200	1
20.05	70	1 4	6200	6525	4	23200	23350	8
70	90	1 3 4 6	6525	6765	8	23350	25070	1
90	110	1 2 4	6765	7000	1	25070	25600	1 4
110	130	1 3 4 6	7000	7100	12	25600	26100	11
130	160	1 4	7100	7300	11** 12*	26100	27500	1
160	200	1	7300	8195	1	27500	28000	1 10 13
200	285	7 8	8195	8815	4	28000	29700	12
285	325	6 7	8815	9040	8	29700	30000	1 10
325	405	7 8	9040	9500	1			
405	415	6 7 8	9500	9775	11	0 unassigned		
415	490	4	9775	9995	1	1 fixed		
490	510	9	9995	10005	5	2 radionavigation		
510	525	7 10	10005	10100	8	3 radiolocation		
525	535	7 10 11	10100	11175	1	4 maritime mobile		
540	1600	11	11175	11400	8	5 standard frequency		
1605	1800	1 3	11400	11700	1	6 maritime #2		
1800	2000	2 12	11700	11975	11	7 aeronautical #2		
2000	2107	4	11975	12330	1	8 aeronautical mobile		
2107	2300	1 4	12330	13200	4	9 mobile distress & call		
2300	2495	1 4 11*	13200	13360	8	10 mobile		
2495	2505	5	13360	14000	1	11 broadcast		
2505	2850	1 4	14000	14350	12	12 amateur		
2850	3155	8	14350	14990	1	13 meteorlogical aids		
3155	3200	4	14990	15010	5			
3200	3400	4 11	15010	15100	8	REGIONS:		
3400	3500	8	15100	15450	11	1 Europe/Africa/USSR		
3500	3800	12	15450	16460	1	2 N & S America		
3800	4000	11 12	16460	17360	4	3 SE. Asia/Australia		
4000	4063	1	17360	17700	1			
4063	4438	4	17700	17900	11	* = region 2 only		
4438	4650	1 10	17900	18030	8	** = regions 1 & 3 only		
4650	4750	8	18030	19990	1			
4750	4850	1 11	19990	20010	5	VLF = 3-30 kHz		
4850	4995	1 10 11	20010	21000	1	LF = 30-300 kHz		
4995	5005	5	21000	21450	12	MF = 300-3000 kHz		
5005	5060	1 11	21450	21750	11	HF = 3000-30000kHz		
5060	5250	1						

U.S. Air Force Global Aeronautical SSB Frequencies

Location	Frequencies (- indicates secondary freq.)					
Albrook AFB	3137-	4495-	6730	6738	8996	9014
Canal Zone	9092-	13244	15015	15026-	15095	17972
	17974					
Anderson AFB	4729	6738	8967	8989	11176	13215
Guam						
Andrews AFB	3071-	4721	4731-	4741-	5700-	6738-
Wash. D.C.	6750-	6756	8967-	8992-	9014-	9019
	9023	11173-	11176	11180	11186	11226-
	11249-	13215	13247	15015-	17972-	17993-
Ascension Is.	6738	6753	10780	11228	15015	20390
Clark AFB	4731	6730	8992	11226	11249	13244
Phillipines						
Croughton AB	3067	6730	6756	11228	13201	13215
England	15036					
Don Muang AB	8967	11176				
Thailand						
Eglin AFB, Fl.	9018					
Elmendorf	5710	6738	8989	11226	11236	13201
AFB, Ak.						
Hickam AFB	4729	6715	8967	11176	13201	13215
Hi.						
Incirlik AFB	6715	6730	11228	13215	15036	15973-
Turkey	17972					
Lajes Field	3081-	4746	5700-	6738	6750-	8967
Azores	11271	13215	13244-			
Langley AFB	11205	13201-				
Va.						
LaPaz, Bolivia	6738	11226	13244	23325		
Loring AFB	3078-	6715	6730	8989	11236	12201
Me.	13201	13215-	15015	18002-		
MacDill AFB	4746	5700-	6740	6750	8989	8993
Fl.	9018-	11226-	11246	11249-	13210	13244

	17972-	17974-	18015-			
McClellan AFB Ca.	3137- 11236-	4746 11239	6730 13201-	6738 13205	8989	11176
Pacific Freq.	11247					
Peterson AFB Co.	6756	13247				
S. Amer. Freq.	6750					
Scott AFB Il.	6727	9018-	11228-	11236	15015	
Thule AFB Greenland	4724 13201	5710	6715	8967	11228	11271-
Vandenberg AFB, Ca.	6746					
Wake Island	8989	13244				
Yokota, Japan	6730	11236	13215	18002		
Other Freqs to watch	6670 8964 11182 18027	6683 8984 11243 23263	6735 9009 13204 23337	6746 9020 15041	6761 9027 15048	8959 11179 18019

From -2531004947174177202
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,570b745fe7ab0fc2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-25 00:53:14 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Oscar-10 update
Message-ID: <1019@eagle.UUCP>
Date: Sat, 25-Jun-83 03:53:14 EDT
Article-I.D.: eagle.1019
Posted: Sat Jun 25 03:53:14 1983
Date-Received: Sat, 25-Jun-83 21:59:07 EDT
Lines: 40

As expected, the sun sensors on AMSAT-OSCAR-10 are now beginning to function. Yesterday, initial data from the sensors indicated that the spin is very low, less than the 2 RPM lower limit at which the spin

rate determination system will function properly. This spin rate was consistent with observed regular fades due to the side lobes of the off-pointed hi-gain antennas.

It was also determined that the spacecraft is apparently spinning slowly BACKWARDS from the direction it should have been spun by the Ariane. This now points to an explanation in which the Ariane either did not give us the correct spin rate or did not spin us up at all.

In any case, software has been loaded to spin up the satellite (in the "backwards" direction so as to avoid going through a zero spin rate) and should execute on the upcoming perigee pass about an hour from now.

Spacecraft systems continue to function quite well, and there is now plenty of power from the solar arrays due to the improved sun angle. Here is a CW telemetry frame just copied from the 145.810 mhz general beacon:

AMSAT OSCAR 10 at 03:30:00 UTC Orbit 19 MA 216/256 TLM: UBAT 14.5 V TBAT 4.9C Iarray 0.4A SA 0.2 dg Spin 2 RPM Satellite status: First motor firing and orbit change delayed to orbit 50 because orientation change required transponder off until then listen to this bulletin on the hour for latest news AMSAT OSCAR 10 HI HI

Comments: Solar array current has not risen because there is already enough current for the spacecraft systems and the battery is fully charged; therefore the battery charge regulator has cut back the operating point of the solar arrays, reducing the generated current. The battery voltage is lower than it was during the first few days of the mission because the NiCds have a negative temperature coefficient; a fully charged battery has a higher open circuit voltage at lower temperatures.

"MA 216/256" (MA = "Mean Anomaly") means that the satellite has completed 216/256 of its orbital period; perigee is defined as MA = 0, and apogee is 128. The SA (sun angle) and Spin figures are still wrong because of the very slow spin rate.

Phil Karn, KA9Q/2

From -4192833563786792478
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e173ff5ca09040cf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-25 05:14:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Oscar-10 at 7 RPM
Message-ID: <1020@eagle.UUCP>
Date: Sat, 25-Jun-83 08:14:56 EDT
Article-I.D.: eagle.1020
Posted: Sat Jun 25 08:14:56 1983

Date-Received: Sat, 25-Jun-83 22:29:15 EDT
Lines: 5

I have just received a report from ZL-land that Oscar-10 has reached a
spin rate of 7 rpm. Magnetic torquing really works!! Next step is
reorientation to motor firing attitude.

Phil

From 6655008790398273371
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,564ba2972327bf80,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,564ba2972327bf80,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,564ba2972327bf80,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1983-06-25 06:28:35 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio,net.space,net.columbia
Subject: Re: Challenger QSO Schedules
Message-ID: <1021@eagle.UUCP>
Date: Sat, 25-Jun-83 09:28:35 EDT
Article-I.D.: eagle.1021
Posted: Sat Jun 25 09:28:35 1983
Date-Received: Sat, 25-Jun-83 23:05:07 EDT
References: tekecs.1437
Lines: 21

First of all, it won't be the next shuttle flight, it'll be STS-9.
Owen Garriot, W5LFL, will be the operator as he is a mission specialist
for that flight. The orbiter will be Columbia, not Challenger.

This particular flight has another advantage in that the inclination
will be 57 degrees instead of the usual 28.5 degrees. This will
cover northern latitudes much better, but the passes will still be very brief.

The operating protocol will most likely consist of alternate one minute
transmit and receive periods. Owen will scan a range of uplinks on 2
meters (not including his own transmit frequency), record the calls he
hears, and then read them off on his downlink frequency during the
alternate minute.

Read July QST for further details. ARRL & AMSAT will be working jointly
on disseminating info on this project.

Phil Karn, KA9Q

PS. Sally Ride is married. Sorry.

From 6575755607794376661
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e0f5788a37b8f0a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-26 07:47:56 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!harpo!eagle!mhuxt!mhuxi!mhuxa!houxm!ihnp4!ixn5c!
inuxc!pur-ee!CSvax:svb
From: CSvax:svb@pur-ee.UUCP
Newsgroups: net.ham-radio
Subject: Service / Friendliness Equipment Manufactureres
Message-ID: <534@purdue.UUCP>
Date: Sun, 26-Jun-83 10:47:56 EDT
Article-I.D.: purdue.534
Posted: Sun Jun 26 10:47:56 1983
Date-Received: Mon, 27-Jun-83 05:57:24 EDT
Lines: 26

I would like to invite you to comment on contacts you had with leading
manufacturers of ham radio equipment (like ICOM, Kenwood etc.).
I will summarize and post to the net. You might esp. comment on the amount
of time it took to get a response.

You might have contacted a manufacturer for

1. service
2. warranty service
3. technical enquirery
4. proposal for improvement
   etc. etc......

The reason I ask this question is twofold:

1. These are problems which are never discussed in the ham
   radio magazines - may be because of fear to loose advertising
   money.
2. I bought a VB 2530 K (1W/25W 2m amplifier for the TR2500 handeld).
   The BNC cable was missing (it is listed in the manual).
   I wrote to Kenwood telling them that they should send one - for
   free of course. I received a bill for .50.....
   I think it is not my problem that they keep their manual consistent
   with what they intend to deliver.

Stephan v. Bechtolsheim
Purdue CS, DF 4 CK / W9

From 8526636072605351212
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b3cea9f7e972634c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-29 22:19:28 PST

Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!
zehntel!zinfandel!berry
From: berry@zinfandel.UUCP
Newsgroups: net.ham-radio
Subject: Re: antenna party humor - (nf)
Message-ID: <1090@zehntel.UUCP>
Date: Thu, 30-Jun-83 01:19:28 EDT
Article-I.D.: zehntel.1090
Posted: Thu Jun 30 01:19:28 1983
Date-Received: Thu, 7-Jul-83 20:21:14 EDT
Lines: 10

#R:ecn-ec:5600011:zinfandel:6100001:000:243
zinfandel!berry   Jun 29 16:12:00 1983

I originally heard a version of the "tower and barrel of tools" on
an old Goon Show record. It's always hilarious, and I love seeing
the endless variations!

Berry Kercheval   Zehntel Inc.
(decvax!sytek!zehntel!zinfandel!berry)
(415)932-6900

From 7884130931363627060
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58650fb95fd93136,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-06-30 02:17:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!genrad!decvax!harpo!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: OSCAR-10 Update
Message-ID: <1025@eagle.UUCP>
Date: Thu, 30-Jun-83 05:17:28 EDT
Article-I.D.: eagle.1025
Posted: Thu Jun 30 05:17:28 1983
Date-Received: Thu, 30-Jun-83 17:03:05 EDT
Lines: 22

This past evening, a second spin-up maneuver was performed successfully
on AMSAT-OSCAR-10. The resulting spin rate is now measured as 18.68 RPM,
although the CW telemetry is saying 26 RPM (the CW telemetry routine
has a bad calibration formula in it, but hey, it's only software..!)
The actual measurement was done with a chart recorder attached to the
S-meter of a receiver. If you listen you will hear rapid, regular fading
on the beacon. This is due to the fact that on two meters, the spacecraft
isn't large enough to act as an ideal ground plane for the omni whip,
resulting in three side lobes at certain look angles.

During torquing maneuvers, the general beacon on 145.810 has been placed

into the 20-minute-on, 40-minute-off cycle as a precautionary measure.
Once it is verified that the sun angles are still OK (i.e., the spinup
did the right thing), the beacon will probably be put back on full time
operation.

The next step is a precession of the spin axis northward to the proper
firing attitude. This will probably take a few more days, so that if
all goes well the first motor burn will be next week. Keep your fingers
crossed (or, as the Germans say, hold onto your thumbs!)

Phil

From -6069282055732410164
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e195422cb4cfade5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-02 13:41:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!wivax!decvax!microsof!fluke!ssc-vax!uw-beaver!cornell!vax135!
ariel!hou5f!hou5a!hou5d!hogpc!houxm!mhuxa!mhuxi!mhuxt!eagle!alice!alb
From: alb@alice.UUCP
Newsgroups: net.ham-radio
Subject: Traffic Handling and Remuneration
Message-ID: <2019@alice.UUCP>
Date: Sat, 2-Jul-83 16:41:29 EDT
Article-I.D.: alice.2019
Posted: Sat Jul 2 16:41:29 1983
Date-Received: Thu, 7-Jul-83 00:41:41 EDT
Lines: 7

Part 97 says we are not allowed to receive remuneration for
services provided by Amateur Radio. This rule is probably
(at least in my opinion) the biggest boon for public service
by amateur radio. A question though: If I originate a message,
does the rule disallow me from offering to pay postage for
the delivering station to mail a copy of the message to
the recipient?

From 5165087127482260454
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4cd9b4582f68eb9c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-05 18:38:30 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!decvax!harpo!eagle!mhuxt!mhuxi!mhuxa!houxm!ihnp4!ixn5c!inuxc!
pur-ee!CSvax:svb
From: CSvax:svb@pur-ee.UUCP
Newsgroups: net.ham-radio
Subject: Service / Friendliness Equipment Manufactureres, Part II
Message-ID: <536@purdue.UUCP>
Date: Tue, 5-Jul-83 21:38:30 EDT

Article-I.D.: purdue.536
Posted: Tue Jul 5 21:38:30 1983
Date-Received: Thu, 7-Jul-83 11:44:12 EDT
Lines: 13

Sorry folks, I received only four replies - so it would be anfair to generalize. Still there seems to be a consensus that

1. It is like dealing with your car dealer - it will take him a minute to sell you a new car but a week to change a broken light bulb.

2. Heathkit (have you read net.audio??) has an extremly good service - which seems to be an exeption.

Stephan v. Bechtolsheim
Purdue CS, DF 4 CK / W9

From -5826077499460020251
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e7e4ab87a69fc599,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-06 10:10:13 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!hao!hplabs!hpda!fortune!dsd!dna
From: dna@dsd.UUCP
Newsgroups: net.ham-radio
Subject: Pacific Packet Radio Society (PPRS) July Meeting
Message-ID: <181@dsd.UUCP>
Date: Wed, 6-Jul-83 13:10:13 EDT
Article-I.D.: dsd.181
Posted: Wed Jul 6 13:10:13 1983
Date-Received: Thu, 7-Jul-83 22:34:52 EDT
Lines: 18

The next meeting of the Pacific Packet Radio Society will be held:

Monday, July 11th, 8:00 pm
AMPEX Cafeteria
401 Broadway
Redwood City, CA

There will be two topics covered during our July meeting:

1. A report on the first West Coast Linking Committee meeting. This meeting will be held in LA on July 9th, and will hopefully set the ground rules for building a west coast packet network.

2. An update on the current status of AMSAT OSCAR 10. A review of the launch and current plans for the satellite.

See you at the meeting --- 73, Hank KA6M (Phone 415-856-7421).

From -2200205070191046338
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8b3d0e383ca180db,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-07 14:19:29 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!decvax!tektronix!zehntel!ihnp4!ihuxf!parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio
Subject: Scanner Ass'n. of North America
Message-ID: <570@ihuxf.UUCP>
Date: Thu, 7-Jul-83 17:19:29 EDT
Article-I.D.: ihuxf.570
Posted: Thu Jul 7 17:19:29 1983
Date-Received: Sat, 9-Jul-83 12:59:06 EDT
Organization: BTL Naperville, Il.
Lines: 125

SCAN Magazine is published bi-monthly by the Scanner Association of North America (SCAN). Mr. Charlie Hildebrandt, of BTL - Holmdel, was kind enough to send me some back issues of this publication.

SCAN Magazine is a glossy, color publication of approximately 30 pages. Aside from feature articles on such topics as Digital Voice Protection, railroad scanning, fire radio terminology, and some technical articles on an elementary level, there are regular columns:

- Frequency Exchange - an ongoing listing of frequency information, sorted by frequency.

- Area Profile - concentrates on one particular geographic area, and contains a rough map and frequency assignments (Buffalo area police frequencies, Chicago area airport frequencies, Pittsburgh fire and EMT frequencies, etc.)

- The World Below 30 mHz - devoted to short wave listening

- Beginner's Advisor - scanning tips for the newcomer

o+ Profile - spotlights particular Community Watch, law enforcement, and ESDA organizations.

o+ Scanning Today - current news briefs of interest to scanner enthusiasts

o+ Photo Contest - photographs of members' "radio shacks"

o+ Member's Ad Service - free classified advertising for members. There's about a page and a half of individual ads for used scanners, crystals, frequency information and other items. Members place ads for such things as "Frequencies and Ten-Codes needed for Champaign County and the Illinois State Police", "Atlanta VHF/UHF aircraft listeners wanted", "Codes and information about Illinois Secretary of State U-car police...", etc. I thought this section was particularly interesting.

The issues I read also featured true stories in which people helped out in crisis situations after overhearing things on their scanners:

o+ Scanner Listener Helps Police Nab Bank Robbers

o+ TV Cameraman "Slaps the Cuffs" on Chattanooga Shooting Suspect

o+ Illinois Firefighter's Scanner Monitoring Helps Halt Tylenol Cyanide Deaths

o+ etc.

This publication contains commercial advertising. There are ads for antennas and other scanning accessories. There is a definite bias towards Bearcat products. It's funny that the only scanners advertised are Bearcat scanners! The captions under pictures of "radio shacks" containing scanners of many brands only point out the Bearcat scanners.

Apparently, this organization is owned/sponsored by Electra Company, the makers of Bearcat (TM) scanners. The earlier issues of "Scanning Today" (a forerunner of SCAN) carried the message "Entire contents copyright 19XX by Electra Company...." The later issues are "copyright Scanner Association of North America".

From the information printed in the March/April 1983 issue, a one year membership in this organization costs $10, which includes:

- a subscription to SCAN Magazine
- an FCC quick reference frequency allocation chart
- ID card
- membership certificate
- vehicle decal
- bumper sticker proclaiming "Scanners Hear It First"

The address of this organization is:

SCAN
Suite 1212
111 E. Wacker Drive
Chicago, IL 60601

I'm debating whether to join this organization. I could do without the bumper sticker, decals, etc. Are there any other SCAN members out there?

While Radio Amateurs may pick and choose from several large magazines (QST, 73, Ham Radio, CQ), scanner enthusiasts and short wave listeners must be content with a meager selection of lower quality publications.

I've just sent a check for $16.50 to the Radio Communications Monitoring Association (RCMA) in Anaheim CA for a one year membership. This club has no commercial affiliation and is run by volunteers. I will post my comments on the RCMA newsletter when my first issue arrives.

Robert S. Parnass, AJ9S (ARRL Technical Advisor)
Bell Laboratories
Naperville, Illinois 60566

ihnp4!ihuxf!parnass

From 5452795516147570290

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,48f85daba257c8d3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-07 17:31:49 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!seismo!hao!hplabs!sri-unix!larson
From: larson@sri-unix.UUCP
Newsgroups: net.ham-radio
Subject: 10 M repeater expansion - (nf)
Message-ID: <5671@sri-unix.UUCP>
Date: Thu, 7-Jul-83 20:31:49 EDT
Article-I.D.: sri-unix.5671
Posted: Thu Jul 7 20:31:49 1983
Date-Received: Sat, 9-Jul-83 14:55:44 EDT
Lines: 36

#N:sri-unix:5200009:000:1461
sri-unix!larson   Jul 5 22:59:00 1983

This from QST, July 83:

> The Commisssion has adopted an NPRM in PR Docket 83-485, which would make additional 10-meter frequencies available for amateur repeater operation. The current 29.5-29.7 MHz segment authorized for repeater use would be expanded to include 29.0-29.5 MHz, increasing the number of "channels" from approximately 4 to 17.
>
> The FCC noted that the Further NPRM in Docket 82-83 would expand the 10-M telephony segment to 28.3 MHz, offsetting most of the loss of frequencies to nonrepeater operation caused by this proposal. Further, it specifically requested comments weighing the
>
> - o need for the proposed repeater subband expansion;
> - o impace of the proposed expansion on existing and future repeater and nonrepeater operation;
> - o acceptability of that impact to the amateur community.
>
> - - - - -

Note that this allocation would place repeaters in the satellite down link bands on 10 meters. This would discourage many from trying satellite communication since most of the satellite users either started on Mode A (10 meter downlink), or use it exclusively (myself included).

The lowering of the telephony portion to 28.3 would cause potential problems to the brand new packet-radio activities around 28.3 MHz, since the growth of packet radio could place even greater demands on the non-telephony parts of 10 meters.

Anyone else feel as I do?

Alan Larson, WA6AZP
...sri-unix!larson (or Larson@sri-kl (arpa))

From 2761283477824556993
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6af0e9ed5eac6dd4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-08 05:52:33 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 ggr 6/21/83; site pyuxdd.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
ihnp4!cbosgd!mhuxi!mhuxa!mhuxm!pyuxi!pyuxnn!pyuxdd!hcl
From: hcl@pyuxdd.UUCP
Newsgroups: net.ham-radio
Subject: Air Variable Capacitors For Gamma Match
Message-ID: <197@pyuxdd.UUCP>
Date: Fri, 8-Jul-83 08:52:33 EDT
Article-I.D.: pyuxdd.197
Posted: Fri Jul 8 08:52:33 1983
Date-Received: Sat, 9-Jul-83 17:00:07 EDT
Organization: Bell Labs, Piscataway
Lines: 6

Anybody out there know where one can get, other than constructing, air
variable capacitors small enough for use in a Quad antenna Gamma Match but
with adequate plate spacing (approx. .07 inches) to handle 2KW and
that do not cost $30.00??????????????????????????????????

If so, please contact Howard Lee (NA2I) PY 2E-342 x2216.

From -5029819067934540854
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 139baf,1e052f3881e0627a,start
X-Google-Attributes: gid139baf,public
X-Google-Thread: 151e61,1e052f3881e0627a,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 132415,1e052f3881e0627a,start
X-Google-Attributes: gid132415,public
X-Google-ArrivalTime: 1983-07-08 11:54:15 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/26/83; site ihuxf.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!ihuxf!
parnass
From: parnass@ihuxf.UUCP
Newsgroups: net.ham-radio,bell.ham-radio,btl.ham-radio
Subject: Radio Shack PRO-24 Pocket Scanner
Message-ID: <573@ihuxf.UUCP>
Date: Fri, 8-Jul-83 14:54:15 EDT
Article-I.D.: ihuxf.573
Posted: Fri Jul 8 14:54:15 1983
Date-Received: Sat, 9-Jul-83 17:06:57 EDT
Organization: BTL Naperville, Il.
Lines: 167

This article briefly summarizes my experiences with the new Radio Shack PRO-24 pocket scanner, priced at $99.95. Problems encountered include:

o+ irregularity in plastic belt clip

o+ misalignment of UHF stages as received from dealer

o+ design deficiency in squelch circuit

o+ incompatibility of recommended AC adapter accessory

Cures for these ills, as well as a modification to increase the scanning rate are covered.

Powered by 4 AA penlight cells, this is a 4 channel, crystal controlled receiver which covers the following bands:

o+ 30 - 50 mHz. (VHF Low)

o+ 144 - 174 mHz. (VHF High)

o+ 450 - 512 mHz. (UHF)

Included with the scanner are tri-band helical and telescoping antennas, a plastic belt clip, and an owner's manual (with schematic).

The outward appearance of this Japanese made scanner is identical to previous Radio Shack models (PRO-20A and PRO-21A) which covered only two bands. The circuitry is similar to other Radio Shack and Montgomery Wards models in that the same multi function MC3357P (2nd local osc., mixer, if amp, detector, and squelch) and T3375 selector chips are used. The audio amplification in the PRO-24 is performed by an LM386 chip, whereas pocket scanners in the past have implemented this function through the use of discrete transistor circuitry.

The PRO-24 uses a plastic belt clip, whereas previous scanners of the same ilk have used metal. The 2 holes in both types of clips are the same size and line up, so if the

plastic clip breaks, it may be possible to order the metal one for an older model from your local Radio Shack store. The plastic belt clip and two screws are furnished in a plastic bag. If the owner wants to install the belt clip, she may find that one of the holes is a bit too small. Do not force the screw in, the brittle plastic may crack! Instead, enlarge the hole slightly.

I installed 1 UHF and 3 VHF High crystals. I had no way to accurately measure the sensitivity or selectivity due the unavailability of calibrated signal generating equipment. The sensitivity on VHF High seemed fairly respectable, considering the tri-band helical antenna. Sensitivity on VHF Low could not be determined due to a lack of a suitable crystal in my collection.

UHF sensitivity was dismal. In particular, the local police repeater on 470.3125 mHz, could not be received in many parts of town. I realigned the RF amplifier and mixer stages in the UHF circuitry, which improved UHF sensitivity noticeably. However, the UHF sensitivity still seems a disappointment. In the PRO-24, the front end stages for the 3 bands are all connected together at the antenna. As an experiment, I disconnected the VHF Low front end from the antenna, thinking that the direct coupling of this stage was loading the others down. I again realigned the UHF stages, but could detect no improvement in sensitivity.

The squelch control had an inordinately high amount of hysteresis, resembling "play" in a car steering wheel. This forced me to keep the squelch up at a point which prevented reception of signals of weak to moderate strength. As mentioned previously, the squelch function is performed by a common Motorola chip, which has been used successfully in several previous scanners. An inspection of the schematic diagram, provided in the owner's manual, revealed that for some reason, a low value of resistance (33,000 ohms) was used for R35, which was placed between the squelch output and the noise amplifier input (IC1, pins 14 and

12). This "feedback" resistor was much smaller than the 220,000 ohm resistors used in previous designs. After changing the resistor in my PRO-24 to 220,000 ohms, the amount of hysteresis decreased markedly, and the squelch worked great.

Both the owner's manual and Radio Shack catalog recommend the model 20-189 AC power adapter/charger accessory ($6.95) for use with the PRO-24. This adapter may be used in two ways:

- If plugged into the AC adapter jack on the scanner, the scanner's batteries are disconnected, and the radio is powered from the AC line.

- If plugged into the charger jack on the scanner, the radio circuitry is completely disconnected, and the batteries are charged by the adapter through a current limiting 27 ohm resistor located inside the scanner.

These two jacks are of the coaxial type, and each contains a switch mechanism which is activated upon insertion of the proper size plug.

I bought the recommended accessory, and although it was labeled 20-189A, I was assured that it was indeed the proper adapter, and the 'A' meant that a new vendor was supplying these to Radio Shack. As a precautionary measure, I made a quick check with my Fluke DMM. This revealed a problem: when the adapter was plugged into the scanner, the internal batteries were still connected!

This can cause two unwanted effects:

- If I used the adapter to power the scanner, the batteries would be charging at an indeterminate rate.

- If I used the adapter plugged into the charging socket, the batteries would be placed directly across the 6 volt DC power supply (bypassing the current limiting resistor!) and would indeed enjoy a short life.

The culprit was the connector on the end of the adapter. The outer diameter was just a bit to small to

actuate the switches in the scanner's jacks.

My problem was solved by buying the Radio Shack 6VDC 150 ma. AC adapter (273-1454, $5.95). In addition to having the proper connector, this adapter works well, is cheaper than the recommended one, and can furnish almost twice the current!

The specifications in the owner's manual state that the scanning speed is 6 channels/second, a bit too slow for my liking. I added another 220,000 ohm resistor in parallel with R64. This changed the time constant of the scanning oscillator, increasing the scanning rate.

When fully squelched, a good portion of the battery drain can be attributed to the light emitting diode channel indicators. When the "manual/scan" switch is in the "man" position, my unit draws approximately 27 ma. from the batteries. Following up on a suggestion from Ed Doubek, N9RF, I always leave the PRO-24 in "scan" mode. When I want to listen to just one particular channel, I just lock out the others. This causes a single LED to blink on and off at about a 25% duty cycle, thus conserving battery life.

I bought this scanner at a reduced price, and in summary, after a several hours work, it performed at a level close to my expectations.

Robert S. Parnass, AJ9S (ARRL Technical Advisor)
Bell Laboratories
Naperville, Illinois 60566

ihnp4!ihuxf!parnass

From 8023757672907844366
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f55675ffc0a61a02,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-08 12:12:02 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Posting-Version: version B 2.10 5/3/83; site mgweed.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!we13!mgweed!rjr

From: rjr@mgweed.UUCP
Newsgroups: net.ham-radio
Subject: Field strength meters
Message-ID: <2011@mgweed.UUCP>
Date: Fri, 8-Jul-83 15:12:02 EDT
Article-I.D.: mgweed.2011
Posted: Fri Jul 8 15:12:02 1983
Date-Received: Sat, 9-Jul-83 17:16:04 EDT
Organization: Western Electric - Montgomery Illinois
Lines: 6

Does anyone know what companies manufacture RF field intensity meters?
I am interested in a portable unit for frequencies up to VHF, that
read out in uv/meter.... Not units for measuring levels in cable TV
systems.....

From 3566745153882852153
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,517c4bcce6664cd0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-07-08 19:17:28 PST
Relay-Version: version B 2.10 5/3/83; site utzoo.UUCP
Path: utzoo!linus!philabs!cmcl2!floyd!whuxlb!pyuxll!eisx!npoiv!npois!hogpc!houxm!
mhuxa!mhuxi!mhuxt!eagle!karn
From: karn@eagle.UUCP
Newsgroups: net.ham-radio
Subject: Oscar-10 burn delayed (again!)
Message-ID: <1031@eagle.UUCP>
Date: Fri, 8-Jul-83 22:17:28 EDT
Article-I.D.: eagle.1031
Posted: Fri Jul 8 22:17:28 1983
Date-Received: Sat, 9-Jul-83 18:50:15 EDT
Lines: 13

The first apogee burn scheduled for 21:37 UTC today (about a half hour
ago) did not take place. The onboard software detected that the
attitude was slightly out of tolerance, so the computer aborted the burn
sequence. We in the US had a good "fire drill", however. The satellite
was right on the horizon, with enough signal to tell that the beacons
had switched, as they were supposed to for the burn, but not enough
signal to decode the beacons to determine if the burn had actually taken
place! Word that the burn had not actually taken place came shortly
afterwards from Germany.

We'll keep you posted on a new burn schedule...

Phil Karn, KA9Q

From -380644353824855769
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,ba9492ce7bfd713,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-11 05:00:44 PST
Message-ID: <bnews.rlgvax.1159>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!seismo!rlgvax!rjf
X-Path: utzoo!decvax!harpo!seismo!rlgvax!rjf
From: rlgvax!rjf
Date: Fri Mar 11 08:00:43 1983
Subject: Re: No-code license
X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 10 12:10:23 1983
Received: Fri Mar 11 08:00:43 1983

Well, the battle lines have been drawn! Code or NO-code?
My feelins on the matter are simple. I believe that there
should indeed be a license class that has a theory requirement
but no code test. HOWEVER, this (Experimenter) Class license
should be restricted to the UHF frequencies, NOT VHF! In other
words, they should only be allowed on above 220 MHz. Certainly,
they shouldn't be allowed on 2 meters. Two meters is crowded
enough with people that HAVE gone through the trouble of learning
Morse Code (at least 5 words per minute anyway). Even 220 is getting
a little full in some areas.

While I understand the new radio computer people wanting
to get on the air with their stuff without learning something
they will NEVER use, let them have frequencies that other hams
don't normally use and where they will have to really work at
getting on the air. Hams have always helped push ahead the
state of the art. If these experimenters really want to get
on the lower frequencies then they should take the time to learn
what everyone else does. I refuse to accept the idea that it is
impossible for someone to learn the theory AND Morse code at 5 wpm.
My wife has NO backround in radio, and she did it. C'mon people,
you want to be a ham, do it, its not hard. You don't want to,
fine, but don't expect the privledges that go with being one.

Bob Fabrizio, WA3SBT
(...!{seismo,mcnc,we13}!rlgvax!rjf)

From 4436101781165068190
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,68e7ef5f02cae4c4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-11 05:07:45 PST
Message-ID: <bnews.sri-unix.5274>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!seismo!hao!hplabs!sri-unix!dbeck
X-Path: utzoo!decvax!harpo!seismo!hao!hplabs!sri-unix!dbeck
From: sri-unix!dbeck
Date: Fri Mar 11 08:07:43 1983

Subject: Re: ARRL DX BULLETIN de k2ph - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Wed Mar 9 06:45:29 1983
Received: Fri Mar 11 08:07:43 1983

#R:inuxc:-58800:sri-unix:5200004:000:169
sri-unix!dbeck   Jan 23 18:31:00 1983

VK0CW was worked here at 1530Z 23 jan. 14 028x/14040r but much qrm
of the intentional type. W6KG/A7 also active about same time around
14.020. Good Hunting. de K6ZX

From 7576194471138191571
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3466e7e4d133b900,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-11 05:27:49 PST
Message-ID: <bnews.eagle.826>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Fri Mar 11 08:27:48 1983
Subject: Satellites on 2 meters
X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 10 22:00:18 1983
Received: Fri Mar 11 08:27:48 1983

Regarding Bob's comment about satellite use of the 2 meter band:

Yes, we realize this is a problem. However, the current frequencies
available to the Amateur Satellite Service (yes, it is a separate
service apart from the regular Amateur Service, for some reason known
only to the FCC) make it difficult to go elsewhere. Here are the current
VHF/UHF satellite bands:

144-146 Mhz
435-438 Mhz

That's ALL. By worldwide gentleman's agreement, only the segment 145.8 to
146.0 is used by satellites and will be almost fully utilized by
the Phase 3-B Mode B downlink. It will also be shared with the UoSAT telemetry
beacon and the RS and Oscar-8 uplinks. We don't know where we're going
to put PACSAT, but we'd sure like to find a place for it on 2m also....

6 meters is not a worldwide amateur band; neither is 146-148
Mhz or 220-225 Mhz. The next available allocation is on the 23 cm band.
Phase 3-B will use 2m, 70cm and 23cm; where else can we go?

Part of our problem is that our users have always screamed bloody murder
whenever a new satellite is proposed to use a higher frequency band.

Some users have never forgiven us for having decided to put no more downlinks on 10m, and others are just now getting the capability to use the 70cm/2m pair. Now, of course, we are asking them to get 23cm transmitters for mode L and the furor is starting again. However, this is the only way we can provide wide transponders: 800 khz on mode L (23cm up, 70cm down) as compared to 150khz for mode B (70cm up, 2m down).

Two meters sure is a useful frequency band. A shame it isn't 10 Mhz wide.

Phil Karn, KA9Q/2

From 6625626318357614709
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ea567d8c617ee8a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-11 05:47:53 PST
Message-ID: <bnews.pur-ee.835>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxz!ihnp4!ixn5c!inuxc!
pur-ee!mahler
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxz!ihnp4!ixn5c!inuxc!
pur-ee!mahler
From: pur-ee!mahler
Date: Fri Mar 11 08:47:48 1983
Subject: Re: John Gilmore"s comments on No-code
References: <bnews.iwsl2.154> <bnews.eagle.818>
X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 10 09:21:45 1983
Received: Fri Mar 11 08:47:48 1983

After reading Mr. Gilmore's open letter to the FCC serveral thoughts come to mind. For brevity they are enumerated below:

1) There should be a NO-CODE license, BUT I don't consider it a canidate
     as a class of
     as a class of AMATEUR RADIO SERVICE. I would be happy for the
     NO-CODE folks to have a separate frequency allocation.

2) NO-CODE is supposed to bring on the air a number of people with "great"
     contributions and those who can bring those ideas to life. Can
     5 WPM code be a significant hurdle to an "interested" person, if
     it is maybe the person isn't that intereseted. Mr. Gilmore by
     his addmission lost interest quickly.

3) John, your talking in this forum to ALOT of software folks. I don't
     think its a great discovery that current RTTY software is very
     primative. It was designed to be upward compatable with other
     amateurs old equipment. Not every one can
     run right out and by a computer, although that time is getting
     very close. Remember its amateur RADIO, -NOT- amateur COMPUTER.

4) I am concerned about your statement that your machine will retry, and
retry, and retry if the conditions are poor. Sure you can put
in retry counts ... but what if I am trying to handle priority
traffic on that frequency ... will your system go off the air
at my request ... so I can work the priority traffic your station
can not hear. What do you think will happen the first time a
life is lost because a digital station did not QRT (thats stop
transmitting).

5) I want a digital world wide computer network, but not at the expense
of the amateur radio service.

-- Steve N9DRR

From 5788855049198992091
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,10b0e70789551ca5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-11 18:41:42 PST
Message-ID: <bnews.inuxc.626>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!wbux5!wb2!houxz!ihnp4!ixn5c!inuxc!lrcard
X-Path: utzoo!decvax!harpo!npoiv!npois!wbux5!wb2!houxz!ihnp4!ixn5c!inuxc!lrcard
From: inuxc!lrcard
Date: Fri Mar 11 21:41:39 1983
Subject: Comments to FCC regarding NPRM, Docket 83-28
X-Google-Info: Converted from the original B-News header
Posted: Wed Mar 9 14:16:36 1983
Received: Fri Mar 11 21:41:39 1983

The following are my comments to FCC NPRM Docket 83-28. I would
appreciate any and all comments regarding this approach
to this issue.

> Incorporating new technology into amateur radio is the
> thrust of the FCC's efforts to formulate a new class of
> license. The argument of a code versus no-code license is a
> side-issue. The real issue is how to incorporate the newer
> data communication technologies desired by some prospective
> hams, while preventing the chaos caused by unskilled and
> frivolous operations as has happened in the CB service. The
> following proposal can achieve both objectives:
>
> > The new class of license to be created, whether
> > entry level or greater, should be a no code
> > license, allowing all currently accepted data
> > communications modes with no voice privileges
> > (A3,A3J,F3) with the exception of P3G in the
> > appropriate bands. If these "data communicators"
> > should ever wish to have code and/or voice
> > privileges they may take the appropriate exam..

By eliminating A3 and F3 (i.e., the technologically simple voice modes), the incentive for frivolous users to somehow obtain a license is removed.

This proposed license will effectively discriminate between those seriously intent on using data communications and those who's interests are, by-in- large, frivolous uses of voice mode just because it is available and easily obtainable.

Larry Card, W9CC, inuxc!lrcard
ABI-Indianapolis

From -1739534514800705656
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,150368c0949d7923,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-11 19:33:21 PST
Message-ID: <bnews.houxp.217>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!hou5f!ariel!houti!hogpc!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!hou5f!ariel!houti!hogpc!houxq!houxp!ad7i
From: houxp!ad7i
Date: Fri Mar 11 22:33:20 1983
Subject: ARRL 18: New 220 record
X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 10 09:22:54 1983
Received: Fri Mar 11 22:33:20 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr arrl bulletin nr 18 from arrl headquarters
newington ct march 9, 1983
to all radio amateurs bt

a new world dx record on 220 mhz was set at 0000z today when kp4eor contacted lu7djz, a distance of 3670 miles. this is approximately 1000 miles farther than the previous record. the contact was made via transequatorial propagation, with kp4eor using both cw and ssb while lu7djz used cw only. complete details will be in may qst ar

From 3699634701366470695
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9d73b6a316a09514,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-11 20:15:47 PST

Message-ID: <bnews.csu-cs.2078>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!seismo!hao!csu-cs!kelly
X-Path: utzoo!decvax!harpo!seismo!hao!csu-cs!kelly
From: csu-cs!kelly
Date: Fri Mar 11 23:15:46 1983
Subject: No-license radio
X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 10 01:48:30 1983
Received: Fri Mar 11 23:15:46 1983

Well, it looks like another round of tear-jerking stories of a world
full of potential Albert Einsteins being heartless denied their
fulfillment by the impossible barrier of 5 words per minute CW.

Just a note on historical freedoms on radio:

1) CB licenses can be had for 2 boxtops and 25 cents. Gab on...

2) 49 Mhz is open to anybody, so long as power is below 100mw.

3) Higher Class CB (Class A?) at 460 Mhz is available.

4) AM (540-1600 Khz) and FM (88-108 Mhz) are there for low power
   use, though I think this is now discouraged.

With these freebies, you can have a ball. If you want to have the
privileges which hams have Earned, you will have to Earn them, too.
Yes they are privileges, and when (if) you study the part 97 in
preparation for Your ham license, you will see this is acknowleged
as an earned privilege. Throwing these pearls before the world
may well destroy this resource from any useful purpose, like
uncontrolled exploitation of other of the nations resources.

Count me on the 'earn your ticket' side of the question...

     Chris Kelly - WD5IBS - CSU/CS

From 4028878951561953677
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b7592a5c3f8613f7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-12 02:03:04 PST
Message-ID: <bnews.whuxlb.1025>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!eisx!whuxlb!mkg
X-Path: utzoo!decvax!harpo!npoiv!eisx!whuxlb!mkg
From: whuxlb!mkg
Date: Sat Mar 12 05:03:03 1983
Subject: Re: Code-Free Comments Draft
References: <bnews.eagle.822>

X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 10 22:45:08 1983
Received: Sat Mar 12 05:03:03 1983

Phil's comments and suggestions are by far the best and most thought provoking of any I've seen on no code licenses. For too long all discussion has been centered around the "digital" no code license while overlooking (ignoring) other types of experimentation. When I first started in ham radio, I had lots of fun and learned quite a bit while playing with a converted APX-6 on 1296 mHz (it was fun to communicate 5 miles across town with a 1.5 inch antenna on both ends). I think it is vital to the future of ham radio to encourage all types of experimentation--not just digital.

I especially like the suggestion for two flavors of license with different levels of difficulty and the use of existing theory exams for them. I think its time that the FCC should do something to encourage technical development instead of continually discouraging it.
Marsh Gosnell AD2H whuxlb!mkg

From 3640636994392590771
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,73ee41446c5766c1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-12 02:50:21 PST
Message-ID: <bnews.inuxc.629>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxz!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxz!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Mar 12 05:50:19 1983
Subject: ARRL DX BULLETIN de K2PH
X-Google-Info: Converted from the original B-News header
Posted: Fri Mar 11 10:25:33 1983
Received: Sat Mar 12 05:50:19 1983

_C_o_c_o_s__K_e_e_l_i_n_g_. VK9YB has been showing up on 14225 kHz at 1200Z.

_G_u_a_m_. Look for AH2AI on 3.8 MHz at 1200Z.

_G_u_i_n_e_a_. LA2EX/3X1 is still checking in with the Family Hour on 21345 kHz at 2330Z.

_E_a_s_t_e_r__I_s_l_a_n_d_. Hector, CE00ERY, can be found on 14208 kHz at 0300Z. QSLs go via WB6WOD.

_E_a_s_t__M_a_l_a_y_s_i_a_. San, K5YY, has left Brunei and his next stop is expected to be at 9M6. Look for him on 3795 kHz at 1100 and 1200Z and on 40 meters at 1130Z.

_A_s_c_e_n_s_i_o_n_. ZD8DX operates on 14205 kHz at 2300Z. QSLs go to W4MJZ.

_V_P_5_/_V_P_2_. VP5KMX is still active. QSL to W8UVZ. VP5KMD is particularly active on 7005 kHz at 0030Z. Also look for him on 3505 kHz at 0100Z. QSL via N00DH. K7NHV/VP2V is active on all bands, cw only. VP2KBD and VP2KBE will be on until March 15. QSL to K1IJV.

_S_p_r_a_t_l_y__I_s_l_a_n_d_s_. Four German amateurs are departing for the Spratly Island group on March 31. They expect to arrive at their destination on April 7 or 8 and operate through April 12. The calls used will be 1S6SI, 1S6NG, 1S6KF, and 1S4EI. QSL routes will be announced later.

_V_S_5_/_V_S_6_/_9_M_6_. VS5HG, VE7ZG/VS6, and 9M6YY will be on Saturday, Sunday, and Monday at approximately 1100Z on 3795 kHz ssb. 80 meter cw and 40 meter operation is also planned.

_S_t_.__H_e_l_e_n_a_. ZD7WT operates on 7002 kHz at 0100Z. QSL via ZD8TM.

_R_o_d_r_i_g_u_e_s_. Alex, 3B8DA/3B9, plans to continue on Rodrigues Island until May.

_D_X_C_C_. QSLs for SM00AGD/KH1 and T31AE are now being received from QSL manager SM3CXS and are being accepted for DXCC credit.

_M_a_u_r_i_t_a_n_i_a_. 5T5TO has been worked on 21030 kHz at 2150Z and on 28025 kHz at 1900Z. He is also active on 80, 40, and 20 meters. F6BUM handles the QSLs.

_H_e_a_r_d__a_n_d__W_o_r_k_e_d_. AP2JL 21275 kHz at 1200Z. J6LCV 3795 kHz at 0100Z, QSL to KA6DFI. EA9JV 3790 kHz at 0120Z.
DF3NV/ST2 14273 kHz at 2250Z. VE7CZU/4U 14225 kHz at 2300Z.
3V8PS 14201 kHz at 2250Z. FR00FLO 14224 kHz at 2250Z.

From 3913608161798375013
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,10b0e70789551ca5
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-12 03:37:56 PST
Message-ID: <bnews.foxvax1.1050>
Newsgroups: net.ham-radio
Path: utzoo!decvax!yale-com!brunix!foxvax1!scs
X-Path: utzoo!decvax!yale-com!brunix!foxvax1!scs
From: foxvax1!scs
Date: Sat Mar 12 06:37:55 1983
Subject: Re: Comments to FCC regarding NPRM, Docket 83-28

References: <bnews.inuxc.626>
X-Google-Info: Converted from the original B-News header
Posted: Fri Mar 11 08:06:40 1983
Received: Sat Mar 12 06:37:55 1983

I think Larry has hit a the solution. If all they want is to experiment with the new forms of communications. Then they should be limited to them. It solves my main concern, that is another CB band on 2 meters. And just after I got an HT.

Steve Schwarm W3EVE
Foxboro Co
Foxboro, MA

From -1794343260353316191
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c550db7b41c644f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-13 02:14:09 PST
Message-ID: <bnews.sri-unix.5275>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:tektronix!zehntel!sytek!menlo70!hao!hplabs!sri-unix!dbeck
X-Path: utzoo!decvax!ucbvax!CAD:tektronix!zehntel!sytek!menlo70!hao!hplabs!sri-unix!dbeck
From: sri-unix!dbeck
Date: Sun Mar 13 05:14:04 1983
Subject: Re: ARRL DX BULLETIN 2/25/83 - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Wed Mar 9 06:45:51 1983
Received: Sun Mar 13 05:14:04 1983

#R:inuxc:-61400:sri-unix:5200005:000:176
sri-unix!dbeck   Feb 26 16:39:00 1983

Added note, VR6KB claiming to be on Pitcairn has surfaced several times lately on CW, last being 2/25 about 14025 around 0300Z. Slim may be alive and well. 73 de dbeck K6ZX

From 4566690586326923316
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8199f51a6c2cc11c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-13 04:34:57 PST
Message-ID: <bnews.eagle.827>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:tektronix!zehntel!sytek!menlo70!hao!seismo!harpo!eagle!karn
X-Path: utzoo!decvax!ucbvax!CAD:tektronix!zehntel!sytek!menlo70!hao!seismo!harpo!eagle!karn

From: eagle!karn
Date: Sun Mar 13 07:34:47 1983
Subject: No code, again
X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 10 22:39:51 1983
Received: Sun Mar 13 07:34:47 1983

In response to Chris and Bob's comments, which were essentially "if I
can do it, then you should too":

The issue is not the absolute degree of difficulty of passing the code
test. The real issue is whether even the small (although I might
dispute that) amount of work required to learn the code is worth it,
when compared to the other things (such as theory) one might be learning
during the same time.

I learned the code and got my ticket when I was in high school; if I had
waited until I had gone on to college when I had far less free time, I
might never have become a ham. Getting started was so time consuming
that I can very well understand why many others refuse to learn the
code.

Amateur radio has often been called a "fraternity". That description is
more than a metaphor, as the code test is our very own version of
hazing. I fought against hazing in my college fraternity, both before
and after I joined, and I'm fighting against it in amateur radio now.
If you want to put up some kind of "test of character" to make sure only
dedicated people enter, fine. Just make it a worthwhile exercise such as
increasing their technical skills, not one which to a newcomer makes no sense.

Phil Karn, KA9Q/2

From 2155037588045772050
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 163b79,d7dcdf9cd8e49d58,start
X-Google-Attributes: gid163b79,public
X-Google-Thread: 151e61,d7dcdf9cd8e49d58,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-14 16:32:51 PST
Message-ID: <bnews.utzoo.2868>
Newsgroups: net.general,net.ham-radio
Path: utzoo!henry
X-Path: utzoo!henry
From: utzoo!henry
Date: Mon Mar 14 19:32:49 1983
Subject: headset telephones
X-Google-Info: Converted from the original B-News header
Posted: Mon Mar 14 19:32:49 1983
Received: Mon Mar 14 19:32:49 1983

I believe there are such things as telephones which have headsets instead
of a big clunky receiver that you have to hold with your hand. Can

anybody enlighten me further? There are times when I dearly wish I
had such a thing. (I have no access to phone-company internal gear,
so it would have to be something commercially available to the public.)
Please reply by mail; I will summarize for the net.

Henry Spencer
U of Toronto
decvax!utzoo!henry

From 6349419200547522730
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fe9063672659caed,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-15 05:09:23 PST
Message-ID: <bnews.pur-ee.839>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!wbux5!wb2!houxz!ihnp4!ixn5c!inuxc!pur-ee!
wn9nbt
X-Path: utzoo!decvax!harpo!npoiv!npois!wbux5!wb2!houxz!ihnp4!ixn5c!inuxc!pur-ee!
wn9nbt
From: pur-ee!wn9nbt
Date: Tue Mar 15 08:09:22 1983
Subject: Re: Who's Going to Dayton??? - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Sun Mar 13 22:26:19 1983
Received: Tue Mar 15 08:09:22 1983

#R:inuxc:-62700:pur-ee:5600009:000:287
pur-ee!wn9nbt   Mar 13 21:49:00 1983

I plan on being there all three days and would be most interested
in an eyeball qso, possibly at the friday night get together, or
make a new get together. I can be on 2 meters or 440 to listen
for meeting places or possibly have an HF net to discuss ?

....Dave Chasey pur-ee!wn9nbt

From 5862945257431638200
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c50c33a60c7594ae,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-17 21:56:43 PST
Message-ID: <bnews.eagle.831>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Fri Mar 18 00:56:39 1983
Subject: Docket 83-28 (no code) excerpts

X-Google-Info: Converted from the original B-News header
Posted: Mon Mar 14 21:49:23 1983
Received: Fri Mar 18 00:56:39 1983

I have received a copy of the FCC's NRPM on the no-code license, reprinted in the March 1983 issue of the AMRAD newsletter. Unfortunately, I cannot determine for sure from the reprint the date of the Federal Register in which this NPRM was printed. While the whole thing is much too long for me to type in here, I would like to quote a few sections. These all come from the later sections marked "Discussion" and "Conclusion".
73,
Phil

"Essentially, we will be considering the authorization of the same frequencies for whichever codeless license we may implement. There are, then, only two principle differences between our proposed codeless Technician class and Experimenter class operator licenses. These are the subject and level of the written examination to be administered to the applicant, and the total number of operator license classes to be provided for in the Amateur Radio Service....

"...we must point out that the Technician class license proposal has an advantage over the Experimenter class license proposal. Implementation of the Experimenter class license may require the Commission to develop a new syllabus and provide, by some means, for the preparation and administration of new examinations... We would be remiss if we did not consider these administrative burdens in weighing the respective desirability of the two license classes proposed. Accordingly, we request that this matter be addressed in the context of comments on this proceeding. Finally, the Commission does not wish to de-emphasize the importance of the international Morse code as a communications mode in the Amateur Radio Service...it is precisely these attributes [the universality and efficiency of CW] that make us believe that Morse code can 'stand on its own two feet.' We believe that once an individual has had an opportunity to become involved in the Amateur Radio Service and become acquainted with its many intricate facets, there is a desire to learn more about radio and the offerings of the service. We anticipate that in the case of the codeless class licenses these new interests may include the international Morse code, just as we anticipate with all other licenses...

"Beyond station identification and use in certain weak signal communications modes, we note that the Morse code is seldom used on frequencies above 50 Mhz, even though all amateur operators are currently required to demonstrate their proficiency in it prior to licensing. We then ask why the Federal Government should continue to require of operators a skill which may have less utility than other skills in these bands for which the license would be granted to operate. We do not, for example, require applicants to demonstrate proficiency with a typewriter even though radioteleprinting may be the most efficient mode for certain 'traffic' handling. We believe that a more important qualification for an operator license is an individuals

ability to understand the Commission's regulations and the radio station for which he/she is responsible. Other than this, we would leave to the individual the decision as to whether learning the Morse code would benefit his/her endeavors in amateur radio.

"...It has also come to our attention that some of the current amateur licensees are particularly concerned that even if a codeless license class were to convey privileges only in the VHF bands and higher, that those privileges might include certain well populated bands (e.g., the popular 2 meter band). With respect to this, we wouldlike to reemphasize that we plan to be flexible on the issue of frequencies that would be authorized for the codeless license class (in particular the Experimenter class, since we are not considering changes in the privileges for Technician class licensees). We will carefully consider the comments of both amateurs and non-amateurs on this issue and make appropriate adjustments in the frequency bands eventually authorized."

From 2598282450137110470
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba9492ce7bfd713
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-18 05:40:26 PST
Message-ID: <bnews.zps.109>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:tektronix!zehntel!zps!digger
X-Path: utzoo!decvax!ucbvax!CAD:tektronix!zehntel!zps!digger
From: zps!digger
Date: Fri Mar 18 08:40:25 1983
Subject: Re: No-code license
References: <bnews.rlgvax.1159>
X-Google-Info: Converted from the original B-News header
Posted: Mon Mar 14 22:45:13 1983
Received: Fri Mar 18 08:40:25 1983

> I will have to agree with Bob. It does not take so much to
> get a ham licence. If these people can learn a computer language
> then they shouldn't have any problem with morse code.
> An experimenters class license is good provided they
> are put in a band of their own. 220 Mhz is alive and active.
> 450 Mhz is also far from dead. If they are to create another
> class of license then they can surely find a portion of VHF
> or UHF that is not allocated to Amateur radio. After all they
> found some for the CB'ers didn't they.?
> I think that the fact that Amateur radio operators
> have the priviledge to build and maintain there own equipment
> (transmitters etc.) is being over looked. If a person can learn
> the theory at age 12 as I did then learning code shouldn't be
> too difficult, besides what ever happened to the chalenges in
> life. I have been a ham for 7 years now and hold the advanced
> class license. I learned the code and I can understand the
> call of most repeater cw identifiers. If no-code licensecees
> appear on VHF and UHF they will never understand the code.

There is code on FM TOO. I think that the operator should be
able to copy the call on my repeater. Not to mention the various
other helpfull messages it produces in code.
Enough is said I will listen again.

Scott Miles
WB6PQM
Northern Amateur Relay Council
220 Mhz coordinator
zps!zehntel!sytek
opps... digger@zps
any way you have my QTH
73's

From 6680597785966535244
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba9492ce7bfd713
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-22 18:18:43 PST
Message-ID: <bnews.tekmdp.1838>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:tektronix!tekmdp!michaelk
X-Path: utzoo!decvax!ucbvax!CAD:tektronix!tekmdp!michaelk
From: tekmdp!michaelk
Date: Tue Mar 22 21:18:39 1983
Subject: Re: No-code license
References: <bnews.zps.109>
X-Google-Info: Converted from the original B-News header
Posted: Tue Mar 15 10:45:21 1983
Received: Tue Mar 22 21:18:39 1983

As a historical comment, ... CB was not created out of non-ham radio
spectrum. It was taken from ham radio. It was the old 11 meter
ham band. I've been a ham for only 19 years or so, & it was already
taken away back then.
Once upon a time I used to have a Heathkit DX-100 (now known
as boat anchor) that had 11 meters on it. Next time you are at a hamfest
look at those B.A.'s! Perhaps there are some old-timers on the net that
can enlighten upon the political reasons for CB creation and such, so
that we can see how the situation then compares with the no-code situation now.

Mike Kersenbrock WB4IOJ
Tektronix Microcomputer Development Products
Aloha, Oregon

From 8654767763977549861
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,89b41f1be10ea3ef,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-22 21:11:58 PST
Message-ID: <bnews.alice.1654>

Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!alb
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!alb
From: alice!alb
Date: Wed Mar 23 00:11:57 1983
Subject: Traffic Query -- Responsibility of Handlers
X-Google-Info: Converted from the original B-News header
Posted: Tue Mar 15 19:54:17 1983
Received: Wed Mar 23 00:11:57 1983

I just delivered a piece of traffic tonight which I picked up from
one of our local nets, and its contents got me thinking (yes, it's
hard to start those gears, but on occasion...): Generally, it was
a request from a person (dunno whether or not it was the actual
originator of the message) for the recipient to deliver a phone
number to the author of the message. Now, how do I know that that
phone number is not going to be used by the author for a business
application? Clearly, that's a violation of the rules. Granted,
if the author is the originator of the message, he should know
better, and if the author is not the originator, it should be the
originator's responsibility to make sure that the message does
not break any rules. But, in the rare case that something like this
DOES get through, what is the implication for those people who
handle the message (the people between and including the originator
and the deliverer)? If the FCC finds that a piece of traffic breaks
some rule(s), are the handlers of that traffic equally responsible
for it and are they subject to punishment? e.g. If that phone number
IS for business, and the FCC finds out about it, can I, as a handler
of the traffic and the person who delivered it, get in trouble for
it?

From 1114984824332918416
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3f1ebcfbc902a87,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-23 05:19:16 PST
Message-ID: <bnews.eagle.840>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
X-Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
From: eagle!karn
Date: Wed Mar 23 08:19:09 1983
Subject: Uosat Bulletin 17
X-Google-Info: Converted from the original B-News header
Posted: Tue Mar 22 18:31:48 1983
Received: Wed Mar 23 08:19:09 1983

        UOSAT SPACECRAFT CONTROL CENTRE
UNIVERSITY OF SURREY, GUILDFORD, SURREY, ENGLAND
****

UOSAT SPACECRAFT OPERATIONAL STATUS:
****
**** UOSAT BULLETIN-17 1500 GMT 18 MARCH 1983 ****

** S/C NEWS **

FOLLOWING PRECISE NAVIGATION ANALYSIS AND ATTITUDE MANOEUVRES DURING MARCH 3-6TH, UOSAT WAS SUCCESSFULLY ORIENTED IN THE CORRECT MANNER AND TIME FOR GRAVITY GRADIENT STABILISATION. BOOM DEPLOYMENT COMMENCED OVER SURREY AT 03:58:15 GMT. AT 04:00:35 HIGH SPEED DATA INDICATED THE CABLES FROM THE SPACECRAFT TO THE TIP-MASS MAGNETOMETER ON THE END OF THE BOOM TO HAVE SNAGGED AND BOOM DEPLOYMENT WAS HALTED IMMEDIATELY AT ONE METRE EXTENSION. THE NAVIGATION AND ATTITUDE OF UOSAT WAS SO PRECISE HOWEVER THAT THE SPACECRAFT SUCCEEDED IN BECOMING GRAVITY-GRADIENT STABILISED FOR APPROX ONE DAY EVEN THOUGH THE BOOM WAS ONLY EXTENDED 1 RATHER THAN 4M. THE GRADUAL INCREASE IN Z-SPIN CAUSED UOSAT TO SLIP OUT OF LOCK ON 8 MARCH. DETAILED ANALYSIS IS UNDER WAY AND ATTEMPTS WILL BE MADE TO RELEASE THE CABLES.

** THANKS FOR FEEDBACK **

W4AUZ, I.CLINE, WA6VRC, K1KSY, N5AHD, WB4KGY, G8EDG, W7AVE, KA9Q/2, G6ESK, G6BTU, G8NEF, G8NOB

** POST BOX **

PLEASE SEND RAW TELEMETRY AND COMPUTER DUMP DATA RECEIVED FROM ORBITS 7770 TO 7865 FOR DETAILED ANALYSIS.

SPACECRAFT ORBITAL DATA

ORBITS FOR 18TH MARCH

	UOSAT	OSCAR-8	NOAA-7	
ORBIT NO :	8000	25654	8939	
EQX TIME :	14:12:56	15:00:43	14:23:08	GMT
EQX LONG :	345.6	181.8	357.7	DEG.W
MEAN HGT :	505.6	905.0	850.0	KM
PERIOD :	94.7279624	103.1672360	101.9113575	MINS
P-DRAG :	5.718E-05	2.166E-06	7.500E-06	*N-REF
LONG INC :	23.6815572	25.7936732	25.4882122	DEGS
L-DRAG :	1.438E-05	7.030E-07	2.000E-07	*N-REF

QSL/POST CARDS CONFIRMING RECEPTION OF UOSAT DATA INCLUDING STATION DETAILS WOULD BE APPRECIATED FOR SURVEY OF NO. AND GEOGRAPHIC DISTRIBUTION OF ACTIVE STATION)
SEND TO: DR.M.N.SWEETING, UOSAT CONTROL CENTRE - THANK YOU

From -7474828959007740542

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5b5935dfa7c1e959,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-24 04:27:35 PST
Message-ID: <bnews.rocksvax.233>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:tektronix!zehntel!sytek!menlo70!hao!seismo!rocheste!
rocksvax!dave
X-Path: utzoo!decvax!ucbvax!CAD:tektronix!zehntel!sytek!menlo70!hao!seismo!
rocheste!rocksvax!dave
From: rocksvax!dave
Date: Thu Mar 24 07:27:34 1983
Subject: Wanted: specs for AX.25
X-Google-Info: Converted from the original B-News header
Posted: Mon Mar 21 15:05:12 1983
Received: Thu Mar 24 07:27:34 1983

Sorry to bother ARPA people twice, but somebody filters ARPA to UUCP news out.
I am looking for the "official" specs for AX.25. Everybody seems to handwave
and say it's like X.25 but...but what. A friend of mine is making a product
to do this stuff and need the details. Is there an official document for this
spec or is it still on the back of a napkin... Somebody please point
me to this magic document, electronically or even through the U.S. Snail.

Dave Sewhuk N2GH
ARPA: Sewhuk.HENR@PARC-MAXC (Preferred mail place)
UUCP: ..!allegra!rochester!rocksvax!dave

From 5767733952049389016
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,54b1aa7b3249661,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-26 05:17:07 PST
Message-ID: <bnews.eagle.844>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sat Mar 26 08:17:02 1983
Subject: WN9NBT's comments
X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 24 19:22:16 1983
Received: Sat Mar 26 08:17:02 1983

Agreed. CW is indeed extremely useful for small signal work on VHF and
UHF: moonbounce and satellite users use it heavily. Dave's comparison
to addition and calculus isn't really appropriate, as the point is that
the code is not really necessary for MOST (not all) of the work
currently conducted on VHF and above, and certainly not necessary for
most of the experimental work.

I would think twice about calling the case for the code-free license

"juvenile". Even disregarding my position in favor of it, I have noticed that most of the OPPONENTS of the code free license are far more emotional and "juvenile" in their arguments than are the proponents, although of course this doesn't constitute an argument in favor of it.

It seems we have an interesting situation here: many amateurs fervently support the code requirement as a "test of dedication", while at the same time saying that the code is "so simple that even a Boy Scout can learn it". So its both hard and easy at the same time; which is it?

I stand by an earlier remark I made: a lot of the opposition to the code free license is based on a fear of others who might prove to be more technically competent than themselves. These amateurs cling to the code test as a way to "prove" to themselves that they're still somehow superior. Recent comments calling the proponents "juvenile" and "lazy", or mocking them as "experts" or "Einsteins" simply confirm my suspicions. Its sad that people feel this way.

Phil, KA9Q/2

From -6115327150277923355
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,78797230294c4f93,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-26 06:54:02 PST
Message-ID: <bnews.houxp.223>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxi!houxz!
hogpc!houxq!houxo!houxp!ad7i
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxi!houxz!
hogpc!houxq!houxo!houxp!ad7i
From: houxp!ad7i
Date: Sat Mar 26 09:53:59 1983
Subject: Propagaion Bulletin 12
X-Google-Info: Converted from the original B-News header
Posted: Fri Mar 25 10:16:38 1983
Received: Sat Mar 26 09:53:59 1983

qst de ad7i
hr propagation forecast bulletin nr 12 from arrl headquarters
newington ct march 21, 1983
to all radio amateurs bt

solar flux information was not available in the 24 hours prior to preparation of this bulletin, but visual observation of the sun indicated that flux values are continuing a gradual rise that began march 14. the flux was estimated at 127 on the 20th, and a peak of about 140 is expected by march 27. the flux average for march 20 to 31 is expected to be above the 123 used in preparing the propagation charts in qst for march.

geomagnetic activity was at intermediate levels and propagation waso fair to good through the 18th. it was higher, and conditions were degraded, march 19 and 20. propagation will remain below par through the 21st, but will improve thereafter, becoming good march 26 and 27. the month will close with erratic conditions carrying through april 2. communications over high latitude paths will be affected most adversely. transequatorial circuits may be enhanced, particularly on 28 and 50 mhz, the latter having been open to south america during march, especially from the southern tier of states.

american sunspot numbers for march 10 through 16 were between 8 and 58 with a mean of 36.9 ar

From 5695105320687794764
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13372f,b2f531fe70b91698,start
X-Google-Attributes: gid13372f,public
X-Google-Thread: 151e61,b2f531fe70b91698,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-26 07:33:47 PST
Message-ID: <bnews.eagle.848>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sat Mar 26 10:33:46 1983
Subject: JAS-1 announced
X-Google-Info: Converted from the original B-News header
Posted: Fri Mar 25 16:24:07 1983
Received: Sat Mar 26 10:33:46 1983

Last weekend, JAMSAT and JARL (the Japanese branch of AMSAT and the Japanese Amateur Radio League) formally announced a project to build an amateur radio satellite for launch in 1986 aboard a new Japanese launch vehicle, the H-1 (similar to the American Delta).

The satellite will physically resemble Oscar-8, and carry two communications payloads. One will be a Mode J 2m-to-70cm linear transponder like that on Oscar-8, and the other will be a digital store-and-forward "mailbox".

The digital half of JAS-1 will be in addition to the similar PACSAT project being planned in the US for one of three launch possibilities: aboard a Space Services launcher, a Delta with Landsat D', or aboard the Landsat 4 Recovery shuttle mission from Vandenburg.

Discussions have been underway between AMSAT and JAMSAT for some time to establish common modulation, protocols and user interfaces wherever possible for PACSAT and the digital portion of JAS-1 in order to minimize user inconvenience.

Launch of JAS-1 is planned for early 1986 into a 1500 km altitude, 50
degree inclination orbit. Note that this orbit will NOT be
sun-synchronous, unlike that planned for PACSAT.

Phil Karn, KA9Q
Asst. VP Engineering, AMSAT

From 1465643438284215371
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e39aef836f2ab47,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-26 07:43:48 PST
Message-ID: <bnews.houxp.224>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!hou5f!hou5b!hou5c!hou5e!hou5a!hou5d!
houxz!hogpc!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!hou5f!hou5b!hou5c!hou5e!hou5a!hou5d!
houxz!hogpc!houxq!houxp!ad7i
From: houxp!ad7i
Date: Sat Mar 26 10:43:45 1983
Subject: ad7i qrv
X-Google-Info: Converted from the original B-News header
Posted: Fri Mar 25 10:17:27 1983
Received: Sat Mar 26 10:43:45 1983

QST: sorry for the delay in posting these bulletins.
I have been off the air for about 10 days.

ad7i

From -5158897188126704000
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,44ef138f656c756,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-26 08:10:42 PST
Message-ID: <bnews.houxp.222>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxi!houxz!
hogpc!houxq!houxo!houxp!ad7i
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxi!houxz!
hogpc!houxq!houxo!houxp!ad7i
From: houxp!ad7i
Date: Sat Mar 26 11:10:38 1983
Subject: SPCL A: Call Signs
X-Google-Info: Converted from the original B-News header
Posted: Fri Mar 25 10:16:13 1983
Received: Sat Mar 26 11:10:38 1983

qst de ad7i

hr spcl bulletin a from arrl headquarters
newington ct march 17, 1983
to all radio amateurs bt

the following list shows the last call sign to be assigned for each
district, as of the first of march,

dist.	a	b	c	d	
0	ky0q	kd0cw	n0enh	ka0puf	
1	ko1g	kb1gl	n1cor	ka1jzc	
2	kz2e	kc2xe	n2edy	ka2rrd	
3	kn3f	kc3gu	n3dhy	ka3kse	
4	wn4d	kf4tn	n4ikj	kb4ehs	
5	nf5a	kd5xi	n5fsp	ka5qfv	
6	nt6g	kf6qa	n6igs	ka6zbf	
7	nb7k	kd7he	n7ezy	ka7poh	
8	na8t	kd8eg	n8ess	ka8rum	
9	ku9o	kc9yk	n9duk	ka9pdz	
hi	wh6h	ah6ep	kh6wu	wh6avu	
ak	wl7r	al7ev	nl7aj	wl7azb	ar

From 5523158892992919028
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c0f28fd0cbf74191,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-26 08:19:00 PST
Message-ID: <bnews.houxp.221>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxi!houxz!
hogpc!houxq!houxo!houxp!ad7i
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxi!houxz!
hogpc!houxq!houxo!houxp!ad7i
From: houxp!ad7i
Date: Sat Mar 26 11:18:51 1983
Subject: ARRL 22: No Code
X-Google-Info: Converted from the original B-News header
Posted: Fri Mar 25 10:15:28 1983
Received: Sat Mar 26 11:18:51 1983

qst de ad7i
hr arrl bulletin nr 22 from arrl headquarters
newington ct march 18, 1983
to all radio amateurs bt

the fcc released an order on march 18 granting arrls request to extend
the comment deadline on fccs no code license proposal, p.r. docket no.
83 28. new comment deadline is june 28, 1983 with reply comments by
july 28, 1983 ar

From -2512103813028285620

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,91c084c7baf300c0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-26 08:21:20 PST
Message-ID: <bnews.houxp.220>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxi!houxz!
hogpc!houxq!houxo!houxp!ad7i
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxi!houxz!
hogpc!houxq!houxo!houxp!ad7i
From: houxp!ad7i
Date: Sat Mar 26 11:21:17 1983
Subject: ARRL 20: Polish operation
X-Google-Info: Converted from the original B-News header
Posted: Fri Mar 25 10:14:47 1983
Received: Sat Mar 26 11:21:17 1983

qst de ad7i
hr arrl bulletin nr 20 from arrl headquarters
newington ct march 17, 1983
to all radio amateurs bt

according to information just received, polish stations will be
permitted back on the air for the annual sp dx contest. the contest
will be held on schedule, from 1500z april 2 until 2400z april 3.
the contest is cw only, 80 through 10 meters. sp stations will send
signal reports and a two letter abbreviation for their province.
others send signal report and serial number. complete rules are
available from arrl hq for an s.a.s.e. ar

From -3033117606139269486
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d30d92d6b39ca739,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-26 10:09:09 PST
Message-ID: <bnews.uw-june.347>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!cornell!uw-beave!uw-june!phil
X-Path: utzoo!decvax!harpo!floyd!vax135!cornell!uw-beave!uw-june!phil
From: uw-june!phil
Date: Sat Mar 26 13:09:02 1983
Subject: an open letter to KA9Q/2
X-Google-Info: Converted from the original B-News header
Posted: Fri Mar 25 10:38:39 1983
Received: Sat Mar 26 13:09:02 1983

Phil,
  Let me say at the start that I do not support the code free license.
Yes, I agree, it is an emotional issue to me. My arguments can not be
supported in hard fact.
  In reference to the code being easy (for a Boy Scout) and hard (a test

of dedication) at the same time, it was never stated that the Boy Scout did not need the same dedication to learn the code. In fact, from my own experience in a Scout type orginazation, only the most dedicated of us learned all the letters and the instructor dissappeared before any of us learned it at 5 wpm, thus ending the class. As I'm sure you know, learning the code is easy for some people while being difficult for others. This is of course the same for the theory.

I also agree with you that Dave's (WN9NBT) comparison to addition and calculus isn't really appropriate, so let me give a comparison that seems better. I am a private pilot. One of the requirements for the license is the ability to read weather charts. I find the weather charts very complex and difficult to read. In fact, every time I read a weather chart, I must to some extent relearn how to read them. In actual use of an airplane, I am restricted to VFR (and good weather). Also, every time I need the weather charts, the people at the flight service station will read them for me. I suspect that 95% of all private pilots never NEED to read a weather chart to conduct a safe flight. But I will not recommend that this requirement be removed, even though this area was the most difficult part of earning the pilot's license for me.

In reply to your remark "a lot of the opposition to the code free license is based on a fear of others who might prove to be more technically competent than themselves." First of all, I think I am reasonably technically competent. Secondly, I would hope that hams as a general rule, would not be so insecure that more technically competent people would pose a threat to them. I believe that a lot of the opposition to the code free license is based on the fear of the results of removing requirements in light of the history of the CB band.

Thank you for tolerating my point of view.
Phil WB6OHF/7

From 7077416851312307994
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d30d92d6b39ca739
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-27 02:23:38 PST
Message-ID: <bnews.eagle.852>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sun Mar 27 05:23:34 1983
Subject: Re: an open letter to KA9Q/2
References: <bnews.uw-june.347>
X-Google-Info: Converted from the original B-News header
Posted: Sat Mar 26 14:04:04 1983
Received: Sun Mar 27 05:23:34 1983

To Phil, WB6OHF/7:
Thanks for your well thought out reply.

I would point out that your comparison to pilots being required to read weather charts is not really relevant either, as being able to do so is

probably a safety consideration. How much money and time should be spent on safety measures is an entirely different philosophical issue that I don't want to get into here. If the only basis for an amateur license test was safety, then the theory examinations would be even simpler than they currently are.

The point is often made that amateur radio would immediately degenerate to CB if a code free license were made available; my point is simply that there are more relevant things (such as stiffer theory exams requiring the same amount of preparation) that could replace the code requirement as a "test of dedication". It is only after I saw this point of view rejected that I began to suspect the "technical insecurity" I alluded to in my previous comments.

Phil Karn, KA9Q/2

From 908468442240822955
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,eb24cb441d56d018,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-27 04:52:17 PST
Message-ID: <bnews.eagle.853>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sun Mar 27 07:52:15 1983
Subject: Packet Conference Proceedings
X-Google-Info: Converted from the original B-News header
Posted: Sat Mar 26 19:01:55 1983
Received: Sun Mar 27 07:52:15 1983

For those of you interested in packet radio, extra copies of the proceedings from the recent San Francisco conference are available. They contain papers on the AX.25 level 2 standard and PACSAT, the AMSAT packet radio satellite, among other topics. If you'd like a copy, send a check for $9 payable to "ARRL" and send it to

  American Radio Relay League
  Second Computer Networking Conference Proceedings
  Newington CT 06111

From 3085535489895728917
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ad39180cbeca7413,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-27 23:00:40 PST
Message-ID: <bnews.eagle.854>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn

From: eagle!karn
Date: Mon Mar 28 02:00:39 1983
Subject: UoSAT Bulletin #18
X-Google-Info: Converted from the original B-News header
Posted: Sun Mar 27 18:54:46 1983
Received: Mon Mar 28 02:00:39 1983

UOSAT SPACECRAFT CONTROL CENTRE
UNIVERSITY OF SURREY, GUILDFORD, SURREY, ENGLAND
****

UOSAT SPACECRAFT OPERATIONAL STATUS:
****
**** UOSAT BULLETIN-18 1200 GMT 25 MARCH 1983 ****

** S/C NEWS **

SEVERAL UNSUCCESSFUL ATTEMPTS HAVE BEEN MADE THROUGHOUT THE LAST WEEK TO RELEASE THE SNAGGED CABLES TO THE TIP-MASS BY ALTERNATELY RETRACTING & EXTENDING THE BOOM. PRECISE RE-CALIBRATION OF THE NAVIGATION MAGNETOMETER HAS BEEN NECESSARY BEFORE FURTHER ATTITUDE MANOEUVRES CAN BE ATTEMPTED. THE SPACECRAFT POWER BUDGET WENT THROUGH A MINIMUM AS THE PRECESSION CONE PASSED THROUGH THE SUN LINE LAST WEEK, HOWEVER THE BATTERIES ARE NOW FULLY CHARGED ONCE MORE. FURTHER ANALYSIS AND EXPERIMENTS WILL CONTINUE TO ATTEMPT TO RELEASE THE CABLES TO ALLOW GRAVITY STABILISATION.

** S/C ATTITUDE **

THE SPACECRAFT IS CURRENTLY SPINNING IN A STABLE MANNER WITH A Z-PERIOD OF 110 SECS AND A LARGE NUTATION ANGLE.

** S/C OPERATIONS SCHEDULE **

SATURDAY & SUNDAY......145 MHZ 1200 TELEM/BULLETIN/SPEECH TELEMETRY

WEEKDAYS.....145/435 MHZ 1200 TELEM; SPEECH; CCD TESTS
.....WHOLE ORBIT DATA DUMPS; MAG & RAD DATA

** THANKS FOR FEEDBACK **

VE2QO, ZL1AOX, JA4GVA, HB9RKR, HB9RJV, JA2GSD, G8EDG, G4LZV, JH7CKF, K1KSY KA9Q, W7AVE, G6ESK, G3UMF - MANY THANKS FOR DATA

** POST BOX **

JR1SWB DE G3YJO...HOPE TO HAVE TELEMAIL HERE SOON, SORRY FOR DELAYS IN TRAVEL.

CQ DE G3YJO...QSL CARDS AVAILABLE SOON - SLIGHT DELAY.

SPACECRAFT ORBITAL DATA

ORBITS FOR 25TH MARCH

	UOSAT	OSCAR-8	NOAA-7	
ORBIT NO :	8107	25752	9038	
EQX TIME :	15:08:17	15:31:06	14:32:19	GMT
EQX LONG :	359.4	189.6	1.1	DEG.W
MEAN HGT :	505.6	905.0	850.0	KM
PERIOD :	94.7218437	103.1670237	101.9106150	MINS
P-DRAG :	5.718E-05	2.166E-06	7.500E-06	*N-REF
LONG INC :	23.6800177	25.7936043	25.4881924	DEGS
L-DRAG :	1.438E-05	7.030E-07	2.000E-07	*N-REF

QSL/POST CARDS CONFIRMING RECEPTION OF UOSAT DATA INCLUDING
STATION DETAILS WOULD BE APPRECIATED FOR SURVEY OF NO. AND
GEOGRAPHIC DISTRIBUTION OF ACTIVE STATIONS
SEND TO: DR.M.N.SWEETING, UOSAT CONTROL CENTRE - THANK YOU

From -4077458043497995180
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d167883f50946f94,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-29 22:19:41 PST
Message-ID: <bnews.dsd.150>
Newsgroups: net.ham-radio
Path: utzoo!decvax!decwrl!sun!megatest!fortune!dsd!dna
X-Path: utzoo!decvax!decwrl!sun!megatest!fortune!dsd!dna
From: dsd!dna
Date: Wed Mar 30 01:19:32 1983
Subject: AX.25 Level 2 Protocol
X-Google-Info: Converted from the original B-News header
Posted: Mon Mar 28 18:14:03 1983
Received: Wed Mar 30 01:19:32 1983

AX.25 LEVEL 2 PROTOCOL

Terry Fox, WB4JFI
Vice-President, AMRAD
1819 Anderson Road
Falls Church, VA 22043

Abstract

This paper contains the latest draft of the AX.25 protocol specification. This is the first public release of this draft. Earlier drafts have been given to specific inviduals for comment and as a reference for software development. Changes should be expected. Please check the AMRAD Newsletter for announcements of later versions.

History

Over the years there have been several protocols suggested for use at layer 2 of the ISO Open System Interface Reference Model (OSI-RM) over Amateur Radio. The one system that has been in use is based on the IBM SDLC protocol, and it has been working as far as it went. One of the immediate problems that came up with SDLC was that its address field of SDLC is very limited (being one byte long), causing problems if there are many amateurs on at a time.

Trying to come up with a protocol that everyone would agree to seemed like an almost impossible task a year ago. What we at AMRAD decided to do was to go over the various protocols in use or available to the amateur, figure out the best and worst parts of each protocol and see if the proto col could be "enhanced" to work properly over the amateur radio enviroment. After reviewing the various protocols around and talking with people in the computer networking industry, we decided to push the X.25 standard, modified to allow a larger address field. At about this time, a group of amateurs in New Jersey were coming to the same conclusion, so about mid-June of 1982 the two groups got together and after two weekends came to an "understanding" on a level 2 protocol. The most delicate part of the negotiations between the two groups concerned the name to be given this protocol. In order to not step on anyones toes, it was decided to call the protocol AX.25, which stands for Amateur X.25.

The next step in the evolvement of AX.25 was that in October of 1982, AMSAT hosted a gathering of some of the leaders in amateur packet radio. AMRAD was at the meeting, along with representatives from TAPR, SLAPR, AMSAT, and PPRS. Three days of intense discussion followed, and an agree-

ment was finally reached on a nation-wide compatible protocol. AX.25 was then modified to be compatible with this new protocol (basically the only major changes were an additional extension of the address field, and the addition of a Protocol IDentifier, or PID field).

The rest of this paper will describe the basics of the AX.25 level 2 protocol.

AX.25 Layer 2 Protocol Specifcation

This protocol conforms with the ISO Recommendations 3309, 4335 (including DAD 1&2) and 6256 high-level data link control (HDLC) and uses some terminology found in these documents.

This protocol also conforms with ANSI X3.66, describing ADCCP, balanced mode.

This protocol is written to work equally well in either half- or full-duplex amateur radio enviroments.

This protocol has been written to work equally well for either point-to-point connections, or connections made thru a larger device, such as a metropolitan network controller (MNC).

This protocol does allow the establishment of more than one layer 2 (link layer) connection per device, if the device is so capable.

This protocol also follows in principle the CCITT X.25 recommendation, with the exception of an extended address field and the addition of the Unnumbered Information (UI) frame.

Most layer 2 protocols assume that one large device (generally called a DCE, or data circuit-terminating equipment) is connected to several smaller devices (usually called a DTE, or data terminating equipment). AX.25 assumes that both ends of the link are balanced, thereby eliminating the two different classes of device.

Frame_Structure

Level 2 packet-radio transmissions are sent in small blocks, called frames. These frames are made up of smaller parts, called fields. Fig. 1 shows how the three types of frames are made up.

Fig. 1 shows the frames in the same bit order that most packet articles show them. Unfortunately, this method has led to some confusion, since the least-significant bit (LSB) is to the left rather than to the right, as most people would ordinarily assume. I am pointing this out early in this paper to prevent mass confusion as I progress. Later on, I will switch to a hopefully more under standable way of showing the frame ans its compo nents.

Field_Definitions

The frame is made up of several parts, called fields. Each of these fields is made up of an integral number of octets (or bytes), and serves a specific function.

Flag_Field

Since amateur packet radio is a bit-oriented protocol, the only way to tell when one frame is over and another is starting for sure is to delimit each frame with a certain bit sequence both at the beginning and the end. This is the job of the flag field. A flag consists of a zero followed by six ones followed by another zero, or 01111110 (7E hex). Due to the bit stuffing mentioned above, the only time this sequence is allowed is at the beginning and end of a legitimate frame.

Address_Field

The address field is used to identify both where the frame came from and what the destination of it is. In the CCITT recommendation X.25, this field is only one octet long. This permits at most 256 users per level 2 channel, and since some bits of this field were used for other purposes, the real number of users were about thirty per level 2 channel. Both the HDLC and ADCCP recom-mendations allowed the address field to be ex-tended, so we decided to extend the address field per their recommendations in the amateur version of X.25 to include the callsigns of both the destination and source amateur radio stations.

The method used to extend the address field will be described shortly.

Control_Field

The control field is used to identify the type of frame and control several attributes of the level 2 connection. It is one octet in length, and its encoding will be discussed in a following section.

PID-Field

The Protocol Identifier (PID) field is used only in information frames, and identifies what kind of layer 3 protocol, if any, is in use. Its encoding is as follows:

MSB LSB	
xx00xxxx	Reserved at the moment.
xx01yyyy	AX.25 layer 3 implemented.
xx10yyyy	AX.25 layer 3 implemented.
11110000	No layer 3 implemented.
11111111	Escape character. Next byte contains more PID information.

Where:

1. An x indicates a "don't care" bit.
2. A y indicates all combinations used.

Information_Field

The information field is used to convey the actual user data from one end of the link to the other. I fields are allowed in only three tyes of frames, the I frame, the UI frame, and the FRMR frame. The I field can be up to 256 octets long, and should be an even multiple of octets long. Any information in the I field should be passed along the link totally transparently, except for any zero-bit insertion necessary to prevent flags from accidentally appearing in the I field.

Frame_Check_Sequence

The frame-check sequence is a sixteen-bit number calculated by both the sender and receiver of a frame. It is used to make sure that the frame was not corrupted by the medium used to get the frame from the sender to the receiver. It is calculated in accordance with ISO 3309 (HDLC) recommendations.

Bit_Stuffing

In order to assure that the flag sequence mentioned above doesn't accidentially appear any where else in a frame, as the frame is being sent it should be monitored, and if more than five contiguous ones are detected, a zero bit should be added between the fifth and sixth ones, eliminating the possibility of a flag appearing in the frame other than where it belongs. The receiver of five ones, a zero, and more ones should automatically eliminate the inserted zero before passing the data on.

Bit_Order_of_Transmission

With the exception of the FCS field, all other fields in an AX.25 frame should be sent starting with the least-significant bit. In accordance with HDLC practices, the FCS should be sent most-significant bit first.

Frame_Abort

If a frame must be prematurely aborted, at least fifteen contiguous ones should be sent with no bit stuffing added.

Invalid_Frames

Any frame consisting of less than 136 bits, or not bounded by opening and closing flags, or not octet aligned (an integral number of octets) should be considered an invalid frame by the link layer.

Address_Field_Encoding

The address field of all frames should be encoded with both the destination and source amateur callsigns of the frame. If a level 2 amateur "repeater" is to be used, its callsign should also be in the address field. AX.25 follows the HDLC recommended method of extending the address field in order to fit all this information into the address field.

Basically, the way the HDLC address field is extended beyond one octet is to reserve the least-significant bit of each octet for what is called an "extender bit". This bit is set to zero if the next octet contains more address field information, and is set to one if this is the last octet. To make room for this extender bit, the amateur radio call sign information is shifted one bit to

the left.

The actual encoding techniques for both non-repeater and repeater operation follows.

Non-Repeater_Address-Field_Encoding

If a level 2 repeater is not being used, the address field is encoded as shown in Fig. 2. The destination address is the call sign of the amateur radio station that the frame is addressed to, while the source address contains the amateur call sign who sent the frame. These call signs are the call signs of the two ends of a level 2 AX.25 link only, not of any other station, such as the destination of a packet going thru an intermediary link. Those addresses should be in a higher layer, not layer 2.

A1 thru A14 are the fourteen octets that make up the two address sub-fields of the address field. The destination sub-address is seven octets long (A1 thru A7), and is sent first. This will allow the receivers of the frame time to check the destination address sub-field and see if the frame is for them while the rest of the frame is being received. The source address sub-field is then sent in octets A8 thru A14. Both of these sub-fields are encoded in the same manner, except for the last octet having the HDLC address extender bit set. Since they are basically the same, only the destination sub-address will be outlined.

There is an extra octet at the end of each address sub-field that allows room for a Secondary-Station Identifier (SSID) and three additional bits for future expansion. The SSID field allows an Amateur Radio operator to have more than one packet radio station. This is useful when an amateur wants to put up a repeater in addition to his regular station for example.

Appendix A shows a typical AX.25 frame in the non-repeater mode.

Destination Sub-Field Encoding

Fig. 3 shows how an amateur call sign is placed in the destination address sub-field, occupying octets A1 thru A7.

| Octet | ASCII |Bin.Data|Hex Data|

```
-----------------------------------
|  A1   |   W   |10101110|   AE   |
|  A2   |   B   |10000100|   84   |
|  A3   |   4   |01101000|   68   |
|  A4   |   J   |10010100|   94   |
|  A5   |   F   |10001100|   8C   |
|  A6   |   I   |10010010|   92   |
|  A7   | SSID  |0RRSSID0|        |
-----------------------------------
Bit Position-->  76543210
```

Fig. 3. Destination Field Encoding

Where:

1. The top octet (A1) is the first octet sent (sort of like popping it off the top of the stack), with bit 0 of each octet being the first bit sent, and bit 7 being the last bit sent.

2. The first (low order or bit 0) bit of each octet is the HDLC extender bit, which is set to zero on all but the last octet in the address field, where it is set to one.

3. The bits marked "R" are reserved bits. they may be used in an agreed upon manner in individual networks. If they aren't implemented, they should be set to one.

4. The characters of the callsign should be standard seven-bit ASCII (upper case only) before being shifted left to make room for the extender bit. If the callsign is less than six characters long, it should be padded at the trailing end with ASCII spaces between the end of the callsign and the SSID octet.

5. The SSID portion of the last octet has been intentionally left vague at this point, and is left up to the individual station to assign. The only recommended restriction is to reserve the all-one condition (1111) for an all-call SSID in case one wants to reach an amateur but dooesn't know what SSID that amateur operates under.

Level_2_Repeater_Address-Field_Encoding

If a frame is to go thru a level 2 amateur packet repeater, there is an additional address sub-field added to the end of the address field. This additional sub-field contains the call sign of the repeater to be used. This will allow more than one repeater to share the same rf channel, which has been a problem with the older protocols. If this field exists, the last octet of the source sub-field has its extender bit set to zero, indicating that more address-field data follows. The repeater address sub-field is encoded in the same manner as the destination and source address sub-fields, except for one bit in the last octet, called the "H" bit. The H bit is used to indicate whether a frame has been repeated or not. This is necessary to prevent someone from potentially receiving two identical frames, the one going to the repeater, and the one coming back from the repeater. Fig. 4 shows how the repeater address sub-field is encoded. Appendix B is an example of a complete frame on its way back from a repeater.

Octet	ASCII	Bin.Data	Hex Data
A15	W	10101110	AE
A16	B	10000100	84
A17	4	01101000	68
A18	J	10010100	94
A19	F	10001100	8C
A20	I	10010010	92
A21	SSID	HRRSSID1	

Bit Order --> 76543210

Fig 4. Repeater Address Encoding

Where:

1. The top octet is the first octet sent, with bit 0 being sent first, bit 7 sent last of each octet.

2. As with the source and destination address sub-fields discussed above, bit 0 of each octet is the HDLC address extender bit, which is set to zero on all but the last address octet (A21) where it is set to one.

3. The "R" bits are reserved just like in

the source and destination sub-fields.

4. The "H" bit is the has-been-repeated bit. It is set to zero on a non-repeated frame, and set to one by the repeater when the frame has been repeated.

It should be noted that some of the advantages of this addressing scheme are mentioned in Appendix C.

Control_Field_Formats

The control field is responsible for identifying what type of frame is being sent, and is also used to convey commands and responses from one end of the link to the other to maintain proper control over the link.

The control fields used in AX.25 use the CCITT X.25 control fields for balanced operation, with an additional control field taken from ADCCP to allow connectionless and round-table operation.

There are three general types of AX.25 frames. They are the Information frame (I frame), the Supervisory frame (S frame), and the Unnumbered frame (U frame). Fig. 5 shows the basic format of the control field associated with these types of frames.

Control Field	Control Field Bits							
Type	7	6	5	4	3	2	1	0
I Frame	N(R)			P/F	N(S)			0
S Frame	N(R)			P/F	S	S	0	1
U Frame	M	M	M	P/F	M	M	1	1

Fig. 5. Control Field Formats

Where:

1. Bit 0 is the first bit sent, bit 7 is the last bit sent of the control field.

2. N(S) is the send sequence number (bit 2 is the LSB).

3. N(R) is the receive sequence number (bit 6 is the LSB).

4. The "S" bits are the supervisory function bits, and their encoding is discussed below.

5. The "M" bits are the unnumbered frame modifier bits and their encoding is discussed below.

6. The P/F bit is the Poll/Final bit. Its function is described in more detail shortly.

Control_Field_Definitions

Information Frame Control Field

All I frames have bit 0 of the control field set to zero. N(S) is the sender's send sequence number (the send sequence number of this frame). N(R) is the sender's receive sequence number (the sequence number of the next expected received frame. These numbers are described in the section regarding flow control.

Supervisory Frame Control Field

Supervisory frames are denoted by having bit 0 of the control field set to one, and bit 1 of the control field set to zero. S frames provide supervisory link control such as acknowledging or requesting retransmission of I frames, and link level window control. Since S frames don't have an information field, the sender's send variable and the receiver's receive variable are not incremented for S frames.

Unnumbered Frame Control Field

Unnumbered frames are distinguished by having both bits 0 and 1 set to one. U frames are responsible for maintaining control over the link beyond what is accomplished with S frames. They are also responsible for the establishment and tearing down of the link. U frames also allow for the transmission and reception of information outside of the normal flow control. Some U frames may contain information fields.

Control_Field_Parameters

Sequence_Numbers_and_Variables

Every AX.25 I frame shall be assigned a sequential number from 0 to 7. This will allow up to seven outstanding I frames per level 2 connection at a time.

Send_State_Variable_V(S)

The send state variable is an internal variable that is never sent. It contains the next sequential number to be assigned to the next transmitted I frame. This variable is updated upon the transmission of each I frame.

Send_Sequence_Number_N(S)

The send sequence number is found in the control field of all I frames. It contains the sequence number of the I frame being sent. Just prior to the transmission of the I frame, N(S) is updated to equal the send state state variable.

Receive_State_Variable_V(R)

The receive state variable is an internal variable that contains the sequence number of the next expected received I frame. This variable is updated upon the reception of an error-free I frame whose send sequence number equals the present received state variable value.

Received_Sequence_Number_N(R)

The received sequence number is in both I and S frames. Prior to sending an I or S frame, this variable is updated to equal that of the received state variable, thus implictly acknowledging the proper reception of all I frames up to and including N(R)-1.

Poll/Final_(P/F)_Bit

The P/F bit may be used in all types of frames. It is used in a command (poll) mode to request an immediate reply to a frame. The reply to this poll is indicated by setting the response (final) bit in the appropriate frame. Only one outstanding poll condition per direction is allowed at a time.

Control_Field_Encoding

Information_Frame_Control_Field

The information frame control field is encoded as shown in Fig. 6. These frames are sequentially numbered to maintain control of their passage over the link level connection.

Control Field Bits

7 6 5	4	3 2 1	0
N(R)	P/F	N(S)	0

Fig. 6. I Frame Control Field

Supervisory_Frame_Control_Field

The supervisory frame control fields are encoded as shown in Fig. 7. In AX.25, S frames are used only as responses to other frames.

Control Field Bits	7 6 5	4	3 2	1 0
Receive Ready RR	N(R)	P/F	0 0	0 1
Receive Not Ready RNR	N(R)	P/F	0 1	0 1
Reject REJ	N(R)	P/F	1 0	0 1

Fig. 7. S frame control Fields

Receive_Ready_(RR)_Response

Receive Ready is used to do the fol lowing:

1. To indicate that the sender of the RR is now able to recieve more I frames.

2. To acknowledge properly received I frames up to, and including N(R)-1.

3. To clear a previously set busy condition created by an RNR command having been sent.

It should be noted that the status of the other side of the link can be requested by setting the poll bit.

Receive_Not_Ready_(RNR)_Response

Receive not ready is used to indicate to the sender of I frames that receiver is temporari-

ly busy and cannot accept any more I frames. Frames up to N(R)-1 are acknowledged. Any I frames numbered N(R) and higher that might have been caught in between and not acknowledged when the RNR command was sent are NOT acknowledged.

The RNR condition can be cleared by the sending of a UA, RR, REJ, or SABM frame. The P/F bit can be used within the RNR frame to interrogate the status of the other side of the link.

Reject_(REJ)_Response

The reject frame is used to request retransmission of I frames starting with N(R). Any frames that were sent with a sequence number of N(R)-1 or less are acknowledged. Additional I frames may be appended to the retransmission of the N(R) frame if there are any.

Only one reject frame condition is allowed in each direction at a time. The reject condition is cleared by the proper reception of I frames up to the I frame that caused the reject condition to be initiated.

As with the other supervisory responses, the P/F bit may be used in the REJ frame.

Unnumbered_Type_Frames

Unnumbered frame control fields are either commands or responses. This standard follows X.25 as much as possible. The only deviation from X.25 is in the addition of the Unnumbered Information (UI) frame from ADCCP. X.25 is designed to work with in full-duplex systems with only one main device (DCE) and potentially many users (DTEs).

Amateur Radio packet systems differ greatly on both of these respects. Not only is Amateur Radio packet networking done in a half-duplex rf environment, but many DCE/DTE links many be sharing the same channel. Many amateurs have rejected the use of X.25 as a result of these problems. X.25 can easily be enhanced so that it will perform properly over amateur radio.

Fig. 8 shows the layout of U frames implemented within this standard.

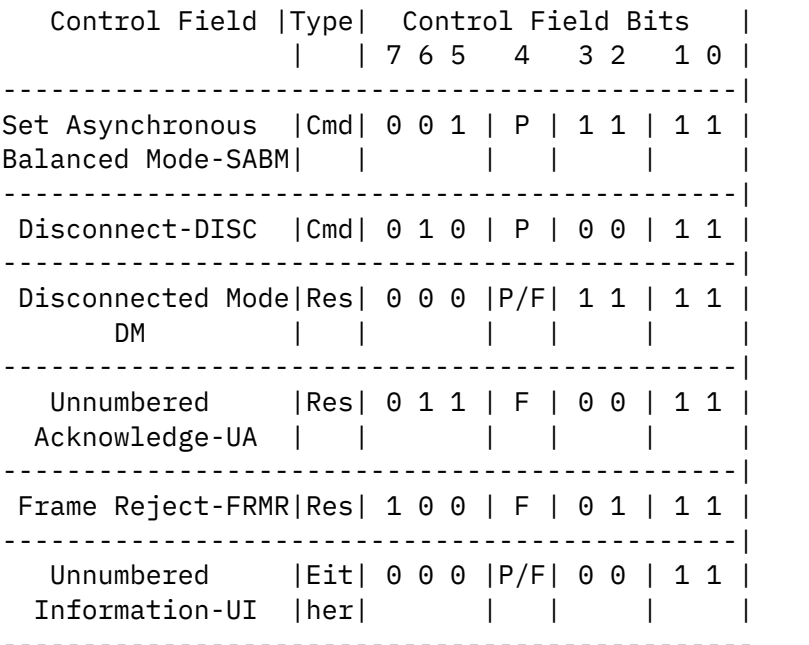


Fig. 8. U Frame Control Fields

Set_Asynchronous_Balanced_Mode_(SABM)_Command

The SABM command is used to place 2 stations in the asynchronous balanced mode. This is a balanced mode of operation known as LAP B where DCEs and DTEs are treated as equals.

Information fields aren't allowed in SABM commands. Any outstanding I frames left when the SABM command is issued will remain unacknowledged.

Disconnect_(DISC)_Command

The DISC command is used to terminate a link session between two stations. No information field is permitted in a DISC command frame. Any outstanding I frames will remain outstanding.

Disconnected_Mode_(DM)_Response

The disconnected mode response is sent whenever the DTE or DCE receives a frame other than a SABM while in a disconnected mode. It is sent to request a set mode command, or to indicate it cannot accept a connection at the moment. The DM response cannot have an information field.

A DCE or DTE in the disconnected mode will respond to any command other than a SABM with a DM response with the P/F bit set to 1.

Unnumbered_Acknowledge_(UA)_Response

The UA response frame is sent to acknowledge the reception and acceptance of a U frame command. A received command is not actually processed until the UA response frame is sent. An information field is not permitted in a UA frame.

Frame_Reject_(FRMR)_Response

The FRMR response frame is sent to report that for some reason the receiver of a command or information frame cannot successfully process that frame and that the error condition is not correctable by sending the offending frame again. Typically this condition will appear when a frame without an FCS error has been received with one of the following conditions:

1. The reception of an invalid or not implemented command or response frame.

2. The reception of an I frame whose information field exceeds the agreed upon length.

3. The reception of an improper N(R). This usually happens when the N(R) frame has already been sent and acknowldeged, or when N(R) is out of sequence with what was expected.

4. The reception of a frame with an information field where one is not allowed, or the reception of an U or S frame whose length is incorrect.

When a CMDR or FRMR frame is sent, an information field is added to the frame that helps to explain where the problem occurred. This information field is three octets long and its contents is shown if Fig. 9 below.

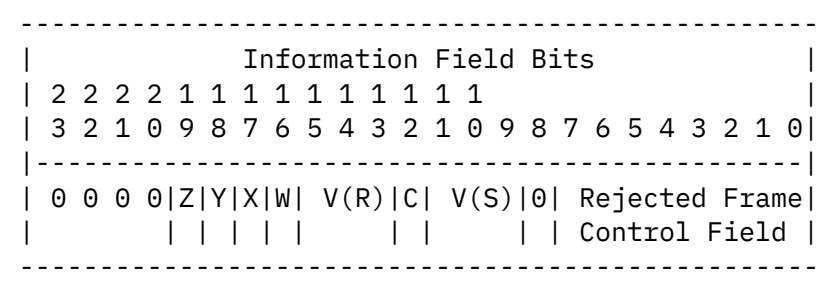


Fig. 9. FRMR Frame Information Field

Where:

1. The rejected frame control field carries the control field of the frame that caused the reject condition. It is in bits 1-8 of the information field.

2. V(S) is the current send state variable of the device reporting the rejection (bit 10 is the low bit).

3. V(R) is the current receive state variable of the device reporting rejection (bit 14 is the low bit).

4. If W is set to 1, the control field received was invalid or not implemented.

5. If X is set to 1, the frame that caused the reject condition was considered invalid because it was a U or S frame that had an information field that is not allowed. Bit W must be set to 1 in addition to the X bit.

6. If Y is set to 1, the information field of a received frame exceeded the maximum capacity of the device reporting the condition.

7. If Z is set to 1, the control field received and returned in bits 1 to 8 contained an invalid N(R).

8. Bits 8, and 20 to 23 are set to 0. Bit 12 is set to 0 if the rejected frame was a command, or 1 if if it was a response.

Unnumbered_Information_(UI)_Frame

The unnumbered information frame is used to pass information along the link outside the normal information controls. This allows information fields to go back and forth on the link bypassing flow control. Since these frames are NOT acknowledgeable, if one gets wiped out, there is no way to recover it.

The UI frame is not defined in X.25. It has been taken from ADCCP to allow uncontrolled information to flow thru the link without interfering with a next higher layer.

Link_Error_Recovery

There are several link-level errors that are recoverable without tearing down the connection. These error situations may occur as a result of malfunctions within the DTE or DCE, or if transmission errors occur.

Invalid_Frame_or_FCS_Error

If an invalid frame is received, or a frame is received with an FCS error, that frame will be discarded with no action taken.

Device_Busy_Condition

When a DTE or DCE becomes temporarily busy, such as when receive buffers are full, it will send a receive not ready (RNR) frame. This tells the other side of the link that the device cannot handle any more I frames at the moment. This condition is usually cleared by the sending of a UA, RR, REJ, or SABM command frame.

Send_Sequence_Number_Error

If the send sequence number , N(S), of an otherwise error-free received I frame does not match the receive state variable, V(R), a send sequence error has occured, and the information field will be discarded. The receiver will not acknowledge this frame, or any other I frames until N(S) matches V(R).

The control field of the erroneous I frame(s) will be accepted so that link supervisory functions can still be performed, such as checking the P/F bit. Because of this updating, the re-transmitted I frame may have an updated P bit and N(R).

Reject_(REJ)_Error_Recovery

REJ is used to request a retransmission of I frames following the detection of a sequence error. Only one outstanding reject condition is allowed at a time. This condition is cleared when the requested I frame has been received.

A device receiving the REJ command will clear the error by sending over the I frame indicated in N(R) of of the REJ command frame.

Time-out_Error_Recovery

When a transmission abnormality wipes out a single I frame, or the last I frame of a group, there is no way of telling this immediately, since the receiver does not necessarily know something was sent until another frame is sent resulting in an out-of-sequence error. To cope with this situation better, some form of time-out delay will be incorporated by the sender after it sends out a frame. This time-out timer is started at the time a frame is sent, and stopped by the reception of an acknowledgement for the sent frame. If the timer times out before an acknowledgement is received, any unacknowledged frames are retransmitted. The delay is an agreed-upon amount that will vary with the type of rf medium and signaling speed used.

Rejection_Error

A rejection error condition occurs when an error-free received frame has one of the following problems:

1. An invalid command or response control field.

2. An invalid frame format.

3. An Invalid N(R).

4. An information field that exceeds the maximum the device can accept.

Once a rejection error occurs, no more I frames are accepted (with the exception of the P/F bit still usable) until the error is resolved. The error condition is reported to the other side of the link by sending a FRMR response frame.

Primary/Secondary_versus_Balanced_Operation

There are two basic classes of link-level connections. The first, known as Link Access Procedure (or LAP) is often called an unbalanced service where the DCE is considered the primary (or master) devices and the DTEs are considered secondary (or slave) devices. The second class of service is known as LAPB, Link Access Procedure Balanced. In this service both devices are

treated as equals as far as connection requests and other types of commands. There is still only one DCE and potentially many DTEs, but both ends can command the link equally.

Primary/Secondary_(LAP)_Operation

LAP is the older style of link control, where most of the intelligence was assumed to be in a large mainframe (the DCE) and the end users were just using smart terminals (the DTEs). Since network software can have a lot of overhead, it made sense at the time to put most of the overhead in the big computer, and just enough smarts to make the link work in the terminals.

Balanced_(LAPB)_Operation

LAPB is a slightly modified version of LAP. It has been changed to allow the two sides of a link to operate in a more balanced manner. In the official version of X.25 there is still only one DCE to potentially many DTEs, but the two can operate more as equals than master and slave.

LAPB is what this document describes for use over Amateur Radio packet networks. Even when there is a network controller overseeing the network operation, the balanced link procedure will enhance operation.

Connection_Operation

In amateur radio network operations, it would be very helpful if one level 2 protocol would work with the various rf systems in use. An example of this is the difference in operation between a simple two-station link, and multiple stations operating thru a network controller. Obviously, when a network controller exists, it should be considered the DCE, while the other stations connecting to it would be the DTEs. A simple two-station connection is another matter. To this type of connection the station requesting a connection should always be considered the DTE, while the device that is receiving the connection request should operate as the DCE. This simple rule should eliminate any ambiguity that might otherwise occur under these conditions.

NOTE There are a couple minor changes from the official X.25 standard in the protocol recommended here. These changes are done only as abso-

lutely necessary to work over the shared rf media. Since X.25 was written to work so that one DCE talked with many DTEs over a closed network, it cannot properly cope with a channel where there may be many DCEs linked to many DTEs. Some amateurs have thrown X.25 out because of this problem. It seems to take just a couple minor changes in the initial link set-up procedure to make X.25 work properly over amateur radio. Where these changes are made, both the original X.25 procedure and the recommended amateur procedure will be noted.

LAPB_Procedures

The following describes the procedures used to set-up, use, and disconnect a balanced link between a DTE and DCE. These procedures have been taken from X.25 and conform very closely to that standard, except where it was necessary to change due to the radio enviroment.

Address_Field_Operation

All transmitted frames shall have address fields conforming to above-mentioned rules. All frames should have both the destination device and the source device addresses in the address field, with the destination address coming first. This will allow many links to share the same rf channel. The destination address is always the address of the station(s) to receive the frame, while the source address contains the address of the dveice that sent the frame. The destination address can be a group name or club call however, if point to multi-point operation is allowed. This will be discussed further under link operations.

LAPB_Connection_Establishment

When a device (either a DCE or DTE) wishes to connect to another device, it will send a SABM command frame to that device and start a time-out timer (T1). If the other device is there and able to connect, it will answer with a UA response frame and at the same time reset both of it's internal state variables (V(S) and V(R)). The reception of the UA response frame at the other end will cause the device requesting the connection to abort the T1 timer and set its internal state variables to 0 also.

If the other device doesn't respond before T1 times out, the device requesting the connection will re-send the SABM frame, and start T1 running again. This trying to establish a connection will continue until the requesting device has tried unsuccessfully a number of times. That number (N1) is variable, depending on the frequency of operation, type of transmission (eg. terrestial vs. satellite), and the signaling speed in use. N1 will be discussed in another section.

Information_Transfer

Once a connection has been established as outlined above, both devices are able to accept I, S, and U frames.

Sending_of_I_Frames

Whenever a station has an I frame to transmit, it will send the I frame with N(S) of the control field equal to it's current send state variable V(S). Once the I frame is sent, the send state variable is incremented by one.

The station should not transmit any more I frames if it's send state variable equals the last received N(R) from the other side of the link plus seven. If it were to send more I frames, the flow control window would be exceeded and errors could result.

If a device is in a busy condition, it may still send I frames as long as the other device is not also busy.

If a device is in the frame-rejection mode, it will stop sending I frames.

Receiving_I_Frames

If a device receives a valid I frame (one with a correct FCS and whose send sequence number equals the receiver's receive state variable) and is not in the busy condition, it will accept the received I frame, increment it's receive state variable, and act in one of the following manner:

1. If it has an I frame to send, that I frame may be sent with the transmitted N(R) equal to it's receive state variable V(R) (thus acknowledging the

received frame. Alternately, the device may send an RR frame with N(R) equal to V(R), and then send the I frame.

2. If there are no outstanding I frames, the receiving device will send an RR frame with N(R) equal to V(R).

If the device is in a busy condition, it may ignore any received I frames without reporting this condition other than repeating the indication of the busy condition.

If a busy condition exists, the station receiving the busy condition indication should poll the sender of the busy indication periodically until the busy condition disappears.

The reception of I frames that contain zero length information fields shall be reported to the next level but no information field will be transferred.

When an I frame is received with a correct FCS, but it's send sequence number does not match the current receiver's receive state variable, the frame should be discarded and a REJ frame should be sent with a receive sequence number equal to one higher (modulo 8) than the last correctly received I frame . Any out-of-sequence received I frames should be handled in this manner. The received state variable and poll bit in such a discarded frame should be checked before throwing it away, and take any action needed depending on the condition of them.

Receiving_Acknowledgement

Whenever an I or S frame is correctly received, even in a busy condition, the N(R) of the received frame should be checked to see if it includes an acknowldegment of outstanding sent I frames. The T1 timer should be reset if the received frame actually acknowledges previously unacknowledged frames. If the T1 timer is reset, and there are still some frames that have been sent that are not acknowledged, T1 should be started again. If the T1 timer runs out before an acknowledgement is received, the device should proceed to the retransmission procedure.

Receiving_Reject

Upon receiving a REJ frame, the transmitting station will set its send state variable to the same value are the REJ frames received sequence number in the control field. The device will then retransmit any I frame(s) outstanding at the next available opportunity conforming to the following:

1. If the device is not transmitting at the time, and the channel is open, the device may commence to retransmit the I frame(s) immediately.

2. If the device is operating on a full duplex channel transmittiong a U or S frame when it receives a REJ frame, it may finish sending the U or S frame and then retransmit the I frame(s).

3. If the device is operating in a full duplex channel transmitting another I frame when it receives a REJ frame, it may abort the I frame it was sending and start retransmission of the requested I frames immediately.

4. The device may send just the one I frame outstanding, or it may send more than one if any more I frames followed the first one not acknowledged, provided the total to be sent does not exceed the flow control window (7 frames).

If the device recives a REJ frame with the poll bit set, it should respond with either an RR or RNR frame with the final bit set before retransmitting the outstanding I frame(s).

Receiving_an_RNR_Frame

Whenever a device receives an RNR frame, it may transmit or retransmit the I frame whose send sequence number equals that of the received sequence number indicated in the RNR control field. If timer T1 runs out after the RNR was received, the waiting acknowledgement procedure listed below should be performed. The poll bit may be used in conjunction with S frames to test for a change in the condition of the busied out station. No I frames other than the one mentioned above may be sent out before the busy condition is cleared.

Sending_a_Busy_Indication

Whenever a device enters a busy condition, it will indicate this by sending an RNR response at the next opportunity. While the device is in the busy condition, it may receive and process S frames, and if a received S frame has the P bit set to one, the device should send a RNR frame with the F bit set to one at the next possible opportunity. To clear the busy condition, the device should send either a RR or REJ frame with the received sequence number equal to the current receive state variable, depending on whether the last received I frame was properly received or not.

Waiting_Acknowledgement

The device should maintain an internal retransmission count variable which is set to zero whenever another I frame is acknowledged (either thru the reception of a UA or RNR frame, or when a received I or S frame has an N(R) higher than the last received N(R), showing the acknowledgement of additional I frames).

Any time the timer T1 runs out, the device will re-enter the timer recovery condition, the retransmission count variable will be incremented by one, and another internal variable (X) will be set to the current send state variable value.

The device will then restart the T1 timer, set its receive state variable to the last receive sequence number, and retransmit the corresponding I or S frame with the P bit set to one.

The timer recovery condition is cleared when the device receives a valid S frame with the F bit set to one.

If the device receives an S frame with the F bit set to one and N(R) within the range from the current send state variable to X mentioned above inclusive while in the timer recovery condition, this condition will be cleared, and the send state variable will be set to the N(R) received.

If the device receives an S frame with the F bit set to zero but otherwise the same condition as the last paragraph, the timer recovery condition will NOT be cleared. The re-

ceived N(R) may be used however to update the send state variable. The device may keep the last I frame transmitted (even if it was acknowledged) to be retransmitted with the P bit set to one if timer T1 expires at a later time.

Once the retransmission count variable reaches N2, the device should proceed to the resetting procedures outlined below.

Link_Disconnection

When in the information-transfer phase, either device may initiate a link disconnection by sending a DISC frame. It should then start its T1 timer, and wait for a response. If the proper response doesn't come before T1 times out, it should send the DISC frame again and restart T1. If this happens N2 times, the device should enter the disconnected state.

When a DISC frame is received, the receiver should return a UA response frame, and enter the disconnected state.

Disconnected_State

After having sent a DISC frame and received a UA, or receiving a DISC and having sent a UA, the device will enter the disconnected state.

In the disconnected state, the device may initiate a link set-up as outlined in connection establishment above. It may also respond to the reception of a SABM and establish a connection, or it may ignore the SABM and send a DM instead.

Any station receiving a DISC command while in the disconnected state should send back a DM response frame.

Any device receiving a command frame other than a SABM or UI frame with the P bit set to one should respond with a DM frame with the F bit set to one. The offending frame should also be ignored.

When the device enters the disconnected state after an error condition or if it has recovered from an internal error condition by coming up in the disconnected state, it should indicate

this by sending a DM response rather than a DISC frame. It should start the T1 timer when the DM is sent, and if T1 times out before getting a SABM or DISC frame back, it should send another DM frame, and restart T1. After retransmitting the DM frame N2 times, the device will remain in the disconnected state, and no other action will be taken.

Resetting_Procedure

The resetting procedure is used to initialize both directions of flow after a non-recoverable error has occured. This resetting procedure is only used when in the information transfer phase of an AX.25 link.

A device shall request a reset by sending an SABM frame. Upon receiving an SABM frame from a station previously connected to, the receiver of an SABM frame should send a UA frame back at the earliest opportunity. Both devices should then set their send and receive state variables to zero. Any busy condition that previously existed will also be cleared.

It is possible to initiate a disconnect procedure instead of resetting the link.

One device may ask the other to reset the link by sending a DM response frame. After the DM frame is sent, the sending device will then enter the disconnected state.

One device may ask the other to initiate a link reset by transmitting a FRMR response frame.

After sending the FRMR frame, The sending device will enter the frame reject state. This condition is cleared when the device that sent the FRMR frame receives an SABM or DISC command, or a DM response frame. Any other command received while the device is in the frame reject state will cause another FRMR to be sent out with the same information field as originally sent.

The device that sent the FRMR frame should start the T1 timer when the FRMR is sent. If above mentioned frames are not received before the timer runs out, the FRMR frame should be retransmitted, and the T1 timer restarted as des-

cribed in the waiting acknowledgement section above. If the FRMR is sent N2 times without success, the link should be reset.

Rejection_Conditions

A device should initiate the link-reset procedure when a frame is received with the correct FCS and address field during the information transfer phase with one or more of the following conditions:

1. The frame is not known as a command or response to the device.

2. The information field is invalid (as an example is longer than 256 octets).

A device will initiate a reset procedure whenever it receives a DM or FRMR response frame during the information transfer phase.

A device may initiate a reset procedure also whenever it receives a UA response frame or if it receives an unsolicited response frame with the F bit set to one.

Collision_Recovery

Collisions_in_a_Half-Duplex_Enviroment

Collisions of frames of any type in a half-duplex enviroment are essentially taken care of by the retry nature of the T1 timer and retransmission count variable. No other special action needs to be taken.

Collisions_in_a_Full-Duplex_Enviroment

Collisions in a full-duplex enviroment are not really frame collisions, but have more to do with the devices being pulled in two different directions at the same time.

Collisions_of_Unnumbered_Commands

If the sent and received U command frames are the same, both devices should send a UA response at the earliest opportunity, and both devices should enter the indicates state.

If the sent and received U commands are different, both devices should enter the discon-

nected state, and transmit a DM frame at the earliest opportunity.

Collision_of_a_DM_with_a_SABM_or_DISC

When an unsolicited DM response frame is sent, a collision between it and a SABM or DISC may occur. In order to prevent this DM from being misinterpreted, all unsolicited DM frames should be transmitted with the F bit set to zero. All SABM and DISC frames should be sent with the P bit set to one, so there isn't any confusion when a DM frame is received.

Connectionless_Operation

In Amateur Radio circles, there is a type of operation that isn't really feasable using level 2 connections. This operation is the roundtable, where several amateurs may be engaged in one conversation. The only way to accomplish this in a connected mode would be to have everyone cross-connected with each other. This would require a seperate frame to be sent to each member of the roundtable every time someone says something. Obviously, this mode is not practical. The way most amateur packet radio enthusiasts have ended up implementing the roundtable operation is outside the AX.25 connection, but still using the AX.25 frame structure. AX.25 does allow a special frame for this operation, called the Unnumbered Information (UI) frame. It is recommended that when this type of operation is in use, the destination address have a code word installed in it to prevent the users of that particular roundtable from seeing all frames going thru the shared RF medium. An example of this is if a group of amateurs are in a roundtable discussion about packet radio, they could put PACKET in the destination address, so they would only receive frames from others in the same discussion. An added advantage of the use of AX.25 in this manner is that the source of each frame is in the source address sub-field, so software could be written to automatically display who is making what comments.

Admittedly, this is a kludge to the level 2 AX.25 protocol. THis type of operation really belongs at the next layer (layer 3, packet level) of operation, but until layer 3 is implemented, this appears to be an acceptable substitute.

Keep in mind that this mode is connection-

less, so all transmitted frames should be of good quality, as there will be no requests for retransmissions of bad frames. Collisions will also occur, with the potential of losing the frames that collided.

List_of_System_Defined_Parameters

Timers

It is recommended that there are two timers used to maintain the integrity of the AX.25 layer 2 connection.

The first timer, T1, is used to make sure a device doesn't wait forever for a response to a frame it sends. This timer cannot be expressed in absolute time, since the time required to send frames varies greatly with the baud rate used at level 1. T1 should be at least twice the time it would take to send a maximum length frame to the other end of the link, and get the proper response frame back from the other end of the link. This would allow time for the other end of the link to do some processing before responding.

The second timer, T2, is used whenever T1 isn't running to make sure that a supervisory frame is sent periodically to maintain link integrity. It also will vary dramatically depending on layer 1 constraints, and is subject for further study.

Maximum_Number_of_Retrys_(N2)

The maximum number of retrys is used in conjunction with the T1 timer. It will vary depending on the layer 1 in use, but will generally be sixteen.

Maximum_Number_of_Octets_in_an_I_Field_(N1)

The maximum number of octets allowed in the I field will be 256. There should also be an even multiple number of octets.

Maximum_Number_of_I_Frames_Outstanding_(k)

The maximum number of outstanding I frames at a time is seven. A smaller number may be used at any time, provided it is agreed upon ahead of time.

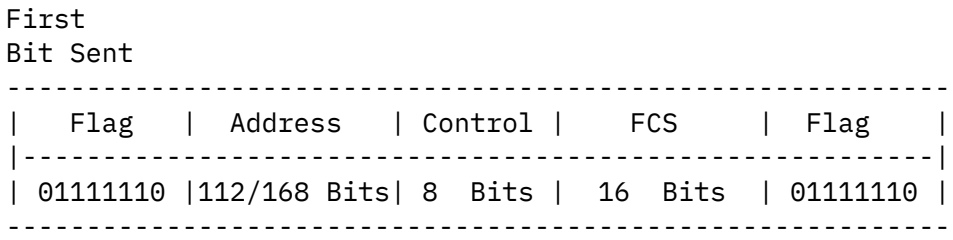


Figure 1A. U and S Frame Construction

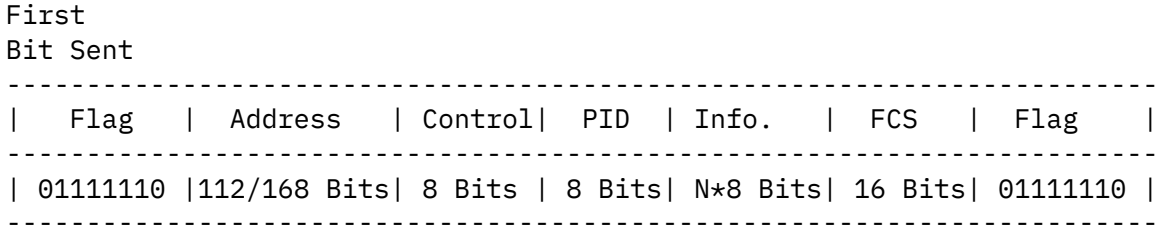


Figure 1B. Information Frame Construction

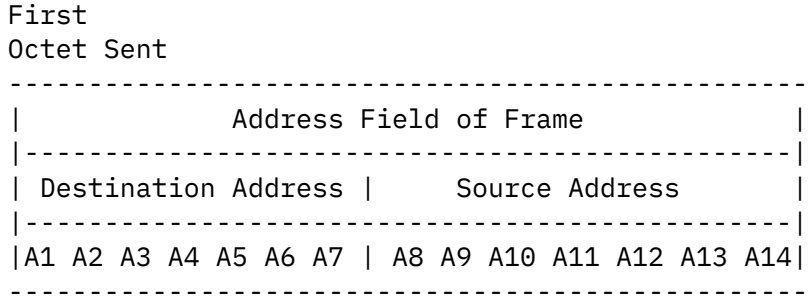


Figure 2A. Non-Repeater Address Field Encoding

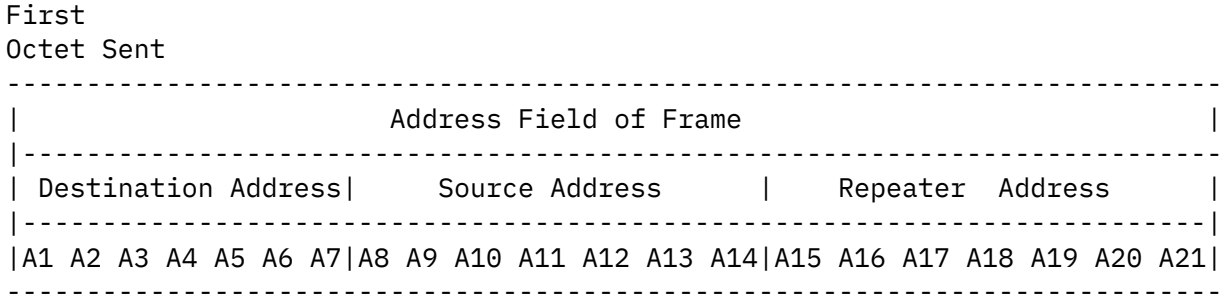


Figure 2B. Repeater Address Field Encoding

Appendix A. Non-Repeater Frame Example

Octet	ASCII	Bin.Data	Hex Data
Flag		01111110	7E
A1	K	10010110	96
A2	8	01110000	70
A3	M	10011010	9A
A4	M	10011010	9A
A5	O	10011110	9E
A6	space	01000000	40
A7	SSID	01100000	60
A8	W	10101110	AE
A9	B	10000100	84
A10	4	01101000	68
A11	J	10010100	94
A12	F	10001100	8C
A13	I	10010010	92
A14	SSID	01100001	61
Control	SABM	00111111	3F
PID	none	11110000	F0
FCS	part 1	XXXXXXXX	HH
FCS	part 2	XXXXXXXX	HH
Flag		01111110	7E

The frame shown is an SABM frame, not going thru a level 2 repeater, from WB4JFI (SSID=0) to K8MMO (SSID=0), with no level 3 protocol.

Appendix B. Repeater Type Operation

Octet	ASCII	Bin.Data	Hex Data
Flag		01111110	7E
A1	K	10010110	96
A2	8	01110000	70
A3	M	10011010	9A
A4	M	10011010	9A
A5	O	10011110	9E
A6	space	01000000	40
A7	SSID	01100000	60
A8	W	10101110	AE
A9	B	10000100	84
A10	4	01101000	68
A11	J	10010100	94

A12	F	10001100	8C
A13	I	10010010	92
A14	SSID	01100000	60
A15	W	10101110	AE
A16	B	10000100	84
A17	4	01101000	68
A18	J	10010100	94
A19	F	10001100	8C
A20	I	10010010	92
A21	SSID	11100011	E3
Control	SABM	00111111	3F
PID	none	11110000	F0
FCS	part 1	XXXXXXXX	HH
FCS	part 2	XXXXXXXX	HH
Flag		01111110	7E

The above frame is the same as in Appendix A, but with the addition of a repeater address sub-field (WB4JFI, SSID=1). The H bit is set, indicating this is from the output of the repeater.

Appendix C.
Advantages of the WB4JFI Addressing Scheme

Some of the advantages to using this addressing system are:

1. Every packet station will have a unique fixed address that doesn't change every time a new network is logged into.

2. Relocating to a new area won't cause major (or minor) problems.

3. Allows for more than 62 or 31 users at a time.

4. No local packet guru is needed to assign addresses with attendant concerns of backup and transfer during failure.

5. Direct or network operation requires no change of address.

6. All the problems with dynamic allocation/de-allocation are eliminated.

7. Reduces local co-network interference due to users in overlapping local network rf

domains with the same address fields.

8. With every frame having both the destination and source addresses in them, it will be a lot easier to set-up and run multiple connections on the same data channel without having problems arise as to who is sending what frames to whom.

9. In round-table operation, every frame sent will have the source address imbedded in it, allowing automatic printing of the source of the frame.

Appendix D. Layer 2 AX.25 State Table

State	I with Poll	I without P	RR with Final	RR without F	REJ with Final	REJ without F	RNR with either	RNR without either	SABM either	DISC either
S1 Disconnected	DM		DM		DM		DM		UA,S5	DM
		SABM,S2								
S2 Link Setup									UA	DM,S1
	S5	S1								
S3 Frame Reject	FRMR		FRMR		FRMR		FRMR		UA,S5	UA,S1
		SABM,S2	SABM,S2							
S4 Disconnect Rqst									DM	UA

| | S1 | S1 | | |

```
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----------------------------|
|S12 Waiting Acknow.|  RR  |   RR  |  I,S5 |  I,S7  |  I,S5  |   I,S7  |        |
|UA,S5 |UA,S
1 |SABM,S2|SABM,S2 | SABM,S2|
| and Remote Busy   |      |       |       |        |        |         |        |
|      |
  |       |        |        |
|-------------------------------------------------------------------------------
--------------------
----------------------------|
|S13 Waiting Acknow.| RNR  |  RNR  |  I,S8 |  I,S11 |  I,S8  |  I,S11  |        |
|UA,S8 |UA,S
1 |SABM,S2|SABM,S2 | SABM,S2|
| Both Devices Busy |      |       |       |        |        |         |        |
|      |
  |       |        |        |
|-------------------------------------------------------------------------------
--------------------
----------------------------|
|S14 REJ Sent and   | RNR  |  RNR  |   I   |   I    |   I    |    I    |   S16  |
S16   |UA,S8 |UA,S
1 |SABM,S2|SABM,S2 | SABM,S2|
| and Device Busy   |      |       |       |        |        |         |        |
|      |
  |       |        |        |
|-------------------------------------------------------------------------------
--------------------
----------------------------|
|S15 REJ Sent and   |RR,S9 | RR,S9 |  I,S6 |  I,S6  |   I,S6 |   I,S6  |        |
|UA,S5 |UA,S
1 |SABM,S2|SABM,S2 | SABM,S2|
| Remote Busy       |      |       |       |        |        |         |        |
|      |
  |       |        |        |
|-------------------------------------------------------------------------------
--------------------
----------------------------|
|S16 REJ Sent and   | RNR  |  RNR  | I,S14 |  I,S14 |  I,S14 |  I,S14  |        |
|UA,S5 |UA,S
1 |SABM,S2|SABM,S2 | SABM,S2|
| Both Devices Busy |      |       |       |        |        |         |        |
|      |
  |       |        |        |
-------------------------------------------------------------------------------
--------------------
----------------------------
```

== Relayed by David Altekruse, W6RAW ==

From -4209659237491643516
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c51c1eed9f73504e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-29 22:59:30 PST
Message-ID: <bnews.csu-cs.2120>
Newsgroups: net.ham-radio
Path: utzoo!decvax!decwrl!sun!megatest!fortune!hpda!hplabs!hao!csu-cs!kelly
X-Path: utzoo!decvax!decwrl!sun!megatest!fortune!hpda!hplabs!hao!csu-cs!kelly
From: csu-cs!kelly
Date: Wed Mar 30 01:59:28 1983
Subject: Speculation on Learning the code
X-Google-Info: Converted from the original B-News header
Posted: Mon Mar 28 12:16:58 1983
Received: Wed Mar 30 01:59:28 1983

I have been wondering about the process of learning "morse" code, and whether it may require some associative processing in the human mind. By this I mean likening it more to language learning than to factual or procedural learning, as the technical aspects of the ham examinations require. Is this why the code is more difficult for certain of the (clearly) competent folks who would otherwise have their tickets today? (That these individuals have highly developed the other side of their brains, possibly at the expense of the artistic, ... associative halves?).

How could we measure this in a straw poll? (how many hams vs aspiring hams enjoy classical music?).

In reply to other letters, I believe that I, as a ham, am indeed afraid of CB-style invasion of the ham bands. I am frankly embarrased by listening to 2-Meters, and would have little sense of loss by abandoning the upper 1 Mhz to experimenters, existing BS artists and possible CB types. If there were a class or even a separate service for experimenters, and GOOD work were being done there, I would probably take that exam in addition to my Advanced ticket. I just fear that the new service could degenerate and cost the hams some really good spectrum, though I doubt that it could get too much worse than 2-meters, and that the CW requirement would not prevent that from happening.

There are at least 7-10 really different specialties in ham radio now, (CW, traffic, DX, VHF FM, EME, satellite, etc) and so long as the implicit band plans are protected by the new class of license, I have little fear of allocating some spectrum to the experimenters, on a shared basis (making experimenters a new class of the same service).

I think that the hams also have some esprit de corps concerning quality of the service, and the traditions/obligations concerning Public service and advancement of the state of the art. If the incoming hams, whether Novice, Tech .... or experimenter, recognize this and acknowledge the charter of the service, I think there is room for them.

I say this as a reversal of my previous position, and with reservations. I pray that the FCC will act wisely, and that the existing ham population will think carefully and act wisely following whatever the FCC does.

73's and long live ALL forms of ham radio (I love CW)...Chris WD5IBS

From -1879301615274150400
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c0efbc7db790e2f4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-30 01:48:06 PST
Message-ID: <bnews.avsdF.261>
Newsgroups: net.ham-radio
Path: utzoo!decvax!decwrl!sun!megatest!fortune!dsd!atd!avsdS:avsdF:artelt
X-Path: utzoo!decvax!decwrl!sun!megatest!fortune!dsd!atd!avsdS:avsdF:artelt
From: avsdF:artelt
Date: Wed Mar 30 04:48:04 1983
Subject: link to chicago
X-Google-Info: Converted from the original B-News header
Posted: Tue Mar 29 07:54:08 1983
Received: Wed Mar 30 04:48:04 1983

I recently purchased an Icom 4AT (3/26/83), and am curious
if there are any control links from the bay area of calif.,
to the chicago-land area via the 70cm band .
I am only interested in link's that may be public knowledge
since I am not a member of any system yet. The only one I
am aware of is something that will get me on 29.600 Mhz.
Any ideas ?
Thankyou,
William Artelt   Ampex Corp. Redwood City, Ca.
wb9yvm

From 4807391711304314239
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9e4a1ffb183d3f6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-31 14:35:37 PST
Message-ID: <bnews.pur-ee.844>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxz!ihnp4!ixn5c!inuxc!
pur-ee!wn9nbt
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxz!ihnp4!ixn5c!inuxc!
pur-ee!wn9nbt
From: pur-ee!wn9nbt
Date: Thu Mar 31 17:35:36 1983
Subject: Re: Docket 83-28 (no code) excerpts - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Tue Mar 22 18:26:28 1983
Received: Thu Mar 31 17:35:36 1983

#R:eagle:-83100:pur-ee:5600010:000:575
pur-ee!wn9nbt   Mar 22 09:27:00 1983

NOTE:
CW is *almost exclusively* used on UHF and above for DX attempts,

NOT as rare as one may think. This whole argument seems pretty juvenile. Granted there are a lot better ways of communicating than Morse Code, however no one says you have to use it, only learn it. A similar argument would be, "I don't need to learn addition to use Calculus." I didn't know there were so many experts out there that can't comprehend a simple "language" that a lot of grade schoolers and Boy Scouts easily become proficient at with minimal effort.

  -- Dave Chasey - pur-ee!wn9nbt

From 8687220887860167889
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aa230d3e62c381fc,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,aa230d3e62c381fc,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1983-04-03 01:44:39 PST
Message-ID: <bnews.eagle.863>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sun Apr 3 04:44:35 1983
Subject: UoSAT Bulletin 19
X-Google-Info: Converted from the original B-News header
Posted: Sat Apr 2 21:05:48 1983
Received: Sun Apr 3 04:44:35 1983

        UOSAT SPACECRAFT CONTROL CENTRE
UNIVERSITY OF SURREY, GUILDFORD, SURREY, ENGLAND
****

UOSAT SPACECRAFT OPERATIONAL STATUS:
****

**** UOSAT BULLETIN-19   1200 GMT   30 MARCH 1983 ****

** S/C NEWS **

FURTHER COMMAND STATION FACILITIES HAVE BEEN DEVELOPED TO SUPPORT ATTITUDE MANOEUVRES DESIGNED TO ATTEMPT TO FREE THE SNAGGED TIP-MASS MAGNETOMETER CABLES BASED ON THE RELATIONSHIP BETWEEN THE SCIENTIFIC AND NAVIGATION MAGNETOMETER DATA AND THE CHANGE IN DYNAMICS OF THE SPACECRAFT COMPOSITE DUE TO CURRENT BOOM DEPLOYMENT.

IT IS NOT KNOWN WHETHER IT WILL BE POSSIBLE TO CLEAR THE CABLE PROBLEM, HOWEVER, IF AFTER ALL ATTEMPTS HAVE BEEN MADE WE ARE UNSUCCESSFUL, ALL IS NOT LOST AS THE SPACECRAFT CAN BE EITHER SPIN STABILISED OR MAGNETICALLY STABILISED OR, POSSIBLY, QUASI-GRAVITY GRADIENT STABILISED USING CONTINUOUS ON-BOARD

COMPUTER ATTITUDE CONTROL. IT WILL TAKE A NUMBER OF WEEKS TO EXHAUST ALL CABLE RECOVERY POSSIBILITIES.

** S/C ATTITUDE **

THE SPACECRAFT IS CURRENTLY SPIN STABILISED WITH A SPIN PERIOD OF 30 SECS.

** S/C OPERATIONS SCHEDULE **

WED 30 MARCH - MON 4 APRIL.....1200/SPEECH TELEMETRY/BULLETIN

TUES 5 APRIL - THU 7 APRIL.....300 BD ASCII / RTTY TELEMETRY

CURRENT OPERATIONAL CONDITIONS SHOULD INCREASE 145MHZ AVAILABILITY DURING WEEKDAYS. NEW SOFTWARE IS UNDER TEST WHICH WILL INCREASE THE RELIABILITY OF LOADING OF THE WEEKEND BULLETIN PROGRAMS. SUGGESTIONS FOR NEW PRESENTATION FORMATS FOR THESE WOULD BE WELCOME.

** THANKS FOR FEEDBACK **

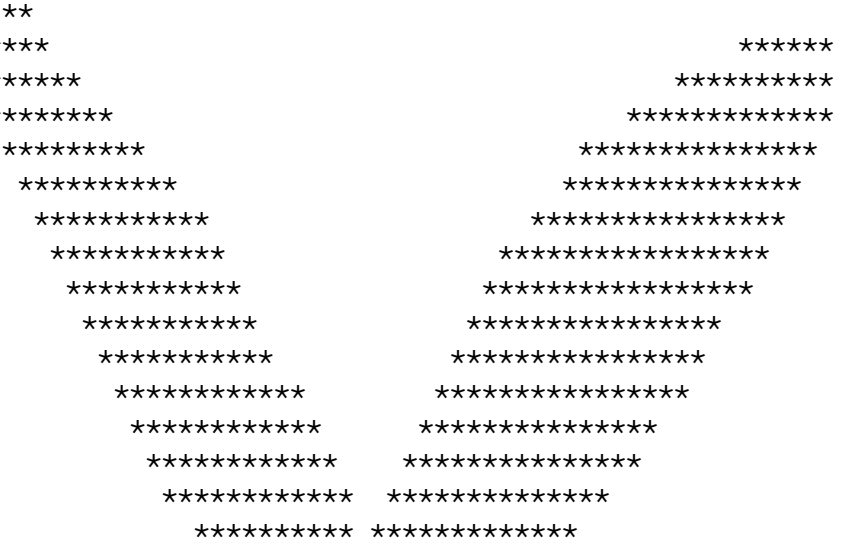
K1KSY,B.LINDHOLM,WA2LQQ,W4AUZ,JA4GVA,WD4IXI,HB9RKR,HB9RJV,VE2QO

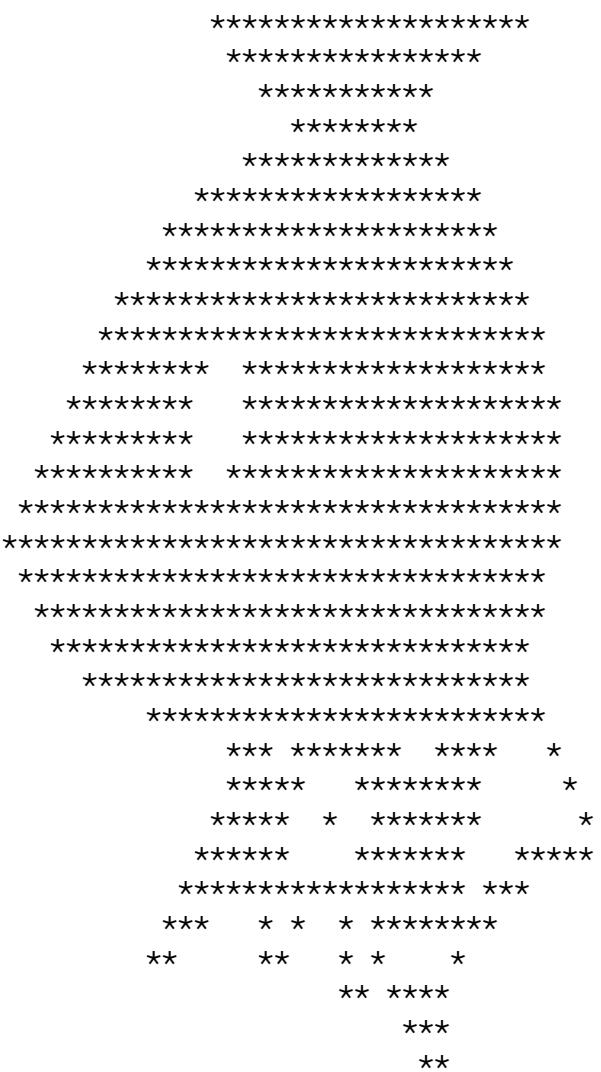
** POST BOX **

**K1KSY DE G3YJO...THANKS FOR DATA AND PLOTS RECEIVED, VERY GOOD.

**WA2LQQ DE G3YJO..DOES THE US NEED ANY MORE COPIES OF THE IERE UOSAT JOURNAL, G3AAJ COULD CARRY IN MAY.

HAPPY EASTER FROM THE UOSAT TEAM





SPACECRAFT ORBITAL DATA

ORBITS FOR 30TH MARCH

	UOSAT	OSCAR-8	NOAA-7	
ORBIT NO :	8183	25821	9109	
EQX TIME :	15:07:18	14:09:37	15:07:57	GMT
EQX LONG :	359.0	169.4	10.7	DEG.W
MEAN HGT :	505.1	905.0	850.0	KM
PERIOD :	94.7183514	103.1668742	101.9100825	MINS
P-DRAG :	5.394E-05	2.166E-06	7.500E-06	*N-REF
LONG INC :	23.6791479	25.7935558	25.4881782	DEGS
L-DRAG :	1.357E-05	7.030E-07	2.000E-07	*N-REF

QSL/POST CARDS CONFIRMING RECEPTION OF UOSAT DATA INCLUDING
STATION DETAILS WOULD BE APPRECIATED FOR SURVEY OF NO. AND
GEOGRAPHIC DISTRIBUTION OF ACTIVE STATIONS
SEND TO: DR.M.N.SWEETING, UOSAT CONTROL CENTRE - THANK YOU

From 3758826136766207050
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5ecca0b8a642ea8c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-05 02:57:11 PST
Message-ID: <bnews.kpno.161>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!seismo!hao!kpno!downey
X-Path: utzoo!decvax!harpo!seismo!hao!kpno!downey
From: kpno!downey
Date: Tue Apr 5 05:57:09 1983
Subject: Amateur radio shuttle retransmissions
X-Google-Info: Converted from the original B-News header
Posted: Mon Apr 4 08:26:18 1983
Received: Tue Apr 5 05:57:09 1983

Amateur radio station W5RRR, Johnson Space Center, Houston, has again been granted temporary authorization to rebroadcast shuttle transmissions. Approximate frequencies are 3905, 7230, 14280, 21375, and 28600 mHz. CW may also be used for contacting W5RRR 25-30 kHz up from the bottom of each band. An attractive QSL card will be available.

WB0OEW
elwood downey, kitt peak national observatory, 950 n. cherry ave, tucson, az
(602) 325-9221
{{{ucbvax|utah-cs|purdue|mcnc}!arizona}|unc|hao}!kpno!downey

From 5846624101861775916
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 163b79,3b61b1f9fb115c30,start
X-Google-Attributes: gid163b79,public
X-Google-Thread: 151e61,3b61b1f9fb115c30,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-05 23:18:36 PST
Message-ID: <bnews.tektronix.1047>
Newsgroups: net.general,net.ham-radio
Path: utzoo!decvax!ucbvax!ucbcad:tektronix!johnbu
X-Path: utzoo!decvax!ucbvax!ucbcad:tektronix!johnbu
From: tektronix!johnbu
Date: Wed Apr 6 02:18:35 1983
Subject: ham radio on Challenger?
X-Google-Info: Converted from the original B-News header
Posted: Tue Apr 5 08:24:57 1983
Received: Wed Apr 6 02:18:35 1983

I've heard various reports (rumors) that one of the Challenger shuttle crew is an amateur radio operator and that he will have a radio (2 meter) with him to make contacts as time permits.

Can anyone confirm or dispute this? More specifically, if it is true, can anyone suggest a frequency he might be on?

Any info would be helpful.

Thanks, John Burgess, N7DCQ

From 5579504850305548732
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,83b2b5a19f10571b,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,83b2b5a19f10571b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-05 23:47:01 PST
Message-ID: <bnews.eagle.870>
Newsgroups: net.columbia,net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Wed Apr 6 02:47:00 1983
Subject: Audio relay, EVA sched
X-Google-Info: Converted from the original B-News header
Posted: Tue Apr 5 18:21:19 1983
Received: Wed Apr 6 02:47:00 1983

Shuttle audio relay via W5RRR is on one or more of the following
frequencies:

3905 - 7230 - 14280 - 21375 - 28600

The station will be active 1100 - 1300 CST and 1600 - ? CST daily and
starting at 0700 CST on Saturday.

Thursday's EVA prep starts at 1009 CST with EVA from 1515 - 1845 CST.
TV downlinks scheduled for 1532, 1707 and 1842 CST.

From 1346602197979483134
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,90840de7c9bcfc22,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-08 00:11:31 PST
Message-ID: <bnews.floyd.1419>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!stan
X-Path: utzoo!decvax!harpo!floyd!stan
From: floyd!stan
Date: Fri Apr 8 03:11:27 1983
Subject: Old Beast of a Radio
X-Google-Info: Converted from the original B-News header
Posted: Thu Apr 7 17:08:35 1983
Received: Fri Apr 8 03:11:27 1983

I've got an old (1946) National HRO-5 receiver which I have recently

replaced with a newer receiver.

My question is: is the HRO-5 worth keeping, or should I sell it?
What is a good selling price for a 50 lb. radio that makes you unplug
coils if you want to change bands? Is it an antique?

Stan King phone: 201-386-7433
Bell Labs, Whippany, NJ Cornet: 8+232-7433
room 2A-111 uucp: floyd!stan

From 5403716372618380735
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3a79f45342a3dd04,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-09 00:48:03 PST
Message-ID: <bnews.inuxc.636>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!hou5f!ariel!houti!hogpc!houxm!
ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!hou5f!ariel!houti!hogpc!houxm!
ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Apr 9 03:48:00 1983
Subject: ARRL DX Bulletin de K2PH
X-Google-Info: Converted from the original B-News header
Posted: Fri Apr 8 08:16:44 1983
Received: Sat Apr 9 03:48:00 1983

_S_p_r_a_t_l_y__I_s_l_a_n_d_s_. DJ6SI and DF3NG left Singapore on the third and expect to be active as 1S1SI and 1S3NG on the eighth.

_C_h_a_t_h_a_m__I_s_l_a_n_d_. Ron, ZL1AMO/c, expects to be active through the tenth. He operates mostly cw but does get on ssb occasionally. Look for Ron at 2300Z on 28025 or 28505 kHz, at 0000Z on 21025 or 21295 kHz, at 0330Z on 14025 kHz and at 0500Z on 7005 kHz. He listens on 3505 kHz at 0600, 1000, 1100 and 1200Z but reports very little activity there.

_C_o_n_g_r_a_t_u_l_a_t_i_o_n_s_. Congratulations to DX Bulletin contributor Jim Dionne, K1MEM, and Genevieve, N1CPC, on their wedding this weekend. Their Caribbean trip may include some hamming from VP2EEM and K1MEM/PJ7.

_C_a_m_e_r_o_o_n_. TJ1GH has been active on 21292 kHz at 2000Z on a list by W3WGS. QSL to Henning via DJ5RT.

_T_a_i_w_a_n_. BV2A has been quite active, showing up on the Family Hour on 21345 kHz at 2330Z.

_N_i_g_e_r_i_a_. KC7UU/5N6 is very active and expects to be on sstv and rtty in the next few months. He is also working toward possible summer trips to 5U and TT8.

_T_a_n_z_a_n_i_a_. Tom, 5H3TL, can be found on 14260 kHz at 0345Z and on 21292 kHz at 1800Z. QSLs go to K8ZH.

_I_T_U_. A Vienna station signing 4U1VIC has been worked on 21310 kHz at 1415Z. QSLs go via the OE3 bureau.

_R_o_d_r_i_g_u_e_s__I_s_l_a_n_d_. K1BJ/3B9 has been worked on 21035 kHz at 1200Z. QSL to his home QTH.

_M_a_r_i_a_n_a_s_. K00TT/KH0 is active on 14030 kHz at 1345Z. QSL to his home call.

_M_a_l_i_. F6FIC/TZ was worked last weekend on 21335 kHz at 1700Z.

_M_a_l_a_w_i_. 7Q7LW was also worked last weekend on the Africaner Net on 21355 kHz at 1800Z.

_H_e_a_r_d__a_n_d__W_o_r_k_e_d_. 9V1TL 21026 kHz at 1430Z. OY7ML 14026 kHz at 1800Z. FP8HL 14028 kHz at 1400Z. ZK1CG 21345 kHz at 1330Z. 7P8CI 21340 kHz at 1800Z.

From 2759031417251517663
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,400afe2a019d7dd3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-13 00:29:41 PST
Message-ID: <bnews.houxp.229>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!hogpc!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!hogpc!houxq!houxp!ad7i
From: houxp!ad7i
Date: Wed Apr 13 03:29:39 1983
Subject: Propagation Bulletin 15
X-Google-Info: Converted from the original B-News header
Posted: Tue Apr 12 08:17:32 1983
Received: Wed Apr 13 03:29:39 1983

qst de ad7i
holmdel, new jersey, u.s.a.
hr propagation forecast bulletin nr 15   from arrl headquarters
newington ct april 11, 1983
to all radio amateurs bt

on april 8 the solar flux curve rose above the line for the previous

solar rotation for the first time since march 23. the solar flux
high thus far in april is only 106, but the current appearance of the
sun shows more active areas than at any time since the middle of
march.   this trend should continue for about ten days, but no major
rise is expected.

geomagnetic activity has been at intermediate levels so far in april,
making for propagation quality generally below normal for this time
of year. some improvement is likely april 12 through 15 and 18
through 20. mild disturbances will occur intermittently much as they
have in recent weeks. the poorest conditions are expected around
april 16 and 22.

the generally lower levels of solar activity and the change to spring
connditions will mean reduced hours of dx on 21 and 28 mhz except for
the lower latitudes and on north south paths. the effects of the
combined solar and seasonal decline are clearly apparent in the
propagation charts shown in qst for april, pages 64 and 65.

american sunspot numbers for march 31 through april 6 were between 28
and 57 with a mean of 46.9 ar

From -4408319566051655293
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2beabc7d3e93cd20,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-13 00:31:48 PST
Message-ID: <bnews.houxp.228>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!hogpc!houxq!houxp!
ad7i
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!hogpc!houxq!houxp!
ad7i
From: houxp!ad7i
Date: Wed Apr 13 03:31:47 1983
Subject: ARRL 29: Volunteer Comments
X-Google-Info: Converted from the original B-News header
Posted: Tue Apr 12 08:17:10 1983
Received: Wed Apr 13 03:31:47 1983

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 29 from arrl headquarters
newington ct april 11, 1983
to all radio amateurs bt

at the request of the qcwa, fcc has granted an extension of time for
filing comments in the notice of proposed rule making on volunteer
examinations, docket 83 27. the deadline for comments has been
extended to april 25 and reply comments to may 19 ar

From 854663649472843642
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e87ff68dc9d4660e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-13 00:37:54 PST
Message-ID: <bnews.houxp.230>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!hogpc!houxq!houxp!
ad7i
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!hogpc!houxq!houxp!
ad7i
From: houxp!ad7i
Date: Wed Apr 13 03:37:42 1983
Subject: Late Bulletins
X-Google-Info: Converted from the original B-News header
Posted: Tue Apr 12 08:18:28 1983
Received: Wed Apr 13 03:37:42 1983

Again, sorry for the delay in posting last weeks messages.
I was out of town and unable to copy W1AW.
              Paul, ad7i

From 3230225651963757906
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,359921e75cc190c2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-13 05:32:46 PST
Message-ID: <bnews.houxp.226>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!hogpc!houxq!houxp!
ad7i
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!hogpc!houxq!houxp!
ad7i
From: houxp!ad7i
Date: Wed Apr 13 08:32:41 1983
Subject: ARRL 24: N.H.
X-Google-Info: Converted from the original B-News header
Posted: Tue Apr 12 08:16:21 1983
Received: Wed Apr 13 08:32:41 1983

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 24 from arrl headquarters
newington ct april 7, 1983
to all radio amateurs bt

attention new hampshire amateurs. hb 561, a bill that would prohibit
municipalities from regulating by zoning ordinance amateur radio
antennas or supporting structures, will be heard before the municipal
and county government committee on wednesday, april 13, 1983, at 1400

est at the legislative building in concord. all interested amateurs
are urged to attend and lend their support ar

From 3470858361847137675
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ebe4a6583aa9d5c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-13 05:42:31 PST
Message-ID: <bnews.houxp.227>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!hogpc!houxq!houxp!
ad7i
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!hogpc!houxq!houxp!
ad7i
From: houxp!ad7i
Date: Wed Apr 13 08:42:29 1983
Subject: ARRL 28: 20M phone expansion
X-Google-Info: Converted from the original B-News header
Posted: Tue Apr 12 08:16:51 1983
Received: Wed Apr 13 08:42:29 1983

qst de ad7i
holmdel, new jersey, u.s.a.
hr arrl bulletin nr 28 from arrl headquarters
newington ct april 8, 1983
to all radio amateurs bt

expansion of the 20 meter phone band becomes effective may 22, 1983
at 0001 utc. the new phone bands will be as follows. 14150 t0
14175 khz, extra. 14175 to 14225 khz, advanced and extra. 14225 to
14350 khz, general, advanced and extra. this is not effective until
may 22, 1983 at 0001 utc ar

From -4959407684769991468
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f3d491ca994d6dd0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-18 04:20:34 PST
Message-ID: <bnews.ihuxo.224>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!orion!lime!houxg!hogpc!houxm!ihnp4!
ihuxo!ejk47
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!orion!lime!houxg!hogpc!houxm!ihnp4!
ihuxo!ejk47
From: ihuxo!ejk47
Date: Mon Apr 18 07:20:33 1983
Subject: Article wanted.
X-Google-Info: Converted from the original B-News header
Posted: Thu Apr 14 15:44:50 1983
Received: Mon Apr 18 07:20:33 1983

I'm looking for an article that had appeared in either 73 or QST magazine a few years ago. The article was about MDS television (the microwave band 1.9 gHz to 2.3 gHz. In that article was plans on how to build a low cost down-converter for that band. I am interested in building a 10-15db low noise amp. that I can put before my down-converter and I believe that there were plans for one in that article. What I primarily need is the schematic and board layout. I currently have a down-converter that is pulling in a signal from 43 miles away (very snowy) and would like to boost the signal before I down-convert. I admit that I am not a ham, some of you may flame on that, but I would appreciate any help that I can get. Please respond via Mail to:

ihuxo!ejk47

From 4080776796776372039
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c43f1353fa1d43b8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-18 19:49:04 PST
Message-ID: <bnews.inuxc.643>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!hogpc!houxm!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Mon Apr 18 22:48:57 1983
Subject: ARRL DX BULLETIN de k2ph
X-Google-Info: Converted from the original B-News header
Posted: Fri Apr 15 09:01:27 1983
Received: Mon Apr 18 22:48:57 1983

_S_p_r_a_t_l_y_. As of 1615Z April 14, there has been no official information on the status of the DJ6SI group.

_M_a_u_r_i_t_a_n_i_a_. Look for 5T5RY around 14200 kHz at 1030Z. QSLs go via F6FNU.

_T_r_i_n_d_a_d_e_. PY1EFM/PY0T may be found on 21335 kHz at 1900Z and on 21280 kHz at 2100Z.

_M_a_l_p_e_l_o__I_s_l_a_n_d_. An operation is expected in June in conjunction with the 50th anniversary of amateur radio in Colombia.

_G_u_a_n_t_a_n_a_m_o_. KG4DX and KG4AW are both very active around 14210 kHz at 1100Z. Also look for KG4AW on 21280 kHz at 1700Z.

_S_u_d_a_n_. DF3NZ/ST2 is on near 3777 kHz at 0300Z.

_S_r_i__L_a_n_k_a_. Look for 4S7EA long path at 1100Z on 14200 kHz.

_M_a_l_d_i_v_e_s_. 8Q7AV is also coming through long path near 14200 kHz at 1100Z.

_C_h_i_n_a_. Tom, VE7BC, reports that a new Chinese station is all ready to go as soon as coax is installed.

_M_a_r_i_o_n__I_s_l_a_n_d_. The crew for the coming year is leaving today and there are no hams included, so ZS2MI will be inactive for at least a year.

_S_t_.__M_a_r_t_i_n_. K1MEM/PJ7 has been operating from the PJ7UQ QTH.

_S_a_n__M_a_r_i_n_o_. The headquarters station of ARRSM will operate as T70/A from 1300Z April 20 to 1300Z April 21. QSL to ARRSM, P. O. Box 1, San Marino 47031.

From 2464790970342646683
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,92593c719b0b8ee0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-21 05:24:26 PST
Message-ID: <bnews.houxp.233>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!lime!houxe!hogpc!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!lime!houxe!hogpc!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Apr 21 08:24:19 1983
Subject: CRRL 15: QSLs
X-Google-Info: Converted from the original B-News header
Posted: Wed Apr 20 08:12:32 1983
Received: Thu Apr 21 08:24:19 1983

qst de ad7i
holmdel, new jersey, u.s.a.
hr crrl bulletin nr 15 from crrl headquarters
london ont april 18, 1983
to all radio amateurs bt

in the first three months of 1983, the crrl central incoming qsl bureau has processed 150,345 cards and forwarded them to the eleven league sponsored qsl bureaus in the provinces and territories.
     the
new crrl outgoing qsl bureau began operation in february and has now procesfgr
me 14,000 cards.

ve4afo and ve3gro have been working on a canadian repeater directory, which will be distributed by crrl ar

From -8416723596296396526
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2310f5760d180d56,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-04-21 05:37:51 PST
Message-ID: <bnews.houxp.231>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!lime!houxe!hogpc!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!lime!houxe!hogpc!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Apr 21 08:37:43 1983
Subject: Propagation Bulletin 16
X-Google-Info: Converted from the original B-News header
Posted: Wed Apr 20 08:11:37 1983
Received: Thu Apr 21 08:37:43 1983

qst de ad7i
holmdel, new jersey, u.s.a.
hr propagation forecast bulletin nr 16 from arrl headquarters
newington ct april 18, 1983
to all radio amateurs bt

after three weeks of the lowest solar activity in five years, the
solar flux is rising slightly again. it reached 113 on the 17th and
should go somewhat higher before turning down again in a few days.
geomagnetik activity was lower as this bulletin was issued, so
somewhat better conditions and slightly higher muf can be expected
about april 20.

higher geomagnetic activity is due briefly around april 21, and over
a longer period beginning about the 24th. this will degrade
conditions on all dx frequencies. propagation will improve near the
end of april, carrying over into early may, mostly on low latitude
and transequatorial circuits.

high latitude f layer dx is about over on 28 mhz until autumn, but
increased e layer ionization will produce short skip on 28 and 50
mhz, mostly at distances of 500 to 1200 miles. multiple hop effects
will be more common in july, increasing the communications range to
2500 miles or more. at the height of the e layer season there will
be skip propagation even on 144 mhz at times, notably in june and
july.

american sunspot numbers for april 7 through 13 were between 58 and
67 with a mean of 61.9 ar

From 3251775359190418408
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab4192f0ec475e,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-20 04:52:04 PST
Message-ID: <bnews.houxp.188>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Jan 20 07:52:03 1983
Subject: ARRL 6: NTS world-wide
X-Google-Info: Converted from the original B-News header
Posted: Tue Jan 18 17:21:06 1983
Received: Thu Jan 20 07:52:03 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr arrl bulletin nr 6 from arrl headquarters
newington ct january 12, 1983
to all radio amateurs bt

amateurs are reminded that the arrl national traffic system can
handle international traffic, with countries with which such traffic
is permitted, via a special liaison schedule with the international
assistance and traffic net. such traffic at any level of the system
should be routed to the eastern area net, ean, cycle four session,
where it will be dispatched to the designated liaison station.
before entering any international traffic into the system, check the
latest list of third party agreements on page 96 of november 1982
qst ar

From -7861243712639146641
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3138961131be6f1d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-21 01:58:01 PST
Message-ID: <bnews.eagle.739>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Fri Jan 21 04:57:57 1983
Subject: Re: 2M CQ - (nf)
References: <bnews.pur-ee.792>
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 21 02:04:29 1983
Received: Fri Jan 21 04:57:57 1983

Yes, those that say "CQ" on a repeater are usually scorned as
"newcomers", even though the usage is entirely correct.

I avoid the issue by saying something informal like "KA9Q listening.

Anybody around?"

Phil

From -6581348322415295817
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3138961131be6f1d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-21 02:32:46 PST
Message-ID: <bnews.pur-ee.792>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxj!mhuxi!mhuxv!burl!sb1!ll1!ihldt!ihnp4!
ixn5c!inuxc!pur-ee!mahler
X-Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxj!mhuxi!mhuxv!burl!sb1!ll1!ihldt!ihnp4!
ixn5c!inuxc!pur-ee!mahler
From: pur-ee!mahler
Date: Fri Jan 21 05:32:45 1983
Subject: 2M CQ - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Thu Jan 20 18:25:50 1983
Received: Fri Jan 21 05:32:45 1983

#N:pur-ee:5600004:000:886
pur-ee!mahler   Jan 20 07:55:00 1983

Socially Unacceptable ?? ... Well thats the way it seems ...
In many parts of the country (although I understand not so
in the Deep South and Hawaii) it is totally unacceptable
to call CQ thru a 2M repeater. And because of the local
feeling I don't call CQ thru the repeaters. BUT WHY!!

I am not advocating calling long CQs on a repeater, anyone
there is going to hear you the first time. It seems to
make more sense, typical calls or "monitoring" or "listening"
really don't say I am on the air and want to talk to any
other station. And surely a QRZ doesn't fit on a repeater
that has been stone quiet. A simple   N9DRR CQ seems to
fill the bill, and is consistant with all other amateur
operations.

So lets drop the stigma surrounding calling a simple CQ
on the 2M repeaters ... Discussion is welcomed, pure
flaming will be routinely ignored.   73's
                    Steve N9DRR

From 3512849599131504O9
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7c3ed2aa9fd870e6,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1983-01-21 23:28:09 PST
Message-ID: <bnews.inuxc.588>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Jan 22 02:28:08 1983
Subject: ARRL DX BULLETIN de k2ph
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 21 09:18:04 1983
Received: Sat Jan 22 02:28:08 1983

_Q_a_t_a_r_. Look for Lloyd and Iris from W6KG/A7. QSL via Yasme.

_S_o_u_t_h__S_h_e_t_l_a_n_d_s_. LU3ZI is now active. QSL via LU2A. Another operation is planned for February 6 through 9 as LU1ZC. QSL to LU2CN.

_S_o_u_t_h__O_r_k_n_e_y_s_. VP8AOB can be found around 14240 kHz at 0300Z. LU5ZA should be active until February 16. QSL to LU2A.

_C_h_i_n_a_. A third Chinese and second Beijing station, BY1QH, is expected soon. BY8AA has been very active recently from 0100 to 0300Z around 14048 to 14050 kHz.

_T_r_i_n_i_d_a_d_e_. PY0/TA is expected to be on again in February, hopefully for a longer period of time this trip.

_H_o_n_g__K_o_n_g_. VS6DO may be on Saturday night at 0100Z on 14220 kHz. VP8XAB has been very active on both phone and cw. Watch 14015 kHz at 0230Z for cw and 14220 kHz at 0100Z for ssb.

_H_e_a_r_d__I_s_l_a_n_d_. The VK0/HI gang left Kerguelen at 0100Z this morning and hope to land in three days. They hope to be set up and ready for action by the 24th. The VK9NS group has left Albany and hopes to arrive in 14 to 16 days.

_C_h_a_d_. WB4ZNH, Carl, and WN4FVU, Martha, hope to be on from TT8 tonight if their license arrives in time. Otherwise, they expect to be active on Monday.

From 6288492412676626845
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4015cfab039285a0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-21 23:51:13 PST
Message-ID: <bnews.houxp.189>
Newsgroups: net.ham-radio

Path: utzoo!decvax!duke!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
X-Path: utzoo!decvax!duke!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
From: houxp!ad7i
Date: Sat Jan 22 02:51:12 1983
Subject: ARRL 8: FCC NPRM
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 21 09:36:48 1983
Received: Sat Jan 22 02:51:12 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr arrl bulletin nr 8 from arrl headquarters
newington ct january 20, 1983
to all radio amateurs bt

at a public meeting held january 20, fcc adopted a notice of proposed rulemaking on the volunteer exam program in response to arrls petition. fcc also adopted an nprm on the subject of a no code license. arrl believes this nprm will offer two alternatives. one would remove the code requirement for the technician license with privileges limited to frequencies above 50 mhz. the other would be a digitally oriented license. please note that these are proposals only, with the texts expected to be released in early february. details will appear in the arrl letter and qst ar

From -1843172802001977599
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4fa5b2a5418dbc4c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-22 01:24:59 PST
Message-ID: <bnews.ihuxp.347>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihuxp!hanson
X-Path: utzoo!decvax!harpo!ihnp4!ihuxp!hanson
From: ihuxp!hanson
Date: Sat Jan 22 04:24:52 1983
Subject: Questions for Elmers
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 21 13:23:18 1983
Received: Sat Jan 22 04:24:52 1983
Reply-To: hanson@ihuxp.UUCP (R. J. Hanson)

I am a new ham, mainly interested in digital communications, though I suppose I wouldn't mind ragchewing, if it were about rigs or computers. Despite Novice standing, I plan to upgrade quickly, and I have a severely limited budget. With this in mind, I have several questions...

1. Digital communications take place mainly on VHF, so I'm told.

What frequencies ? What modems/format/protocol ? (At least here in Chicagoland...)

2. Why are there no multiband VHF/UHF rigs - in the same way that MF/HF rigs are multiband (reminder, 160m = MF)? If I can afford only one rig, I'd like it to cover all frequencies of interest to me, so I'm not left out when a new (scarce) digital source goes on the air. One rig for 160m-10m and another for 6m, 2m, 220, 440 - pretty neat idea I think. Sure it'd be twice as expensive as a monoband rig - but it would cover four bands ! Or even three bands would be an alternative...

3. Why are there so few 220 rigs advertised in QST and '73 ? It seems that every 2m rig has a 440 counterpart, but no 220 ! Just the ICOM 3A(T). I'm confused, especially since I'm told that 220 is a popular choice for digital (2m is too crowded, 440 is too costly and lagging in power/propagation). Where are you 220 guys ? Stand up, please !

4. I have 2 Hy-Gain CB boards, and have read that 10 meter AM is alive. I listen on the club rig and don't hear much. Why ? (time-of-day = noon, maybe that's why). It seems to me that a $ 7.00 rig and a homebrew linear (oh, 40 watts or so...) would be a very popular, LOW COST way to get on the air. Articles, anyone (I have only a few)? What bandplan for 10m AM ? Any personal experiences on the net about converting the Hy-Gain board: what am I getting into ?

5. Also, why 10 FM ? Is it really worth the extra hassle to convert to FM? If so, why don't I hear ANY activity at all here ? Even so, there are only a few channels reserved by agreement, doesn't seem like much of a choice...

6. Commercial FM broadcasters use stacked circularly-polarized bays to increase low-angle radiation (hence their ERP), and maintain omnidirectional coverage. Why are there only vertical omni's and horizontal beams in the ham world ? Is no one interested in gain AND omni coverage ?

7. Where can I see HF antenna types rated together for performance, directionality, gain, cost, etc ?

How about some Elmers to the rescue...

R. J. Hanson KA9OQD
ihuxp!hanson
BTL IW 1A-407

From 20323252892118190
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8c386ff804c38c5e,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1983-01-22 02:11:01 PST
Message-ID: <bnews.iwsl2.130>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!iwsl2!jgpo
X-Path: utzoo!decvax!harpo!ihnp4!iwsl2!jgpo
From: iwsl2!jgpo
Date: Sat Jan 22 05:10:59 1983
Subject: Re: CQ 2m FM
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 21 14:23:43 1983
Received: Sat Jan 22 05:10:59 1983
Reply-To: jgpo@iwsl2.UUCP (John Opalko)

Out of habit and convention I usually key up a machine and state that
I am "listening" or "monitoring." However, I have no objection to
a *SHORT* CQ on the repeater. Let's just not make it a 3x3 repeated
X number of times. A simple "CQ BARS, this is KA9MNK" will suffice.

73,
John KA9MNK

From 6399989963894128933
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cde0c4d247b73b08,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-23 01:56:11 PST
Message-ID: <bnews.houxt.265>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!npoiv!npois!houxm!houxa!houxt!4341shn
X-Path: utzoo!decvax!duke!harpo!npoiv!npois!houxm!houxa!houxt!4341shn
From: houxt!4341shn
Date: Sun Jan 23 04:56:10 1983
Subject: Looking for Pager and Pager info
X-Google-Info: Converted from the original B-News header
Posted: Thu Jan 20 12:47:49 1983
Received: Sun Jan 23 04:56:10 1983

I am interested in aquiring a vhf pager (e.g., page-boy).
Anyone have one for sale? Also, has anyone designed
encoders to activate them?
Steven Nurenberg

From -7180590594536852437
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f69607969a6dccdf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-23 04:53:29 PST
Message-ID: <bnews.sdchema.379>
Newsgroups: net.ham-radio

Path: utzoo!decvax!duke!harpo!floyd!cmcl2!philabs!sdcsvax!sdchema!bam
X-Path: utzoo!decvax!duke!harpo!floyd!cmcl2!philabs!sdcsvax!sdchema!bam
From: sdchema!bam
Date: Sun Jan 23 07:53:28 1983
Subject: Remote people??
X-Google-Info: Converted from the original B-News header
Posted: Wed Jan 19 17:17:36 1983
Received: Sun Jan 23 07:53:28 1983

Are there any Cactus, Couvra, or Scumma people in netland???

Bret Marquis
WA6QDV

From 1313005441721565527
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3138961131be6f1d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-23 05:54:14 PST
Message-ID: <bnews.aluxz.1100>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxj!mhuxi!aluxz!ltn
X-Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxj!mhuxi!aluxz!ltn
From: aluxz!ltn
Date: Sun Jan 23 08:54:12 1983
Subject: Re: 2M CQ - (nf)
References: <bnews.pur-ee.792>
X-Google-Info: Converted from the original B-News header
Posted: Sat Jan 22 10:44:50 1983
Received: Sun Jan 23 08:54:12 1983

Sure, let's call CQ on the repeaters.
Besides, if you really want a QSO, calling CQ is probably the best way to get one. I'll bet that nine times out of ten, some guy who wouldn't bother coming back to a `monitoring' announcement WILL reply to your CQ, simply to flame on about not calling CQ on a repeater, and to `straighten out' the newcomer.

de WA7WJZ, monitoring

(Les Niles, Bell Labs Murray Hill (aluxz!ltn))

From 7497367669960963627
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3138961131be6f1d
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1983-01-24 03:51:18 PST
Message-ID: <bnews.mitccc.269>
Newsgroups: net.ham-radio
Path: utzoo!decvax!genradbo!mitccc!jfw
X-Path: utzoo!decvax!genradbo!mitccc!jfw
From: mitccc!jfw
Date: Mon Jan 24 06:51:17 1983
Subject: Re: 2M CQ - (nf)
References: <bnews.eagle.739>
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 21 22:48:50 1983
Received: Mon Jan 24 06:51:17 1983

When I have the urge to call CQ on a 2M repeater, I usually say:
"Is anyone around? WB7EEL" or something on the order. I have yet to
receive a complaint. My only objection to someone who would say
"CQ from ax1e"* would be the fact that "CQ" belongs to CW, and the more
informal nature of 2M makes the terse "CQ" rather silly.

John Woods WB7EEL/1, ...!genradbo!mitccc!jfw

*apologies to the hypothetical AX1E, the visual pun was too tempting.

From -3902174414238205807
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,edca27793f96f7f1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-27 17:30:53 PST
Message-ID: <bnews.houxp.190>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Jan 27 20:30:52 1983
Subject: ARRL 9: Third Party Agreements
X-Google-Info: Converted from the original B-News header
Posted: Tue Jan 25 08:29:03 1983
Received: Thu Jan 27 20:30:52 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr arrl bulletin nr 9 from arrl headquarters
newington ct january 24, 1983

the fcc has announced that a third party traffic agreement is now in
effect between the united states and st. vincent, prefix j8. please
add st. vincent to the list of third party traffic agreements
appearing on page 96 of the november 1982 issue of qst ar

From 9037567783748997497
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,861f3333c64856bb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-27 17:32:09 PST
Message-ID: <bnews.houxp.191>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Jan 27 20:32:08 1983
Subject: Propagation Bulletin 4
X-Google-Info: Converted from the original B-News header
Posted: Tue Jan 25 08:29:37 1983
Received: Thu Jan 27 20:32:08 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr propagation forecast bulletin nr 4 from arrl headquarters
newington ct january 24, 1983
to all radio amateurs bt

the solar flux rise reported last week was minimal. after reaching
145 on the 16th, the flux slid to a low of 117 on the 22nd. it rose
slightly the next day, but the appearance of the sun gives little
indication of significant upward movement in the next few days.

geomagnetic activity went through a broad peak just after the middle
of the month, but it was falling again and propagation was improving
at bulletin time. prospects are for a minor disturbance peak about
the 25th, followed by improved conditions through the rest of the
forecast week.

qst propagation charts for late january show a slight increase in the
number of hours available for east west work on the higher
frequencies despite the anticipated drop in solar activity and
sunspot numbers. this is the expected result of increasing hours of
northern hemisphere daylight at this season. the decline in solar
activity has brought the solar flux down nearer to the base numbers
used for the charts, making for improved accuracy on most paths
through at least february.

american sunspot numbers for jan 13 through 19 ranged between 80 and
103, with a mean of 90.7 ar

From 858817514527585563
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9681bd06bef6a8fa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-28 23:55:52 PST

Message-ID: <bnews.inuxc.595>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Jan 29 02:55:51 1983
Subject: This Weekend's Contests
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 28 09:16:29 1983
Received: Sat Jan 29 02:55:51 1983

This weekends contests include

Novice Roundup (see article 347)

ARRL Midnight Special

Contest Period: 0400Z to 0600Z Jan 30. First hour 40 cw, second hour 80 cw

Frequencies: 7040 to 7075 and 3540 to 3575

Exchange: HONEST signal reports (aka, not all 599's, HI) and a three letter
          abbreviation for the name of your county. Work stations once per
          band. NO AMPLIFIERS!!!

CQWW 160 Meter CW Contest

Contest Period: 2200Z Jan 28 until 1600Z Jan 30. CW only

Exchange: Signal report and QTH (state/province for W/VE stations, country for
           others.
Frequencies: 160 Meters, of course, but stay out of the 1825 to 1830 Khz cw
              DX window!!

French CW Contest

Contest Period: 0600Z Jan 29 until 1800Z Jan. 30

Exchange: Signal report and Serial No.. French Stations will also send
           a two digit Department (county) number.

From 7073918779218496255
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab33e0980daf220e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-29 01:56:53 PST
Message-ID: <bnews.harpo.1351>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!Anonymous

X-Path: utzoo!decvax!harpo!Anonymous
From: harpo!Anonymous
Date: Sat Jan 29 04:56:52 1983
Subject: VUCC.grid.location - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 28 17:18:54 1983
Received: Sat Jan 29 04:56:52 1983

#N:harpo:8100001:000:671
harpo!Anonymous   Jan 28 16:19:00 1983

I've written a fortran 77 program to
determine the VUCC Grid Location
given latitude and longitude.

Example: 40d 46.9m N 74d 41.4m W = FN20ps

See QST, Jan 83, "VHF/UHF Century Club",
by W1XX, page 49.   The definitions
given for the 1st, 2nd, 5th and 6th
characters are mathematically incomplete.
I had to call ARRL to find unambiguous
descriptions.

The program is a bit long to put
out on the net unless there is
sufficient interest. (About 100 lines,
about half comments)
If anyone is interested I can
send them a copy from whuxb.
The links for mail, usend, uucp, etc. to/from
the new gummo unix seem to be gummed up.

Ron, W2IOL, whuxb!rcmcc, harpo!gummo!rcmcc

From -2939832857192812081
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5f10159db0d61caa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-29 03:08:49 PST
Message-ID: <bnews.yale-com.749>
Newsgroups: net.ham-radio
Path: utzoo!decvax!yale-com!kaufman
X-Path: utzoo!decvax!yale-com!kaufman
From: yale-com!kaufman
Date: Sat Jan 29 06:08:48 1983
Subject: 2m HTs
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 28 15:18:24 1983
Received: Sat Jan 29 06:08:48 1983

Having finally upgraded my Novice, I've been looking at HTs.
The best two look to be the TR-2500 and the latest Santec
(I forget the model number). Nobody around here uses the
Santec - does anybody out there in netland? Why don't people
buy from Santec? Please respond - the Santec looks to me like
the better HT, but I don't want to get stuck with a radio that
can't get repaired, or something.
     Thanx and 73s,
          David Kaufman, KA1AGE (Interim New York)

From -5906191267582323908
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b22c631fc8cad2ed,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,b22c631fc8cad2ed,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1983-01-30 00:43:56 PST
Message-ID: <bnews.eagle.749>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sun Jan 30 03:43:55 1983
Subject: Ariane L-6 Delayed
X-Google-Info: Converted from the original B-News header
Posted: Thu Jan 27 02:18:39 1983
Received: Sun Jan 30 03:43:55 1983

The following is quoted from Aviation Week and Space Technology, Jan 17, 1982,
page 27.

"Sixth flight of Europe's Ariane launcher is facing possible new delays as
program personnel work on third-stage engine modifications and ground
verification checks required after the failure of Ariane 5 last September
(AW&ST Sept. 20 1982, p. 20). The sixth flight is now expected in May or
June, although a firm date will not be set until after review meetings.
The launch had been planned for November, 1982, but was pushed back to the
second half of April after the No. 5 Ariane's failure (AW&ST Nov. 1, 1982,
p. 24)."

Note that this launch is the one scheduled to carry Amsat Phase-3B in a
dual-payload carrier along with the primary payload, ECS-1.

Phil Karn, KA9Q/2

From 8510834038899594036
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2366a427de32ef81,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-30 03:20:00 PST
Message-ID: <bnews.inuxc.593>

Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sun Jan 30 06:19:57 1983
Subject: 1983 ARRL NOVICE ROUNDUP
X-Google-Info: Converted from the original B-News header
Posted: Thu Jan 27 12:26:45 1983
Received: Sun Jan 30 06:19:57 1983

Yes folks, Its Novice Roundup time, one of the few, if not the
only, contest designed for Novice and HF Technician activity.

Object: For Novice and Techs to work as many stations on the HF Novice
         Tech bands as possible. Others work Novices and Techs only.

Contest Period: First week of February, Including both weekends. Begins
         0000 UTC Saturday, Jan 29 and ends 2359 UTC Sunday, February 6.
         Operate no more than 30 Hours.

Exchange: Signal report and ARRL section or country for DX stations. Novice
      should sign /N and Techs /T to indicate license class

From 5420209016905881435
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,db32772f95906162,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-30 07:35:04 PST
Message-ID: <bnews.teklabs.1697>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:tektronix!teklabs!arnoldf
X-Path: utzoo!decvax!ucbvax!CAD:tektronix!teklabs!arnoldf
From: teklabs!arnoldf
Date: Sun Jan 30 10:35:02 1983
Subject: Batteries for Sale
X-Google-Info: Converted from the original B-News header
Posted: Thu Jan 27 08:47:27 1983
Received: Sun Jan 30 10:35:02 1983

I have acquired a large quantity of fresh Eveready 186 batteries. They
were shipped from Union Carbide the first week of January, 1983.

They are approximately .455Diax.125L and are manganese dioxide system-
1.5volts. They are suitable for use in calculators, portable radio
receivers, and in battery backup of small or CMOS memories.

In factory bulk pack, 0 per hundred, less than dealer cost.
Distributor net price is $.62, and price breaks are generally not
available in any quantity below 5000 pcs.

From -1655857075660570181
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,485a5e3e827c75da,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-31 00:40:25 PST
Message-ID: <bnews.sri-unix.5099>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:tektronix!zehntel!sytek!menlo70!hao!hplabs!sri-unix!
dbeck
X-Path: utzoo!decvax!ucbvax!CAD:tektronix!zehntel!sytek!menlo70!hao!hplabs!sri-
unix!dbeck
From: sri-unix!dbeck
Date: Mon Jan 31 03:40:24 1983
Subject: Re: ARRL DX BULLETIN de k2ph - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Thu Jan 27 23:08:08 1983
Received: Mon Jan 31 03:40:24 1983

#R:inuxc:-58800:sri-unix:5200004:000:169
sri-unix!dbeck   Jan 23 18:31:00 1983

VK0CW was worked here at 1530Z 23 jan. 14 028x/14040r but much qrm
of the intentional type. W6KG/A7 also active about same time around
14.020. Good Hunting. de K6ZX

From -8059963157476296484
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d5f19a3c4a86ccdf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-31 00:41:39 PST
Message-ID: <bnews.eagle.753>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Mon Jan 31 03:41:38 1983
Subject: New use for CW
X-Google-Info: Converted from the original B-News header
Posted: Sun Jan 30 16:30:41 1983
Received: Mon Jan 31 03:41:38 1983

I believe I have just found a new use for CW.

I just got one of those junk phone calls in which a "computer"
(tape recorder) calls you up and spits out questions, followed by
prompts for answers.

Well, I faithfully listened to each question and answered each one
truthfully - in CW, using the touch tone dial!

I have not yet received another call.

Phil, KA9Q/2

From -2951584802911603950
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b9bbeef937e29633,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,b9bbeef937e29633,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1983-01-31 23:05:35 PST
Message-ID: <bnews.eagle.754>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Tue Feb 1 02:05:33 1983
Subject: Decoded Uosat Telemetry
X-Google-Info: Converted from the original B-News header
Posted: Mon Jan 31 03:29:41 1983
Received: Tue Feb 1 02:05:33 1983

Following is a recently decoded frame of telemetry from Uosat-Oscar-9,
courtesy of Bob Diersing, N5AHD, in Corpus Christi, TX:

UOSAT OSCAR 9 --- DATE: 83.029 = 01/29/83 --- TIME: 2221 UTC --- ORBIT: 07276
-------- DATA RATE: 01200 BPS --- MODE: ASYNC --- BEACON FREQ: 145.82 --------
                    ---- SPACECRAFT SYSTEMS STATUS ----

STATUS POINT	SYSTEM	STATE
01	145 MHZ BEACON	ON
02	435 MHZ BEACON	OFF
03	PRIMARY COMPUTER	ON
04	CCD CAMERA MODULE	OFF
05	RADIATION DETECTOR - A	ON
06	MAGNETOMETER EXPT.	ON
07	7 MHZ BEACON EXPT.	OFF
08	14 MHZ BEACON EXPT.	OFF
09	21 MHZ BEACON EXPT.	OFF
10	28 MHZ BEACON EXPT.	OFF
11	2.4 GHZ BEACON EXPT.	OFF
12	10.47 GHZ BEACON EXPT.	OFF
13	145 MHZ COMMAND RX	SQUELCHED
14	435 MHZ COMMAND RX	SIGNAL
15	STATUS CALIBRATE	
16	BATTERY CHG REG STATUS	A
17	H F BEACON EXPT. SYNTH.	OFF
18	TELECMD DECODER STATUS	GROUND
19	MAGNETORQUER	OFF
20	PRI COMPUTER BLOCK LOAD	DISABLE
21	SEC COMPUTER DATA O/P	ACTIVE
22	SEC COMPUTER CLOCK	INT FAIL
23	SEC COMPUTER PROCESSOR	RUNNING

24	SEC COMPUTER POWER DOWN	ON
25	14 MHZ SYNTH LOCK	OUT
26	28 MHZ SYNTH LOCK	OUT
27	21 MHZ SYNTH LOCK	OUT
28	RADIATION DETECTOR - B	OFF
29	TIP MASS UNCAGE CONFIRM	NO
30	SPEECH SYNTH POWER	ON
31	VISUAL MEMORY DISPLAY	OFF
32	GRAV GRAD BOOM MTR PWR	OFF
33	SEC COMPUTER POWER	OFF
34	H F BEACON EXPT. POWER	OFF
35	NAV MAGNETOMETER PWR	ON
36	COMPUTER MEM ERR BIT - 1	
37	COMPUTER MEM ERR BIT - 2	
38	COMPUTER MEM ERR BIT - 3	
39	STATUS CALIBRATE	
40	PRI COMPUTER UART O/P	INACTIVE
41	GRAVITY GRAD BOOM MOTOR	FORWARD
42	MAGNETORQUER POWER	FORWARD
43	MAGNETOMETER EXPT.	MEASURE
44	NAVIGATION MAGNETORQUER	SAFE
45	GRAVITY GRAD BOOM MOTOR	SAFE

UOSAT OSCAR 9 --- DATE: 83.029 = 01/29/83 --- TIME: 2221 UTC --- ORBIT: 07276

-------- DATA RATE: 01200 BPS --- MODE: ASYNC --- BEACON FREQ: 145.82 --------

---- SPACECRAFT TELEMETRY ---- 7 ----

CHANNEL	PARAMETER	RAW VALUE	ACTUAL	UNITS
00	SEC COMP CURRENT	110	132.00	MA
01	SOLAR ARRAY CURRENT +X	160	379.20	MA
02	BATTERY HALF VOLTAGE	703	7.10	VOLTS
03	RADIATION DETECTOR A O/P	001	41.60	COUNT
04	RADIATION DETECTOR B O/P	001	41.60	COUNT
05	MAGNETOMETER HX-COARSE	622	14782.25	NT
06	MAGNETOMETER HY-COARSE	307	-30274.91	NT
07	MAGNETOMETER HZ-COARSE	555	5516.12	NT
08	BATTERY PACK-A TEMP	471	0.61	DEGREES C
09	+X FACET TEMP	386	17.78	DEGREES C
10	VISUAL DISPLAY & CCD CURRENT	100	84.00	MA
11	SOLAR ARRAY CURRENT +Y	150	368.00	MA
12	2.4 GHZ BEACON POWER O/P	000	0.00	MW
13	RADIATION DETECTORS EHT VOLTS	360	360.00	VOLTS
14	RADIATION DETECTORS CURRENT	310	40.55	MA
15	MAGNETOMETER HX-FINE	546	631.75	NT
16	MAGNETOMETER HY-FINE	813	5444.91	NT
17	MAGNETOMETER HZ-FINE	623	2006.88	NT
18	BATTERY PACK-B TEMP	470	0.81	DEGREES C
19	-X FACET TEMP	385	17.98	DEGREES C
20	PRI COMP CURRENT	160	162.00	MA
21	SOLAR ARRAY CURRENT -X	030	233.60	MA
22	BATTERY/BCR 14V BUS	678	14.32	VOLTS
23	SUN SENSOR +Z AXIS	002	0.01	VOLTS
24	10.4 GHZ BEACON CURRENT	007	-8.00	MA
25	MAGNETOMETER TEMP	416	11.72	DEGREES C
26	MAGNETOMETER CURRENT	429	53.33	MA

27	TELECOMMAND RX CURRENT	265	29.63	MA
28	RADIATION EX TEMP +X1	470	0.81	DEGREES C
29	+Y FACET TEMP	388	17.37	DEGREES C
30	BATTERY CHARGE CURRENT	190	570.00	MA
31	SOLAR ARRAY CURRENT -Y	020	222.40	MA
32	POWER COND MODULE +10V	666	10.32	VOLTS
33	TELEMETRY SYS CURRENT	224	7.52	MA
34	2.4 GHZ BEACON CURRENT	013	0.86	MA
35	145 MHZ BEACON POWER O/P	311	382.43	MW
36	145 MHZ BEACON CURRENT	376	93.54	MA
37	145 MHZ BEACON TEMP	402	14.54	DEGREES C
38	PRI COMP TEMP -X1	479	-1.01	DEGREES C
39	-Y FACET TEMP	382	18.58	DEGREES C
40	+14 V LINE CURRENT	110	314.60	MA
41	+5 V LINE CURRENT	100	64.00	MA
42	POWER COND MODULE +5V	738	5.51	VOLTS
43	SUN SENSOR -Z AXIS	074	0.37	VOLTS
44	HF BEACONS CURRENT	041	1.73	MA
45	435 MHZ BEACON POWER O/P	000	0.00	MW
46	435 MHZ BEACON CURRENT	002	-11.23	MA
47	435 MHZ BEACON TEMP	462	2.42	DEGREES C
48	SEC COMP TEMP +Y1	476	-0.40	DEGREES C
49	+Z FACET TEMP	500	-5.25	DEGREES C
50	+10V LINE CURRENT	090	270.00	MA
51	-10V LINE CURRENT	090	39.00	MA
52	POWER COND MODULE -10V	274	4.10	MA
53	NAV MAGNETOMETER Y-AXIS	107	-102098.95	NT
54	NAV MAGNETOMETER Z-AXIS	758	-79881.63	NT
55	NAV MAGNETOMETER X-AXIS	578	-15855.83	NT
56	SPEECH SYNTH CURRENT	454	44.19	MA
57	CCD IMAGER TEMP	478	-0.81	DEGREES C
58	TELEMETRY SYS TEMP -Y1	478	-0.81	DEGREES C
59	-Z FACET TEMP	462	2.42	DEGREES C

From 3124584829300868987
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ebfc6c3b1bc4250a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-01 01:05:58 PST
Message-ID: <bnews.inuxc.597>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!hou5f!hou5d!houxz!ihnp4!ixn5c!inuxc!
wheatley
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!hou5f!hou5d!houxz!ihnp4!ixn5c!inuxc!
wheatley
From: inuxc!wheatley
Date: Tue Feb 1 04:05:54 1983
Subject: This Weekends Contests
X-Google-Info: Converted from the original B-News header
Posted: Mon Jan 31 10:20:35 1983
Received: Tue Feb 1 04:05:54 1983

This weekend's contests include:

NOVICE ROUND-UP:

Continues this week, through Sunday, Feb. 6 at 2359Z

ARIZONA QSO PARTY

>From 1800Z Feb. 5 until 0600Z Feb. 6.

Exchange signal report and QTH (county for AZ stations; state, province, or country for others. Work stations once per band.

Frequencies: phone 3895, 7230, 14280, 21365, 28560
              cw 60 KHz up from lower band edge
              novice 25 KHz up from lower band edge

QRP SSB CONTEST

>From 1500Z Feb. 5 until 1500Z Feb. 6

Exchange signal report, using maximum of 10 Watts PEP output.

NEW HAMPSHIRE QSO PARTY

>From 1900Z Feb. 5 until 0700Z Feb. 6 and 1400Z Feb. 6 until 0700Z Feb. 7

Exchange signal report and QTH (county for NH stations, ARRL section or country for others. Work stations once per band and mode.

Frequencies: phone 3935, 3975, 7235, 14280, 21380, 28575, 50115, 145015
              cw 1810 and 55 KHz up from lower band edge
              novice 30 KHz up from lower band edge

SOUTH CAROLINA QSO PARTY

>From 1800Z Feb. 5 until 2359 Z Feb. 6

Exchange signal report and QTH (county for SC stations; state, province, or country for others. Work stations once per band and mode.

Frequencies:: phone 3895, 7230, 14280, 21365, 28560
               cw 60 KHz up from lower band edge
               novice 25 KHz up from lower band edge

From 2056283058838251747
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13372f,af738d29ee41897a,start
X-Google-Attributes: gid13372f,public

X-Google-Thread: 151e61,af738d29ee41897a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-01 06:31:40 PST
Message-ID: <bnews.eagle.752>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!lime!we13!otuxa!ll1!sb1!burl!
mhuxv!mhuxi!mhuxj!mhuxt!eagle!karn
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!lime!we13!otuxa!ll1!sb1!burl!
mhuxv!mhuxi!mhuxj!mhuxt!eagle!karn
From: eagle!karn
Date: Tue Feb 1 09:31:39 1983
Subject: Uosat Bulletin #13
X-Google-Info: Converted from the original B-News header
Posted: Sat Jan 29 04:42:30 1983
Received: Tue Feb 1 09:31:39 1983

UOSAT SPACECRAFT CONTROL CENTRE
UNIVERSITY OF SURREY, GUILDFORD, SURREY, ENGLAND
****

UOSAT SPACECRAFT OPERATIONAL STATUS:
****

**** UOSAT BULLETIN-13 1200 GMT 28 JANUARY 1983 ****

** S/C NEWS **

THE 2.4 GHZ AND 10.5 GHZ BEACONS ON UOSAT WERE ACTIVATED ON ORBITS 6920 AND 6996 WHEN TELEMETRY INDICATED BOTH BEACONS TO BE OPERATING CORRECTLY WITH 100 MW OUTPUT ON 2.4 GHZ. ATTEMPTS TO TRACK THE 2.4 GHZ BEACON BEFORE STABILISATION IS COMPLETE MAY FOLLOW IF THE ATTITUDE MANOEUVRES SCHEDULE ALLOWS.

THERE HAVE BEEN FURTHER TESTS ON THE CCD EXPT IN PREPARATION FOR POST-STABILISATION OPERATIONS. CCD EXPT OPERATION WAS NOMINAL AND RESULTS WILL BE GIVEN WHEN ANALYSIS IS COMPLETE.

A COMPLETE LIST OF TELEMETRY CALIBRATION EQUATIONS, INCLUDING UPDATES, WILL BE INCLUDED IN A BULLETIN SOON.....WATCH THIS SPACE!

** S/C ATTITUDE **

FURTHER ATTITUDE MANOEUVRES TO TILT THE S/C UP INTO THE ORBIT PLANE IN PREPARATION FOR BOOM DEPLOYMENT HAVE CONTINUED THIS WEEK, INCLUDING CHANGES TO THE Z-SPIN PERIOD, CURRENTLY 50 SECS AT 47 DEGREES. WE HOPE TO BE THERE SOON!!

** S/C OPERATIONS SCHEDULE **

MONDAY TO FRIDAY......ATTITUDE CONTROL & SYSTEM TESTS (INC CCD)

SATURDAY & SUNDAY.....TELEMETRY, BULLETIN & SPEECH TELEMETRY

********** THE 145 MHZ BEACON WILL BE OFF FROM 1200 GMT SUNDAY 30/1/83 FOR ESSENTIAL ATTITUDE MANOEUVRES USING 435 MHZ BEACON **********

IF ALL GOES WELL, THE TIP-MASS RELEASE PYROS ARE SCHEDULED TO BE FIRED ON ORBIT 7316 FOLLOWED BY RECALIBRATION OF THE MAGNETOMETERS.

** THANKS FOR FEEDBACK **

G3LYP, G8UYB, HP1AC, G8EDG, K4GFG, DB2OS, G3YMC, WD4IXI, JH7CKF, AMSAT-UK-523, AMSAT-LM-728, SM7AIO, HP1AC, WA5ZIB, G3UYB, G4ROA, SM7-6859, JA4GVA, OZ1WN.

POST BOX

*** JR1SWB DE G3YJO, TNX FOR LETTER 11/1/83 WILL ADVISE WHEN VISIT POSSIBLE.

*** QSL CARDS WILL BE SENT TO ALL STATIONS SUPPLYING REPORTS SHORTLY.

SPACECRAFT ORBITAL DATA

ORBITS FOR 28TH JANUARY

	UOSAT	OSCAR-8	NOAA-7	
ORBIT NO :	7256	24975	8247	
EQX TIME :	15:19:41	15:18:58	14:31:53	GMT
EQX LONG :	2.8	307.7	351.8	DEG.W
MEAN HGT :	509.0	905.0	850.0	KM
PERIOD :	94.7662145	103.1680733	101.9167240	MINS
P-DRAG :	7.191E-05	2.611E-06	8.000E-06	*N-REF
LONG INC :	23.6911583	25.7934846	25.4735060	DEGS
L-DRAG :	1.809E-05	7.028E-07	2.000E-06	*N-REF

QSL/POST CARDS CONFIRMING RECEPTION OF UOSAT DATA INCLUDING STATION DETAILS WOULD BE APPRECIATED FOR SURVEY OF NO. AND GEOGRAPHIC DISTRIBUTION OF ACTIVE STATIONS
SEND TO: DR.M.N.SWEETING, UOSAT CONTROL CENTRE - THANK YOU

From 6690659017457424603
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8ed5e1864e94b8f4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-01 23:52:55 PST
Message-ID: <bnews.eagle.757>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn

From: eagle!karn
Date: Wed Feb 2 02:52:52 1983
Subject: TAPR board information & availability
X-Google-Info: Converted from the original B-News header
Posted: Tue Feb 1 00:24:08 1983
Received: Wed Feb 2 02:52:52 1983

I just had a telephone conversation with Den Connors, KD2S/7, the president of TAPR. Den gave me some tentative information that would be of interest to those of you who would like to obtain packet radio boards.

At this point, TAPR is busily assembling, testing, and is about to ship 200 "beta" version packet radio boards. These are going to members of TAPR who agreed to be test users. Part of the reason that beta site users are required to be members is legal: if TAPR were to sell complete units to the "general public", they would have been required to meet the Part 15 Class B RFI limits and submit a unit with a $2000 testing fee to the FCC lab for verification. On the other hand, a kit is not subject to the requirements.

The TAPR board of directors is meeting this Saturday to decide how to further distribute the boards past the beta test. At this point, the possible alternatives are as follows:

1. A blank board for $40.

2. A board and a kit of parts for $250. This would consist of a board with the discrete parts and IC sockets wavesoldered on by a professional PC board house. The ICs supplied would be tested. All you would have to do is plug in the ICs. This is as far as they can go without having to pay the $2000 testing fee (but of course you take responsibility for meeting those requirements, just as with any personal computer.)

3. Same as #2, but including a custom cabinet, $300.

TAPR is likely to decide to go with only two of these three alternatives; further information will be forthcoming as it comes.

For those interested in further information or in joining TAPR, here's their mailing address. One year's membership is $12.

Tucson Amateur Packet Radio Corporation
PO Box 22888
Tucson, AZ 85734

Phil Karn, KA9Q/2

From -1172843519166191746
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bd11c52dc4c9a183,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-03 00:35:31 PST

Message-ID: <bnews.houxp.192>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Feb 3 03:35:29 1983
Subject: ARRL 10: AMTOR
X-Google-Info: Converted from the original B-News header
Posted: Wed Feb 2 08:50:39 1983
Received: Thu Feb 3 03:35:29 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr arrl bulletin nr 10 from arrl headquarters
newington ct january 28, 1983
to all radio amateurs bt

the fcc has authorized the use of the amtor digital teleprinter code
by radio amateurs in the hf bands. amtor is a handshaking digital
teleprinter technique which is immune to fading, interference and
receiver tuning errors. see june 1981 qst, page 25, for details on
amtor.   this fcc action will be effective upon publication in the
federal register ar

From -7467829768753915938
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4f07890cb648e94e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-03 01:49:21 PST
Message-ID: <bnews.houxp.193>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Feb 3 04:49:19 1983
Subject: ARRL 11: Code Free License
X-Google-Info: Converted from the original B-News header
Posted: Wed Feb 2 08:50:57 1983
Received: Thu Feb 3 04:49:19 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr arrl bulletin nr 11 from arrl headquarters
newington ct february 1, 1983
to all radio amateurs bt

the fcc has released the notice of proposed rulemaking proposing to
establish an amateur radio operator license class which would not
require any demonstrated ability to send or receive morse code. the

so called codeless license proposal seeks to create one of two possible new classes of amateur license. one alternative would be the technician class without the five word per minute morse code examination. this license would carry all amateur privileges above 50 mhz. the second alternative would be an experimenter class. this license would require passing a theory test which would require knowledge of digital and other amateur techniques and would grant all amateur privileges above 144 mhz. fcc seeks comments on this proposal, especially views on the composition of the new theory test for the proposed experimenter class. it also seeks comments on the frequency privileges to be given to either a codeless technician or experimenter class. comment deadline is april 29, 1983. replies are due may 31. march 1983 qst will carry the entire text of this proposal, including information on how to file comments with the fcc. the docket number is 83 28 ar

From -8230177405299867071
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2247abcb67cf383d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-04 01:31:04 PST
Message-ID: <bnews.teklabs.1710>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!seismo!hao!menlo70!sytek!zehntel!tektronix!teklabs!
arnoldf
X-Path: utzoo!decvax!harpo!seismo!hao!menlo70!sytek!zehntel!tektronix!teklabs!
arnoldf
From: teklabs!arnoldf
Date: Fri Feb 4 04:30:51 1983
Subject: Batteries for Sale
X-Google-Info: Converted from the original B-News header
Posted: Mon Jan 31 09:53:54 1983
Received: Fri Feb 4 04:30:51 1983

I have acquired a large quantity of fresh Eveready 186 batteries. They were shipped from Union Carbide the first week of January, 1983.

They are approximately .455Diax.125L and are manganese dioxide system-1.5volts. They are suitable for use in calculators, portable radio receivers, and in battery backup of small or CMOS memories.

In factory bulk pack, $30 per hundred, less than dealer cost. Distributor net price is $.62, and price breaks are generally not available in any quantity below 5000 pcs.

From -28615204942394094
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 13372f,e989fade6f86fba0,start
X-Google-Attributes: gid13372f,public
X-Google-Thread: 151e61,e989fade6f86fba0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-06 00:24:30 PST
Message-ID: <bnews.eagle.761>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sun Feb 6 03:24:29 1983
Subject: UOSAT Bulletin #14
X-Google-Info: Converted from the original B-News header
Posted: Sat Feb 5 04:13:23 1983
Received: Sun Feb 6 03:24:29 1983

UOSAT SPACECRAFT CONTROL CENTRE
UNIVERSITY OF SURREY, GUILDFORD, SURREY, ENGLAND
****

UOSAT SPACECRAFT OPERATIONAL STATUS:
****

**** UOSAT BULLETIN-14 1200 GMT 4 FEBRUARY 1983 ****

** SPACECRAFT NEWS **

THE BOOM TIP-MASS RELEASE PYROTECHNIC PIN-PULLERS WERE FIRED SUCCESSFULLY ON ORBIT 7127 FOLLOWING A LAST MINUTE SOFTWARE HOLD ON ORBIT 7126. DETAILED ANALYSIS OF REAL-TIME TELEMETRY AND STORED MAGNETOMETER DATA HAVE CONFIRMED THERE TO HAVE BEEN NO PERTURBATION TO EITHER THE S/C ATTITUDE NOR THE MAGNETOMETER ALIGNMENT.

** SPACECRAFT ATTITUDE **

ATTITUDE MANOEUVRES HAVE CONTINUED THIS WEEK, INCLUDING CHANGES TO THE Z-SPIN PERIOD, CURRENTLY 70 SECS AT 60 DEGREES TILT. WE HAVE NOW ENTERED THE REGION OF POTENTIAL GRAVITY GRADIENT CAPTURE. MANOEUVRES TO INCREASE THE TILT AND REDUCE THE SPIN FURTHER WILL CONTINUE NEXT WEEK IN PREPARATION FOR BOOM DEPLOYMENT.

** SPACECRAFT OPERATIONS SCHEDULE **

MONDAY TO FRIDAY......ATTITUDE CONTROL & DEPLOYMENT SOFTWARE TESTS

SATURDAY & SUNDAY.....TELEMETRY, BULLETIN & SPEECH TELEMETRY

** THANKS FOR FEEDBACK **

G3LYP, G8UYB, HP1AC, G8EDG, K4GFG, DB2OS, G3YMC, WD4IXI, JH7CKF, AMSAT-UK-523, AMSAT-LM-728, SM7AIO, HP1AC, WA5ZIB, G3UYB, G4ROA, SM7-6859, JA4GVA, OZ1WN, G3UKV, VE2QO, UNIV.BERGEN.

** POST BOX **

*** JR1SWB DE G3YJO, TNX FOR LETTER 29/1/83

*** QSL CARDS ARE BEING PREPARED & WILL BE SENT TO ALL STATIONS SUPPLYING REPORTS SHORTLY.

SPACECRAFT ORBITAL DATA

ORBITS FOR 4TH FEBRUARY

	UOSAT	OSCAR-8	NOAA-7	
ORBIT NO :	7362	25072	8346	
EQX TIME :	14:45:09	14:06:15	14:41:36	GMT
EQX LONG :	354.1	289.7	353.7	DEG.W
MEAN HGT :	509.0	905.0	850.0	KM
PERIOD :	94.7634940	103.1678200	101.9159320	MINS
P-DRAG :	5.480E-05	2.611E-06	8.000E-06	*N-REF
LONG INC :	23.6904744	25.7934164	25.4733080	DEGS
L-DRAG :	1.378E-05	7.028E-07	2.000E-06	*N-REF

QSL/POST CARDS CONFARMING RECEPTION OF UOSAT DATA INCLUDING STATION DETAILS WOULD BE APPRECIATED FOR SURVEY OF NO. AND GEOGRAPHIC DISTRIBUTION OF ACTIVE STATIONS
SEND TO: DR.M.N.SWEETING, UOSAT CONTROL CENTRE - THANK YOU

From -8772027004600209120
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d54cfd1c5347ca2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-06 02:32:29 PST
Message-ID: <bnews.inuxc.602>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sun Feb 6 05:32:28 1983
Subject: ARRL DX BULLETIN de K2PH
X-Google-Info: Converted from the original B-News header
Posted: Sat Feb 5 15:47:42 1983
Received: Sun Feb 6 05:32:28 1983

_H_e_a_r_d__I_s_l_a_n_d_. VK0CW has made over 17,000 contacts. Both VK0CW and VK0HI are extremely active on all bands from 80 through 10 meters. Watch 7003 or 7017 kHz at 1800 and 2330Z. QSL to N2DT. Also, VK0NS should be active by the time you read this. This group left Kerguelen Island on Tuesday.

_A_m_s_t_e_r_d_a_m__I_s_l_a_n_d_. FB8ZQ if often around 14025 kHz at 2200Z. Alain is also active on 40 and 80 meters. QSL via F6AJN.

_K_e_r_g_u_e_l_e_n__I_s_l_a_n_d_. FB8XAB can be found on 21-16 kHz at 1500Z and on 14005 kHz around 0100Z. QSL to F6GXB.

_C_h_a_d_. TT8BC said during the recent operation that more activity should be heard from this country in the future. QSLs for TT8BC go to K4PHE and for TT8AC to N4NX.

_S_o_u_t_h__S_h_e_t_l_a_n_d_s_. LU3ZI has been very active on 160 through 10 meter cw. Watch 1829 kHz at 0300 and 0600Z. Operation will continue until February 16.

_S_o_u_t_h__O_r_k_n_e_y_s_. LU5ZA is active on 80 through 10 meters ssb with three or more operators. Look on 7085 kHz at 0600Z and 3740 kHz at 0800Z. CW operation will begin as soon as the keyer is fixed. QSL to LU2A.

_I_n_d_i_a_. VU2BK can be found on 7002 kHz at 2300Z and 3502 kHz from 0000Z.

_P_o_r_t_u_g_a_l_. CT stations are optionally using the prefix CQ through the end of March.

_L_i_b_y_a_. 5A1BQ is apparently a pirate operation. None of the various QSL managers specified know anything about the operation.

_N_i_g_e_r_i_a_. KC7UU/5N6 is very active on 14024 kHz at 0000Z, 21012 kHz at 1300Z, and 7005 kHz at 0200Z.

_Q_a_t_a_r_. A71AD may be found nightly on 3795 kHz. W6KG/A7 can be found on 21022 kHz around 1500Z and on 28501 kHz at 1330Z. Iris and Lloyd will next stop at A9 later this month. They will not be visiting A6.

_U_n_i_t_e_d__A_r_a_b__E_m_i_r_a_t_e_s_. DJ8WL left Wednesday for a two month stay in A6. Peter will try for an authorized operation.

From 2450420683970538317
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc4685bf25b79568,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-09 02:44:27 PST
Message-ID: <bnews.eagle.767>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
X-Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
From: eagle!karn
Date: Wed Feb 9 05:44:24 1983
Subject: RS Satellite News
X-Google-Info: Converted from the original B-News header
Posted: Mon Feb 7 23:31:05 1983
Received: Wed Feb 9 05:44:24 1983

The following is courtesy of K1HTV, VP Operations for AMSAT:

Here are some notes on some of the presently operating Radio Amateur satellites.

The RS5 telemetry beacon (29.452 MHz) was heard today (Feb 7) in the dwell mode, sending a series of either "E01" or "EG01". This is normally the battery voltage telem. channel and a reading of 01 translates to a dead battery. The RS-5 satellte however is far from dead and seems to be operating properly, even in darkness so the meaning of the 01 raw data on channel "E" and "EG" is unclear. Maybe it has something to do with the codestore message mentioned later in this text.

Although the R5-5 transponder has been comanded off, three channels have been operational, the 29.452 MHz telem. beacon, the 29.350 MHz service channel which retransmits CW on 145.850 MHz, and the ROBOT-Codestore channel on 29.330 MHz. This latter channel is presently being used by a Soviet Antarctic expedition whose communications group is headed by Leo Labutin, 4K1CR (UA3CR), whose picture recently appeared in ASR #50. Because of the unreliable HF propagation between the Antarctic and the U.S.S.R. , the expedition is using the store and forward (codestore) capability of RS-5 to exchange messages between the Soviet Antarctic base(s) and Moscow.

On Monday, February 7th the following message was copied around 21:30 UTC from the RS-5 beacon on 29.330 MHz.

"UA3AJH UW3CX SRO(OE)NO [OE sent as one letter sounds like cheh] DAJTE SEANSY KOSPASA QTH NEOBHODIMO OTMETITX KARTE ULETAM 10 FEW DE 4K1CR 4VUV ".

Aquick call to Dex Anderson, W4KM, provided the following translation of the above Russian message to English. It says UA3AJH UW3CX (in Moscow), URGENTLY GIVE (us) PASSES (orbital info) on KOSPASA . It is NECESSARY TO NOTE the QTH ON MAP.

FLY OUT on FEB 10 . FROM 4K1CR (call sign of Leo, UA3CR).

The KOSPASA mentioned in the above message refers to the Soviet KOSPAS search and rescue satellite which was launched on June 30, 1982 as part of a joint international effort by the United States, the U.S.S.R., France and Canada. KOSPAS and SARSAT satellites are to be used to locate downed civil aircraft and ships. The first rescue mission occured on Sept.10, 1982 when a downed Canadian plane was found using the Soviet KOSPAS satellite.

>From the message one can speculate that the reason for the Antarctic expedition wanting the orbital data for the KOSPAS satellite is that they are going to do some transmitting on one of the ELT (Emergency Locating Transmitter) frequencies to test the bird. The results should indicate on the map just where on the Antarctic continent the Soviet base is located.

The last part of Leo's message mentions TO FLY OUT FEB 10. It is not clear if he means that they will be flying out of their present are to another base or if they will be leaving the Antarctic continent.

Switching to other Soviet birds, RS-6 and RS-8 have had their transponders on lately and have been in favorable positions at times for a number of long haul DX contacts between eastern Europe and the U.S. east coast. In the past week, EQXs were around 30 degrees West longitude and occured about 21:00 UTC. Yours truly, K1HTV, located 12 miles NE of Washington, DC worked YO2IS in Rumania on three different passes as well as a number of Czech stations. Earlier in one of those passes, TU2IE in the Ivory Coast was worked. For those who still need Asia to complete Satellite WAC and don't mind waking up in the middle of the night for an hour or so might I recommend a try with UA0BBN. Mike is on especially on weekends, where he goes begging for contacts at times. He often calls people who call CQ and likes to operate about 20KHz up from the low end of the RS6 & RS8 satellites' passbands . On Feb. 6th UA0BBN and K1HTV worked on 6 different passes of RS6,7 & 8. The QSO via RS7 was via the 145.850 / 29.350 MHz service channel.

On 6 Feb> RS7 was copied dumping a list of stations that had made contact with its onboard ROBOT . Of the 50 call signs dumped, there were stations from all continents except Africa, (but ROBOT did work two stations in Antarctica). I wonder how long it will be before ROBOT gets DXCC.

Reports continue to come in indicating that RS1 and RS2 are both semi-operational. The 29.4 MHz beacon of RS1 can be heard when the bird is in sunlight. The telemetry it sends is not valid and the satellite identifies itself as "55". In fact all letters in the RS1 telemetry are sent as the numeral "5".

A recent report from Europe indicates that RS2 is also active at times, with its transponder occasionally on (and very sensitive) but its 29.4 MHz beacon off. The last report of the RS2 beacon being copied was from W6ELT who in mid January, heard both RS1 with its NG telemetry and RS2 with its good telemetry and its RS RS identifier which indicated that its transponder was ON. Both birds were heard by George within the same hour, about 30 minutes apart between the hours of 5:45 and 6:30 AM PST before local sunrise. So with RS1-8 and U-O-9 it looks like we presently have a total of 9 active (or sem-active) Radio Amateur satellites in orbit.

73 de Rich, K1HTV

From -68230021075350931
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9bb8323dac369532,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-11 03:33:15 PST
Message-ID: <bnews.bpa.112>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihldt!ll1!sb1!sb6!bpa!espo
X-Path: utzoo!decvax!harpo!ihnp4!ihldt!ll1!sb1!sb6!bpa!espo
From: bpa!espo
Date: Fri Feb 11 06:33:12 1983
Subject: Simplex Repeater info
X-Google-Info: Converted from the original B-News header
Posted: Tue Feb 8 17:42:24 1983
Received: Fri Feb 11 06:33:12 1983

Does anyone have info on 2-meter simplex repeaters?? I'd appreciate any info available.

Thanks in advance...

...sb6!bpa!espo

From -5891253013699253779
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5d50ac514ec5efee,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,5d50ac514ec5efee,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1983-02-12 02:12:11 PST
Message-ID: <bnews.iwsl2.148>
Newsgroups: net.wanted,net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!iwsl2!jgpo
X-Path: utzoo!decvax!harpo!ihnp4!iwsl2!jgpo
From: iwsl2!jgpo

Date: Sat Feb 12 05:12:10 1983
Subject: Commercial FCC Licenses
X-Google-Info: Converted from the original B-News header
Posted: Fri Feb 11 09:18:41 1983
Received: Sat Feb 12 05:12:10 1983
Reply-To: jgpo@iwsl2.UUCP (John Opalko)

Now that the First Phone license no longer exists, could anyone tell me what commercial licenses (and endorsements) the Friendly Communications Commission is still issuing and what they're good for? Also, does the FCC publish any kind of study guide or outline? I still see guide books for the First and Second Phone in the stores; would these suffice to study for the General? Which of these study books are the best?

Please reply via mail and I will summarize to the net.

Thanks,
John Opalko
...!iwsl2!jgpo

From -9027432699456509401
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3dff210e0a8e648b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-12 03:58:36 PST
Message-ID: <bnews.we13.395>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!hou5f!ariel!houti!lime!we13!rjr
X-Path: utzoo!decvax!harpo!npoiv!hou5f!ariel!houti!lime!we13!rjr
From: we13!rjr
Date: Sat Feb 12 06:58:35 1983
Subject: How to comment on dockets
X-Google-Info: Converted from the original B-News header
Posted: Fri Feb 11 14:06:11 1983
Received: Sat Feb 12 06:58:35 1983

I believe there was a question on how and where to send comments to the FCC. Here is the recommended proceedure:

Comments to the FCC should be on 8 1/2 by 11 inch paper with the left-hand and top margins being at least 1 1/2 inches and at least one inch on the right side and bottom of the page. Use one side of the paper only and double-space your comments, except for long quotations, which may be single spaced. All papers shall be typewritten. Number your paragraphs and in your comments, refer to the docket paragraph number or rules Part number that you are commenting on.

Be polite and don't insult the Commission. Don't say "don't do" something unless you have an alternative to offer.

Mail the original and 5 copies to:

Federal Communications Commission
Mr. William Tricarico, Secretary
1919 M. Street, NW.
Washington, D.C. 20554

The top of the first page should be headed as in the following example:

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	Docket No. 82-83
Notice of Proposed Rulemaking	)	
and Notice of Inquiry regarding	)	
expansion of phone subbands in	)	
the Amateur Radio Service	)	

COMMENTS

On the last page, sign and date your comments:

Respectfully submitted
8-10-82

Robert J. Roehrig, K9EUI
314 S. Harrison Street
Batavia, Illinois 60510

Bob Roehrig
...we13!rjr

From 944827442251252953
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b77a0127ffb8a1ef,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-13 03:28:30 PST
Message-ID: <bnews.inuxc.603>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sun Feb 13 06:28:29 1983
Subject: ARRL DX BULLETIN de k2ph
X-Google-Info: Converted from the original B-News header
Posted: Sat Feb 12 13:28:15 1983
Received: Sun Feb 13 06:28:29 1983

_H_e_a_r_d__I_s_l_a_n_d_. The VK00JS and VK00NL expedition is now active, as well as the VK00CW and VK00HI group. VK00CW and VK00HI have now made over 23,000 contacts and have been particularly active on 20 meters. VK00JS and VK00NL are also very active on 20 and have made many contacts on 40 meters. Check 7004 kHz at 2200Z.

_N_e_p_a_l_. An operation by a group of JA amateurs signing 9N1WW is expected to begin February 15 and continue for 12 days, followed by three days at S21, Bangladesh. QSLs go to JA8BMK.

_S_o_u_t_h__O_r_k_n_e_y_s_. LU5ZA continues very active on all bands.

_S_o_u_t_h__S_h_e_t_l_a_n_d_. LU3ZI is reported to have left the island.

_G_u_i_n_e_a__B_i_s_s_a_u_. J5HTL has been showing up with the W7PHO Family Hour on 21345 kHz around 0020Z. QSL via SM3CXS.

_B_u_r_u_n_d_i_. There was activity from 9U5JM this past weekend on 21285 kHz at 2015Z. QSL to John via F3LQ.

_F_B_8_. A net activity from 0100 to 0200Z on 14285 kHz includes most of the active FB8 stations, such as FB8WI, FB8WH, FB8XAB, and FB8ZQ.

_T_r_i_n_d_a_d_e_. There is a rumor of an operation beginning on the 17th by PY00TA.

_1_6_0__M_e_t_e_r_s_. Good catches include XT2AW on 1829 kHz at 0600Z, LU5ZA on 1818 kHz at 0600Z, and ZS5LB on 1826 kHz at 0300Z.

_B_e_a_c_o_n_s_. The Northern California DX Foundation worldwide beacon net has added 4X6TU/B and ZS6DN/B to its roster. For information on net operation and listener reports, contact

W6RQ.

_H_e_a_r_d__a_n_d__W_o_r_k_e_d_. 3A2EE 3796 kHz at 0530Z. DU9RG 3795 kHz at 1230Z. AP2KS 3799 kHz at 2210Z. VS5HG 21345 kHz at 0020Z. 9X5MB 21290 kHz at 2045Z. VK6LK and VK6HD 3795 kHz at 2200Z. G4LJF/3V8 28545 kHz at 0025Z.

From 3931718004026341882
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,82e79e07b03ec1b9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-19 22:47:32 PST
Message-ID: <bnews.inuxc.604>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxz!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxz!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sun Feb 20 01:47:31 1983
Subject: ARRL DX BULLETIN
X-Google-Info: Converted from the original B-News header
Posted: Fri Feb 18 09:48:14 1983
Received: Sun Feb 20 01:47:31 1983

_R_o_d_r_i_g_u_e_s_. 3B8DA/3B9 can be found on 28550 kHz at 1300Z and around 14215 kHz at 0330Z.

_Z_D_7_,__8_,__a_n_d__9_. ZD7BW, ZD8LM, ZD9BV, ZD9BX, and ZD9YL may all be found on 21335 kHz between 1700 and 1900Z. They are usually on three or four days each week.

_C_e_n_t_r_a_l__A_f_r_i_c_a_n__R_e_p_u_b_l_i_c_. TL8TX plans a long stay. Look for him on 21280 kHz at 1700Z and 28700 kHz at 1300Z.

_S_o_u_t_h_e_r_n__S_u_d_a_n_. 9Y4RD/ST/0 plans a two month operation. Present activity is mainly on 10 and 15 meter ssb.

_M_a_l_a_g_a_s_y_. 5R8AL is back and is active on Monday and Wednesday on 21330 kHz at 1700Z. Look for him also on rtty on 21095 kHz at 1900Z. F6EXV hopes to operate 5R8AL for two weeks in mid-March.

_C_o_m_o_r_o_s_. D68AM is due up on 21285 kHz at 1800Z on Wednesday, February 23.

_U_g_a_n_d_a_. 5X5FS is on 21280 kHz at 1800Z on Fridays and on 28600 kHz at 1700Z on Saturdays. QSL to EI9G.

_I_r_a_q_. YI1BGD may be found on the low end of the 20 meter ssb band around 1500Z on Saturdays.

_S_o_u_t_h__O_r_k_n_e_y_s_. Sunday evenings find VP8AOB on 14220 kHz around 0300Z.

_M_o_r_o_c_c_o_. CN8EU is very active on 21295 kHz at 2200Z. QSL to KA4S.

_M_a_r_c_h__R_u_m_o_r_s_. There may be operations from Clipperton and from Malpelo in March. Details as they develop.

_G_r_a_n_d__T_u_r_k_s_. VP5MOX will be on cw for the contest this weekend and plans ssb operation before and after, through Wednesday.

_1_6_0__M_e_t_e_r_s_. It is reported that W1FC became the first W1 to work Japan on 160. He contacted JA8IEF at 1134Z on the 13th, with signals apparently coming long path.

_B_e_a_c_o_n_s_. The Northern California DX Foundation is seeking volunteers to monitor the Worldwide Beacon Net now partially operational on 14000 kHz. Contact W6RQ for details.

From -8994741985718418467
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d0d68d0fa79d3d0c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-19 22:49:06 PST
Message-ID: <bnews.ihuxb.228>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxz!ihnp4!ihuxb!gps
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxz!ihnp4!ihuxb!gps
From: ihuxb!gps
Date: Sun Feb 20 01:49:04 1983
Subject: SAFETY
X-Google-Info: Converted from the original B-News header
Posted: Fri Feb 18 09:14:06 1983
Received: Sun Feb 20 01:49:04 1983
Reply-To: gps@ihuxb.UUCP (Greg Stephens)

Since Spring is just around the corner I feel that the subject of
safety should be addressed. One area of the hobby can be rather
dangerous if proper and careful planning has not been accomplished,
I'm speaking of antenna installations. Let me relay this story
of a fellow amateur who did not think ahead. This gentleman is
sitting at his desk answering a letter from his insurance company.
  " I am writing in response to your request for additional
information for block number three of the accident reporting form.
I put "poor planning" as the cause of my accident. You said in
your letter that I should explain more fully and I trust the
following detail will be sufficient.
  I am an amateur radio operator and on the day of the accident,
I was working alone on the top section of my new 80 foot tower.

When I had completed my work, I discovered that I had, over the course of several trips up the tower, brought up about 300 pounds of tools and spare hardware. Rather than carry the now un-needed tools and material down by hand, I decided to lower the items down in a small barrel by using a pulley, which fortunately was attached to the gin pole at the top of the tower.

Securing the rope at ground level, I went to the top of the tower and loaded the tools and material into the barrel. Then I went back to the ground and untied the rope, holding it tightly to insure a slow decent of the 300 pounds of tools. You will note in block number eleven of the accident reporting form, that I weigh only 155 pounds.

Due to my surprise of being jerked off the ground so suddenly, I lost my presence of mind and forgot to let go of the rope. Needless to say, I proceeded at a rather rapid rate of speed up the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming down. This explains my fractured skull and broken collarbone. Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley.

Fortunately, by this time, I had regained my presence of mind and was able to hold onto the rope in-spite-of my pain. At approximately the same time, however, the barrel of tools hit the ground and the bottom fell out of the barrel. Devoid of the weight of the tools, the barrel now weighed approximately 20 pounds. I refer you again to my weight in block number eleven. As you might imagine, I began a rapid descent down the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming up. This accounts for the two fractured ankles and the lacerations of my legs and lower body.

The encounter with the barrel slowed me enough to lessen my injuries when I fell onto the pile of tools and fortunately, only three vertebrae were cracked. I am sorry to report, however, that as I lay there on the tools, in pain, unable to stand and watching the empty barrel 80 feet above me... I again lost my presence of mind. I let go of the rope."

Original author unknown.

From -6158919118387043831
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6a31675dbfadba9a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-21 04:58:31 PST
Message-ID: <bnews.eagle.786>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Mon Feb 21 07:58:30 1983
Subject: New Oscar-8 Operating Schedule
X-Google-Info: Converted from the original B-News header
Posted: Wed Feb 16 18:40:24 1983

Received: Mon Feb 21 07:58:30 1983

W9KDR (ARRL) has announced that effective today, 16 Feb 83, the AO-8 schedule
is as follows:

Mode A: Sun, Mon, Tue
Mode J: Thu, Fri, Sat
Rechg: Wed.

Phil Karn, KA9Q/2

From 3350903264874074410
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dbb648e19e5cbcc4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-22 10:23:57 PST
Message-ID: <bnews.hcr.325>
Newsgroups: net.ham-radio
Path: utzoo!hcr!anton
X-Path: utzoo!hcr!anton
From: hcr!anton
Date: Tue Feb 22 13:23:43 1983
Subject: circuit wanted
X-Google-Info: Converted from the original B-News header
Posted: Tue Feb 22 13:17:29 1983
Received: Tue Feb 22 13:23:43 1983

Some years ago I saw a circuit for a flourescent light inverter
in a magazine. It ran of 12-15 volts, the idea being you could use
it in a camper running of a battery.

I now have the need for such a circuit, but appear to have lost the
mamgazine/photocopy.

I know of other places to get the basic circuit, but what made this
one special, and what I am after, is that it had a dimmer facility.
As you may have noticed, flourescent lights do not dimm just by having
a phase triggered SCR.

Can anybody out there help me ? I would be glad to pay postal
charges for a copy of such a circuit. It does not have to run off
a battery, 110 volts is fine.

/anton aylward HCRC
         ..decvax!hcr!hcrvax!anton

From 8093039074445443058
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e15986ab5fc76526,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1983-02-24 16:32:24 PST
Message-ID: <bnews.sdchema.426>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!cmcl2!philabs!sdcsvax!sdchema!bam
X-Path: utzoo!decvax!harpo!floyd!cmcl2!philabs!sdcsvax!sdchema!bam
From: sdchema!bam
Date: Thu Feb 24 19:32:19 1983
Subject: TAPR meeting query..
X-Google-Info: Converted from the original B-News header
Posted: Sat Feb 19 00:54:51 1983
Received: Thu Feb 24 19:32:19 1983

Did anyone in netland attend the TAPR meeting in Arizona earlier
this month?? What was discussed and decided??

I couldn't attend and would really appreciate an update.

Thanks,

Bret Marquis (WA6QDV)
U. C. San Diego

From 3737787811980854383
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4afc283dcaea68aa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-25 02:43:36 PST
Message-ID: <bnews.inuxc.613>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxi!houxz!
ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxi!houxz!
ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Fri Feb 25 05:43:35 1983
Subject: This Weekend's Contests
X-Google-Info: Converted from the original B-News header
Posted: Thu Feb 24 12:54:50 1983
Received: Fri Feb 25 05:43:35 1983

CQWW 160 Meter Phone

>From 2200z Feb. 25 until 1600z Feb. 27
Exchange signal report and QTH (state/province/country)

French Contest (Phone)

>From 0600z Feb. 26 until 1800z Feb. 27

Exchange signal report and serial number. French stations also send their "Department" (county) number - 2 digits.
Work French stations, including overseas territories and DA1/2 French Military Stations.

RSGB 7 MHz Contest (CW)

>From 1200z Feb. 26 until 0900z Feb. 27.
Exchange signal report and serial number, starting with 001.
Frequencies 7000-7030.

World RTTY Championship Contest

>From 0000z to 2400z Feb. 26.
Exchange signal report and state or province. DX send signal report and serial number.

From -421211088854023915
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,de193d2c0b43eb2b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-02-25 22:07:39 PST
Message-ID: <bnews.inuxc.614>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxz!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxz!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Feb 26 01:07:37 1983
Subject: ARRL DX BULLETIN 2/25/83
X-Google-Info: Converted from the original B-News header
Posted: Fri Feb 25 09:31:08 1983
Received: Sat Feb 26 01:07:37 1983

_M_o_z_a_m_b_i_q_u_e_. Jack, ON6BC/C9, has appeared from Mozambique as of one week ago and plans to stay through the end of next week. Jack has been worked on 10 through 40 meters, both phone and cw. The DXCC status is yet unconfirmed as ham radio has been disallowed in Mozambique for some years.

_I_n_f_o_r_m_a_l__D_X__N_e_t_. An informal roundtable group has assembled daily at 1700Z on 21335 kHz. Although this is not strictly a DX net, this week there have been appearances by 5X, 3X, 7Q7, TL8, and ZD7, 8, and 9.

_E_a_s_t_e_r__I_s_l_a_n_d_. A new operator, Hector, CE00ERY, has been licensed and stationed on Easter Island. Look around 0330Z on 20 meter ssb. His QSL manager is WB6WOD.

_T_u_r_k_s__a_n_d__C_a_i_c_o_s_. VP5FUX has been active for the ARRL contest and will be active during the 160 meter contest this weekend. QSL Fred via his home call, K9VV. Many other VP5s have been active recently, some plan to stay for the 160 contest also.

_S_t_.__V_i_n_c_e_n_t_. J87LTA, operated by K4LTA, and others is now active on all bands, 160 through 10 meters. The group plans to move to Antigua next week, signing V2AXA.

_C_e_n_t_r_a_l__A_f_r_i_c_a_n__R_e_p_u_b_l_i_c_. TL8DC appears regularly Wednesdays at 1500Z around 28600 kHz.

_1_6_0__C_o_n_t_e_s_t_. Don't forget the CQWW 160 Meter Phone Contest, from 2200Z February 25 to 1600Z February 27.

_U_g_a_n_d_a_. Terry, 5X5FS, has been suddenly active after an absence of many years. Terry signs EI9G in his home country and plans to be active in Uganda for at least a few more weeks. QSL via his home callsign.

_K_e_n_y_a_. Nana, JI1VLV, and a small Japanese group are activating 5Z4NN. This station has been worked on 80 through 10 meters, specifically concentrating on cw. QSL this call via JI1VLV.

_M_a_d_a_g_a_s_c_a_r_. Alain, 5R8AL, is back on the air from Madagascar. Look for him around 1730Z around 21330 kHz.

_F_B_8_. Activity has been at an all time high from FB8W, X, and Z. However, FB8XAB departed on schedule last week for France. Alain, FB8ZQ, is heard daily on 20 meter cw around 0100 until 0145Z.

_S_t_.__P_e_t_e_r__a_n_d__S_t_.__P_a_u_l__R_o_c_k_s_. A German group is scheduled to depart for St. Peter/St. Paul around March 5. They are planning a five or six day operation. More details next week.

_S_v_a_l_b_a_r_d_. JW5AA, operated by Jerry, LA5VAA, is currently active from Bear Island. Although Jerry has been worked and heard on all bands, he prefers 15 meter ssb. QSL via LA4YM.

_A_n_g_u_i_l_l_a_. The group signing VP2E in last week's contest is still active on most bands with various callsigns. Each callsign has a separate QSL manager.

_B_a_h_a_m_a_s_. Gary, K00GVB/C6A, has arrived in the Bahamas for the 160 meter contest this weekend and has been heard testing antennas.

_T_r_i_n_d_a_d_e_. A PY1 station from Brazil is presently active signing /PY00 from Trindade. Although the callsign is unknown, this station has been reported on several occasions over the last few days. It is not known how long this activity will continue.

_A_n_t_a_r_c_t_i_c_a_. The Federal German South Polar Station DP00LEX will be replaced by DP00AA in March.

From 5410188320021826636
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4aa8ab48440fb25e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-02 02:22:39 PST
Message-ID: <bnews.ucbvax.1005>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!halbert
X-Path: utzoo!decvax!ucbvax!halbert
From: ucbvax!halbert
Date: Wed Mar 2 05:22:38 1983
Subject: wanted: info on buying ham gear in Japan
X-Google-Info: Converted from the original B-News header
Posted: Mon Feb 28 23:08:54 1983
Received: Wed Mar 2 05:22:38 1983

Have any of you bought ham gear in Japan? I'll be vacationing there shortly.
I know about Akihabara and have been told that "Rocket" is a good store.
I need information about relative prices, duty, export models as opposed to
"made for Japan" models, validity of warranties, and so forth. Thanks.
--Dan, N6ICX (halbert@Berkeley, Halbert.PA for Xeroids)

From -6901286602644793993
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f70649424528b72f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-09 00:41:32 PST
Message-ID: <bnews.sun.211>
Newsgroups: net.ham-radio
Path: utzoo!decvax!decwrl!sun!gnu
X-Path: utzoo!decvax!decwrl!sun!gnu
From: sun!gnu
Date: Wed Mar 9 03:41:29 1983
Subject: My comments to the FCC on the No Code NPRM -- did you submit yours yet?
X-Google-Info: Converted from the original B-News header
Posted: Tue Mar 8 06:37:50 1983
Received: Wed Mar 9 03:41:29 1983

Before the

FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	PR Docket No. 83-28
Establishment of a Class of	)	
Amateur Operator License Not	)	
Requiring a Demonstration of	)	
Proficiency in the International	)	
Morse Code.	)	

COMMENTS

I am overjoyed to see a proposal for a codeless Amateur Radio Operator's License.

I am a computer programmer, 27 years old, with more than 10 years' experience in computers. Two years ago I became heavily involved with the local Amateur Packet Radio group, headed by Hank Magnuski, KA6M. (The group has since become the Pacific Packet Radio Society.) At that time there were about 30 people in the group. I was excited by the idea and the potential of packet radio and was willing to learn and to help it get going.

I started collecting information and equipment. I subscribed to the newsletters of the Vancouver Area Digital Communications Group and the Hamilton (Ont.) packet radio club, and bought the AMRAD Packet Radio Conference proceedings. I bought a 1200 baud modem and a packet radio "terminal node controller" board. I started reading listings of the software that runs in the controller board. I reviewed a Canadian book (from Tab Press) on packet radio.

At the same time, I was attending Packet Radio meetings and meeting many of the hams involved. I discovered that, to connect a radio to my computer and send 1200-baud ASCII computer data over the air, I was required to deal with a Federal agency and to learn an archaic transmission code well enough to decode it in my head "on the fly". I began to see why packet radio was still holding meetings and not building a network.

I'm not sure how familiar you are with the history of the computer industry. I am not the person to teach it, but one thing has been clear to me: Much technological progress has occurred because anyone could attempt to design and build an

improved anything -- hardware, software, communications network, mass storage device, you name it -- and it was NOT controlled by the Government, choked by bureacracy, or shielded by special interest rules and legislation. If I liked ASCII better than EBCDIC for my application, there was nobody who could force me to use EBCDIC. If I found a way to store twice as many bits on a disk, or push twice as many down a local area network cable, the marketplace and my organizational ability would decide whether my invention was worth its salt.

I began to learn about Amateur Radio from the hams around me. Here is what I learned:

* Whether or not I ever USE Morse code, I need to learn it to pass this test. Being able to write a program that can read it off the air and translate to ASCII on my screen is not good enough. The idiot work must be done by a human to be worthwhile.

* If I don't go get a license, but just set up a radio and a modem and start transmitting, I am committing a Federal crime, and there are plenty of old hams who do nothing but sit in their homes and listen for people like me so they can turn me in to the Feds. This is true whether or not I cause any harm or interference to anyone else.

* It's theoretically possible to run our packet radios faster than 1200 baud -- in fact by using telephone style modems we are using a lot more bandwidth than we need -- but it would take a special variance from the FCC even to experiment with it, and there's no guarantee that it would ever be legal for the general public anyway.

* Yes, I could hook up a packet radio to my Computer Bulletin Board System (which had been running for about a year, accepting public telephone calls on my Apple computer to allow people to send and receive messages with each other) and let people send and receive messages over the radio, but there are laws that require me to be there at all times so I can cut them off if they swear or something. (I need a "control operator".) Furthermore, I can't pass "third party traffic" and if someone might use my system instead of making a toll phone call then I am illegally using amateur radio to steal business from the phone company.

* I have some good ideas, but why don't I go get a license and then I'll really have something to say. My opinion is not worth much because my name doesn't have random letters and numbers after it. (This was not true of everyone but was definitely there in some.)

This was daunting, but I still had enough excitement and energy to continue working. (Partly, I couldn't believe things were

really that bad. If I built a packet radio station and got it working and providing a useful service to the Amateur community, nobody would really play straight-and-narrow with the rules, would they?) I bought parts for my Terminal Node Controller board and started to build and debug it -- buying and borrowing tools and equipment, setting up a room in my house for electronics work. I got a copy of the FCC Working Paper on deregulation of Amateur Radio and prayed and tried to get people to read it. I enrolled in the San Francisco Radio Club's class for novices and started to learn radio theory (easy), regulations (rote memorization), and Morse code. I kept going to Packet Radio meetings and eventually ended up on the Steering Committee -- it turned out that since many of the hams there had little computer experience, they'd never been exposed to networking concepts, ideas, or implementations. As a result I was one of the three or four people in the club who could actually UNDERSTAND the protocol being used and the program that implemented it. "They also serve who stand and rag-chew", I guess, but they weren't helping to design the network, which I was.

Alas, my Morse Code classes weren't going very well. They were trying to teach at 15-18 words a minute, so we'd eventually be comfortable at 13 words a minute. It was an effort, and I wasn't interested; I was interested in getting past the regulations so I could start to get some real work done. The radio theory was going fine and there was interesting information there, things that I would need to know. But after a month of two-night-a-week classes, I dropped out. We hadn't even been taught all the letters yet!

I tried to stir up some sentiment in the Packet Radio Society that we should work towards a code-free license, by passing a resolution and sending it to the FCC, ham magazines, etc. The general feeling was that I should get a license first and then they'd think about it.

I tried to find out why people felt so strongly about Morse code. Most of them admitted that they never used it themselves except for I.D.; they all used voice and packet. So what was the fuss? Here were some answers I got. Some were used as arguments, some were told in private by friends, some were figured out by me:

* We had to do it, so you will too. No punk kid is going to get away with getting in easy when I had to pay my dues.

* If we removed the code test, the airwaves would be flooded with trash. It would be just like CB. We've got to hold on to the spctrum space and not let it get crowded or it won't be any good anymore.

* It's not such a big deal, it only took me a week, so

what are you so worried about?

* That's the way it is and you'll understand after you've been in this field as long as I have.

* It's useful in emergencies, you might hear an SOS that nobody else hears and save a life.

* You could transmit using nothing but a rusty spoon and a piece of rock when the earthquake happens and your packet radio is smashed.

* It can get thru many kinds of interference that voice and computer data just can't penetrate.

Some of these need no rebuttal, but others might:

* The airwaves belong to "the public". Hams seem to feel that the airwaves belong to hams -- that it's fine for them to carry around a handy-talky and talk to their friends all day on the repeaters, but for the general public to do that would spoil their game. They aren't advancing the state of the art of radio -- why do they get privileged use of the airwaves?

* If the communications modes in use now are too crowded, the solution is not to create a privileged class -- the solution is to use new modes, such as packet rather than Morse, which allow more people to share the same channels that are now crowded.

* Maybe with the right teacher it IS possible to learn the code in a week. I didn't get that teacher. Mine tried to teach me far more than I wanted to know or needed to know. As a result, I never learned it -- should that be a reason to keep me from advancing the state of the art of radio networking?

* Cardio-Pulmonary Resuscitation and first aid are useful in emergencies too, but not knowing them doesn't keep you from getting a ham radio license. The government can encourage emergency preparedness but to mandate it just means that people who would contribute in other ways won't contribute at all.

* After the earthquake there will be several thousand voice handy-talkies around, as well as good old CB radios. Civilization is not going to disappear from the Earth without killing all the humans too, so building radios from natural raw materials is not going to be a problem.

* Packet radio gear automatically detects garbled transmissions and will retry them without my even noticing most of the time. If packet won't get thru and it's really important, of course, I'll use the telphone. I can always use a program to transmit and receive in Morse when conditions are bad

and the phones are down, if I ever need to -- the same way I'd use a program to talk packets (much faster) under normal conditions.

Meanwhile, back in the hardware lab, the circuit board I was building was giving me problems. I'd tried to replace the memory section with one that only required 5 volts instead of 5, 12, and -5, and had a power supply that was too small for the board. I had managed to burn out 3 or 4 central processor chips and possibly some of the auxiliary chips while debugging. The board worked once in someone else's system but I never got it to work by itself.

Between the lack of support on the code&license question, and the hardware problems, my active interest in packet radio started to dwindle. I kept attending meetings and talking with Hank (KA6M) on the protocol, but eventually sold the circuit board to someone who could debug it, returned the borrowed scope, disassembled the wire-wrapped PROM burner, and went back to working on software. To this day I haven't made an active contribution to the technical art of packet radio -- I've critiqued several designs and offerred suggestions, but I never got the chance to work on the software or hardware to actually implement the designs.

That's where the crying need is now. There are plenty of people who know how to build a radio, put up an antenna, organize a ham society. There are only two people in our group (of about 40, still) who have worked on the software, though -- and they aren't likely to get new recruits who aren't already hams. For someone coming from the free-and-easy world of computers, coping with the attitudes of hams and the bureacracy that governs their behaviour is a serious problem. We and the other packet radio groups would like to build a nationwide network of store-and-forward packet radio repeaters. This requires a lot of work -- much of it organizational, some of it in hardware, and a lot in software.

That's where I can make my contribution -- except there's a whale in the way. You, the FCC, are that whale. When I gave up, I resolved to just sit back and wait until the ham radio situation straightened itself out (if ever) before attempting again to contribute. The current proposal (for a code-free license) is a step in the right direction. If you implement it, I will get a license (although that alone will probably take six months of paper-shuffling) and get some more hardware and go back to trying to do some good for the packet radio world. If not, I'll sit waiting in the wings until some of the old (and young) reactionary hams die off and maybe there is some acceptance of new ideas.

My ultimate fantasy is to see black boxes with an RS232 (serial computer data connector) plug on one end and an antenna on the

other. Anyone could walk into their favorite computer store, Radio Shack, or ham store, and buy one, plug it into their home computer, and be interconnected with the other packet radio users in their city (and thru their city's connection to the packet radio backbone network and packet radio amateur satellites, to all other packet radio sites in the world).

Right now, due to earlier FCC deregulation efforts, that kind of networking is possible with a 300-baud direct-connect telephone modem -- and thousands of people have bought and used them for exactly that (such as with my Apple Bulletin Board System). Curiously enough, visitors from other countries express the same incomprehension at seeing this that hams express at the idea of people just buying a packet radio and turning it on.

The problems with telephone modems are that they are slow and only provide local communication -- nobody can afford to use one for long-distance communication unless they can write it off as a business expense.

Imagine what would occur if you could buy an Atari or Apple or IBM home computer with a communications box -- one that didn't cost $20/hr on the telephone, but still put you in touch with the world. I've been using computer networks for close to 10 years and I have some idea of the amount of information that would be available -- that would make peoples lives and jobs easier -- that would provide conversation and company to people who are feeling alienated -- that would provide a forum for people upset or enraged or interested in a public discussion -- that would bring the Information Age into the homes of the people, not for the benefit of a corporation, not with a monopoly deciding what information would get into the network and who would get it out, but for the benefit of all the people helping each other to build their dreams, share their knowledge and their energies and their pleasures, and live their lives a little closer to the way they want them.

There are people attempting to build the first hardware toward this vision -- the Tucson Amateur Packet Radio Society. (Their box does not include the radio; you have to add a handy-talky.) There are people, of whom I am one, working on and using networking software that connects over four hundred diverse computers around the world into an anarchistic computerized forum -- controlled by no-one, participated in by all. (All messages are transferred over phone lines, and any long-distance calls are paid for by business and University computer budgets.) This network is called the Usenet and much of its software is in the public domain. I and others from the computer field can adapt this, and other, software, and contribute the knowledge of networking required to make it work. There are people who have been trying to design "WorldNet" for years now -- figuring out the software and administrative requirements for a network that anyone could connect to or disconnect from at will, a network

that could handle a million or 100 million users, in their usual state of motion and change, without falling apart. We're professionals who realize the potentials and are afraid that, as in the past, most of the benefits of computer technology will continue to go to businesses and governments, operating to restrain peoples' choices instead of expanding them, giving the public pay-TV, video games, and central control over information distribution, instead of an improved society.

But WorldNet is still a fantasy. Some of the problem is economics -- technology is taking care of that. Most of the rest of the problem is governments. Within the U.S., that means the FCC. Even with a code-free license, a license is still required, classes have to be taken, there's an N-month delay while the bureacracy shuffles your papers. To many people, it's just not worth hassling with -- there are so many other interesting things that they could be doing with their computers -- they'll find another interest. One where they can walk in, buy it, and use it, without asking the government. And those places are where the products will be introduced, where the technical advances and the price reductions will be made, where the public will be served. Not in packet radio or WorldNet. Not unless the regulations get as loose as CB, or looser.

I realize that it takes time to dismantle a legacy of bureacracy, and I've been encouraged in recent years to believe that is the job the FCC has undertaken to do. The code-free license is an important step on that path, and no matter how much it angers the existing special-interest-group (many Amateur Radio Operators), it will be for the ultimate good of the country and will contribute to the world's progress both in the radio art and in the improvement of the general quality of life.

I believe that removing the current Morse code requirement from the Technician Class license is the best way to introduce the code-free license into the existing licensing structure. It significantly reduces the administrative burden on the FCC without significantly altering the requirements of the license or the privileges granted by it, in comparison with the proposed Experimenter Class. It also imposes no new burden on the ARRL volunteer licensing program (except larger volumes of people taking the existing tests, which the ARRL can hardly object to).

I furthermore believe that the frequencies and transmission modes authorized for the codeless license should be the same as those of the current Technician's and General licenses (subject to restrictions imposed by international agreements). I believe that, in general, the introduction of new communications methods into the Amateur service will be hastened by as few restrictions and regulations as possible; a competent Technician should not be required to upgrade her or his license to use a frequency band or a transmission mode which was previously unused for similar methods. In other words, as many possiblilties should

be legalized at once as is possible, to avoid later having to spend time removing restrictions, and to avoid discouraging good new ideas because a long-drawn regulatory process is required to experiment with them. I realize that some areas must be reserved for Advanced and Extra classes as an incentive measure, but this should not be applied such that the set of available frequencies for experimental Technican and General use is too small.

In particular, almost all current Packet Radio work is going on in the 2-meter bands, because equipment is cheap and plentiful. If the 2-meter band was not available, packet development work would have to move to 220 or 440MHz where equipment is costlier. This would also split the existing packet radio groups between old-timers who could continue to use 2 meters, and newcomers who'd be forced into other bands.

I note that the ARRL's editorial against this proposal (March 1983 QST, page 9) never once mentions an argument against the proposal; it simply states that most amateurs oppose it, and rages against the FCC's refusal to obey the ARRL in this important matter. Personally, I'm on your side.

I have enclosed a few comments that were exchanged on the Usenet (the computer network mentioned above) on the subject of code-free licenses. I have also put these comments into the Usenet, and encouraged others to send their own. A few sentences will clear up some terminology problems: Phrases like "decwrl!decvax!harpo!floyd!peri!sbcs!rick" identify the path that the message has taken thru the network, from Rick on machine "sbcs" (SUNY Stony Brook computer science dept.), thru machine "peri", to "floyd", and so on to "decwrl" (Digital Equipment Corp's Western Research Lab). A "flame" is a heated reply; e.g. a response made while annoyed, rather than after deliberation. The enclosed are only a few of the comments that were made on the topic; I started to save them but quickly realized that there were far too many messages to save, so these are only the first few. The last message was sent by me in response to a general "Hey, has anybody used packet radio out there?" query.

Respectfully submitted
7 March 1983

John C. Gilmore
Sun Microsystems, Inc.
2550 Garcia Ave.
Mt. View, CA 95051
(415) 960-1300 x309

CC: Usenet newsgroup net.ham-radio
     Hank Magnuski, KA6M
     Curtis Spangler, N6ECT
     Vic Clark, W4KFC
     Paul Rinaldo, W4RI

From -5990697838423230772
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c55a669176abbc7f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-09 00:42:48 PST
Message-ID: <bnews.sun.212>
Newsgroups: net.ham-radio
Path: utzoo!decvax!decwrl!sun!gnu
X-Path: utzoo!decvax!decwrl!sun!gnu
From: sun!gnu
Date: Wed Mar 9 03:42:47 1983
Subject: Hypocracy in March QST -- short note
X-Google-Info: Converted from the original B-News header
Posted: Tue Mar 8 06:45:40 1983
Received: Wed Mar 9 03:42:47 1983

In the same issue where the ARRL rages against the FCC's proposal to
create a code-free license (but fails to give any reasons against it,
besides "We don't like it."), there's also a little box on page 57
inviting lawyers who are also hams to help the ARRL "stem the tide of
overly restrictive regulations on Amateur Radio". Also pg. 79's Club
Corner bemoans the lack of young people in ham radio, claiming that they
seem more interested in computers and video games, then goes on to present
recruiting proposals designed to wean the kiddies away to ham radio
instead. It might be easier if you could buy a ham radio and play with
it -- like a computer or video game -- instead of studying and passing
tests first, but somehow this point is missed.

     John Gilmore, Sun Microsystems

From -4144888982923132423
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ea567d8c617ee8a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-09 23:31:13 PST
Message-ID: <bnews.eagle.818>
Newsgroups: net.ham-radio

Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
X-Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
From: eagle!karn
Date: Thu Mar 10 02:31:12 1983
Subject: Re: John Gilmore"s comments on No-code
References: <bnews.iwsl2.154>
X-Google-Info: Converted from the original B-News header
Posted: Tue Mar 8 21:34:27 1983
Received: Thu Mar 10 02:31:12 1983

To John Opalko:

Aw, come on, gimme a break! John's comments are precisely the kind of
input the FCC has been looking for from non-hams. I'm sure that John
and others like him would be an asset to amateur radio given the kinds
of activities he's involved in. The least you could do is offer him
some encouragement; I doubt your "comment" would be taken as seriously
as his if you filed it with the Commission.

Phil Karn, KA9Q/2

From -1600238426643695762
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c934cab827898a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-11 00:09:10 PST
Message-ID: <bnews.eagle.821>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!esquire!cmcl2!floyd!vax135!ariel!hou5f!npoiv!alice!mhtsa!
eagle!karn
X-Path: utzoo!decvax!harpo!esquire!cmcl2!floyd!vax135!ariel!hou5f!npoiv!alice!
mhtsa!eagle!karn
From: eagle!karn
Date: Fri Mar 11 03:09:08 1983
Subject: "No-code, no-voice licenses"
X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 10 02:31:12 1983
Received: Fri Mar 11 03:09:08 1983

 ...are a bad idea in my opinion.

Although I think packet radio is perhaps the most interesting new form
of communication that needs encouragement, we shouldn't forget that
plenty of advances can still be made in the more mundane modulation methods.
For this reason, an experimenter needs the maximum freedom in the choice
of modulation, and could very well have good reason to use voice.
For example:

1. Experimentation with high efficiency switcher-modulated linear
   amplifiers, such as those used by necessity on the Oscar satellites.
2. Voice associated with television transmission.
3. Good old on-the-air voice coordination of specialized communications

tests, such as packet radio.

Why should a Experimenter be prohibited from putting up a repeater or sending television or facsimile? Knowledge of the code is certainly no guarantee that someone is competent enough to do so.

No, I don't think code proficiency should be a requirement for anything other than sending CODE (and using the HF bands, according to treaty). If you want to "keep the loonies out" or keep the influx of new amateurs within limits to prevent band crowding, which are both worthwhile considerations, the proper way to do it is by making the theory test sufficiently difficult, not by making the license useless.

I have an Extra Class license to show that I personally did not consider the code requirement as something to be minimally met; however, I fully sympathize with those potential experimenters who consider it superfluous for THEIR interests.

I am beginning to think that the real reason so many amateurs oppose the no-code license is a growing insecurity regarding the prospect of an influx of newcomers who might be more technically competent than themselves. As an emotional defense mechanism, these amateurs hold on to the code requirement to "prove" to themselves and others that they're still superior in some way to the masses. It is time for this attitude to change.

Phil Karn, KA9Q/2

From -6149319226920129799
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b7592a5c3f8613f7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-11 00:37:06 PST
Message-ID: <bnews.eagle.822>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
X-Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
From: eagle!karn
Date: Fri Mar 11 03:37:04 1983
Subject: Code-Free Comments Draft
X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 10 08:27:50 1983
Received: Fri Mar 11 03:37:04 1983

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)

	)	PR Docket No. 83-28
Establishment of a Class of	)	
Amateur Operator License Not	)	
Requiring a Demonstration of	)	
Proficiency in the International	)	
Morse Code.	)	

COMMENTS OF MR. PHILIP KARN, KA9Q

I have been a licensed amateur for over 11 years, almost 10 as an Amateur Extra Class licensee. During this time, I graduated from high school, obtained Bachelor's and Master's degrees in Electrical and Computer Engineering, and obtained a professional position with Bell Telephone Laboratories. I consider the technical knowledge and motivation for learning gained through amateur radio to have been a strong factor in my choice of a career in the communications and computer industry.

During my years as an amateur, although I have contributed to public service activities (e.g., Civil Defense) my primary interests have always been technical: new communications modes, techniques, and higher frequencies. I am currently involved in two new technologies: packet radio and amateur satellites, as an Assistant Vice President for Engineering with the Radio Amateur Satellite Corporation (AMSAT). Because I share the Commission's interest in furthering the state of the art, my comments will deal almost exclusively with this potential of a code free license.

As one who has both professional and amateur interests in communications, I am constantly struck by the contrast between the people in my two environments. On the one hand, a disturbingly large fraction of radio amateurs with access to the spectrum appear relatively uninterested in advancing the state of the art. On the other, many of my colleagues have a personal interest in radio communications. While they certainly have the capability to make significant contributions to low-cost implementations of advanced technologies, they are barred from doing so by even the 5 wpm code requirement associated with the Technician Class license.

I have often tried to encourage interested colleagues to obtain amateur licenses. The replies are often along these lines:

1. "I don't need or want to learn the code; I just want to experiment with packet radio". [or, satellites, microwaves, etc]
2. "Why should I want to be part of a service that's snobbish enough to insist that everyone learn the code?"
3. "Nobody does anything technically innovative in the Amateur Service. I wouldn't have anybody to work with."

These three reasons reinforce each other. Opportunities for innovation are often missed because many "technical types" aren't hams. They resist what they perceive as an arbitrary requirement kept in place by an elite group more intent on maintaining their "exclusive rights" than in advancing the state of the art. While I point out that CW is still a useful mode in many situations, even in advanced systems such as OSCAR satellites, I cannot help but agree that the code should not be a mandatory entrance requirement.

I therefore strongly support the Commission's desire to create a form of "code free" license, fully aware that the majority of my fellow amateurs disagree with this position. My only concerns are practical: while there is general agreement that the "microwave bands" (1215 Mhz and up) could easily support many more amateurs, it is not as clear with regard to the 50-450 Mhz bands.

For this reason, I feel that if the Commission adopts any code-free proposal, it should also do the following to alleviate congestion if at all possible:

1. Grant no new services access to the 220 Mhz band.
2. Maintain the use of 420-430 Mhz by the Amateur Service.
3. Expedite the allocation of additional VHF/UHF spectrum to the Amateur Service, particularly the 902 Mhz WARC-79 band.

Even with additional VHF/UHF frequencies, simply removing the code test from the Technician license would likely result in severe overcrowding on the popular 144 Mhz band. Overcrowding, such as that in Southern California, not a lack of code proficiency, is the major cause of accidental and intentional interference. It therefore unfortunately becomes necessary to limit access to 144 Mhz, but I cannot justify the code requirement on its own merits for that band any more than I can for the less crowded higher frequencies.

The best way to limit crowding on 144 Mhz while still encouraging talented newcomers and the use of the higher amateur bands would be with two types of code free license. The lower grade would require only the theory test associated with the Technician license and provide all privileges on 220 Mhz and up. The higher grade would grant all privileges above 50 Mhz to licensees who demonstrate a knowledge of theory equivalent to that required of Advanced or Extra Class licensees.

While a "digital" specialty license would undoubtedly appeal to a number of potential amateurs, I feel that it would be too restrictive. Such a license would ignore the needs of potential amateurs interested in other areas, such as microwaves and satellites, and isolate those who do obtain the "digital" license from the rest of the amateur community.

Respectfully submitted,

Philip R. Karn, Jr, KA9Q/2
61 Greenbrook Road
Berkeley Heights, NJ 07922

From 7512107541729885495
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,61245b3f86278069,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-03-11 03:19:16 PST
Message-ID: <bnews.we13.423>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxj!mhuxi!mhuxv!burl!sb1!ll1!otuxa!we13!rjr
X-Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxj!mhuxi!mhuxv!burl!sb1!ll1!otuxa!we13!
rjr
From: we13!rjr
Date: Fri Mar 11 06:19:14 1983
Subject: no-code comment
X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 10 13:24:56 1983
Received: Fri Mar 11 06:19:14 1983

It is good to see all the docket comments and ideas posted here on the net. It is an excellent way to get numerous ideas on how to write one's own comments. I also appreciate the various bulletins that appear here. They are immensly useful for distributing on our local 2 meter nets.

One thing that comes to mind concerning the no-code license. I notice that some propose no voice priveleges for the new class. The problem then becomes, how do they identify themselves? If they don't know code and can't transmit voice, I see a problem.

Phil brought up an important point, about the crowding on 2 meters, especially in California (We are not far from it in the Midwest).

How 'bout something in between, like voice is ok, but no repeater operation?

I think it is too bad that the 2 meter band was chosen for some of the satellite operation. I don't recall AMSAT worrying about congesting 2 meters.....

Bob K9EUI

Bob Roehrig
...we13!rjr

From -1687608833081888580
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,beacd93989604cec,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1983-03-11 03:33:48 PST
Message-ID: <bnews.rlgvax.1164>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!seismo!rlgvax!rjf
X-Path: utzoo!decvax!harpo!seismo!rlgvax!rjf
From: rlgvax!rjf
Date: Fri Mar 11 06:33:46 1983
Subject: Disclaimer
X-Google-Info: Converted from the original B-News header
Posted: Thu Mar 10 16:20:10 1983
Received: Fri Mar 11 06:33:46 1983

Reference: rlgvax.1159

> I have had pointed out to me already that when I said my wife
> could get her license I did not clarify my position enough.
> Before I get all these replies that tell me how I've degraded
> females en masse, let me state this here and now:
>
> I meant (and stated so) that my wife, like many others in this
> world, male and female alike, had NO radio or electronics
> experience. Yet she WAS able to obtain her license anyway.
> The fact that she is female had NOTHING to do with that
> statement. (Of course, I'm glad that she is female, but then,
> that's a topic for another newsgroup.)
>
> Bob Fabrizio, WA3SBT
> (...!{seismo,mcnc,we13}!rlgvax!rjf)

From 6859904605129271136
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c6d70cf2bccd736,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-15 04:19:11 PST
Message-ID: <bnews.purdue.472>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!CSvax:svb
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!CSvax:svb
From: CSvax:svb
Date: Wed Dec 15 07:19:10 1982
Subject: CW: sorry for duplicate article
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 14 18:38:05 1982
Received: Wed Dec 15 07:19:10 1982

I have been carying 2m handhelds on about 5 domestic flights and never had
problems - I always stated that 'I would not use them because
it is not legal'.

Once I got into trouble - in West Germany. There security people told me

that I would not be allowed to take it on board - I could
threaten to explode a bomb in my suitcase with it.....

Stephan v. Bechtolsheim, Purdue CS
DF 4 CK / W9

From 5183856742793293329
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8ec0b8fda309ce1f
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,8ec0b8fda309ce1f
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1982-12-15 05:02:08 PST
Message-ID: <bnews.hou5f.164>
Newsgroups: net.aviation,net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!hou5d!hou5f!kfr
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!hou5d!hou5f!kfr
From: hou5f!kfr
Date: Wed Dec 15 08:02:06 1982
Subject: HAM radio use on airliners
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 14 13:51:08 1982
Received: Wed Dec 15 08:02:06 1982

It seems that a large number of HAM's are under the impression that
they can use portable radio equipment on board an airliner as long
as they ask the crew and get their permission.

THIS IS INCORRECT - HAM RADIOS ARE ILLEGAL ON AIRLINERS

Although Part 97 of the FCC rules indicates that the pilot can give
permission, the FAA's rules (FAR 91.19c) states that only the airline
itself, and not the pilot, can give permission to operate. The rules
are quite explicit on this point, and I wish you the best of luck in
trying to get official airline permission to operate (as far as I know,
it has only happened once in the mid 70's. The operator was an airline
maintenance employee and helped do the required testing).
Whenever a HAM is aboard an airliner, that person is bound by both
Part 97, AND the Federal Aviation Regulations (FAR's), even though
the FCC hasn't realized it yet.

I've seen what my 2 meter rig can do to aircraft navigation radios,
and I sure wouldn't want to be on an airliner that was experiencing
the same kind of interference.

Kevin Redden
BTL-HO
201 949-3268

From -4871173556613136378

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13375c,844dabfe5ad8faec,start
X-Google-Attributes: gid13375c,public
X-Google-Thread: 151e61,844dabfe5ad8faec,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-17 00:16:51 PST
Message-ID: <bnews.rabbit.989>
Newsgroups: net.aviation,net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!rabbit!wolit
X-Path: utzoo!decvax!harpo!npoiv!alice!rabbit!wolit
From: rabbit!wolit
Date: Fri Dec 17 03:16:50 1982
Subject: Re: Radios on Airlines
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 15 10:48:33 1982
Received: Fri Dec 17 03:16:50 1982

There's good reason not to allow ham radios on airliners. The
potential for messing up the cabin pressurization system isn't one of
them. Sorry, Adam, but there's no way that could happen.
     Jan Woliztky

From -3899204769383374998
X-Google-Language: GERMAN,ASCII-7-bit
X-Google-Thread: 151e61,c33b0b22d9cb4aac,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-17 00:25:54 PST
Message-ID: <bnews.hou5f.165>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!hou5f!jak
X-Path: utzoo!decvax!harpo!npoiv!hou5f!jak
From: hou5f!jak
Date: Fri Dec 17 03:25:52 1982
Subject: Dec. call book
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 15 09:37:28 1982
Received: Fri Dec 17 03:25:52 1982

The following is a list of net.ham-radio readers/contributers:

CALL - NAME - MAIL ADDRESS
KB0YH - Augie (Gus) Hansen - druxy!arh
K1DK - Dan Kahn - research!alice!danny
WB1EXN/6 - Keith Muller - ucbvax!sdcsvax!muller
KA1GNG - Rob Wood - decvax!genradbolton!rob
W1UI - Jerry Gann - ucbvax!lbl-unix!asgvax!gann
              WA1ZVN - Scott A. Magnuson - houxi!hocsb!scott
KI2A - Steve Gross - houxq!sg
K2ANC - Lou - Kohnen.Wbst@PARC-MAXC
K2ART - Mike Pilla - houxi!u1100a!mp
KB2BQ - Michel - Denber.WBST@PARC-MAXC
WB2CFV - Rick Spanbauer - rick@suny-sbcs | allegra!sbcs!rick

N2CHL - Rich Gopstein - allegra!gop
Ka2CUC - Pete Dusel - Dusel.Wbst@PARC-MAXC
WA2CVU - Karen Schroeder - floyd!philabs!kis
K2DM - George Briggs - houxo!43351gw
W2EMF - Al Donkin - houxm!aed
W2FPY - Steve Robinson - eagle!ajll11!robinson
WB2FSI - MIKE - Fayette.wbst@PARC-MAXC
N2GH - Dave - Sewhuk.HENR@PARC-MAXC
KU2H - Al Morley - houxm!arm
AD2H - Marsh Gosnell - npois!pyuxbb!mkg or whuxlb!mkg
WA2HSJ - Glenn Golden - houxg!glenn or lime!glenn
N2IC - Steve London - druxm!n2ic or houxp!9535sml
WA2ILB - Mark Ziegler - houxg!rmz | houxe!rmze
W2IOL - Ron McConnell - harpo!rcmcc
W2IY - Mike Tortorella - houxi!w2iy
KA2JDY - Joel Damiano - ucbvax!teklabs!joeld or decvax!teklabs!joeld
KB2JG - joe massi - houxn!4432jrm
KB2JN - Jeff - Duntemann.WBST@PARC-MAXC
KA2JQH - Adam Buchsbaum - research!sjb
KA2KFG - Ed McKenna - via copy from Ironside. WBST@PARC-MAXC
K2LYV - Dave - Birnbaum.HENR@PARC-MAXC
WA2MOR - Larry Kaufman - nwuxc!lsk
N2ND - Dick Maybach - houxq!4373rlm
KA2OMX - Emerson Ironside - IRONSIDE.WBST@PARC-MAXC
W2OZH - Jim - Taylor.WBST@PARC-MAXC
K2PH - Bob Schreibmaier - houxq!k2ph
WA2PME - Azi Heuman - houxo!3357ah
WB2QOQ - Rick Anderson - harpo!rja
WA2QYN/2 - Paul Rubin - allegra!phr
WB2RPC - Mike Sajor - harpo!zeppo!mes
N2YK - Bruce McNair - houxg!bem or houxm!bem2
N3AGV, Ron Natalie, unc!brl-bmd!ron, ron@brl
N3AUC - Doug Kingston - unc!brl-bmd!dpk, dpk@brl
N3CKF - Joe Pistritto - unc!brl-bmd!jcp, jcp@brl
WA3IRQ - Lee Nackman - duke!unc!lrn
VE3QB/WA3ZIA - Larry - Kaysersri-unix!fortune!dsd!dna
WA3THP/2 - Stu Brown - allegra!stu
WA3VJS - Scott E. Garfinkle - princeton!scotteg
DF4CK/W9 - Stephan Bechtolsheim - decvax!pur-ee!purdue!svb
G4EHL - Anthony Short - decvax!microsof!anthony
K4EO - Larry - Stewart.PA@PARC-MAXC
K4FUM - Jere Sandidge - scbhq!jts
WB4FWL - Ned Danieley - duke!ndd
KB4GZ- Frank Starmer - duke!unc!cfs or duke!cfs
WA4IFA - Chuck Bennett - duke!unc!tucc!uchuck
KA4ISF - Joe - Fusco.ES@PARC-MAXC
W4IZI - Lindsay Cleveland - ihnss!ihuxi!lindsay
K4QET - Mike - Rutkaus.LB@PARC-MAXC
W4RI - Paul Rinaldo -
KA4VXA - Mike Leuze - duke!mrl
N5AHD - Robert Diersing -
VE5BEL - Peter Hardie - utah-cs!sask!hardie
WB5YFU Jose Sancho-dominguezja.DLOS@PARC-MAXC

N6AFZ - Glenn - GMulligan.es@PARC-MAXC
WA6AZP - Alan Larson - ucbvax!larson@sri-kl
KD6BA - Ted Lane - ucbvax!menlo70!sytek!zehntel!ted
WA6BEV - Robert R. Henry - ucbvax!rrh or research!rrh
WB6BXW - Lauren Weinstein - ucbvax!ucla-s!lauren or Lauren@UCLA-Security
KD6CQ - Scott - Gray.ES@PARC-MAXC
WA6FAA - Jim Gillogly - randvax!jim
N6FQR - Bill - Danielson.PA@PARC-MAXC
KO6G - Steven Schoch - ucbvax!ONYX:schoch
KD6HR - Pete - McAfee.ES@PARC-MAXC
KU6I - Roger Jollis - intelqa!gsp86!linden
WA6IGJ - Tony Cardenas - ucbvax!Cardenas.ES@PARC-MAXC
WA6JFZ - Ron - RBrown.PA@PARC-MAXC
K6KLY - Russ Bentson - ucbvax!atd!t:jon or sri-unix!fortune!dsd!atd!t:jon
K6LB - Ram - Ronen.ES@PARC-MAXC
KB6LK - Bill Peters - Peters.EOS@PARC-MAXC
KA6MCN - Allen Snethen -
W6MIK - Dave - Shalita.ES@PARC-MAXC
KA6NIL - Don - Ahern.es@PARC-MAXC
WA6OAD - Terry Haney - Haney.eos@PARC- MAXC
NO6Q - Trung - TNguyen.es@PARC-MAXC
KB6QI - Nick - NBarnieri.ES@PARC-MAXC
WB6QMS - Don - Duncan.es@PARC-MAXC
KA6RCQ - Michael Shiloh - ucbvax!shiloh
WB6RPC - Mike - harpo!zeppo!mes
KA6SOJ - Donovan - Dghess.ES@PARC-MAXC
KC7AK - Ed Reuss - teklabs!edr
WB7EEL/1 - John Woods - decvax!genradbo!mitccc!jfw
AD7I - Paul Newland - houxp!ad7i
WA7KGX - Chuck Forsberg - cdi!caf
WB7UBD - Ed Morin - teklabs!tekmdp!edm
WB8ELK - Bill Brown - decvax!sytek!zehntel!varian!bilbo
WB8FBM - Dale DeJager - cbosg!dale
WN8GUE - Steve Wheatley - inuxc!wheatley
G8LHI - Martin Levy - lime!martin
K8NU - Carl Yaffey - rmas70!cly
KQ8P - Jeff Coleman - ihnss!ihuxo!jnc
G8RDF - Martin Harriss - houxi!pyuxjj!martin
W8SDZ - Keith Petersen - W8SDZ@MIT-MC
WB8WWV - Greg Ordy - ucbvax!decvax!cwruecmp!ordy
WA8ZNH - Jim Kutsch - npois!jak | npoiv!hou5f!jak
WB9AAX - Phil Gunsul - lime!we13!prg
KB9BO - Jim Krist - ihnss!ihuxs!jtkrist
W9CC - Larry Card - inuxc!lrcard
KA9ELG - Mark Yoder - ucbvax!pur-ee!yoder
K9EUI - Bob Roehrig - lime!we13!rjr
WD9HDR - Jim Erickson - ihuxs!erickson
WD9ICG - Jim Wiman -
KA9KDC - Larry Schroeder - ihuxq!larrys
KA9MHK - Dan Hoelker - ihnss!ihuxu!mstach
WN9NBT - Dave Chasey - pur-ee!wn9nbt
KA9Q - Phil Karn - eagle!karn
WB9RIN - Dennis Noonan - inuxc!wb9rin

WB9VGW - John Wrycza - ihuxu!johnw
KK9W - Dave Andersen - pur-ee!kk9w
(no call) - David Comay - ucbvax!ARPAVAX:comay
(no call) - Steven Bellovin - duke!unc!smb

Send additions/corrections to Jim Kutsch -- npois!hou5f!jak

From 2562645092092865957
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,844dabfe5ad8faec
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13375c,844dabfe5ad8faec
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1982-12-18 18:19:18 PST
Message-ID: <bnews.hou5e.164>
Newsgroups: net.aviation,net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!hou5d!hou5a!hou5e!dwl
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!hou5d!hou5a!hou5e!dwl
From: hou5e!dwl
Date: Sat Dec 18 21:19:17 1982
Subject: Re: Radios on Airlines
References: <bnews.rabbit.989>
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 15 22:23:38 1982
Received: Sat Dec 18 21:19:17 1982

In following up the reply to Adam's article, I don't think Adam
meant that the HT was likely to have any effect on the
pressurization controls. The problem is that if anything that is
obvious to passengers DOES go wrong, the poor guy with the HT is
going to be blamed for it! Mostly a PR problem for him, and for the
airline who let him fly with it!

-Dave Levenson
-BTL Holmdel

From 7616245967639658002
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2d0ba2b11a47c146,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-18 19:23:01 PST
Message-ID: <bnews.houxp.174>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Sat Dec 18 22:22:58 1982
Subject: ARRL 113: elections
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 16 08:21:50 1982
Received: Sat Dec 18 22:22:58 1982

qst de ad7i
hr arrl bulletin nr 113 from arrl headquarters
newington ct december 14, 1982
to all radio amateurs bt

the following have been elected without balloting as section managers
for their respective sections, arizona n7eh, iowa k0cy, montana
n7aik, northern texas k5pc and wyoming wa7wfc. those elected will
begin new terms april 1, 1983 ar

From 1388891549212434761
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9077015553940ea5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-18 22:49:45 PST
Message-ID: <bnews.houxp.175>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Sun Dec 19 01:49:44 1982
Subject: CRRL 46: appointments
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 16 08:22:17 1982
Received: Sun Dec 19 01:49:44 1982

qst de ad7i
hr crrl bulletin nr 46 from arrl headquarters
newington ct december 14, 1982
to all radio amateurs bt

ve7csd and ve1asj have been appointed as crrl directors for british
columbia and the atlantic region respectively.

starting in january, the northern alberta amateur radio club will
sponsor on the air code practice. practice at 8 through 18 wpm will
be sent at 0300 utc on monday, thursday and saturday on 3747 khz ar

From 546242393615381962
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5bd8b31d52e757b0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-19 05:56:38 PST
Message-ID: <bnews.harpo.1264>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!rja

X-Path: utzoo!decvax!harpo!rja
From: harpo!rja
Date: Sun Dec 19 08:56:37 1982
Subject: CAPACITOR ANYONE ?
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 16 18:36:02 1982
Received: Sun Dec 19 08:56:37 1982

I am looking for a Hammarlund HF-30X,double spaced capacitor.
Does anyone have any ideas as to where the heck I can find one.??
Need one for 6 meter strip line filter..

TNX 73's Rick WB2QOQ

From -1172477358831257890
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13375c,844dabfe5ad8faec
X-Google-Attributes: gid13375c,public
X-Google-Thread: 151e61,844dabfe5ad8faec
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-19 09:02:43 PST
Message-ID: <bnews.avsdT.219>
Newsgroups: net.aviation,net.ham-radio
Path: utzoo!decvax!decwrl!sun!megatest!fortune!dsd!atd!avsdS:avsdT:wcl
X-Path: utzoo!decvax!decwrl!sun!megatest!fortune!dsd!atd!avsdS:avsdT:wcl
From: avsdT:wcl
Date: Sun Dec 19 12:02:42 1982
Subject: Re: Radios on Airlines
References: <bnews.rabbit.989>
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 16 13:01:05 1982
Received: Sun Dec 19 12:02:42 1982

I haven't seen an answer to the original question, which is
"if airline nav equiptment is so sensitive to RFI, then how much
RFI does it take to mess it up?". In particular, can ground radios
affect it, or does the faraday cage nature of the cabin keep the RFI
out of the sensitive parts? And if so, what does that say about the
new composite aircraft (such as LearFan) made of fiber/epoxy (no
Faraday cage effect)? Also, what about calculators, computers, etc.
I have heard that microprocessors, and radio receivers are banned
for similar reasons, but I have yet to be asked to remove the battery
from my digital watch for the duration of the flight. What's **REALLY**
going on here? Is this just the FAA being Pleistocene?

Bill Lindemann
atd!avsdT:wcl
AMPEX Corporation

From -1355078206210780115

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f1f4d82c25262126,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-20 23:18:03 PST
Message-ID: <bnews.eagle.697>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Tue Dec 21 02:17:58 1982
Subject: UoSAT Bulletin Board Msg
X-Google-Info: Converted from the original B-News header
Posted: Sun Dec 19 21:43:52 1982
Received: Tue Dec 21 02:17:58 1982

During the weekend, Uosat-Oscar-9 has been alternating among 1200 baud telemetry, a bulletin board message also at 1200 baud, and synthesized speech from the National Semiconductor Digitalker. The speech synthesizer stays on long enough to read off one complete telemetry frame.

The following is the bulletin board message, courtesy of WA2LQQ of AMSAT:

```
        UOSAT SPACECRAFT CONTROL CENTRE
UNIVERSITY OF SURREY, GUILDFORD, SURREY, ENGLAND
************************************************

UOSAT SPACECRAFT OPERATIONAL STATUS:
***********************************
BULLETIN-8   1200 GMT  17 DECEMBER 1982

* S/C ATTITUDE *
   THE EFFECTS OF THE ATTITUDE CONTROL MANOEUVRES PERFORMED DURING
   THE WEEK ENDING 10/12/82 HAVE CAUSED CONCERN OVER S/C TEMPERATURES
   - THE BATTERY TEMPERATURES DROPPED TO -17.5C DUE TO THE
   ENLARGED PRECESSION ANGLE.  INCREASING THE Z-SPIN PERIOD TO 153
   SECS HAS REDUCED THE PRECESSION PERIOD FROM APPROX 22 DAYS TO 4
   DAYS WHICH WILL REDUCE THE AMPLITUDE AND LONG PERIOD OF THIS
   THERMAL CYCLING.  THE CURRENT THERMAL CYCLE, PERIOD 4 DAYS AND
   VARYING BETWEEN +3C AND -11C IS BEING MONITORED BEFORE FURTHER
   ATTITUDE CONTROL MANOEUVRES ARE PERFORMED.
* NEW DATA FORMAT *
   WHOLE-ORBIT DATA COLLECTION (A FUNCTION PREVIOUSLY PERFORMED BY
   THE F100L COMPUTER) HAS BEEN TRANSFERRED TO THE 1802.  THE CURRENT
   VERSION PRODUCES CHECKSUMMED LINES OF DATA, WITH CHANNEL NUMBERS
   AND A VARIABLE NUMBER OF TELEMETRY DATA VALUES.  THE FORMAT IS:
             NNNFXYZXYZXYZXYZCC
   WHERE   NNNN IS 4-HEX DIGIT SEQUENCE COUNTER ( UP TO 046DH LINES
              ARE SENT AS DATA IS ACCUMULATED )
           XYZ ARE BCD TELEMETRY CHANNEL DIGITS AS ORDINARY TELEMETRY
           IS 1 BYTE CHECKSUM  ( ADD NN, NN, 0X, YZ, CC BYTES
              USING 8-BIT BINARY ADDITION - RESULT SHOULD BE 0AAH )
```

NNNN=0000 GIVES CHANNEL NUMBERS RECORDED IN 0YZ POSITIONS
CURRENTLY, SEQUENCE COUNTER 0001 IS PROGRAM LOAD TIME - OVER
ENGLAND. NO COMPUTER-READABLE TIMESTAMP IS YET AVAILABLE. DATA
WILL BE TRANSMITTED FOR APPROX 2 ORBITS TO ALLOW FULL RECORDING.

* SPACECRAFT ORBIT DATA * 17-DEC-1982

	UOSAT	OSCAR-8	NOAA-7	
ORBIT NO:	6618	24389	7654	
EQX TIME:	15:23:59	15:42:02	14:59:45	GMT
EQX LONG:	4.5	312.6	356.9	DEG W
MEAN HGT:	515	905	854	KM
PERIOD:	94.822475	103.233288	102.04	MINS
DRAG:	1.044067E-4	-2.6112E-6	-8.0E-6	*N
LONG INCR:	23.87912	25.811037	25.49	DEG W
DRAG:	2.626891E-5	-7.028E-7	-2.0E-6	*N
N=ORBIT NO.-	6618	0	0	

* THANKS FOR FEEDBACK *
DATA RECEIVED FROM: JR1SWB, K4GFG, VK2WB, RS24754, BRS 34348,
VE2QO, W4AUZ, WB0GAI, G8EDG, G8WFZ, G3EMU, OZ1WN, ZL1AOX
WA0OJS, G8TZJ, G6ESK, K1KSY, G6ADC, WA6VRC, VK5HI, VK5AGR,
G3RUH, *G3YAC*, GM8ZDG, JA1OGZ, G3VYV, F9XG, B. LINDHOLM, OZ1WN,
LU4ENQ, G3EFR, W4KDP.

QSL/POST CARDS CONFIRMING RECEPTION OF UOSAT DATA INCLUDING
STATION DETAILS WOULD BE APPRECIATED FOR SURVEY OF NO. AND
GEOGRAPHIC DISTRIBUTION OF ACTIVE STATIONS
SEND TO: DR.M.N.SWEETING, UOSAT CONTROL CENTRE - THANK YOU

From 3264810585720780985
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6a7ec9e79fbda799,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-21 04:33:01 PST
Message-ID: <bnews.hou5f.170>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!hou5f!kfr
X-Path: utzoo!decvax!harpo!npoiv!hou5f!kfr
From: hou5f!kfr
Date: Tue Dec 21 07:32:59 1982
Subject: ham radios on airliners
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 20 15:37:35 1982
Received: Tue Dec 21 07:32:59 1982

The article on page 59 of the December issue of QST stated that it was
permissable for the captain of a "nonscheduled airliner" (italized in
QST) to give permission for ham operation. Captain Russell has
erroneously added an interpretation to the rules that is incorrect!
The Federal Aviation Regulations made no distinction between scheduled

and nonscheduled airlines for the purpose of portable electronic device operation. Since there seems to be so much confusion about this regulation, here is the full text:

91.19 PORTABLE ELECTRONIC DEVICES

a) Except as provided in paragraph (b) of this section, no person may operate, nor may any operator or pilot in command of an aircraft allow the operation of, any portable electronic device on any of the following U.S. registered civil aircraft:
   1) Aircraft operated by an air carrier or commercial operator; or
   2) Any other aircraft while it is operated under IFR.

b) Paragraph (a) of this section does not apply to:
   1) portable voice recorders;
   2) Hearing Aids;
   3) Heart pacemakers;
   4) Electric shavers;
   5) any other portable electronic device that the operator of the aircraft has determined will not cause interference with the navigation or communication system of the aircraft on which it is to be used.

c) In the case of an aircraft operated by an air carrier or commercial operator, the determination required by paragraph (b)(5) of this section shall be made by the air carrier or commercial operator of the aircraft on which the particular device is to be used. In the case of other aircraft, the determination may be made by the pilot in command or other operator of the aircraft.

Kevin Redden WB2ZLF
Bell Labs (Ho)

From 4522716313297555697
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5695180ba8f1da27,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-21 22:50:36 PST
Message-ID: <bnews.houxp.176>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Wed Dec 22 01:50:31 1982
Subject: ARRL Propagation Bulletin 51
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 21 08:31:38 1982
Received: Wed Dec 22 01:50:31 1982

qst de ad7i

hr propagation forecast bulletin nr 51   from arrl headquarters
newington ct december 19, 1982
to all radio amateurs bt

the solar flux went above 200 december 4, reached 279 six days
later, and then dropped sharply to 179 on the 19th. because of many
solar flares, at least two of nearly record intensity, the period of
high flux was rather disapointing. there were marginal east west
50 mhz openings, but nothing like those of the three previous years.
propagation on lower frequencies was no better than fair, except for
a short period near the middle of the month.

the solar flux is expected to continue downward through the forecast
week, but this will not affect the traditional dx bands appreciably.
in fact, the lower geomagnetic activity will mean higher average
signal levels and less fading than in the past week.   propagation
via the f layer is unlikely on 50 mhz east west paths. north south
50 mh work should be possible when the wwv k index is 3 or higher.

a severe disturbance in progress as this bulletin was issued will
decrease, bringing genrally good propagation december 22 through
24, and again in the last 3 days of the old year. the prediction
charts in december qst should be on the conservative side in this
period.

american sunspot numbers last week were between 86 and 136, for a
mean of 119 ar

From 7628913119614724718
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6b9649c581d02868,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-22 00:55:03 PST
Message-ID: <bnews.alice.1331>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!sjb
X-Path: utzoo!decvax!harpo!npoiv!alice!sjb
From: alice!sjb
Date: Wed Dec 22 03:55:00 1982
Subject: WARC 79 Ratified
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 21 19:57:36 1982
Received: Wed Dec 22 03:55:00 1982

The U.S. Senate today ratified (finally!) the final acts of
the WARC '79 conference by voice vote.

From -1624532170258549821
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,844dabfe5ad8faec
X-Google-Attributes: gid151e61,public

X-Google-Thread: 13375c,844dabfe5ad8faec
X-Google-Attributes: gid13375c,public
X-Google-ArrivalTime: 1982-12-22 02:46:18 PST
Message-ID: <bnews.hou5f.167>
Newsgroups: net.aviation,net.ham-radio
Path: utzoo!decvax!harpo!npoiv!hou5f!jak
X-Path: utzoo!decvax!harpo!npoiv!hou5f!jak
From: hou5f!jak
Date: Wed Dec 22 05:46:17 1982
Subject: Re: Radios on Airlines
References: <bnews.avsdT.219>
X-Google-Info: Converted from the original B-News header
Posted: Fri Dec 17 10:02:38 1982
Received: Wed Dec 22 05:46:17 1982

As for other rfi, once while waiting for others to board a flight from
Denver to Newark, I was speaking with the flight engineer requesting permission
to "listen only" to my 2 meter ht during the flight. His comments were
interesting ... He said that many times hand calculators and electronic games
used by passengers during flights presented a significant interference
problem to the instruments. He said that some times, some electronic games
were so bad that they had to walk through the cabin looking for the offensive
device and request that the passenger turn it off!

Jim Kutsch WA8ZNH   hou5f!jak

From -4493672304477712598
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,55848e961c7e0078,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-24 00:33:13 PST
Message-ID: <bnews.inuxc.560>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!duke!harpo!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Fri Dec 24 03:33:11 1982
Subject: ARRL DX BULLETIN 12/17 de k2ph
X-Google-Info: Converted from the original B-News header
Posted: Fri Dec 17 09:11:21 1982
Received: Fri Dec 24 03:33:11 1982

       _3_0__M_e_t_e_r_s_. U. S. amateurs are reminded to avoid use of the
       10.109 to 10.115 MHz segment of the new band. Also,
       contacts on the 10 MHz band will not be creditable toward
       ARRL awards.

       _K_e_r_g_u_e_l_e_n__I_s_l_a_n_d_. FB8XR is expected to become active at
any
       moment for a three month operation by F6GVX. In a similar
       operation, F6DWQ will operate FB8ZP from Amsterdam and St.
       Paul Islands for 11 months.

_R_o_d_r_i_g_u_e_s__i_s_l_a_n_d_. Alex, 3B8DA, will be going to Rodrigues Island about the 18th for a week as 3B8DA/3B9.

_T_r_i_n_d_a_d_e_. PY00TA and PY00TB are expected to begin a 34 hour all band operation at any time.

_T_r_i_n_i_d_a_d__a_n_d__T_o_b_a_g_o_. 9Y4PW has been quite active on the low end of 20 meters, around 14228 kHz at 1200Z. QSL to G4DXC.

_M_a_r_i_o_n__I_s_l_a_n_d_. Rumor has it that ZS2MI will be on before the end of the month.

_C_h_i_n_a_. A new Chinese station, BY1BC, is expected soon. The antenna is ready to go, but rig problems are delaying its start.

_N_e_p_a_l_. Four operators including a YL, plan to operate from 9N1 through January 1 on all bands, ssb and cw.

_I_r_a_q_. YI1BGD has been on recently on 10 and 20 meter ssb between 1200 and 1600Z. He is also sometimes on with JY3ZH on 14220 kHz at 0630Z.

_H_e_a_r_d__I_s_l_a_n_d_. The DXpedition plans are progressing on schedule. After departure on January 2, keep in touch via VK00SJ/MM.

_T_u_n_i_s_i_a_. 3V8AA has been active on 28745 kHz at 1300 to 1400Z.

_S_y_r_i_a_. The Technical Institute of Radio will celebrate 35 years of amateur radio in Syria with 6C35A, 6C35M, 6C35N, and 6C35O operating 80 through 10 meters, ssb only, between 0300Z December 25 and 1300Z December 26 and between 0300Z December 30 and 0800Z December 31.

From 8737834004053841588
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d832a29684dfc629,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-24 02:30:28 PST
Message-ID: <bnews.houxp.177>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Fri Dec 24 05:30:26 1982
Subject: ARRL 114: WARC approved by Senate
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 23 08:55:19 1982

Received: Fri Dec 24 05:30:26 1982

hr arrl bulletin nr 114 from arrl headquarters
newington ct december 22, 1982
to all radio amateurs bt

on tuesday, december 21, the senate approved treaty document 97 21,
thus consenting to ratification of the final acts of the 1979 world
administrative radio conference. this represented the last major
hurdle for implementation in the united states of the warc 79
agreements. president reagan is expected to sign the document
without delay. fcc release of its proposals for warc implementation,
as a notice of proposed rule making in docket 80 739, is expected any
day ar

From -1950068143190177962
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d832a29684dfc629
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-24 02:58:41 PST
Message-ID: <bnews.houxp.178>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Fri Dec 24 05:58:38 1982
Subject: ARRL 114: WARC approved by Senate
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 23 11:11:18 1982
Received: Fri Dec 24 05:58:38 1982

hr arrl bulletin nr 114 from arrl headquarters
newington ct december 22, 1982
to all radio amateurs bt

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thus consenting to ratification of the final acts of the 1979 world
administrative radio conference. this represented the last major
hurdle for implementation in the united states of the warc 79
agreements. president reagan is expected to sign the document
without delay. fcc release of its proposals for warc implementation,
as a notice of proposed rule making in docket 80 739, is expected any
day ar

From 5233942180206985803
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,83e9fe5dca9392dc,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-29 22:33:40 PST
Message-ID: <bnews.houxp.179>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Thu Dec 30 01:33:39 1982
Subject: Propagation Bulletin 52
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 29 08:00:23 1982
Received: Thu Dec 30 01:33:39 1982

qst de ad7i
hr propagation forecast bulletin nr 52 from arrl headquarters
newington ct december 27, 1982
to all radio amateurs bt

from a high of 279 december 10 the solar flux dropped to 156 by the 21st. it then rose to 176 but was back to 172 on the 27th. it is expected to move slightly lower before beginning what should be a considerable rise at the years end. the december average will be about 178, the highest since march.

these statistics show cycle 21 maintaining quite high activity for more than four years. dx work has been possible on 50 mhz since late in 1978, a record that might stand for a long time. sunspot numbers and the solar flux have been mostly above base figures used for the qst propagation charts, so the muf has been higher than the charts predicted, much of the time.

recent high solar activity has not been an unmixed blessing, as frequent solar flares and high geomagnetic activity have increased signal absorption on paths that cross or paths near the auroral zone. only about 5 days this month were really good for hf dx. conditions were improving as this bulletin was issued. propagation should be generally good through the end of december, and again around january 3 and 10 to 12. except when the wwv k index is 3 or higher, the f layer muf will tend to be above that shown in the qst charts. the timing of daily muf on a given path is based mainly on sun position, d this factor should follow the charts closely, regardless of flux levels.

american sunspot numbers were not available at bulletin time ar

From -6282812718049696774
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4d5c72d11c2fdb70,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-03 23:55:38 PST

Message-ID: <bnews.hou5f.174>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!npoiv!npois!houxm!houxa!houxi!hou5d!hou5a!hou5e!
hou5c!hou5b!hou5f!jak
X-Path: utzoo!decvax!duke!harpo!npoiv!npois!houxm!houxa!houxi!hou5d!hou5a!hou5e!
hou5c!hou5b!hou5f!jak
From: hou5f!jak
Date: Tue Jan 4 02:55:35 1983
Subject: source for low-price high-quality tubes wanted
X-Google-Info: Converted from the original B-News header
Posted: Mon Jan 3 14:21:51 1983
Received: Tue Jan 4 02:55:35 1983

I need a few tubes for my Drake T4XB and R4B and am considering
buying a complete set of replacement tubes.
However, this is quithe costly if the tubes are purchased from
a local electronics shop.

Can anyone recommend a good source (mail order or whatever)
for inexpensive high quality tubes?

73, Jim KY2D (x WA8ZNH) ...!hou5f!jak

From -3874255810734127862
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,688dd78a2408732d,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,688dd78a2408732d,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1983-01-04 00:13:21 PST
Message-ID: <bnews.floyd.1064>
Newsgroups: net.ham-radio,net.wanted
Path: utzoo!decvax!harpo!floyd!stan
X-Path: utzoo!decvax!harpo!floyd!stan
From: floyd!stan
Date: Tue Jan 4 03:13:20 1983
Subject: Info wanted on Sony ICF-2001 receiver
X-Google-Info: Converted from the original B-News header
Posted: Mon Jan 3 16:43:46 1983
Received: Tue Jan 4 03:13:20 1983

I am interested in info on the Sony ICF-2001 receiver. It is a digitally
controlled HF receiver in a package the size of a book.

Specifically, I am interested in specs like selectivity, coverage,
BFO, etc. and also user experience.

References to articles about it would be nice. Also, if you own one
and live in this area (Northern NJ) and could give me a demo, that would
be great.

Thanks,

Stan King
Bell Labs, Whippany
room 2A-111
Phone 201-386-7433

From -8153357031783387317
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5ad4ca69a9cc93a4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-05 23:54:12 PST
Message-ID: <bnews.houxp.180>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Thu Jan 6 02:54:11 1983
Subject: ARRL 1: elections
X-Google-Info: Converted from the original B-News header
Posted: Wed Jan 5 08:29:24 1983
Received: Thu Jan 6 02:54:11 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr arrl bulletin nr 1 from arrl headquarters
newington ct january 4, 1983
to all radio amateurs bt

the following have been elected without balloting as sms for their
respective sections, mississippi w4wlf and orange wa6wzn. those
elected will begin new terms april 1, 1983 ar

From 3965203133873602261
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,64f0ea65db4b0447,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-05 23:57:31 PST
Message-ID: <bnews.houxp.181>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Thu Jan 6 02:57:29 1983
Subject: ARRL 2: UN activity
X-Google-Info: Converted from the original B-News header
Posted: Wed Jan 5 08:29:41 1983
Received: Thu Jan 6 02:57:29 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr arrl bulletin nr 2 from arrl headquarters
newington ct january 4, 1983
to all radio amateurs bt

the united nations has proclaimed 1983 as world communications year.
an amateur radio operating activity will be held on january 15, 1983
to commemorate the event. all amateurs throughout the world are
invited and encouraged to participate. further details can be found
in the contest corral column of november qst or the iaru calendar
113 ar

From 6925640431950324167
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d3e76fadd6dccdde,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-06 22:17:52 PST
Message-ID: <bnews.inuxc.575>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Fri Jan 7 01:17:50 1983
Subject: CONTESTS THIS WEEKEND (1/8-9)
X-Google-Info: Converted from the original B-News header
Posted: Thu Jan 6 08:01:47 1983
Received: Fri Jan 7 01:17:50 1983

This weekend's contests include:

World 40 Meter and 80 Meter SSB Championships

Sponsor: 73 Magazine

Time: 40 Meter contest: 0000 to 2400Z January 8
       80 Meter contest: 0000 to 2400Z January 9
       (Two separate contests!)

Stations may be worked once per band, phone only.

Exchange: Signal report and state or province

Zero District QSO Party

Time: 2000Z Jan. 8 until 0200Z Jan. 10

Exchange: signal report and ARRL section
          0-land stations send county also

Stations may be worked once per band and mode. Mobile
stations may be worked (0 land only) again as they change
counties.

Suggested Frequencies: cw: 60 KHz up from low end of band
                      phone: 3.900, 7.270, 14.300, 21.370, 28.570
                     novice: 25 KHz up from low end of Novice band

14 MHz SSB Contest

Time: 0000Z to 2400Z January 9

Exchange signal report, serial no. starting with 001 and International
Short Wave League membership no. (if any)

Suggested Frequencies: 14.175 (dx) and 14.225

From 8758177411663862460
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fd07c15b20e9c84f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-06 22:19:27 PST
Message-ID: <bnews.houxp.184>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Fri Jan 7 01:19:26 1983
Subject: ARRL 4: elections
X-Google-Info: Converted from the original B-News header
Posted: Thu Jan 6 08:28:50 1983
Received: Fri Jan 7 01:19:26 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr arrl bulletin nr 4 from arrl headquarters
newington ct january 5, 1983
to all radio amateurs bt

upon the withdrawal of one of the candidates, kp4ew has been elected
without balloting as section manager of the west indies section. his
term begins april 1, 1983 ar

From -6331247525629829614
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6aace737b87e0b6a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-06 22:21:47 PST

Message-ID: <bnews.houxp.183>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Fri Jan 7 01:21:44 1983
Subject: ARRL 3: computer conf
X-Google-Info: Converted from the original B-News header
Posted: Thu Jan 6 08:28:31 1983
Received: Fri Jan 7 01:21:44 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr arrl bulletin nr 3 from arrl headquarters
newington ct january 5, 1983
to all radio amateurs bt

the arrl is sponsoring a second amateur radio computer networking conference on march 19 in san francisco. technical papers are invited on all aspects of amateur packet radio, advanced radioteletype including amtor, and related amateur radio digital communications via hf, vhf/uhf and satellite media. for more information, contact paul rinaldo, w4ri, 1524 springvale ave, mclean, va 22101 ar

From 476813947092069765
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,71caffad98c537fa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-06 22:29:37 PST
Message-ID: <bnews.inuxc.577>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Fri Jan 7 01:29:34 1983
Subject: World Communications Year Contest (1/15/83)
X-Google-Info: Converted from the original B-News header
Posted: Thu Jan 6 09:19:40 1983
Received: Fri Jan 7 01:29:34 1983

Time: 0001 to 2400Z Jan. 15, 1983
Bands: All bands and modes 1.8 MHz through 275 GHz (excluding 10, 18, and 24
       MHz bands)

Exchange: ITU region and ITU zone (example: DL1AA sends 128, W1AAA sends 208
          JA1AA sends 345)

Work stations once per band; telegraphy and telephony emissions count as
separate bands.

From 5798445585150200109
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,69cc82cbe4a5b06,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-08 04:13:45 PST
Message-ID: <bnews.eagle.714>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sat Jan 8 07:13:40 1983
Subject: Uosat Bulletin
X-Google-Info: Converted from the original B-News header
Posted: Sat Jan 8 03:46:04 1983
Received: Sat Jan 8 07:13:40 1983

UOSAT SPACECRAFT CONTROL CENTRE
UNIVERSITY OF SURREY, GUILDFORD, SURREY, ENGLAND
****

UOSAT SPACECRAFT OPERATIONAL STATUS:
****
** UOSAT BULLETIN-11   1400 GMT   7 JANUARY 1983 **

* S/C ATTITUDE *

THE EFFECTS OF THE INCREASE IN Z-SPIN PERIOD PERFORMED BEFORE CHRISTMAS TO ENSURE THERMAL STABILITY DURING AUTONOMOUS OPERATION OVER THE LAST TWO WEEKS HAVE BEEN MEASURED. THE Z-SPIN PERIOD FELL FROM 153 SECONDS TO APPROX 60 SECS, AS THE PRECESSION CONE ANGLE DROPPED FROM 55 DEGREES TO AROUND 15 DEGREES. THE NUTATION ANGLE IS ALSO MUCH REDUCED. THIS ATTITUDE EFFECT COULD BE READILY OBSERVED BY MONITORING THE SPACECRAFT BATTERY TEMPERATURES, WHICH CHANGED FROM AN INITIAL CYCLIC VARIATION BETWEEN -17C AND 2C TO A STEADIER 7C DURING THREE WEEKS.

* S/C OPERATIONS SCHEDULE *

MAGNETORQUER MANOEUVRES TO INCREASE THE Z-SPIN PERIOD TO 108 SECS HAVE ALREADY BEEN PERFORMED, AND THIS WILL BE FOLLOWED SHORTLY BY THE RESTORATION OF THE PRECESSION ANGLE IN PREPARATION FOR GRAVITY GRADIENT STABILISATION. COMPUTER-GENERATED MAGNETOMETER DATA WILL BE HEARD ON THE 435 MHZ DOWNLINK WHEN IT IS ACTIVATED OVER EUROPE.

* THANKS FOR FEEDBACK *

DATA RECEIVED FROM: W4FJ, BRS 34348, PD0JCY, G6HRH, G3VYV,
W4AUZ, DC7BZ, G3EMU, G8EDG, VK5AGR ET AL, K1KSY.

SPACECRAFT ORBITAL DATA

	UOSAT	OSCAR-8	NOAA-7	
ORBIT NO:	6937	24681	7950	
EQX TIME:	15:25:31	13:47:26	14:02:16	GMT
EQX LONG:	4.5	284.4	346.1	DEG.W
MEAN HGT:	509	905	854	KM
PERIOD :	94.787436	103.233288	101.98	MINS
P-DRAG :	8.95919E-5	-2.6112E-6	-8.0E-6	*N
LONG INC:	23.696487	25.811037	25.49	DEGS
L-DRAG :	2.254152E-5	-7.028E-7	-2.0E-6	*N
N=ORB.NO-	6937	0	0	

QSL/POST CARDS CONFIRMING RECEPTION OF UOSAT DATA INCLUDING
STATION DETAILS WOULD BE APPRECIATED FOR SURVEY OF NO. AND
GEOGRAPHIC DISTRIBUTION OF ACTIVE STATIONS
SEND TO: DR.M.N.SWEETING, UOSAT CONTROL CENTRE - THANK YOU

From -1605615225610063856
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,34d6c64fd290ac12,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-10 23:04:15 PST
Message-ID: <bnews.eagle.722>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Tue Jan 11 02:04:11 1983
Subject: TAPR Status
X-Google-Info: Converted from the original B-News header
Posted: Mon Jan 10 23:47:13 1983
Received: Tue Jan 11 02:04:11 1983

By Lyle Johnson WA7GXD, and Dan Morrison KV7B

BLACK THURSDAY

All was going well. The parts were in hand, PC boards delivered and volunteer (slave) labor lined up for the BIG PUSH -- would you believe Beta TNCs in time for Christmas?

Neither would Murphy! On Wednesday, 8 December 1982, the first TNCs were delivered to TAPR from one of the two assembly plants. The first one worked perfectly! Unfortunately, by 2:00 AM, Thursday, 9

December, a serious problem was very apparent. "Black Thursday" was upon us. Only 3 of the first 19 TNCs were functional.

After a fitful (morning's) rest, an emergency meeting of the TAPR executives was called, production halted, and an investigation into Murphy's doings launched.

It turned out that there was a problem in the plate-through job on the PC boards, meaning that the top half and the bottom half of the board were intermittently (dis)connected. The 119 TNCs assembled by the time of the halt in production were sent to the scrap bin, and an assessment of the damages made. The losses were a staggering $8600!

TAPR, being in no position to absorb such a blow, determined to finish the project anyway. A salvage operation was mounted, and in the end there is a $3000 loss to contend with -- not insubstantial, but one that, with a judicious amount of finagling, and some voluntary $upport from those interested in seeing this thing through, can be overcome. New boards were ordered fabricated (free) and parts to populate the boards re-ordered.

After a few slips in the schedule, 10 boards were received the week of 28 December 1982. Two were hand-assembled by WA7GXD, and worked the first time. Three were assembled by one of the two assembly plants, wave-soldered and delivered. All three worked!

The delay time was used by both the software group, for additional debugging and refinement, and the hardware group, for additional testing and interfacing. Meanwhile, the approximately 70-page TNC Manual is being edited and clarified.

The present schedule calls for board assembly to begin the week of 9 January with assemblies delivered to TAPR late in the week of 16 January. The boards will then be powered up and power supply voltages checked. Passing this test, the ICs will be loaded and calibration performed on the MODEM. Finally, the TNC will "connect" to itself via a digipeater, then be packed up, along with the manual, for shipment to the Beta coordinator. The Beta coordinator will then be responsible for distribution of the TNCs to the individual site participants.

It has often been asked if the TAPR TNCs will be compatible with the Vancouver TNCs, and the answer is

an emphatic YES! Harold Price, NK6K and co-author of the high-level PASCAL software, established a connection with Skip Hanson, WB6YMH, in Los Angeles on 8 January 1983. Harold was using a Beta TNC, while Skip used a VADCG TNC. Packets were exchanged for a half-hour or so, and the test was a complete success!

The initial software released with the Beta boards is a version of the AMSAT protocol agreed upon in Washington DC the weekend of October 8th, in addition to the more-or-less standard Vancouver protocol in general use. The software is outlined in more detail below.

SOFTWARE UPDATE

This update would be written by Margaret, KV7D, rather than by me (KV7B), except that as these words are being composed she is putting the last bells and whistles in the TAPR/AMSAT AX.25 level 2 protocol software which will appear on the TAPR Beta board at time of distribution. The people responsible for this monumental effort are: Dave Henderson, KD4NL, who was responsible for implementing the protocol; Margaret Morrison, KV7D, who put together the entire package of real-time assembly language routines and debugger; and Harold Price, NK6K, who built the extremely flexible command parsing language. Of the 24k bytes of PROM on board, 22k are used in this release. The high-level routines were written in compiled Pascal, and occupy about 16k of the total. The entire development time was roughly from the AX.25 protocol meeting in October until today (mid-January).

The simplest description of the software is that it's everything any of us dared to hope for and more. Not only does it implement AX.25 level 2 protocol "by the book," (it follows the October 10 document produced at the AMSAT meeting, based on the AMRAD recommendations; and where ambiguities exist, follows Ma Bell's BX.25, issue 2 document), but it can also operate in Vancouver compatibility mode with no problems.

Present at this time are some 66 user settable parameters for controlling the behavior of the board, many of them for determining the details of terminal communication. In this short space only a few highlights may be mentioned, but they include such items as hardware and software flow control, separately controllable in either direction, with the software flow control characters being user definable. In order to permit total transparency a single command defeats all special character traps and packetizes according to

timer and packet length criteria. At the other extreme, input editing at the character and line level are available, including a separate "cancel packet" command.

Perhaps the most important features are the elaborate timer operated CSMA procedures, including (all user settable) separate key-up delays for digipeating and originating packets, separate delays for voice repeater key-up and tail-drop times, and random wait times after collisions. Flow control on the RF link also involves time delays. Altogether, there are ten distinct timer functions associated with the RF link, requiring 4 separate clocks to be maintained by the interrupt driven routines.

All in all, the functions presently on board should be more than adequate for the "shakedown cruise" coming up during Beta Test, and future releases will have even more features (we've still got 2k PROM to go before adding the next deck to the board!).

From -1553071682589451503
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,267acf916df10505,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-10 23:06:44 PST
Message-ID: <bnews.eagle.721>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Tue Jan 11 02:06:40 1983
Subject: TAPR Experiments Document
X-Google-Info: Converted from the original B-News header
Posted: Mon Jan 10 23:46:39 1983
Received: Tue Jan 11 02:06:40 1983

LOCAL AREA NETWORKS VIA PACKET RADIO MEDIUM

Den Connors

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Abstract

Investigations are underway by the Amateur Radio community to incorporate digital communications techniques into the Amateur Service. The network system utilizes simple techniques, using normal terminals and personal computers, and a wide variety of amateur radio transceivers. Complete local area network protocols are realized by incorporating a micro-processor based interface unit to connect the terminal device and radio. Physical-level protocol involves half-duplex transmissions with frequency-modulated transceivers. Channel activity is sensed by the packet radio, and negative acknowledgement used to determine if retransmission of lost packets is required. A data-link control is also implemented, and two connecting protocols are being tested on top of these lower levels. The TAPR/AMSAT protocol provides multiple point-to-point connections on the channel. The TAPR/DA (dynamic-addressing) protocol implements a full datagram network, and uses a robust network control scheme to provide near-optimum channel utilization and network tolerance to a number of error conditions related to open radio channels.

Introduction

The Tucson Amateur Packet Radio group is currently coordinating a series of tests with Amateur Radio operators in eighteen major U.S. cities, to investigate the use of digital computer and terminal communications using packet radio techniques. Initial investigations are being performed on the Amateur Radio Service VHF bands, using half-duplex transmissions. Two sets of experiments are being undertaken; the first is testing multiple simultaneous connections on a single shared frequency, while the second tests a new form of efficient radio frequency local area network.

A general description of the system is given in terms of the signals and medium access. This is followed by information on the hardware implementation. A more detailed description of the signalling technique, data link protocol and the two types of link and network protocols are described.

Physical and Medium Access Protocols

Both protocol tests are using a common medium. Access to the radio channel is accomplished using audio frequency shift keying within the normal audio communications passband. The packet radios are able to detect digital communications on the channel, and will defer transmissions while there is activity on the channel. Collisions, interference and unusual conditions (fading, multipath, etc.) which cause unsuccessful transmissions will result in no acknowledgement, and an automatic retransmission will result after a set delay. Multiple unsuccessful transmissions will produce an error indication at the data source. Successful transmissions will result in an acknowledgement being transmitted to the originating station. The acknowledgements may occur after each packet, or may be deferred for up to seven packets, using standard high-level bit-oriented data link protocol (HDLC), implemented with large-scale integrated circuitry.

This multiple-access protocol is therefore based on on-channel data sensing, with negative acknowledgement causing retransmission (data-sensed multiple-access with collision-detection by negative acknowledgement, or DSMA/NAK). It should be noted that the normal LAN technique of carrier-sensing is not appropriate to the Amateur Radio Service, where all manner of signals are apt to impinge on the data channel. Use of much less occupied bands is possible, and conversion to carrier-sensing trivial. However, the choice of using the more heavily-used bands was made to provide exposure to the general population, and promote acceptance of this new mode.

Hardware

The Tucson Amateur Packet Radio Corporation (TAPR) has created a single-board packet radio terminal node controller (TNC) which interfaces standard microcomputers or data terminals to commonly available Amateur Radio transceivers.

Initial investigations in Tucson are using the two-meter band (144-148MHz), and both this band and others will be used in the other seventeen test sites. This band was chosen for maximum visibility

within the Amateur community.

The transceiver interface is performed without modification to the unit by using the three normally-available signal lines; audio input (microphone), audio out (speaker) and transmit (push-to-talk). This ease of equipment configuration was the primary reason to use audio-frequency shift keying, and to keep the modulating signals within the audio passband.

The digital data from the terminal or computer is fed to the packet radio interface board either through a standard RS-232 serial interface port, or by using a custom parallel interface. TTL-level lines are provided on the board for these connections, and a wire-wrap area is also included for non-standard interconnects.

The TNC accepts the serial or parallel data and formats the data into packets, using the standard HDLC format as described below. These serial packets are encoded using a non-return-to-zero inverted (NRZI) code to assist in providing an audio signal for the demodulator to lock on, using phase-locked loops. This NRZI data is presented to the audio FSK modulator, and the modulated signal is fed to the audio input of the transceiver.

The received signal appears as an AFSK signal on the audio output of the radio. A side benefit of using standard Amateur radios is the availability of a speaker for monitoring the channel while the experiments are in progress, although experience suggests that continued monitoring can be most distracting.

The signalling tones used to modulate the radio were chosen to be compatible with those of the Bell 202 half-duplex modem set of standards. This was done both to use a well-tested pair of frequencies with much operating experience, and to allow earlier experimenters with surplus 202-type modems to use their equipment, expanding the size of the test community. The main drawback to the 202-type modem is the limitation of 1200 bits/second of data transmission. Further experimentation is planned for higher-speed phase-shift keying modems within radios built expressly for packet radio service.

Hardware also exists on board to handle packet

encoding and decoding, buffering, and system initialization and calibration. All components necessary to provide the channel access and data link control, as well as network protocol, are also contained on the TNC. A built-in modem and power supply minimize the complexity of installation.

Data Link Control

Both protocols being investigated use similar data-link protocols, although there are differences in addressing modes. An HDLC controller integrated circuit provides most of the circuitry for building and disassembling the packets. HDLC framing signals, address bytes, control byte and trailing cyclic redundancy check bytes are employed without modification. Successful packets are acknowledged on receipt, using standard HDLC control modes. Each packet is checked for correct CRC calculation, and the acknowledgement packet is withheld if the CRC is incorrect. This forces a retransmission by the source station. Retransmitted packets are thereby forced either by incorrect CRC calculation or by having been interfered with (collisions or unwanted signals). Collisions of packets are minimized by the data-sensing capabilities of the packet radios.

The decision of the next time to retransmit a packet will be weighted by a binary-exponent random back-off algorithm, similar to that used by Ethernet-like systems. This minimizes the possibility of continuing collisions by radios with nearly-synchronous retransmission attempts.

Unlike most LAN media, the open radio channel susceptibility to intentional and unintentional interference adds complexity to the link-level algorithms used to reschedule transmissions. Another problem is the phenomenon of "capture" of the receiver demodulator by FM signals stronger than that of the desired signal.

Connection-Oriented Protocol

The first protocol used to exercise the packet radio system was one developed simultaneously by groups in the Los Angeles and Washington, D.C. areas, and approved and "standardized" at a meeting sponsored by the Radio Amateur Satellite Corporation (AMSAT) in October of 1982. The

implementation of this TAPR/AMSAT protocol provides a means of connecting pairs of packet radios with a communication channel transparent to other users of the shared channel. While lacking some of the capabilities of a full local area network, this protocol nonetheless provides a means of experimenting with channel capacity, access algorithms and system parameters.

The TAPR/AMSAT implementation provides the same types of functions as the link-access protocol of X.25. Connection and disconnection, error indications and control, and flow control are all provided. Virtual circuits are supported on the channel and channel-wide monitoring is available.

The addressing scheme is unique, in that the Amateur Radio Service has associated with each station a single call sign, that of the station owner/operator. The packet radios have made use of this uniqueness to provide unambiguous addressing, both within LAN's and across future internetwork gateways. A serious drawback is the requirement of seven bytes for both sending and receiving addresses, but on the half-duplex channels currently in use, this added overhead is not noticeable.

A further enhancement allows extension of the network to larger geographical areas with any of the stations acting as a store-and-forward packet repeater. Stations requiring repeat services use bits in the HDLC control word to signal the need to have a message repeated, and repeated messages turn off this bit to prevent possible multiple acknowledgements.

Although this protocol is designed primarily for point-to-point links within a larger multi-point network configuration, it does lend itself well to some of the needs of the shared-channel packet system, including terminal-to-host and host-to-host connections.

Datagram Protocol with Dynamic Addressing

The second protocol being used in the packet radio experiment test beds has a more efficient addressing scheme, providing each station with a mechanism to obtain a one-byte address when first accessing the network. This dynamic-addressing protocol, called TAPR/ DA, provides a full network

configuration with connectionless protocol and a centralized, failure-tolerant network control mechanism.

The unique aspect of this LAN protocol is this utilization of dynamic address allocation. A network control station (NCS) monitors for stations attempting to sign on, and replaces the amateur radio call sign sent to the NCS with a single byte address for efficiency. Each station then has available from the NCS a list of users (amateur call signs) and corresponding assigned addresses. This list is the system status table. For robustness and ease of switching to other radio channels, the first station on any given frequency will automatically be chosen as the NCS, and in the event of loss of this station, the next station attempting transmissions which require the NCS will become the NCS.

This protocol also supports a store-and-forward repeat capability. The possibility of hearing stations in a different network geographically remote, but using the same frequency requires special algorithms. The conditions of multiple store-and-forward digipeaters, network control stations or identically-addressed stations must be detected and corrected.

Future Research

Currently experiments are underway to further extend network topology through the use of specified stations as network-to-network links, using separate radio channels. Additionally, the use of amateur radio satellites is being planned.

Acknowledgements

The author wishes to acknowledge the efforts of Lyle Johnson, who is the principal architect of the terminal node controller hardware. Margaret Morrison, Harold Price and David Henserson wrote the TAPR/AMSAT software for the system, and Marcus Chamberlin and David McClain produced the TAPR/DA software. Design credit also goes to all of the above, as well as Charles Green, Mark Baker and Dan Morrison for several design concepts. Further gratitude is given to the 180 hams who have volunteered a wide variety of resources to help test the system.

From -4610268301745649941
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,371c98267765d09b,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 16aac1,371c98267765d09b,start
X-Google-Attributes: gid16aac1,public
X-Google-Thread: 163b79,371c98267765d09b,start
X-Google-Attributes: gid163b79,public
X-Google-ArrivalTime: 1983-01-13 08:42:49 PST
Message-ID: <bnews.utcsstat.496>
Newsgroups: net.physics,net.ham-radio,net.general
Path: utzoo!utcsrgv!utcsstat!nishri
X-Path: utzoo!utcsrgv!utcsstat!nishri
From: utcsstat!nishri
Date: Thu Jan 13 11:42:24 1983
Subject: faster than light
X-Google-Info: Converted from the original B-News header
Posted: Thu Jan 13 10:04:39 1983
Received: Thu Jan 13 11:42:24 1983

"An electrical signal in a conductor, under suitable conditions of very
 low L and C values, can be made to pass through a conductor at a velocity
 considerably greater than that of light."

So concludes Harold W. Milnes, Ph.D, in the January 1983 issue of
"Radio-Electronics" in an article that begins on page 55.

I found I did not agree with parts of the article. I would be interested
in comments from others who have read the article.

Please mail comments to : decvax!utzoo!utcsrgv!utcsstat!nishri
Informational replies of general interest should be posted to net.physics

From 2495175840952379482
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,78b75fff373bab4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-13 23:19:08 PST
Message-ID: <bnews.hou5f.186>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!hou5f!kfr
X-Path: utzoo!decvax!harpo!npoiv!hou5f!kfr
From: hou5f!kfr
Date: Fri Jan 14 02:19:06 1983
Subject: Looking for 12V power supply
X-Google-Info: Converted from the original B-News header
Posted: Wed Jan 12 09:38:49 1983
Received: Fri Jan 14 02:19:06 1983

I am looking for a 120 VAC to 12 VDC 5 amp power supply
for use with my 2M FM rig. Does anyone in New Jersey
have one for sale?

Kevin Redden   Westfield NJ 654-5431
ABI-HO 834-4211

From 7138333156487535 23
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,94de222c70f6dbff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-14 00:13:46 PST
Message-ID: <bnews.harpo.1317>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!rja
X-Path: utzoo!decvax!harpo!rja
From: harpo!rja
Date: Fri Jan 14 03:13:45 1983
Subject: 2 meter rig for sale
X-Google-Info: Converted from the original B-News header
Posted: Wed Jan 12 12:41:04 1983
Received: Fri Jan 14 03:13:45 1983

FOR SALE

Icom IC-211,2 meter multimode rig.
10 watts output
CW,SSB,FM
144-148 Mhz.
Dual Vfo's
Built in 117V power supply.
Excellent condition.
   $350
Rick WB2QOQ, wh 1D-314, X3073 harpo!rja

From 8133608167834277582
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,371c98267765d09b
X-Google-Attributes: gid151e61,public
X-Google-Thread: 16aac1,371c98267765d09b
X-Google-Attributes: gid16aac1,public
X-Google-Thread: 11e8b6,e9ea024fd81a2050,start
X-Google-Attributes: gid11e8b6,public
X-Google-ArrivalTime: 1983-01-15 02:49:03 PST
Message-ID: <bnews.aluxz.37>
Newsgroups: net.physics,net.ham-radio,net.followup
Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!mhuxt!mhuxi!aluxz!ltn
X-Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!mhuxt!mhuxi!aluxz!ltn
From: aluxz!ltn
Date: Sat Jan 15 05:49:02 1983

Subject: Re: faster than light
References: <bnews.utcsstat.496>
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 14 08:23:18 1983
Received: Sat Jan 15 05:49:02 1983

Under certain propagation conditions (not necessarily in a conductor; the same thing can happen to a wave propagating in a plasma), an electrical signal *can* travel at a velocity greater than light.
But that is only true for the phase velocity. The phase velocity is the velocity of a wave of a single frequency, which means that signal has a constant amplitude for all time.
The key point is that the group velocity *cannot* exceed the speed of light. The group velocity is the velocity that a modulation envelope (whether amplitude modulation, on-off cw pulses, or whatever) will travel at. The difference arrises because modulation involves propagating signals of many different frequencies (remember Fourier) which travel with different velocities (the faster-than-light phenomenon only occurs in dispersive media). Thus *information* still cannot travel faster than light, and information propagation is what relativity is concerned with.

Les Niles, Bell Labs Murray Hill (aluxz!ltn)

From 7088277353017779582
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf50d34d4f5858b5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-15 04:18:50 PST
Message-ID: <bnews.inuxc.585>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxi!mhuxj!mhuxv!burl!sb1!ll1!ihldt!ihnp4!
ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxi!mhuxj!mhuxv!burl!sb1!ll1!ihldt!ihnp4!
ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Jan 15 07:18:49 1983
Subject: ARRL DXINFO BULLETIN
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 14 09:40:58 1983
Received: Sat Jan 15 07:18:49 1983

> _H_e_a_r_d__I_s_l_a_n_d_. The VK9NS expedition had navigational problems and had to return to Tasmania. It is not yet known if this trip will be resumed. The VK00HI crew is progressing on schedule and is approximately 800 miles from Heard Island. Operation may be expected around the 15th.
>
> _T_o_g_o_. N6NW plans to operate as 5V7NW or 5V7HL from January 15 through 24, ssb only. Frequencies will be 21300, 14225, 14195 listening up, and 3795 kHz. He expects to be very active on the weekends and after 1800Z during the week. QSL to AK3F.

_N_i_u_e_. ZK2RS is active, especially during the weekends, between 28500 and 28600 kHz at 2200Z.

_P_i_t_c_a_i_r_n__I_s_l_a_n_d_. Congratulations to Tom Christian, VR6TC, who was recently awarded the honorary "Member of the British Empire" by Queen Elizabeth. YL operation from Pitcairn by VR6KY is expected for two weeks beginning January 12.

_N_o_r_t_h__C_o_o_k__I_s_l_a_n_d_. ZK1WL will be active for the next six months.

_R_o_d_r_i_g_u_e_s__I_s_l_a_n_d_. Alex, 3B8DA/3B9 has been heard on 14217 kHz at 0230Z.

_S_o_u_t_h__S_h_e_t_l_a_n_d__a_n_d__S_o_u_t_h__O_r_k_n_e_y__I_s_l_a_n_d_s_. Look for operations by LU1ZA and LU1ZC around the end of January and first of February.

_K_e_r_g_u_e_l_e_n__I_s_l_a_n_d_. FB8XAB is often on 14220 kHz around 0330Z. QSLs go via F6GXB.

_F_r_a_n_z__J_o_s_e_f__L_a_n_d_. UK1PGO can be found on 20 meter ssb and cw between 1100 and 1300Z. Watch for him on 14215 and 14204 kHz.

_C_h_i_n_a_. BY8AA has been putting through a good signal on the east coast during the evening hours. He is now operating split, so please do not call on his frequency.

_H_e_a_r_d__a_n_d__W_o_r_k_e_d_. JW5VAA 10101 kHz at 2200Z. QSL to LA4YW. Remember that 10 MHz contacts are not creditable toward ARRL awards. 7P8CL 7003 kHz at 0350Z. QSL via SM5GOJ. CE00CEW Juan Fernandez 14035 kHz at 0150Z. KA2PFV/SV9 28555 kHz at 1330Z. QSL to P. O. Box 301, Iraklion, Crete. OE2TWM/YK 28595 kHz at 1400Z.

From 6512244586474404896
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d3c10a07b488a040,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-16 03:17:55 PST
Message-ID: <bnews.sask.190>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!utah-cs!sask!hardie
X-Path: utzoo!decvax!harpo!utah-cs!sask!hardie
From: sask!hardie
Date: Sun Jan 16 06:17:52 1983
Subject: anyone going to unicom?
X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 14 09:17:59 1983

Received: Sun Jan 16 06:17:52 1983

Any hams out there going to UNICOM in San Diego?
Maybe we could have an 'eyeball QSO party'!
Send me your name and call and if enough replies arrive I will summarize to
the newsgroup.
Pete ve5bel
(harpo!utah-cs!sask!hardie)
73 + cu there!

From 6507750823355875706
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,42d3146d75edf255,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-18 05:41:58 PST
Message-ID: <bnews.sask.192>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!utah-cs!sask!hardie
X-Path: utzoo!decvax!harpo!utah-cs!sask!hardie
From: sask!hardie
Date: Tue Jan 18 08:41:57 1983
Subject: A noisy problem
X-Google-Info: Converted from the original B-News header
Posted: Sat Jan 15 23:20:44 1983
Received: Tue Jan 18 08:41:57 1983

With help from various people, I have managed to track down a source of noise
which has plagued me ever since I got my first rig seven months ago. The noise
has got worse over those seven months to the point that it will obliterate
all useful HF bands on my rig for a period of as much as a week. I looked
at the rig's audio output with a scope and the noise is basically a 120Hz
spike with some ringing. I won't bore you with all the blind alleys I followed!
The problem turned out to be one of two transformers in the substation which
feeds this whole residential area. One of the beams that supports some lightning
arrestors and insulators has a ground wire running along the underside and this
wire is stapled to the wood. Neither the staples nor the wire are insulated.
The problem was one of those staples! According to the DOC inspector who
accompanied me to the substation (and who has the expensive ultrasound gadget
that detected the problem) said this is a common cause of noise. It seems that
there are so many high-tension wires around there that sometimes a path to
ground can occur through the wood. He says that in some substations there
is so much juice around that the power crews won't even touch supporting
guy wires unless they know it is safe.
I thought I would pass along the basics of how the problem was ultimately
tracked down.
1. First of all prove that the noise is not in your rig, not due to faulty
house wiring and NOT due to a light dimmer. The first thing DOC asked me
when I first complained to them was ' have you got any light dimmers'.
They can be a dreadful source of interference.
2. Once you are satisfied that the noise is power line related but coming
from outside then all you have to do is locate the fault. Our area has
overhead wiring. If your power is distributed underground then about the

only thing you can check is the transformers. If your power is above
ground then the noise can be detected by using essentially the same technique
as the DOC. Find the highest frequency at which you can just hear the noise
and walk (or drive) around the neighbourhood to find out which direction
gives you the strongest signal. (If you have a beam antenna then you are a long
way towards solving it. If you also have a nearby friend with a beam you can
triangulate and its done!). Then walk in the direction of the noise and
increase your listening frequency as the signal gets louder. At some point
you should locate the noise. I was almost certain the noise was coming from
the transformers anyway so we checked it first and the 2 meter rig confirmed
it. Those rigs are really useful because the two transformers are only about
15 feet apart and because of the fence around the substation you cant get closer
than about 15 feet. Even so, the mobile rig indicated, and the handheld 100%
confirmed, that the noise was coming from only one of the transformers.
The reason for this is, of course, that most of the energy caused by the arc
goes into the lower frequencies so that you have to be close to the source
of the noise for it to interfere with VHF rigs. The arc is also the reason
why there is a 120Hz spike - one for each half cycle of the 60Hz power wave.

Another cause of interference is arcing insulators or lightning arrestors.
With overhead wiring the fault could be one of those two or simply a loose
connection somewhere and finding out where the noise is NOT, is sometimes
as valuable as knowing where it IS. In my case I found that the noise also
occurred in my daughter's piano teacher's house which is about 10 blocks
away and which is also fed from a different phase than our house. BUT
we are both on the same transformer. If you suffer from power line noise the
fault could be much closer to home. For example, the local transformer
that supplies power to your block.

If anyone has questions about this I will be glad to answer mail but I should
stress that I am NOT an expert in this sort of thing. If necessary, I will
summarize to the net. I am also interested in hearing of any noise problems
(no matter what source ... e.g. cordless phones etc.)
you may have had for which you have a solution - post them to the group
or mail to me.

I should mention that the ultrasound device that the DOC uses
looks like a bullhorn but it has a parabolic dish and a pair of headphones.
I presume that it uses the doppler effect to convert the motion of an abject
into sound. Anyway, the DOC inspector let me try it and there was no doubt
that it was the staple. You could point the thing at the staple and hear
it vibrating like crazy and only an inch or so away there was silence!

73
pete ve5bel

From -4155685341359577312
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8cedb1f94fb75c43,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-19 01:30:53 PST
Message-ID: <bnews.sask.193>

Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!utah-cs!sask!hardie
X-Path: utzoo!decvax!harpo!utah-cs!sask!hardie
From: sask!hardie
Date: Wed Jan 19 04:30:47 1983
Subject: 2M questions
X-Google-Info: Converted from the original B-News header
Posted: Sun Jan 16 13:24:45 1983
Received: Wed Jan 19 04:30:47 1983

I have been looking at 2M Hand-held rigs since I now can afford to
splurge on one and would have liked to have one to take to San Diego.
In Canada the TR-2500 costs about $439 , the FT208R costs $319, or
$289 from a place that just happens to be out of stock! The IC-2AT is $309.
The Azden and the Santec are not in the race for me unless I can find
a Canadian supplier.
 Of course, the Kenwood and Yaesu are fully
synthesized (10 memories, scanning etc.) and the Kenwood is a better
designed rig than the Yaesu but I don't think it is $120 to $150
better. The ICOM is a neat beast as long as you don't mind thumbwheel
entry (and NO memory, scanning etc.).
Questions.
1. Is anyone out there in a position to say whether
ICOM is going to come up with a fully synthesized rig to take out the
other guys? In Canada, the difference of only $10 between them and
the 208R suggests that their sales have to be slowing down a bit.
(Although I doubt that Canadian sales are a determining factor in their
marketing strategy, I think the same type of thing is happening in the U.S.)
It seems odd that their mobile rigs (e.g. 25a) are marvellous little
beasts with memory, scanning and so on, but their H.T. has still got
thumbwheels.

2. Yaesu has recently dropped their price on the 208R by about $100
and they did the same sort of thing to the FT-101-ZD just before they
brought out the FT-102. Anyone know if they are just trying to compete
with the TR-2500 (as the Kenwood supplier disdainfully told me "Our rig
is better") or is there something better coming down the pipe?

Please mail to me.
Tx + 73
pete ve5bel
harpo!utah-cs!sask!hardie

From -6805997278445090331
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,97801df809e89369,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-19 03:48:03 PST
Message-ID: <bnews.inuxc.587>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley

From: inuxc!wheatley
Date: Wed Jan 19 06:48:00 1983
Subject: This weekend's contests
X-Google-Info: Converted from the original B-News header
Posted: Mon Jan 17 14:51:26 1983
Received: Wed Jan 19 06:48:00 1983

ARRL QSO PARTY
starts: 1800Z Jan 22
ends: 0600Z Jan 23
exchange status (mbr (member of arrl), etc) and arrl section. This
contest is phone only (CW was a few weeks ago).
frequencies: 1.865, 3.870-3.910, 7.200-7.245, 14.265-14.295, 21.340-21.360,
28.600-28.630. Try 10 on the hour from 1800 to 2100 utc, and 160 at 0430 and
0530 utc.

NORTH DAKOTA QSO PARTY (Yes, there is a North Dakota)
time: 0000 to 0800 and 1600 to 2400Z Jan 22
        0800 to 1600Z Jan 23

Exchange signal report and qth (county for ND stations; state, province, or
country for others.

Work stations once per band and mode. Suggested frequencies: phone:3905,
7280, 14280, 21380, 28580   cw: 1810 3540, 7035, 14035, 21035, 28035
novice: 25KHz up from lower band edge.

TEXAS QSO PARTY
Time: 0000Z Jan 22 to 1800Z Jan 23
exchange serial number and qth (county for TX stations, state, province, or
country for others)

frequencies: phone 3940, 7260, 14280, 21370, 28600
              cw 65 KHz up from the lower band edge
              novice 10 KHz up from lower band edge

WEST VIRGINIA QSO PARTY
time: from 1700Z Jan 22 to 1700Z Jan 23

exchange signal report, serial number, and QTH (county for WV stations, state
or county for others)

Suggested freq: phone 10 KHz up from lower General band edge
                 cw 35 KHz up from low end
                 novice 35 KHz up from band edge

From -6097472330076642296
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2861d85c555288bc,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,2861d85c555288bc,start
X-Google-Attributes: gid13372f,public

X-Google-ArrivalTime: 1983-01-19 04:50:39 PST
Message-ID: <bnews.eagle.730>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Wed Jan 19 07:50:38 1983
Subject: Amsat/Vita agreement
X-Google-Info: Converted from the original B-News header
Posted: Mon Jan 17 21:11:48 1983
Received: Wed Jan 19 07:50:38 1983

Jan 14,1983 -- The Radio Amateur Satellite Corp. (AMSAT) and the Volunteers In Technical Assistance (VITA) {note -- pronounce as VI-TAH as in the word vital} have today announced their intent to pursue a joint effort to develop a low-cost packet radio satellite system called PACSAT.

VITA, headquartered in Rosslyn, VA, is a private, nonprofit organization that supports people working on technical problems in developing countries with technical information provided by thousands of volunteer scientists, engineers and technologists. The information and assistance VITA provides is aimed at helping local people in developing countries to select and implement technologies appropriate to their local situations.

VITA Director Henry Norman and VITA Project Coordinator Dr. Gary Garriott (WA9FMQ) today announced that VITA has just awarded AMSAT a $15,000 Design Definition Grant to support development of PACSAT as a reliable low-cost digital satellite system to meet requirements for communications of technical information on renewable energy resources to and from their many field locations. AMSAT's role in this joint activity will be to provide hardware suitable for demonstration programs and to provide technical assistance in developing a low-cost system. Part of this effort will involve adapting solar power, amateur radio and personal computer technology for use in the field, far removed from any technical support.

AMSAT's PACSAT project manager Den Connors (KD2S) indicated that this grant will support initial PACSAT design definition activities which are being coordinated by AMSAT with work being done in some 15 locations around the world.

It is also of interest to note that WA9FMQ is a cousin of NASA astronaut Dr. Owen Garriott, W5LFL who may be amateur radio's first "space mobile" by operating from the Space Shuttle if a proposal submitted by AMSAT and ARRL is approved by NASA.

AMSAT
850 Sligo Ave.
Silver Spring, MD 20910

VITA
1815 North Lynn St.
Rosslyn VA 22209

From 7625443276726921701
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c11ecf5fb2fb0e49,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-19 22:46:04 PST
Message-ID: <bnews.eagle.732>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Thu Jan 20 01:46:01 1983
Subject: Re: Interference
References: <bnews.eagle.731>
X-Google-Info: Converted from the original B-News header
Posted: Tue Jan 18 00:03:35 1983
Received: Thu Jan 20 01:46:01 1983

Two additions to my item on power line RFI:

The Interference Handbook is published by Radio Publications, Box 149,
Wilton, CT 06897, and is available through most of the ham radio
distributors.

I meant to say "Naperville Electric Dept" instead of "Naperville
Electric Co". Part of the problem was that I was dealing with a small
municipal agency who bought power from Commonwealth Edison and
maintained the local distribution network. They were simply too small
to afford the RFI specialists that large companies hire.

Phil

From -4770108303780206844
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c11ecf5fb2fb0e49
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-19 22:48:14 PST
Message-ID: <bnews.eagle.731>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Thu Jan 20 01:48:12 1983
Subject: Interference
X-Google-Info: Converted from the original B-News header

Posted: Mon Jan 17 23:55:57 1983
Received: Thu Jan 20 01:48:12 1983

Here's a book I can recommend to anyone interested in the details of interference troubleshooting:

Interference Handbook, by William R. Nelson, WA6FQG, Former RFI Investigator, Southern California Edison Company.

As you might expect from the author's former job, he is very thorough in his discussion of the myriad ways power distribution networks can cause RFI. His method is very similar to the one Peter Hardie used to find his noisy transformer.

I got interested in the problem of power line interference by necessity (the usual route.) When I lived in Illinois, a dual 138kv transmission line passed my house 10 houses away. As it turned out, the poles near my house were not a problem, but the "corner towers" 1/2 mile away where the line made a Z turn along a road toward a substation. The symptoms were somewhat strange: slowly rising horizontal static "bars" on the TV, and intermittent broadband noise pulses ruining 2 meter SSB (especially Oscar-7 mode B) reception. During heavy rainstorms, the noise would go away instead of getting worse!

Although Oscar-7 failed in the summer of 1981, and I subsequently moved to NJ without the problem never really being resolved, I was reasonably certain I understood the problem.

Ground lines running across the top of high-voltage towers are there to take lightning strikes, which could occur as often as every day or two during the late summer in Illinois. Although the ground lines were firmly clamped to the towers on the straight runs, at the corners a double-loop "dead-end" was used, with no hard connection between the ground line and the tower.

Significant amounts of current were induced in the ground line from the power conductors, and arcing occured at the dead-ends. When it rained, however, my theory is that it temporarily suppressed the arcing and the interference.

Fighting power line interference can be an exhausting experience. I spent many hours on the phone, riding around with the Naperville Electric Co maintenance men, and in desperation, writing letters to the Mayor and the FCC, all with only partial success.

The best medicine is preventative - don't live near a large power line!!

Phil Karn, KA9Q/2

From 5805585870512070654
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1fbfdc2149d89a51,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-20 00:07:47 PST
Message-ID: <bnews.sri-unix.5054>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!seismo!hao!hplabs!sri-unix!smh
X-Path: utzoo!decvax!duke!harpo!seismo!hao!hplabs!sri-unix!smh
From: sri-unix!smh
Date: Thu Jan 20 03:07:44 1983
Subject: Re: anyone going to unicom? - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Mon Jan 17 23:11:22 1983
Received: Thu Jan 20 03:07:44 1983

#R:sask:-19000:sri-unix:5200003:000:208
sri-unix!smh   Jan 17 01:34:00 1983

Sounds good to me! I am from Sdgo but have not been active there since 1977... sigh...

What are the popular repeater/simplex frequencies? (144/220 mhz).

Scott M. Hinnrichs, SRI Int'l
N6HRN
smh@sri-unix

From -8478236851198867851
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a271389989faf5e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-20 00:24:13 PST
Message-ID: <bnews.houxf.270>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!npoiv!npois!houxm!houxa!houxf!4313dim
X-Path: utzoo!decvax!duke!harpo!npoiv!npois!houxm!houxa!houxf!4313dim
From: houxf!4313dim
Date: Thu Jan 20 03:24:11 1983
Subject: Program to Calculate UOSAT Crossings
X-Google-Info: Converted from the original B-News header
Posted: Tue Jan 18 10:48:24 1983
Received: Thu Jan 20 03:24:11 1983

I have been trying to listen to UOSAT for about 3 months now with the frustration of trying to determine when the next pass will be. Many a time I have missed it due to miscalculations or having to wait up to 1 hour for its crossing. Having had enough of this, I have devised a simple program for the HP33 series calculator that, given UOSAT data from this net, calculates the passes of UOSAT quite accurately -- even two weeks ahead is within a few minutes! This program could be adapted to any calculator; the program is self explanatory.
Note that this program does not factor in the drag coefficient given in the UOSAT data. This program was not meant to be that

sophisticated. Also, for best results, use the latest info for the
initial conditons of the satellite and orbital data.
The following registers are used:

0 number of iterations. Once the calculator has stopped, the
   display will read the number of passes past what was
   computed, ie, it will have a negative number for each time
   the program is run past the last iteration.
2 This contains the present longitude for each calculation.
   Initialize it with the information from the UOSAT bulletin.
3 Longitude increment in decimal form from the UOSAT bulletin.
4 the constant 360. Used for modulo 360 calculation.
5 time of equinox. Initialized from the the UOSAT bulletin in
   decimal form (hours local or GMT)
6 time per revolution (hours) in decimal form from UOSAT
   bulletin.
7 constant 24 for the modulo 24 calculation.

This is the program for a HP 33C calculator:

```
01   RCL 2     ;CALCULATE FOR NEW LONGITUDE
02   RCL 3     ;ADD THE INCREMENT
03   +
04   STO 2     ;ADD BACK TO LONGITUDE
05   RCL 4     ;LONGITUDE MUST BE MODULO 360 DEGREES
06   -
07   (g)X>0    ;CORRECT IF > 360 DEGREES (MODULO 360)
08   STO 2
09   RCL 5     ;NOW CALCULATE TIME OF EQUATOR CROSSING
10   RCL 6     ;ADD INCREMENT
11   +
12   STO 5
13   RCL 7     ;CORRECT IF >24 HOURS (MODULO 24)
14   -
15   (g)X>0
16   STO 5     ;IF >= 24 HOURS, SUBTRACT 24
17   0    ;CHECK FOR NUMBER OF ITERATIONS
18   RCL 0     ;FETCH NUMBER OF ITERATIONS TO GO
19   1
20   -    ;DECREMENT SAME
21   STO 0     ;AND STORE IT
22   (f)X<=Y   ;IF ZERO OR LESS, STOP
23   R/S  ;STOP HERE.  IF WANT ANOTHER PASS, HIT R/S
24   GTO 01    ;FOR EACH PASS, CALCULATOR WILL STOP WITH
          ;NUMBER OF PASSES DONE
```

An example of how this works is given:
On Jan. 7, the UOSAT data was given as:
Equatorial crossing @ 15:25:31 GMT and the Long. was 4.5 deg.
west. Therefore, the time was 10:25:31 EST which is about
10.425 hours decimal. This was entered into register 5.
4.5 was entered into register 2.
The period for the revolution of the craft was given as

94.787 minutes/pass which is 1.58 hours per pass. This is
entered into register 6. The longitudinal increment is
entered into register 3. This was given as 23.696
deg./pass.
Now, to find out how many times (iterations) are needed,
realizing that there are about 15 orbits per day, figure the number
of iterations as days times 15. I wanted the passes for the afternoon
of Jan. 17, which is 10 days after Jan. 7, or 150 iterations.
This was entered into register 0. Now start the program at
01 and wait. When it stops, register 2 will have 7.425 EST
and register 5 will be 318.9 deg. The angle here is too low
for any use; use anything between +- 15 deg. from your longitude
is sure to work. By hitting the R/S button once, the
time and long. registers are incremented once. Again look
at the values to see if they are within range. This single
iteration may be repeated. After four single iterations
(ie, pressing R/S four times) -4 will be displayed. The
time in register 5 will be 13.745 hours (13:45 EST) and the
angle will be 53.7 deg. One more iteration yields 15.325 hours
(15:20 EST) and 77.4 deg. Being in NJ (~74 deg W) I found that
I could hear (with only a 5/8 wave and a mobile rig which
proves that you don't need anything special) the 13:45 EST
pass (54 deg W) and the 15:20 EST pass (77 deg W).
Note that the result in register 5 is in hours decimal form.
Convert this into the normal hours:mins for convenience.
Also note that this is the equator crossing time. It takes
about 3.8 deg./min. for the craft to make its way up from the
equator, so for NJ (~41 deg N) add about 11 min. to the time
for the overhead crossing. This yielded a 15:31 pass that
WB2HJX will attest to.

Please direct any comments, etc. to this newsgroup or to me,
houxf!4313dim. Enjoy.

Scott McLellan KA2JIV

From 8420108712283635497
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,371c98267765d09b
X-Google-Attributes: gid151e61,public
X-Google-Thread: 16aac1,371c98267765d09b
X-Google-Attributes: gid16aac1,public
X-Google-Thread: 11e8b6,e9ea024fd81a2050
X-Google-Attributes: gid11e8b6,public
X-Google-ArrivalTime: 1983-01-20 00:58:16 PST
Message-ID: <bnews.hocsd.124>
Newsgroups: net.physics,net.ham-radio,net.followup
Path: utzoo!decvax!duke!harpo!ihnp4!houxz!hocsb!hocsf!hocsd!jis
X-Path: utzoo!decvax!duke!harpo!ihnp4!houxz!hocsb!hocsf!hocsd!jis
From: hocsd!jis
Date: Thu Jan 20 03:58:14 1983
Subject: Re: faster than light

X-Google-Info: Converted from the original B-News header
Posted: Fri Jan 14 14:46:06 1983
Received: Thu Jan 20 03:58:14 1983

Although the phase velocity of an elctromagnetic disturbance can be greater
than the speed of light in dispersive media, it strikes me as improper or
misleading to claim that an "electric signal" can travel faster than light.
The concept of a signal is intimately related to communication, and a
"electric signal" travelling at the phase velocity (whatever that might mean)
cannot be used to relly send a "signal" (as is normally connoted by the word)
to anyone at a velocity greater than that of light.

Jishnu Mukerji
ABI Holmdel 1B-425
{vax135, harpo, allegra}!hocsd!jis

From -7782222216500511066
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2ed5fe1ef57f994d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-20 02:08:46 PST
Message-ID: <bnews.avsdF.198>
Newsgroups: net.ham-radio
Path: utzoo!decvax!decwrl!sun!megatest!fortune!dsd!atd!avsdS:avsdF:artelt
X-Path: utzoo!decvax!decwrl!sun!megatest!fortune!dsd!atd!avsdS:avsdF:artelt
From: avsdF:artelt
Date: Thu Jan 20 05:08:40 1983
Subject: MLA-2500B FOR SALE !!!!!!
X-Google-Info: Converted from the original B-News header
Posted: Wed Jan 12 13:23:58 1983
Received: Thu Jan 20 05:08:40 1983

 !!!!!!!! FOR SALE !!!!!!!!
WE HAVE A 'DENTRON' MODEL MLA-2500B
AMATEUR RADIO LINEAR FOR SALE WITH
10 METER'S INSTALLED !
THE ASKING PRICE FOR THE UNIT IS
$675.00 ..... VERY VERY FEW HOURS
ON THE UNIT !
ORIGINAL SHIPPING BOXES W/ALL BOOKS
ON THE OPERATION.
IF ADDITIONAL INFORMATION IS REQUIRED,
OR TO BUY THIS UNIT, PLEASE CALL
415-656-3407
OR LEAVE MESSAGE ON THE NET ....
BILL ARTELT - WB9YVM/6

From -2065586077717284431
X-Google-Language: GERMAN,ASCII-7-bit
X-Google-Thread: 151e61,73a6acc94b1fbf60,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1983-01-20 02:18:43 PST
Message-ID: <bnews.hou5f.193>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!hou5f!jak
X-Path: utzoo!decvax!harpo!npoiv!hou5f!jak
From: hou5f!jak
Date: Thu Jan 20 05:18:38 1983
Subject: jan. call book
X-Google-Info: Converted from the original B-News header
Posted: Tue Jan 18 14:30:19 1983
Received: Thu Jan 20 05:18:38 1983

The following is a list of net.ham-radio readers/contributers:

CALL - NAME - MAIL ADDRESS
KB0YH - Augie (Gus) Hansen - druxy!arh
K1DK - Dan Kahn - research!alice!danny
WB1EXN/6 - Keith Muller - ucbvax!sdcsvax!muller
KA1GNG - Rob Wood - decvax!genradbolton!rob
W1UI - Jerry Gann - ucbvax!lbl-unix!asgvax!gann
WA1ZVN - Scott A. Magnuson - houxi!hocsb!scott
KI2A - Steve Gross - houxq!sg
K2ANC - Lou - Kohnen.Wbst@PARC-MAXC
K2ART - Mike Pilla - houxi!u1100a!mp
KB2BQ - Michel - Denber.WBST@PARC-MAXC
WB2CFV - Rick Spanbauer - rick@suny-sbcs | allegra!sbcs!rick
N2CHL - Rich Gopstein - allegra!gop
Ka2CUC - Pete Dusel - Dusel.Wbst@PARC-MAXC
WA2CVU - Karen Schroeder - floyd!philabs!kis
KY2D - Jim Kutsch - npois!jak | hou5f!jak
K2DM - George Briggs - houxo!43351gw
W2EMF - Al Donkin - houxq!aed
W2FPY - Steve Robinson - eagle!ajll11!robinson
WB2FSI - MIKE - Fayette.wbst@PARC-MAXC
N2GH - Dave - Sewhuk.HENR@PARC-MAXC
KU2H - Al Morley - houxm!arm
AD2H - Marsh Gosnell - npois!pyuxbb!mkg or whuxlb!mkg
KA2HAZ - Dusty Kramer - Vincent.WBST@PARC-MAXC
WA2HSJ - Glenn Golden - houxg!glenn or lime!glenn
K2HYD - Ray ALBERS - houxr!rayalb
N2IC - Steve London - druxm!n2ic or houxp!9535sml
WA2ILB - Mark Ziegler - houxg!rmz | houxe!rmze
W2IOL - Ron McConnell - harpo!rcmcc
W2IY - Mike Tortorella - houxi!w2iy
KA2JDY - Joel Damiano - ucbvax!teklabs!joeld or decvax!teklabs!joeld
KB2JG - joe massi - hogpc!4432jrm
KB2JN - Jeff - Duntemann.WBST@PARC-MAXC
KA2JQH - Adam Buchsbaum - research!sjb
KA2KFG - Ed McKenna - via copy from Ironside. WBST@PARC-MAXC
K2LYV - Dave - Birnbaum.HENR@PARC-MAXC
WA2MOR - Larry Kaufman - nwuxc!lsk
N2ND - Dick Maybach - houxm!4373rlm
KA2OMX - Emerson Ironside - IRONSIDE.WBST@PARC-MAXC

W2OZH - Jim - Taylor.WBST@PARC-MAXC
K2PH - Bob Schreibmaier - houxq!k2ph
 WA2PME - Azi Heuman - houxo!3357ah
WB2QOQ - Rick Anderson - harpo!rja
WA2QYN/2 - Paul Rubin - allegra!phr
WB2RPC - Mike Sajor - harpo!zeppo!mes
N2YK - Bruce McNair - houxg!bem or houxm!bem2
N3AGV, Ron Natalie, unc!brl-bmd!ron, ron@brl
N3AUC - Doug Kingston - unc!brl-bmd!dpk, dpk@brl
N3CKF - Joe Pistritto - unc!brl-bmd!jcp, jcp@brl
WA3IRQ - Lee Nackman - duke!unc!lrn
VE3QB/WA3ZIA - Larry - Kaysersri-unix!fortune!dsd!dna
WA3THP/2 - Stu Brown - allegra!stu
WA3VJS - Scott E. Garfinkle - princeton!scotteg
DF4CK/W9 - Stephan Bechtolsheim - decvax!pur-ee!purdue!svb
G4EHL - Anthony Short - decvax!microsof!anthony
K4EO - Larry - Stewart.PA@PARC-MAXC
K4FRS - Jack Buchanan - duke!mcnc!jwb or duke!tucc!jwb
K4FUM - Jere Sandidge - scbhq!jts
WB4FWL - Ned Danieley - duke!ndd
KB4GZ- Frank Starmer - duke!unc!cfs or duke!cfs
WA4IFA - Chuck Bennett - duke!unc!tucc!uchuck
WB4IOJ - Mike Kersenbrock - teklabs!tekmdp!michaelk
KA4ISF - Joe - Fusco.ES@PARC-MAXC
W4IZI - Lindsay Cleveland - ihnss!ihuxi!lindsay
K4QET - Mike - Rutkaus.LB@PARC-MAXC
W4RI - Paul Rinaldo -
KA4VXA - Mike Leuze - duke!mrl
N5AHD - Robert Diersing -
WD5BBT - Kenneth Ingham - floyd!cmcl2!lanl-a!unm-ivax!ingham
VE5BEL - Peter Hardie - utah-cs!sask!hardie
WB5QDS - denny rossbach - floyd!cmcl2!lanl-a!unm-ivax!ee5951aa
WB5YFU Jose Sancho-dominguezja.DLOS@PARC-MAXC
N6AFZ - Glenn - GMulligan.es@PARC-MAXC
WA6AZP - Alan Larson - ucbvax!larson@sri-kl
KD6BA - Ted Lane - ucbvax!menlo70!sytek!zehntel!ted
WA6BEV - Robert R. Henry - ucbvax!rrh or research!rrh
WB6BXW - Lauren Weinstein - ucbvax!ucla-s!lauren or Lauren@UCLA-Security
KD6CQ - Scott - Gray.ES@PARC-MAXC
WA6FAA - Jim Gillogly - randvax!jim
N6FQR - Bill - Danielson.PA@PARC-MAXC
KO6G - Steven Schoch - ucbvax!ONYX:schoch
KD6HR - Pete - McAfee.ES@PARC-MAXC
KU6I - Roger Jollis - intelqa!gsp86!linden
WA6IGJ - Tony Cardenas - ucbvax!Cardenas.ES@PARC-MAXC
WA6JFZ - Ron - RBrown.PA@PARC-MAXC
K6KLY - Russ Bentson - ucbvax!atd!t:jon or sri-unix!fortune!dsd!atd!t:jon
K6LB - Ram - Ronen.ES@PARC-MAXC
KB6LK - Bill Peters - Peters.EOS@PARC-MAXC
KA6MCN - Allen Snethen -
W6MIK - Dave - Shalita.ES@PARC-MAXC
KA6NIL - Don - Ahern.es@PARC-MAXC
WA6OAD - Terry Haney - Haney.eos@PARC- MAXC

NO6Q - Trung - TNguyen.es@PARC-MAXC
KB6QI - Nick - NBarbieri.es @ PARC-MAXC
WB6QMS - Don - Duncan.es@PARC-MAXC
KA6RCQ - Michael Shiloh - ucbvax!shiloh
WB6RPC - Mike - harpo!zeppo!mes
KA6SOJ - Donovan - Dghess.ES@PARC-MAXC
KC7AK - Ed Reuss - teklabs!edr
WB7EEL/1 - John Woods - decvax!genradbo!mitccc!jfw
AD7I - Paul Newland - houxp!ad7i
WA7KGX - Chuck Forsberg - cdi!caf
WB7UBD - Ed Morin - teklabs!tekmdp!edm
WA8EJH - Larry Meehan - pur-ee!iuvax!lwm
WB8ELK - Bill Brown - decvax!sytek!zehntel!varian!bilbo
WB8FBM - Dale DeJager - cbosg!dale
WN8GUE - Steve Wheatley - inuxc!wheatley
G8LHI - Martin Levy - lime!martin
W8MFM - Mailen Kootsey - duke!phs!jmk
K8NU - Carl Yaffey - rmas70!cly
KQ8P - Jeff Coleman - ihnss!ihuxo!jnc
G8RDF - Martin Harriss - houxi!pyuxjj!martin
W8SDZ - Keith Petersen - W8SDZ@MIT-MC
WB8WWV - Greg Ordy - ucbvax!decvax!cwruecmp!ordy
WB9AAX - Phil Gunsul - lime!we13!prg
KB9BO - Jim Krist - ihnss!ihuxs!jtkrist
W9CC - Larry Card - inuxc!lrcard
KA9ELG - Mark Yoder - ucbvax!pur-ee!yoder
K9EUI - Bob Roehrig - lime!we13!rjr
WD9HDR - Jim Erickson - ihuxs!erickson
WD9ICG - Jim Wiman -
KA9KDC - Larry Schroeder - ihuxq!larrys
KA9MHK - Dan Hoelker - ihnss!ihuxu!mstach
WN9NBT - Dave Chasey - pur-ee!wn9nbt
KA9Q - Phil Karn - eagle!karn
WB9RIN - Dennis Noonan - inuxc!wb9rin
WB9VGW - John Wrycza - ihuxu!johnw
KK9W - Dave Andersen - pur-ee!kk9w
(no call) - David Comay - ucbvax!ARPAVAX:comay
(no call) - Steven Bellovin - duke!unc!smb

Send additions/corrections to Jim Kutsch -- hou5f!jak

From 8948113651854815015
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a271389989faf5e
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-20 02:52:32 PST
Message-ID: <bnews.eagle.733>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Thu Jan 20 05:52:28 1983

Subject: Re: Program to Calculate UOSAT Crossings
References: <bnews.houxf.270>
X-Google-Info: Converted from the original B-News header
Posted: Tue Jan 18 14:51:39 1983
Received: Thu Jan 20 05:52:28 1983

For those with personal computers, I can recommend several good programs
to give azimuth/elevation data as functions of time for satellites such
as Uosat; if there is interest, I'll post further details.

For those who would like to use Scott's HP-33 program, I would be happy
to post equator crossings derived from the NASA prediction bulletins I
receive for the following satellites, if there is sufficient interest:

Oscar 8,9
RS 3 thru 8
Noaa 6,7

Phil Karn, KA9Q/2

From 2473788821164691640
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f50118ea5a17d2bc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-20 04:38:48 PST
Message-ID: <bnews.houxp.187>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Jan 20 07:38:41 1983
Subject: Propagation Bulletin 3
X-Google-Info: Converted from the original B-News header
Posted: Tue Jan 18 17:19:12 1983
Received: Thu Jan 20 07:38:41 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr propagation forecast bulletin nr 3 from arrl headquarters
newington ct janqary 16, 1983
to all radio amateurs bt

major changes in solar activity have occurred in recent weeks.
there was only a slow rise and fall in the solar flux, from 136 to
170, and back down to 140. the flux was rising gradually after
january 13, but no major peak seems imminent. flux levels have been
as much as 110 points below those at the same time in the previous
solar rotation.

no large solar flares have been reported, and the average level of
geomagnetic activity has continued much below that of december. this

made for more stable long distance propagation, partqcularly on h oh
latitude circuits. the muf was lower in early january, but otherwise
dx conditions have been generally good, except for an absorption peak
january 10 and 11. there will be higher wwv a and k indices during
much of the forecast week, and conditions will bepsomewhat like those
of january to date. more stable and generally better conditions are
expected after january 22.

the solar flux is likely to average higher in the last half of
january than in the first half, but the increase will have only a
slight effect on the higher frequency dx bands. january may have a
solar flux average below that of any month in recent years.

american sunspot numbers for january 6 through 12 ranged from a low
of 67 on the 11th to a high of 110 on the 8th for a mean of 90r4 ar

From -1920070620783675973
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d9c73d14c727c87f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-20 04:47:43 PST
Message-ID: <bnews.houxp.185>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Jan 20 07:47:42 1983
Subject: ARRL 7: elections
X-Google-Info: Converted from the original B-News header
Posted: Tue Jan 18 17:18:31 1983
Received: Thu Jan 20 07:47:42 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr arrl bulletin nr 7 from arrl headquarters
newington ct january 17, 1983
to all radio amateurs bt

in the ontario section, ve3gt was elected section manager without
balloting. his new term will begin april 1, 1983 ar

From -734510615929255548
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,72e3262603c0a48,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1983-01-20 04:49:47 PST
Message-ID: <bnews.houxp.186>
Newsgroups: net.ham-radio

Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxb!houxq!houxp!ad7i
From: houxp!ad7i
Date: Thu Jan 20 07:49:44 1983
Subject: CRRL 1/2: fees
X-Google-Info: Converted from the original B-News header
Posted: Tue Jan 18 17:18:52 1983
Received: Thu Jan 20 07:49:44 1983

qst de ad7i
red bank, new jersey, u.s.a.
hr crrl bulletin nr 2/1 from arrl headquarters
newington ct january 17, 1983
to all radio amateurs bt

licence fees will not be raised this year but there is the
possibiliy of a small increase in 1984. any major restructuring of
doc licence fees will wait until 1985.

carf has asked doc to issue a special prefix to mark the world
communications year and crrl will be announcing a special awards
program for the 1983 iaru radiosport contest in july.

new crrl assistant directors are ve1oc, ve2xx, ve3and, ve3gco,
ve3ego, ve3fon, ve3fov, ve4afo and ve3amm ar

From 7530424868447428254
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e984d5bac984d874,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-21 23:20:57 PST
Message-ID: <bnews.pur-ee.668>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!davy
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!davy
From: pur-ee!davy
Date: Mon Nov 22 02:20:55 1982
Subject: Re: No code license - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Sun Nov 21 18:27:43 1982
Received: Mon Nov 22 02:20:55 1982

#R:sbcs:-13400:pur-ee:5600003:000:1521
pur-ee!davy   Nov 20 16:27:00 1982

> I also agree with the article(s) in favor of the no-code
> license. I am not a ham, but am interested in becoming one. In
> fact, I'd probably be one now, if it weren't for that code

requirement. I simply don't have the time right now (I am a full time student, plus I work ~20 hours a week) to sit down and learn it.

If and when I do get my license, I don't plan on using CW at all. Not because I think it's necessarily outdated or primitive, just because that end of things doesn't really interest me. Instead of requiring the code to get a license, I think perhaps they (the FCC) should simply make the written test more difficult. I looked at a "sample" novice test, and answered about 75% of the questions correctly without even knowing the answers, I just used common sense.

Perhaps the test to get a code-free license should be more along the level of a general-class test (I've never seen one, I'm just making an example), but the license should only grant the permissions given to technician-class folks. Then, I guess if they really wanted to, the FCC could require that code-free license holders take a code test if they wish to upgrade to a higher-level license.

Oh well, enough rambling. Mail any comments, flames, etc. to me, not to the net.

--Dave Curry
pur-ee!davy

From 5846891886777667663
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2edcc3edf5bd9053,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-22 00:58:54 PST
Message-ID: <bnews.houxp.153>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Mon Nov 22 03:58:53 1982
Subject: ad7i QSY
X-Google-Info: Converted from the original B-News header
Posted: Sun Nov 21 10:05:16 1982
Received: Mon Nov 22 03:58:53 1982

ad7i msg 023

Hello netland:

Paul Newland, ad7i, has changed computers as part of the BTL-ABI scramble. Please make a note that I can now be reached at houxp!ad7i

and no longer at houxc!ad7i.

73, Paul, ...houxp!ad7i

From 2491934677107336520
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,379c6af415ebb13b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-22 22:55:35 PST
Message-ID: <bnews.tpdcvax.218>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ittvax!tpdcvax!baker
X-Path: utzoo!decvax!ittvax!tpdcvax!baker
From: tpdcvax!baker
Date: Tue Nov 23 01:55:33 1982
Subject: no code license
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 22 10:18:58 1982
Received: Tue Nov 23 01:55:33 1982

     having been a ham for 23 years i have some observations about no code licenses. when i became a novice the big challenge was the code at 5 wpm and ohms law. i over came both of them and felt that i had to work for it and now that i have it i want to protect it from those who would destroy it.

     The sad state of affairs on the hf bands (lids, kids, space cadets and phonetic fanatics) with all the jamming, swearing, etc. drove me to uhf weak signal work and oscar. up here we have those 'technicians' who all they know is the code at 5 wpm. well of course noboby cares because all license classes operate in harmony.

     what is the major mode for weak signal work? cw of course. the majority of eme qso's are cw, the majority of low enhancement dx qso's are cw. what does it prove? even in the highly technical world of uhf, cw is very important.

     you can have your no code license up here, but please don't stomp on my 'in the noise almost readable' signal because i am also trying to advance the communications art.

     the biggest problem will be in the test the fcc gives. if it is too difficult all the non ee types will be claiming discrimination. if it is too easy another cb band will result. just maybe a 5 wpm cw test will be perfect way to separate the men from the boys.

                              73 and good dx
                                 dan af9r
                        (....decvax!ittvax!tpdcvax!baker)
h

From -1241616420796010237
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c75a13fbef3f6f73,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-24 01:23:40 PST
Message-ID: <bnews.houxp.155>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Wed Nov 24 04:23:37 1982
Subject: ARRL 104: elections
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 08:38:23 1982
Received: Wed Nov 24 04:23:37 1982

qst de ad7i
hr arrl bulletin nr 104 from arrl headquarters
newington ct november 20, 1982
to all radio amateurs bt

the arrl committee of tellers met today to count ballots in the elections just concluded for director and vice director. the number of votes credited to each candidate is as follows. the first listed candidate is declared elected for the next term of office. central division for director edmond a. metzger, w9prn, 2668, don c. miller, w9ntp, 2398. central division for vice director howard s. huntington, k9km, 2920, kenneth a. ebneter, k9en, 2090. hudson division for director george a. diehl, w2iha, 1616, linda s. ferdinand, n2yl, 1395, john j. d luhy, k2exi, 526. hudson for vice director stephen a. mendelsohn, wa2dhf, 1194, dennis b. mcalpine, k2sx, 706, paul lindgren, ah2m, 636, philip h. bradway, kb2hq, 537, alex m. pontus, w2fcr, 458. new england for vice director richard p. beebe, k1pad, 2223, clevis o. laverty, w1rwg, 1415. northwestern for director mary e. lewis, w7qgp, 1917, joseph n. winter, wa7rwk, 1909. rocky mountain for vice director marshall quiat, ag0x, 943, robert w. scupp, wb5yyx, 597. southwestern for vice director fried heyn, wa6wzo, 1790, joseph merdler, n6ahu, 1451, peter f. matthews, wb6uia, 1012.

the new directors and vice directors take office starting january 1, 1983. on that date the following candidates, previously declared elected, also take office for two year terms. new england division director john sullivan, w1hhr. northwestern division vice director mel c. ellis, k7aoz. roanoke division director gay e. milius, w4ug, vice director john kanode, n4mm. rocky mountain division director lys carey, k0pgm. southwestern division director jay a. holladay, w6ejj. west gulf division director raymond b. wangler, w5edz, vice director thomas comstock, n5tc ar

From 8486991524997972243
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9d0d4e6eb094be74,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-24 01:26:19 PST
Message-ID: <bnews.houxp.156>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Wed Nov 24 04:26:17 1982
Subject: ARRL 105: Mass. Hams
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 08:38:52 1982
Received: Wed Nov 24 04:26:17 1982

qst de ad7i
hr arrl bulletin nr 105 from arrl headquarters
newington ct november 22, 1982
to all radio amateurs bt

follows a matter of particular concern to radio amateurs in
massachusetts. with the retention of the communications tower on mt.
greylock in severe jeopardy, amateurs may wish to contact their state
senator and representative to urge their support of the massachusetts
house bill introduced by representatives scelsi and nagle to save
this vital amateur communications facility ar

From -1872755626848027510
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a55d2df9f6eae878,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-24 01:28:41 PST
Message-ID: <bnews.houxp.157>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Wed Nov 24 04:28:38 1982
Subject: CRRL 43: CRTPB
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 08:39:20 1982
Received: Wed Nov 24 04:28:38 1982

qst de ad7i
hr crrl bulletin nr 43 from arrl headquarters
newington ct november 22, 1982
to all radio amateurs bt

ve3ar of crrl and ve3tt of carf represented canadian amateurs at a meeting of the electromagnetic interference committee of crtpb, the canadian radio technical planning board, held in ottawa on november 8. all recommendations now go to the full canadian radio technical planning board which will meet in 1983 ar

From -6816056839038312240
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3971d182bd4024b7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-24 01:31:12 PST
Message-ID: <bnews.houxp.158>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Wed Nov 24 04:31:11 1982
Subject: Propagation Forecast Bulletin 47
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 08:39:47 1982
Received: Wed Nov 24 04:31:11 1982

qst de ad7i
hr propagation forecast bulletin nr 47 from arrl headquarters newington ct movember 22, 1982
to all radio amateurs bt

in the past week, the solar flux rose from 162 on the 17th to 206 on the 21st. this was the highest since october 1, and it was enough to push the f layer muf over 50 mhz. thus cycle 21 became the first solar cycle in which 50 mhz was open for f layer dx in four consecutive years. generally low geomagnetic activity made recent days notable for the excellent quality of hf propagation as well.

the solar flux has been above readings for the previous solar rotation since november 5, and this will continue for a few more days. there was a major aurora the evening of november 21, degrading hf propi ion but providing an exceptional vhf auroral opening across northern usa and adjacent canadian areas. there will be more disturbances through november 29, but in between there will be good hf conditions and very likely more 50 mhz dx. at the end of november the solar flux and muf will be lower, but hf conditions will be good to excellent in early december.

american sunspot numbers ranged from 93 on the 11th to 140 on the 17th, for a mean of 109 ar

From 2177636314332705078
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,efb349b96c0da5f8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-24 01:45:58 PST
Message-ID: <bnews.eagle.646>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Wed Nov 24 04:45:57 1982
Subject: The Soviets do it again (Iskra 3)
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 10:20:06 1982
Received: Wed Nov 24 04:45:57 1982

Iskra 3 was deployed from the Russian Salyut 7 spacecraft on Thursday,
18 November 1982, according to TASS, the Soviet News Agency. The birth
of Iskra 3 was very similar to Iskra 2 which occurred on 17 May 1982.
Several stations have observed the complex telemetry transmissions on
29.583 mhz. Like the earlier satellite, this one will probably be
short-lived, burning up in the atmosphere in about two months.

The following is orbital data for Iskra 3:
Catalog number: 13663
Epoch time: 82322.76294085
                 Thu Nov 18 13:18:38 1982 EST
Inclination: 51.6338 deg
RA of node: 125.6904 deg
Eccentricity: 0.0002195
Arg of perigee: 159.7567 deg
Mean anomaly: 200.3331 deg
Mean motion: 15.72403550 rev/day
Decay rate: 0.0038881 rev/day/day
Epoch rev: 3372
Semi major axis: 6730.171 km
Period: 91.579544 min
Apogee: 355.08 km
Perigee: 352.12 km

From -6455689054956959542
X-Google-Language: GERMAN,ASCII-7-bit
X-Google-Thread: 151e61,da7dc24348d4f060,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-24 01:58:41 PST
Message-ID: <bnews.hou5f.111>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxa!houxm!npois!npoiv!hou5f!jak
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxa!houxm!npois!npoiv!hou5f!
jak
From: hou5f!jak
Date: Wed Nov 24 04:58:39 1982

Subject: nov call book
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 10:03:26 1982
Received: Wed Nov 24 04:58:39 1982

The following is a list of net.ham-radio readers/contributers:

CALL - NAME - MAIL ADDRESS
KB0YH - Augie (Gus) Hansen - druxy!arh
K1DK - Dan Kahn - research!alice!danny
WB1EXN/6 - Keith Muller - ucbvax!sdcsvax!muller
KA1GNG - Rob Wood - decvax!genradbolton!rob
W1UI - Jerry Gann - ucbvax!lbl-unix!asgvax!gann
WA1ZVN - Scott A. Magnuson - houxi!hocsb!scott
KI2A - Steve Gross - houxq!sg
K2ANC - Lou - Kohnen.Wbst@PARC-MAXC
K2ART - Mike Pilla - houxi!u1100a!mp
KB2BQ - Michel - Denber.WBST@PARC-MAXC
WB2CFV - Rick Spanbauer - rick@suny-sbcs | allegra!sbcs!rick
N2CHL - Rich Gopstein - allegra!gop
Ka2CUC - Pete Dusel - Dusel.Wbst@PARC-MAXC
WA2CVU - Karen Schroeder - floyd!philabs!kis
K2DM - George Briggs - houxo!43351gw
W2EMF - Al Donkin - houxm!aed
W2FPY - Steve Robinson - eagle!ajll11!robinson
WB2FSI - MIKE - Fayette.wbst@PARC-MAXC
N2GH - Dave - Sewhuk.HENR@PARC-MAXC
KU2H - Al Morley - houxm!arm
AD2H - Marsh Gosnell - npois!pyuxbb!mkg or whuxlb!mkg
WA2HSJ - Glenn Golden - houxg!glenn or lime!glenn
N2IC - Steve London - druxm!n2ic or houxp!9535sml
WA2ILB - Mark Ziegler - houxg!rmz | houxe!rmze
W2IOL - Ron McConnell - harpo!rcmcc
W2IY - Mike Tortorella - houxi!w2iy
KA2JDY - Joel Damiano - ucbvax!teklabs!joeld or decvax!teklabs!joeld
KB2JN - Jeff - Duntemann.WBST@PARC-MAXC
KA2JQH - Adam Buchsbaum - research!sjb
K2LYV - Dave - Birnbaum.HENR@PARC-MAXC
WA2MOR - Larry Kaufman - nwuxc!lsk
N2ND - Dick Maybach - houxq!4373rlm
W2OZH - Jim - Taylor.WBST@PARC-MAXC
K2PH - Bob Schreibmaier - houxa!k2ph
WA2PME - Azi Heuman - houxo!3357ah
WB2QOQ - Rick Anderson - harpo!rja
WA2QYN/2 - Paul Rubin - allegra!phr
WB2RPC - Mike Sajor - harpo!zeppo!mes
N2YK - Bruce McNair - houxg!bem or houxm!bem2
N3AGV, Ron Natalie, unc!brl-bmd!ron, ron@brl
N3AUC - Doug Kingston - unc!brl-bmd!dpk, dpk@brl
N3CKF - Joe Pistritto - unc!brl-bmd!jcp, jcp@brl
WA3IRQ - Lee Nackman - duke!unc!lrn
VE3QB/WA3ZIA - Larry - Kaysersri-unix!fortune!dsd!dna
WA3THP/2 - Stu Brown - allegra!stu

WA3VJS - Scott E. Garfinkle - princeton!scotteg
DF4CK/W9 - Stephan Bechtolsheim - decvax!pur-ee!purdue!svb
G4EHL - Anthony Short - decvax!microsof!anthony
K4EO - Larry - Stewart.PA@PARC-MAXC
K4FUM - Jere Sandidge - scbhq!jts
WB4FWL - Ned Danieley - duke!ndd
KB4GZ- Frank Starmer - duke!unc!cfs or duke!cfs
WA4IFA - Chuck Bennett - duke!unc!tucc!uchuck
KA4ISF - Joe - Fusco.ES@PARC-MAXC
W4IZI - Lindsay Cleveland - ihnss!ihuxi!lindsay
K4QET - Mike - Rutkaus.LB@PARC-MAXC
W4RI - Paul Rinaldo -
KA4VXA - Mike Leuze - duke!mrl
N5AHD - Robert Diersing -
VE5BEL - Peter Hardie - utah-cs!sask!hardie
WB5YFU Jose Sancho-dominguezja.DLOS@PARC-MAXC
N6AFZ - Glenn - GMulligan.es@PARC-MAXC
WA6AZP - Alan Larson - ucbvax!larson@sri-kl
KD6BA - Ted Lane - ucbvax!menlo70!sytek!zehntel!ted
WA6BEV - Robert R. Henry - ucbvax!rrh or research!rrh
KF6BK - Trung - TNguyen.es@PARC-MAXC
WB6BXW - Lauren Weinstein - ucbvax!ucla-s!lauren or Lauren@UCLA-Security
KD6CQ - Scott - Gray.ES@PARC-MAXC
WA6FAA - Jim Gillogly - randvax!jim
N6FQR - Bill - Danielson.PA@PARC-MAXC
KO6G - Steven Schoch - ucbvax!ONYX:schoch
KD6HR - Pete - McAfee.ES@PARC-MAXC
KU6I - Roger Jollis - intelqa!gsp86!linden
WA6IGJ - Tony Cardenas - ucbvax!Cardenas.ES@PARC-MAXC
WA6JFZ - Ron - RBrown.PA@PARC-MAXC
K6KLY - Russ Bentson - ucbvax!atd!t:jon or sri-unix!fortune!dsd!atd!t:jon
K6LB - Ram - Ronen.ES@PARC-MAXC
KA6MCN - Allen Snethen -
W6MIK - Dave - Shalita.ES@PARC-MAXC
KA6NIL - Don - Ahern.es@PARC-MAXC
WA6OAD - Terry Haney - Haney.eos@PARC- MAXC
KB6QI - Nick - NBarnieri.ES@PARC-MAXC
WB6QMS - Don - Duncan.es@PARC-MAXC
KA6RCQ - Michael Shiloh - ucbvax!shiloh
WB6RPC - Mike - harpo!zeppo!mes
KA6SOJ - Donovan - Dghess.ES@PARC-MAXC
AD7I - Paul Newland - houxp!ad7i
WB7UBD - Ed Morin - teklabs!tekmdp!edm
WB8ELK - Bill Brown - decvax!sytek!zehntel!varian!bilbo
WB8FBM - Dale DeJager - cbosg!dale
WN8GUE - Steve Wheatley - inuxc!wheatley
G8LHI - Martin Levy - lime!martin
K8NU - Carl Yaffey - rmas70!cly
KQ8P - Jeff Coleman - ihnss!ihuxo!jnc
G8RDF - Martin Harriss - houxi!pyuxjj!martin
W8SDZ - Keith Petersen - W8SDZ@MIT-MC
WB8WWV - Greg Ordy - ucbvax!decvax!cwruecmp!ordy
WA8ZNH - Jim Kutsch - npois!jak | npoiv!hou5f!jak

WB9AAX - Phil Gunsul - lime!we13!prg
KB9BO - Jim Krist - ihnss!ihuxs!jtkrist
W9CC - Larry Card - inuxc!lrcard
KA9ELG - Mark Yoder - ucbvax!pur-ee!yoder
K9EUI - Bob Roehrig - lime!we13!rjr
WD9HDR - Jim Erickson - ihuxs!erickson
WD9ICG - Jim Wiman -
KA9KDC - Larry Schroeder - ihuxq!larrys
KA9MHK - Dan Hoelker - ihnss!ihuxu!mstach
WN9NBT - Dave Chasey - pur-ee!wn9nbt
KA9Q - Phil Karn - eagle!karn
WB9RIN - Dennis Noonan - inuxc!wb9rin
WB9VGW - John Wrycza - ihuxu!johnw
KK9W - Dave Andersen - pur-ee!kk9w
(no call) - David Comay - ucbvax!ARPAVAX:comay
(no call) - Steven Bellovin - duke!unc!smb

Send additions/corrections to Jim Kutsch -- npois!jak

From -4807972156929772926
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b1ef4541eff3a524
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-24 02:10:57 PST
Message-ID: <bnews.sri-unix.4299>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!NBarbieri.es@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!NBarbieri.es@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Wed Nov 24 05:10:56 1982
Subject: Re: No code license
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 22 10:43:03 1982
Received: Wed Nov 24 05:10:56 1982

I am in favor of a no code license in the frame work of what the Canadian digital
license is, if that is it's only purpose for introduction. Having been a teacher
for amateur classes and a ham for 5+ years, I agree that there are a lot of
technica__GoOgLE_
X-Google-ArrivalTime: 1982-11-24 02:12:41 PST
Message-ID: <bnews.sri-unix.4296>
Newsgroups: net.micro
Path: utzoo!decvax!cca!LIN@Mit-Mc@sri-unix
X-Path: utzoo!decvax!cca!LIN@Mit-Mc@sri-unix
From: Mit-Mc@sri-unix
Date: Wed Nov 24 05:12:39 1982
Subject: [CSTROM: diagnostics for new computers, fresh out of box]
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 22 03:15:39 1982
Received: Wed Nov 24 05:12:39 1982

From: Herb Lin <LIN@Mit-Mc>

Date: 20 November 1982 08:31-EST
From: Charlie Strom <CSTROM>
To: LIN
Re: diagnostics for new computers, fresh out of box

Sudden infant mortality is surely a very common occurrence in the microcomputer field. Memoery tests are very useful; the best I have seen is called the Rasmussen Memory test (MEMR2) from Lifeboat and is most likely available from them for a modest fee. There are also a plethora of public domain memory tests available in the public domain and they are generally useful for "hard" errors only; I have seen several instances of bad memory where the mory tests insist that all is well. Those that exercise the memory at full speed are the best. Look at one called WORM and another called UMPIRE (both in the public domain .) I did just have ocassion to repair a CCS 16K static board on which a 2114 went bad after about 18 months of almost daily use. This is the exception.
The best way to burn in the system is to use it in normal operation intensively for a while. I find that the real life conditions will show up any faults much more effectively than the so-called test programs. If your machine runs WordStar for example, chances are that there are no problems.
I will leave comments re disk drives and other components to others who are more knowledgeable about them.

Regards,
Charlie

From -8818669321259303458
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b0dc085c4e06a1b6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-24 02:16:53 PST
Message-ID: <bnews.sri-unix.4302>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!McAfee.es@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!McAfee.es@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Wed Nov 24 05:16:52 1982
Subject: Re No Code License
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 22 12:11:23 1982
Received: Wed Nov 24 05:16:52 1982

Thought I would pass this on to Arpanet.
Pete   KD6HR

Date: 22 Nov. 1982 2:26 pm EST (Monday)
From: Stephany.WBST
Subject: Re: No code license
To: Hamradio^.ES

CW is not old fashioned and is an essential requirement to be considered a real radio operator. Any dope can yack into a mike.

The reason for CW in the HF bands is (1) it is highly effective with simple equipment, (2) it is much easier to "talk" to people that do not know English, (3) the bandwidth is very small (usually less than 100 Hz as compared with 2000 Hz for sideband) which allows more stations to be on the air (4) it acts as a barrier to getting a licese so the people that become Hams are the ones that really want to be Hams.

The people that "cant" or wont learn CW are the ones that want everything easy By leaning the code, at least once in your life, you get something by really earing it.

Without the code the HF bands would become something like the CB bands with no one communicating with anyone.

Despit what is said about the effectiveness of CW vs Sideband, CW is much more effective means of communication under emergency conditions. Note that almost all Moonbounce is done with CW.

CW has the advantage of narrow bandwidth giving more effective penetration as well as a good hardcopy (I have heard sidebanders on numerous occations go to CW when they wand to send written text.

Phone is comparable with telephoning another person. CW is comparable with writting a letter. The telephone did not stop people from writting letters and Phone should not stop people from using CW.

Many people cite the Canadian Packet licese as an example, ;but it is a poor example. Only less than 200 have been insued and it may die from lack of interest. The Technician licese was started in this country to bring in all those millions of geniuses that don't want to learn 13 WPM code. They never materialized. Similarly, a code free UHF licese will not bring in many: the people that are motivated and have the technical training have already learned the code. For the others, the removal of the code barrier will not make them produce anything, and it is best to leave them on CB radio.

Joe N2XS
(29 Years a Ham ... Spark forever !!!)

From -5555337154068367954

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b0dc085c4e06a1b6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-24 06:20:39 PST
Message-ID: <bnews.sri-unix.4301>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!McAfee.es@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!McAfee.es@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Wed Nov 24 09:20:38 1982
Subject: Re No Code License
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 22 12:10:43 1982
Received: Wed Nov 24 09:20:38 1982

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Pete KD6HR

Date: 22 Nov. 1982 2:26 pm EST (Monday)
From: Stephany.WBST
Subject: Re: No code license
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Joe N2XS
(29 Years a Ham ... Spark forever !!!)

From 6913494715950508413
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-24 23:50:40 PST
Message-ID: <bnews.sri-unix.4329>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!duntemann.wbst@sri-unix
X-Path: utzoo!decvax!cca!duntemann.wbst@sri-unix
From: duntemann.wbst@sri-unix
Date: Thu Nov 25 02:50:39 1982
Subject: Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 06:18:26 1982
Received: Thu Nov 25 02:50:39 1982

Flames indeed! I could smell this all coming. First the techies admit timidly that they never did like code and think it might not be necessary to require all hams to learn it. Then the "spark forever" chaps dive in and claim that CW is absolutely essential, that it is the most efficient use of our band space, that it is the necessary "barrier" to keep out throngs of CBers who would ruin hamming for everybody. And, yes, a final rejoinder that CW is fun and should not be done away with altogether.

What was that again? Do away with it altogethner? Who said anything about that?

We were talking about making CW an oPTIOnAL part of ham radio...like, maybe giving people a choice? What a peculiar notion...kind of like giving people a choice as to whether or not they have to join a union to keep their jobs. Unions virtually froth at the mouth when such a thing is suggested, usually claiming that making unions optional is a plot to "do away with unions altogether."

Funny how making something optional is a plot to do away with it altogether.

Maybe such an assertion is just an aggressive way of admitting that very
few people really WANT CW or labor unions, and that if optional, they
would be pitched over the rail in short order. Think about it.

Other issues: CW is the most efficient use of our bandwidth.

Nonsense. CW buys narrowness of bandwidth at the cost of throughput.
The real measure of band usage efficiency is the quantity of information
passed per second per unit of bandwidth. Measuring this accurately is
NOT trivial. I'm not sure it's ever been tried. I was a novice, and
I worked CW as long as I had to. I dropped it because it was painfully,
agonizingly slow. I pondered that speeding it up to the throughput of
a phone signal would probably make it just as wide as a phone signal.
Bandwidth increases as information density increases. Sorry about that.
The only way to increase band-usage efficiency is to be real tricky--
to pack information into the dead spots, to stop going "um,ahhhh" and
dah dididididah, dah dididididah, etc. In short, to use packet techniques,
and all the other neat stuff Bob Van Valzah might teach us if we'd just
let him in.

Now let's talk about Barriers. We need barriers to test the mettle
of prospective hams so that we don't allow the Tennesee Toilet Flusher
to Git Awn the Channul and take over. Agreed. But why CW as a barrier?
What does it buy us other than a brick wall? It buys us
dedicated hams who can pound brass. Does it buy us hams who know how to design
advanced digital filters? No. Does it buy us
hams who can define and implement really and truly efficient
modes of information transfer? No. It gives us dedicated brass pounders.
It gives us nothing to advance the art past where we're already at.
If we're to have a barrier, give us a barrier that improves the art.
I think an EE/digital barrier would be much more appropriate. I
probably couldn't pass it right now. But I would
durn well crack a book and study it until I could, figuring that in
the process I was learning something that would be of genuine use,
not something that had gotten the last ounce of efficiency squeezed
out of it thirty years ago.

More could be said, but I've said enough. A proposal, then: Make
the CW test 5WPM for all license classes to satisfy the treaties, leave
the CW bands as they are, and let N2XS and the novices do their thing.
Make the tests much tougher to keep the yahoos out. Give hams a
choice. All in favor say aye. All opposed, click your keys. Somebody
else tally it up. I gotta go back to work.

73, Jeff Duntemann   KB2JN (Packets forever!)

From -5657843342762047285
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1982-11-24 23:53:16 PST
Message-ID: <bnews.sri-unix.4332>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Denber.WBST@sri-unix
X-Path: utzoo!decvax!cca!Denber.WBST@sri-unix
From: Denber.WBST@sri-unix
Date: Thu Nov 25 02:53:15 1982
Subject: Re: Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 09:32:51 1982
Received: Thu Nov 25 02:53:15 1982

> "if optional, they would be pitched over the rail in short order"

Right - but why stop there? Let's get rid of speed limit laws, and license plates for cars - who needs them either? How about income taxes - if anything ought to be optional, that's it. Seriously, if you want to join the club, pay the admission fee. For a mere 5 wpm. you can can your very own Tech. Come on guys, do you know how *s l o w* that is? You can pass that just by memorizing A through Z and doing table lookup in your mind for each letter (although that's certainly no way to really learn the code).

Sure, there's arguments on both sides, but in the time it takes you to grump about how unfair life is, you could have learned the code.

"Oh the farmer and the cowboy should be friends,
Oh the farmer and the cowboy should be friends.
One man likes to pound a key,
The other uses SSB,
But that's no reason why they can't be friends."

- Michel
KB2BQ

From 4058805895940672165
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-24 23:55:39 PST
Message-ID: <bnews.sri-unix.4334>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!haney.EOS@sri-unix
X-Path: utzoo!decvax!cca!haney.EOS@sri-unix
From: haney.EOS@sri-unix
Date: Thu Nov 25 02:55:38 1982
Subject: Re: Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 10:31:13 1982
Received: Thu Nov 25 02:55:38 1982

AMEN,

TERRY
WA6OAD

From 8020610876288283096
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3e9b2e92e175a995,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 00:06:44 PST
Message-ID: <bnews.sri-unix.4336>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!McAfee.es@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!McAfee.es@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Thu Nov 25 03:06:43 1982
Subject: Re: No Code
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 12:01:59 1982
Received: Thu Nov 25 03:06:43 1982

Emerson:
I pretty much agree with your comments.

If you copy ham-radio at SRI-UNIX you can get your message to all out there on the "nets".

Pete kd6hr

From: IRONSIDE.WBST
Date: 23-Nov-82 8:52:41 EST
Subject: NO CODE LICENSSE
To: HAMRADIO^.ES

Having past my Tech exam last May after spending 20 years desiring a ham license but it off because of the code requirements I can perhaps shed some light on this ongoing discussion.

No this isn't one of those "I had to do it so everyone else should" (flames), let's face it without the code requirement I7d have had a \license over 20 years ago.

By the same token when I finally found the time to sit down and learn the 5wpm required it really wasn't all that hard with the proper instruction from an ARRL affliated club.

Now to the points I'd like to add to the discussion:

1) In reference to Pete(VE5BEL)'s fear it has been pointed out many times that below 30 MHZ a knowledge of Morse Code is required by INTERNATIONAL AGREEMENT (ITU) regulations. Therefore any no code license would be for use of frequencies above 30 MHZ.

2) In response to Dave Puree having just taken the General Class written exam in May 1982 it was very disappointing to say the least. The technical content was nil to non existent. No wonder we have general's who don't know how to cut a dipole or which end of a beam antenna directs the signal.

3) It must be remembered that with the passage of the Goldwater bill the licensening exam for all but the Extra Class will be administered most probably by ARRL affliated clubs drawing questions from a national pool (computerized) selection.

4) The only remianing question would be if a code free license is approved would it replace the present Tech with a corresponding loss of privledges below 30 MHZ? The alternative would be an entirely new license class call it (DIGITAL)

My own personal preference would be a new class (Digital) with frequency allocations to be determined for argument sake say 220MHZ and above. Prefrrably not 144 which is already extremely crowded nation wide.

This would bie those desiring to experiment and advance the state of the art a license without code requirements but limited to frequencies on the fronteer of the art for experimental purposes. On the other hand we also maintain the present traditional class structure for those who want to pursue the HF bands for DX or other reasons with the required code attachments per the International agreement.

I personally enjoy both the CW in the Novice bands for code practice and long range communications as well as my 220 repeater operation for local and home communications.
Address flames arrows etc. to IRONSIDE.WBST

What do you say to a new license class completely?

Emerson C. Ironside
KA2OMX

From 914665107258549187
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 00:07:56 PST
Message-ID: <bnews.sri-unix.4337>

Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!KOHNEN.WBST@sri-unix
X-Path: utzoo!decvax!cca!KOHNEN.WBST@sri-unix
From: KOHNEN.WBST@sri-unix
Date: Thu Nov 25 03:07:55 1982
Subject: Re: Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 12:06:08 1982
Received: Thu Nov 25 03:07:55 1982

Jeff,

Why all the concern over speed of data transfer in the amateur service. Ham radio is supposed to be a hobby and as such should be relaxing and enjoyable. Life is too hurried nowadays as it is without putting rush-rush into the hobby. Slow down a little and enjoy life, don't burn out a bearing.

    Lou
    K2ANC

From 3448110752815340680
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3e9b2e92e175a995
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 00:09:09 PST
Message-ID: <bnews.sri-unix.4338>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!McAfee.es@sri-unix
X-Path: utzoo!decvax!cca!McAfee.es@sri-unix
From: McAfee.es@sri-unix
Date: Thu Nov 25 03:09:07 1982
Subject: Re: No Code
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 12:14:08 1982
Received: Thu Nov 25 03:09:07 1982

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To: HAMRADIO^.ES

Having past my Tech exam last May after spending 20 years desiring a ham license but it off because of the code requirements I can perhaps shed some light on this ongoing discussion.

No this isn't one of those "I had to do it so everyone else should" (flames), let's face it without the code requirement I7d have had a \license over 20 years ago.

By the same token when I finally found the time to sit down and learn the 5wpm required it really wasn't all that hard with the proper instruction from an ARRL affliated club.

Now to the points I'd like to add to the discussion:

1) In reference to Pete(VE5BEL)'s fear it has been pointed out many times that below 30 MHZ a knowledge of Morse Code is required by INTERNATIONAL AGREEMENT (ITU) regulations. Therefore any no code license would be for use of frequencies above 30 MHZ.

2) In response to Dave Puree having just taken the General Class written exam in May 1982 it was very disappointing to say the least. The technical content was nil to non existent. No wonder we have general's who don't know how to cut a dipole or which end of a beam antenna directs the signal.

3) It must be remembered that with the passage of the Goldwater bill the licensening exam for all but the Extra Class will be administered most probably by ARRL affliated clubs drawing questions from a national pool (computerized) selection.

4) The only remianing question would be if a code free license is approved would it replace the present Tech with a corresponding loss of privledges below 30 MHZ? The alternative would be an entirely new license class call it (DIGITAL)

My own personal preference would be a new class (Digital) with frequency allocations to be determined for argument sake say 220MHZ and above. Prefrrably not 144 which is already extremely crowded nation wide.

This would bie those desiring to experiment and advance the state of the art a license without code requirements but limited to frequencies on the fronteer of the art for experimental purposes. On the other hand we also maintain the present traditional class structure for those who want to pursue the HF bands for DX or other reasons with the required code attachments per the International agreement.

I personally enjoy both the CW in the Novice bands for code practice and long range communications as well as my 220 repeater operation for local and home communications.

Address flames arrows etc. to IRONSIDE.WBST

What do you say to a new license class completely?

Emerson C. Ironside
KA2OMX

From 7599784774222860906
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 00:36:51 PST
Message-ID: <bnews.sri-unix.4340>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!DGHESS.ES@sri-unix
X-Path: utzoo!decvax!cca!DGHESS.ES@sri-unix
From: DGHESS.ES@sri-unix
Date: Thu Nov 25 03:36:50 1982
Subject: Re: Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 13:32:58 1982
Received: Thu Nov 25 03:36:50 1982

RIGHT ON, LOU.......

AS I MENTIONED BEFORE, AFTER A LONG DAY (I DRIVE 600 MILES A WEEK TO & FROM WORK), I FOR SURE DO NOT WANT TO SPEED JAM ANY KIND OF COMMUNICATION. CW FOR ME IS A NICE WAY TO HAVE A RELAXING CONVERSATION WITH THE EXCITEMENT OF GETTING ANOTHER STATE WITH MY HW-8 & INVERTED VEE.

SO THERE !!!!!
DONOVAN KA6SOJ

From 5055341908778545172
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 00:48:30 PST
Message-ID: <bnews.sri-unix.4341>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!NBarbieri.es@sri-unix
X-Path: utzoo!decvax!cca!NBarbieri.es@sri-unix
From: NBarbieri.es@sri-unix
Date: Thu Nov 25 03:48:28 1982
Subject: Re: Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 13:36:38 1982
Received: Thu Nov 25 03:48:28 1982

Seems to me that those interested in the true blue experimentism of the upper bands are not against the proposal. Then there are those who would not know what a handheld was if they tripped over it. Okay, fine. Everyone has their favorites. Gen__GoOgLE_
X-Google-ArrivalTime: 1982-11-25 00:50:15 PST
Message-ID: <bnews.floyd.879>
Newsgroups: net.jokes
Path: utzoo!decvax!harpo!floyd!rjs
X-Path: utzoo!decvax!harpo!floyd!rjs
From: floyd!rjs
Date: Thu Nov 25 03:50:11 1982
Subject: oxymoron
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 16:46:09 1982
Received: Thu Nov 25 03:50:11 1982

>From calculus: arbitrary fixed constant

From -5533939958636387416
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,98af74ac5d448f45,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 02:13:48 PST
Message-ID: <bnews.eagle.647>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Thu Nov 25 05:13:46 1982
Subject: Code free license
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 19:32:52 1982
Received: Thu Nov 25 05:13:46 1982

The comments about the usefulness of CW on HF, although I generally agree with them, aren't really relevant to the proposed no-code license.

The most likely proposal from the FCC this winter will be to drop the CW test from the Technician class license. Of course, by international treaty, the Novice CW privileges granted to Technicians in the middle 70's would have to be removed from any code-free license. Therefore, the proposal poses no threat to HF operations.

The result would be full privileges on 6m and up, excepting the segments reserved for CW only. As an aside, it is true that much, if not most, small-signal work, e.g., EME, on VHF/UHF is conducted using CW. However, it is also true that this work is usually carried out in the CW-only segments, and these would be off-limits to a code-free licensee.

The basic argument I would make to those who oppose the code-free license is this: No one is trying to deny the usefulness of CW in its proper places

or to do away with it altogether. CW is certainly NOT obsolete, and it will continue to be used both on HF and for small-signal work on the higher frequencies for a long time. Including by me. If the code-free license becomes a reality, however, it would have the LEAST effect on the dedicated brass pounders who spend all their time in the CW subbands. Therefore, I don't understand what they have to object to.

As an issue completely separate from the usefulness of CW, I do believe strongly that it is a mistake to make CW an inflexible prerequisite for doing work in entirely different facets of amateur radio. The comments clarifying the difference between bandwidth efficiency versus throughput are clearly correct. If the FCC were to require all amateurs to be proficient in the technique that results in the most efficient use of our allocations, everyone would be forced to learn packet radio, not CW!

In our crowded bands, any advances in the state of the art which could improve the utilization of our allocations is clearly desirable.
These advances are much more likely to take place with the influx of technically talented people that a code-free license would provide.
If you want a test to keep the "lids" off the bands, make it technical!

Phil Karn, KA9Q/2

From -2614859790590999172
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b0dc085c4e06a1b6
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 03:32:02 PST
Message-ID: <bnews.pur-ee.692>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!kk9w
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!kk9w
From: pur-ee!kk9w
Date: Thu Nov 25 06:31:59 1982
Subject: Re: Re No Code License
References: <bnews.sri-unix.4302>
X-Google-Info: Converted from the original B-News header
Posted: Wed Nov 24 00:16:15 1982
Received: Thu Nov 25 06:31:59 1982

A few of my thoughts on the no code license:

1. It probably does deter people who are not serious about the hobby, even if they are interested in electronics, or digital or cs or whatever.

2. It's a well known fact that the only people who get anything useful done are ones who are serious about accomplishing the task they set out to do.

3. People who are on the outside of our hobby looking in promise great things if the code restrictions were lifted, such as lots of experimentation on packet systems, sattellite communications, etc.

4. The code (at 5wpm) is not tough at all if a person is serious and puts a few hours a week for 3-4 weeks. This is all that is currently required to obtain the privileges that these people so desire.

5. If alleged experimenters won't put forth that small amount of effort, what makes anyone think that they would do anything useful if given the privileges they want.

6. My own personal opinion is that we would just open the doors to a bunch of poor operators who would contribute a negligible amount of research to the hobby. If they havent't got the gumption to learn the code at 5wpm, then they don't have the drive to do any experimenting either.

thanks for letting me get that off my chest. Now watch out as maybe the folkIve aimed this at will prove me wrong.

--... ...-- -.. . dave andersen pur-ee!kk9w

From 9077572629386134825
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,41833b5ae876d24b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 05:14:30 PST
Message-ID: <bnews.houxp.159>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Thu Nov 25 08:14:28 1982
Subject: ARRL 106: 10 MHz
X-Google-Info: Converted from the original B-News header
Posted: Wed Nov 24 08:43:46 1982
Received: Thu Nov 25 08:14:28 1982

qst de ad7i
hr arrl bulletin nr 106 from arrl headquarters
newington ct november 23, 1982
to all radio amateurs bt

thirty meter band users are reminded that only the frequencies 10.100 to 10.109 and 10.115 to 10.150 mhz in that band are available to the amateur service in the u.s. violators believed by fcc to be repeatedly or willfully using the frequencies 10.109 to 10.115 mhz are now being fined by the commission. during the previous three

weeks or so, fcc has warned violators with advisory notices or phone calls. however, the commission has now received an official complaint of interference from the government service which uses 10.109 to 10.115 mhz and accordingly has escalated its response. thirty meter users are further reminded that the entire assignment is temporary and is available on the basis of no interference being caused to stations in the fixed service. only a1 and f1 emissions are permitted and power is limited to 250 watts input by general, advanced or extra class license holders only ar

From -4986973106585150466
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4eb35fac24563087,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 05:52:00 PST
Message-ID: <bnews.houxp.161>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Thu Nov 25 08:51:59 1982
Subject: CW requirement: A changed opinion
X-Google-Info: Converted from the original B-News header
Posted: Wed Nov 24 12:19:03 1982
Received: Thu Nov 25 08:51:59 1982

ad7i msg 24:

I can't help but add my comments and thoughts concerning the CW requirement controversey for amateur radio licenses.

I have vasillated several times on this issue.
However, I now think that my opinion has been finalized.
I no longer support the code-free license for the following reasons:

1) Learning CW at 5 WPM is not an undue burden for the privilidge of using the public's airwaves. It is easy. It does require a little work.

2) CW is a "language transparent" communications mode. That is, with standard internationally adopted abbreviations, I can communicate with others that do not have a spoken language in common with me.

3) Finally, and most importantly, CW is a mode that radios utilizing different modulation methods can always use to communicate. If one is AM and the other is PM, that's ok. CW is a pain to copy on an AM receiver but it can be done at 5 WPM. If a

station is causing interference on a channel, regardless
of modulation, other stations should be able to inform
him of that and he SHOULD BE ABLE to understand those
messages. Be it at 20 WPM or 2 WPM; I will be happy
to accomodate him.

I think that item 3 is the one that hits the mark.
If someone is causing YOU interference, it is not unreasonable to
expect them to be required to understand your messages telling
them to GET THE HELL OFF THE CHANNEL, QSO IN PROGRESS!
No excuses.
QRT de ad7i

From 6156627461186199211
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,da7dc24348d4f060
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 06:00:11 PST
Message-ID: <bnews.sri-unix.4370>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Peters.EOS@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!Peters.EOS@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Thu Nov 25 09:00:10 1982
Subject: Re: nov call book
X-Google-Info: Converted from the original B-News header
Posted: Wed Nov 24 08:47:16 1982
Received: Thu Nov 25 09:00:10 1982

Please add:
KB6LK - Bill Peters - Peters.EOS@PARC-MAXC

THANKS;
Bill

From 1679757959340820733
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 07:06:26 PST
Message-ID: <bnews.brl-bmd.453>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!esquire!brl-bmd!wmartin
X-Path: utzoo!decvax!harpo!esquire!brl-bmd!wmartin
From: brl-bmd!wmartin
Date: Thu Nov 25 10:06:25 1982
Subject: Re: Thoughts on CW
References: <bnews.sri-unix.4329>
X-Google-Info: Converted from the original B-News header
Posted: Wed Nov 24 16:30:01 1982

Received: Thu Nov 25 10:06:25 1982

I am somewhat confused as to the traditional concept (i.e., I read it before somewhere more than once) of "bandwidth used = information transfer rate". Let me postulate this: A very slow CW signal is transmitted by generating an RF signal 100 Hz in bandwidth, switching it on and off once per second to make a second-long dit. This on-off switching speed is increased, assuming the transmitting and receiving equipment can handle and detect it, to ten times per second, then 100 times per second, then 1000 times per second. Instead of one-second dits, we now have one-millisecond dits, right? All along, the signal has been 100 Hz wide, because the SIGNAL has never been changed, all we have been doing is turning it on and off faster. So our information transfer rate has multiplied by a factor of 1000, but the bandwidth is unchanged. Couldn't this process continue, reducing the dit length to a microsecond, and then a nanosecond, until the pulses are so short that they cannot be distinguished from a continuous signal? The bandwidth is still unchanged, isn't it? Or is it some magic effect of the switching that turning something on and off at a higher rate will somehow increase the bandwidth it occupies? If it does, is this some effect like splatter? If so, isn't eliminating it just an engineering problem, not a theoretical issue?

Hmmm... Will Martin

From -8024047303748484968
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e984d5bac984d874
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 08:06:14 PST
Message-ID: <bnews.uiucdcs.1126>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!uiucdcs!uicsovax!delong
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!uiucdcs!uicsovax!delong
From: uicsovax!delong
Date: Thu Nov 25 11:06:06 1982
Subject: Re: No code license - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Wed Nov 24 18:30:22 1982
Received: Thu Nov 25 11:06:06 1982

#R:sbcs:-13400:uicsovax:3400001:000:823
uicsovax!delong   Nov 23 17:19:00 1982

I might as well put my 2 cents in also. I too was faced with a decision years ago as to which hobby I wanted to devote my time. I was interested in becoming a ham as it was different from my work. I was not willing to spend a considerable amount of time learning a needless skill as I am a klutz at skill activities and I rebelled at the code anyway. I had a 3rd class at the time and worked at a radio station.

I perked up my ears when I heard about the potential move to codeless hamming. I've been scanning this newsgroup since then.

If the majority, wish to continue the requirement for code as a badge of honor and membership into the club that is their right and I have no agrument with that mind set. However, I think I'll continue to pass until codeless becomes a reality as time is allways scarce.

From 1349594178311428170
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d6bfbbe53a026c7c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 09:10:52 PST
Message-ID: <bnews.eagle.648>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Thu Nov 25 12:10:47 1982
Subject: RK03 (Iskra 3) status
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 23 21:39:21 1982
Received: Thu Nov 25 12:10:47 1982

The new Soviet amateur radio satellite Iskra 3 is apparently carrying a 15-to-10 meter transponder like the one carried on Iskra 2 that was never turned on. The frequencies are:

input: 21.230 - 21.270 mhz
output: 29.580 - 29.620 mhz
beacon: 29.583

The transponder was on Thursday and part of Friday (just after being deployed from Salyut-7.) However, temperature readings shot up to 50 degrees Celsius, and the transponder was shut off. Bus voltages are reading low, and the beacon power output is down to 50 milliwatts, half of its nominal value.

Since Sunday, the spacecraft has been in a simple telemetry mode. Temperatures are still about 50 C.

Phil Karn, KA9Q

From -1445619436156373657
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c670e9d538e6b6fa,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 09:22:46 PST
Message-ID: <bnews.houxp.160>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i

From: houxp!ad7i
Date: Thu Nov 25 12:22:45 1982
Subject: ARRL 107: SCM Elections
X-Google-Info: Converted from the original B-News header
Posted: Wed Nov 24 08:45:24 1982
Received: Thu Nov 25 12:22:45 1982

qst de ad7i
hr arrl bulletin nr 107 from arrl headquarters
newington ct november 23, 182
to all radio amateurs bt

ballots for the section communications manager elections for
missouri, nebraska, new york city and long island, south carolina and
vermont have been counted according to the prescribed rules. the
following have been declared elected. missouri k0pck, nebraska
k0gnd, new york city and long island k2iz, south carolina wd4hlz and
vermont wb1abq. their terms begin january 1, 1983 ar

From 1829831635881264452
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-25 10:50:21 PST
Message-ID: <bnews.eagle.652>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Thu Nov 25 13:50:10 1982
Subject: Re: Thoughts on CW
References: <bnews.sri-unix.4329> <bnews.brl-bmd.453>
X-Google-Info: Converted from the original B-News header
Posted: Wed Nov 24 21:52:23 1982
Received: Thu Nov 25 13:50:10 1982

Envelope shaping in a CW transmitter places a limit on the speed at which
it can be keyed with the dots remaining separable at the receiver. Envelope
shaping is also what determines the bandwidth.

In the extreme case, a CW transmitter that could generate
distinguishable dots at 20,000 dots/second would be generating terrific
"key clicks" even if keyed at a much slower rate.

In order for a CW transmitter to take up the minimum possible bandwidth,
its keying envelope would have to be changed as a function of the operator's
sending speed. If the operator were to send slower, the rise/fall times
of the transmitter envelope should be made longer, and the occupied bandwidth
would decrease. Ideally, the envelope rise time should be adjusted so that the
transmitter just reaches full power at the point where the key is

released in a "dot", resulting in a sinusoidal envelope. Otherwise, bandwidth
is being wasted by communicating the rise time of the envelope faster than
it need be.

The same effect is true in narrow CW filters for receivers. If one uses
too narrow a filter (assuming the receiver remains stable), fast CW
would come out as a blur. Any filter will spread out the rise and fall
times of the signals passing through it.

Phil Karn, KA9Q

From 7972396219468760997
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-28 01:19:07 PST
Message-ID: <bnews.pur-ee.694>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!mahler
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!mahler
From: pur-ee!mahler
Date: Sun Nov 28 04:19:01 1982
Subject: No Code License
References: <bnews.sri-unix.4334>
X-Google-Info: Converted from the original B-News header
Posted: Thu Nov 25 10:37:45 1982
Received: Sun Nov 28 04:19:01 1982

I obtained my novice ticket within the last month, and within a couple
weeks I'll trek to Chicago for a 13 wpm code and General written exam.
I am in favor of maintaining the code elements for amateur licensing.
I don't know (yet) if I'll continue to use CW after I get my General but
it is a skill that might prove useful in the future, and currently is
a factor in maintaining a good level of ops on the low bands. I don't
consider it any different than anything in life. Each thing that
we do (like college,job,hobby) has a hoop, and if we want to reach the
final goal we must jump through the hoops.

--Steve Mahler, KA9OLT, Network Services Manager, Eng. Comp. Network, Purdue

From 8836155713398345504
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b1ef4541eff3a524
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-29 17:18:38 PST
Message-ID: <bnews.eagle.637>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Mon Nov 29 20:18:37 1982

Subject: Re: No code license
References: <bnews.sbcs.134>
X-Google-Info: Converted from the original B-News header
Posted: Thu Nov 18 22:47:01 1982
Received: Mon Nov 29 20:18:37 1982

I thoroughly agree with the article in favor of the no code license.

I have been licensed about 11 years, 9.5 as an Extra. I do enjoy using CW on the HF bands, even though I was one of those who said "I just want to be able to talk" before I got my first license. However, I feel that state-of-the-art technical capability is FAR more important (and far more lacking, unfortunately) than Morse Code capability in the Amateur service, and that knowledge of CW is often irrelevant to many of these technical areas.

I have often asked technical friends who are interested in the practical aspects of communications why they don't get an amateur license. The replies are usually along these lines:

1. "I don't want to learn the code; I just want to experiment with [packet|satellites|microwave|etc]."
2. "Why should I want to be part of a service that still uses Morse Code?"
3. "Nobody does anything technically innovative in the Amateur Service."

When you think about it, these three reasons are circular. Opportunities for major technical innovations are missed because many technical types aren't hams. Many technical types don't become hams because they don't feel learning CW is worthwhile. CW is still used because there haven't been technical innovations (and the acceptance by the amateur community) to replace it.

The surest way to break this cycle is to introduce new blood by removing the CW requirement. I'm not sure that making the written test harder is the right thing to do; the purpose of the test should be to make sure that the operator has the technical expertise and understanding of the rules to operate his station safely and prevent interference to others. The FCC has also shown that it is incapable of producing tests that are truly relevant, up to date and a good measure of an operator's technical expertise.

The biggest threat to our amateur allocations come from competing interests who point out the underutilization in our higher bands. The surest way to protect these bands is to use them, and the best way to use them is to bring in new amateurs who will use them.

Phil Karn, KA9Q/2

From -8716909923799021061
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f543c62fe37b6612,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1982-11-29 21:31:11 PST
Message-ID: <bnews.sri-unix.4470>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!fayette.wbst@sri-unix
X-Path: utzoo!decvax!cca!fayette.wbst@sri-unix
From: fayette.wbst@sri-unix
Date: Tue Nov 30 00:31:10 1982
Subject: Re: Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 04:51:53 1982
Received: Tue Nov 30 00:31:10 1982

BRAVO !!!!! TNX to you Jeff
mike wb2fsi

From -5223887752105276151
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1dfa5473456b827,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-29 22:12:52 PST
Message-ID: <bnews.sri-unix.4480>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!IRONSIDE.WBST@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!IRONSIDE.WBST@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Tue Nov 30 01:12:50 1982
Subject: FT-101E For Sale
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 11:34:19 1982
Received: Tue Nov 30 01:12:50 1982

     Yaesu FT-101E in excellent condition for sale

     Contact Gene (WB2ECK) at
      (716)-671-4730 after 1800 EST
       Asking $475.00

From -3457650703840192897
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f543c62fe37b6612
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-29 22:16:12 PST
Message-ID: <bnews.sri-unix.4473>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Tue Nov 30 01:16:10 1982
Subject: Re: Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 09:01:58 1982

Received: Tue Nov 30 01:16:10 1982

The bandwidth of a CW signal is 4 times the words per minute (5 letters/word not 4 letters/word as in Canada and England). As the information rate is increased the bandwidth goes up .... a law of physics and not a thing that can be eliminated. The confussion in these types of arguments is the fact that you mix the time and frequency domain. In the frequency domain there are only sidebands and carriers that never change in time. In the time domain there are only carriers that change in amplitude. The components in the frequency domain always add up to what you get in the time domain (fourier transform). In the case of CW the unvarying components in the frequency domain add up to a signal in the time domain that goes on and off. The components in the frequency domain do not go on and off when keyed.

The frequency domain is what you get when you tune across a signal with a receiver of bandwidth much much less than the signal bandwidth. The time domain is what you get when you tune across a signal with a bandwidth much wider than the signal bandwidth. In reality we are always between the two. Usually you set your bandwidth to be just a little bigger than the signal so the output is in the time domain but not so much in the time domain that you get a signal you don't want.

If a dit becomes a microsecond then the bandwidth is about two megahertz or a little more and you occupy two megahertz of spectrum. The FCC doesn't like that although the Germans did just this during WW2 in sending to their subs. They sent CW in a burst, recorded it and played it back at a low speed so the operator could copy it.

The faster you switch on and off the wider the bandwidth. If you restrict the band width you lose information. In other words Shannon's formula:

Signal bit rate/Bandwidth = log(base 2) (signal/noise +1)

If you send more information you need more power or more bandwidth. This is a fundamental limit of nature for which there is, at present, no way of getting around.

Joe N2XS

From -8631183020663179999
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f543c62fe37b6612
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-29 22:17:52 PST
Message-ID: <bnews.sri-unix.4474>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Stephany.WBST@sri-unix
X-Path: utzoo!decvax!cca!Stephany.WBST@sri-unix
From: Stephany.WBST@sri-unix
Date: Tue Nov 30 01:17:51 1982
Subject: Re: Thoughts on CW

X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 09:34:20 1982
Received: Tue Nov 30 01:17:51 1982

The people in favor of a code free licese have several arguments which I consider invalid. Some of these are:

1. CW is "Just another mode" and should not be forced on people that do not want to use that mode.

If ham radio was like any other hobby then you are at liberty to do what you want. But ham radio is not. Its fundamental purpose is public service. We are using a national resource ... spectrum space. If its just to amuse ourselves then we could do anything. But The reason you have your licese is because it contributes to the good of the nation. In particular disaster communication. I cannot see how anyone that pretends to be contributing to the public service can call himself a radio operator without being able to send and receive CW.

CW, on HF or UHF can get through under most adverse conditions. Recently a boating accident left a boat sinking on the Pacific near San Francisco. The mike was smashed in the accident but the guy knew CW because he had leaned it as an Eagle Scout many years ago. He was saved because a Ham operator that knew CW was listening on the CB band.

Also CW has been sent by waving flags, flashing flashlights, tapping with pipes, etc.etc.etc. In a submarine disaster code was sent to the men inside and back by tapping a pipe ... one bang for dots, two bangs for dashes. Many lives have been saved because of a knowledge of CW both on and off the bands. Also, in times of disaster on a wide level, most communication is by written message. This can be more accurately and faster sent and received by CW.

2. CW is an unnecessary restriction and is just "too difficult to learn".

It takes a person of average intelligence about 4 hours to learn and send and received at 5 WPM. After leaning the code it takes about 30 minutes practice to get to 5WPM.

3. CW is not necessary on the UHF bands.

In the future it will even be more necessary. As the space shuttle builds a space station, exploration to the planets and beyond will take place. QSO's by hams will be at first by CW because of the simplicity and effectiveness. Also, emergency communication with people in space, via the Hams on Earth would be greatly hampered without CW. How would you feel if the first distress message from space was sent via CW and there were no hams that knew how to copy it ? Remeber that boating accident.

Joe, N2XS (spark forever !!)

From -4237267789729166018
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8bd366e2225ce1dc,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-29 22:24:40 PST
Message-ID: <bnews.sri-unix.4479>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!IRONSIDE.WBST@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!IRONSIDE.WBST@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Tue Nov 30 01:24:39 1982
Subject: CALL BOOK ADDITION
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 11:32:45 1982
Received: Tue Nov 30 01:24:39 1982

    Please add the following to the Callbook list
     KA2OMX - Emerson Ironside - IRONSIDE.WBST@PARC-MAXC

    Also KA2KFG - Ed McKenna via copy from Ironside.

     Thanks
      73's
      Em

From -1946752059815255899
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,41833b5ae876d24b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-29 23:13:52 PST
Message-ID: <bnews.alice.1214>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!danny
X-Path: utzoo!decvax!harpo!npoiv!alice!danny
From: alice!danny
Date: Tue Nov 30 02:13:51 1982
Subject: Re: ARRL 106: 10 MHz
References: <bnews.houxp.159>
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 11:07:57 1982
Received: Tue Nov 30 02:13:51 1982

Just out of curiosity, does anyone know anything about the
function of the signal on 10.112 MHz (the reason for the
"30-meter gap"?

                  Dan, K1DK

From 5023324726952762088
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f543c62fe37b6612
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1982-11-29 23:24:28 PST
Message-ID: <bnews.sri-unix.4472>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Tue Nov 30 02:24:27 1982
Subject: Re: Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 09:01:33 1982
Received: Tue Nov 30 02:24:27 1982

The bandwidth of a CW signal is 4 times the words per minute (5 letters/word not 4 letters/word as in Canada and England). As the information rate is increased the bandwidth goes up .... a law of physics and not a thing that can be eliminated. The confussion in these types of arguments is the fact that you mix the time and frequency domain. In the frequency domain there are only sidebands and carriers that never change in time. In the time domain there are only carriers that change in amplitude. The components in the frequency domain always add up to what you get in the time domain (fourier transform). In the case of CW the unvarying components in the frequency domain add up to a signal in the time domain that goes on and off. The components in the frequency domain do not go on and off when keyed.

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If a dit becomes a microsecond then the bandwidth is about two megahertz or a little more and you occupy two megahertz of spectrum. The FCC doesn't like that although the Germans did just this during WW2 in sending to their subs. They sent CW in a burst, recorded it and played it back at a low speed so the operator could copy it.

The faster you switch on and off the wider the bandwidth. If you restrict the band width you lose information. In other words Shannon's formula:

   Signal bit rate/Bandwidth = log(base 2) (signal/noise +1)

If you send more information you need more power or more bandwidth. This is a fundamental limit of nature for which there is, at present, no way of getting around.

Joe N2XS

From 6913242968711677762
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,98af4c9c64e128b2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-29 23:38:09 PST
Message-ID: <bnews.we13.266>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!orion!lime!we13!rjr
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!orion!lime!we13!rjr
From: we13!rjr
Date: Tue Nov 30 02:38:08 1982
Subject: CW BANDWIDTH
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 08:58:24 1982
Received: Tue Nov 30 02:38:08 1982

The bandwidth of a cw signal is determined by the formula:

Bw = BK

where Bw is the bandwidth in Hz, B is the baud rate, and K is a
fudge factor given as 5 for fading circuits. Thus, the common
bandwidth of 100 Hz for a cw signal is actually at 20 baud.

Anyway, on-off keying is a form of modulation (actually 100% AM)
so the keying speed is equivalent to the modulating frequency.
Like any AM signal, then, the higher the modulating frequency,
the wider the actual bandwidth. Thus, a 600 baud cw signal would
require about 3 kHz bandwidth (same as a SSB signal).

Bob K9EUI

From 428239830086139078
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-29 23:41:56 PST
Message-ID: <bnews.alice.1213>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!danny
X-Path: utzoo!decvax!harpo!npoiv!alice!danny
From: alice!danny
Date: Tue Nov 30 02:41:55 1982
Subject: Re: Thoughts on CW
References: <bnews.sri-unix.4329> <bnews.brl-bmd.453>
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 11:02:36 1982
Received: Tue Nov 30 02:41:55 1982

Yes, there is a theoretical reason why increasing the rate at which
a "pure" RF carrier is turned on and off MUST increase its bandwidth.
The branch of mathematics/engineering which makes this clear is

Fourier analysis.

From -9182256729665713025
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c0be6b48ebd780d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-30 21:54:51 PST
Message-ID: <bnews.sri-unix.4500>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Wed Dec 1 00:54:50 1982
Subject: Re: How to Solve Crowding on HF
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 30 09:55:46 1982
Received: Wed Dec 1 00:54:50 1982

I think it makes sense to cut power to 250 Watts:

1) On 20 meters and above it doesnt help you

2) on 80 and 40 it is used to blast out the other stations.

If you cut power, they would still be blasting each other but at a lower level.

Remember the DB loss is only 20 log(1000/250) = 10 db or about 2 "S" units.

From -219996087869816782
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,484c29602cc796bc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-30 23:53:29 PST
Message-ID: <bnews.inuxc.536>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!orion!lime!we13!otuxa!ll1!ihldt!ihnp4!
ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!orion!lime!we13!otuxa!ll1!ihldt!
ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Wed Dec 1 02:53:29 1982
Subject: SOFTWARE
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 30 16:06:27 1982
Received: Wed Dec 1 02:53:29 1982

Does anyone out there have any software that is helpful in ham
radio contesting??? Am especially interested in dupe programs, contest
programs, etc. How do they perform??? Are they slow in searching for dupes?

Has anyone published on this subject?

I will summarize and publish the results of this query on the net!

Steve WN8GUE, inuxc!wheatley
..

From -6820714120763378826
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-01 01:09:51 PST
Message-ID: <bnews.sri-unix.4485>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!DGHESS.ES@sri-unix
X-Path: utzoo!decvax!cca!DGHESS.ES@sri-unix
From: DGHESS.ES@sri-unix
Date: Wed Dec 1 04:09:47 1982
Subject: Re: Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 13:36:50 1982
Received: Wed Dec 1 04:09:47 1982

BRAVO, BRAVO !!!!!!!!!!!!

I LOVE IT !!!!!!

DONOVAN, KA6SOJ

From 1120260225454809497
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d98fddd7ac80be
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-01 03:05:48 PST
Message-ID: <bnews.azure.1502>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!hplabs!hao!menlo70!sytek!zehntel!teklabs!tekcrd!azure!
michaelk@sri-unix
X-Path: utzoo!decvax!cca!hplabs!hao!menlo70!sytek!zehntel!teklabs!tekcrd!azure!
michaelk@sri-unix
From: michaelk@sri-unix
Date: Wed Dec 1 06:05:43 1982
Subject: Re: Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Sun Nov 28 20:28:18 1982
Received: Wed Dec 1 06:05:43 1982

Running CW at 0 w.p.m ideally gives you a bandwidth of zero hz (Awful
clean, stable xmtr). When you key it, you are modulating it, producing
sidebands. If you increase the w.p.m rate, the bandwidth increases. If

your transmitter doesn't "waveshape" the keying action
then the bandwidth increases much in the way the modulating square wave
has a bandwidth wider than it's fundamental. At 20 w.p.m. (assuming
suitable "waveshaping") the bandwidth is still under 100 Hz or
so. By the way, bandwidth does not determine the information transfer
rate, it only limits it. Human voices (like in SSB mode) are not
efficient in bandwidth use. In the second I might say "hello", I could
send 120 characters with my 1200 baud modem that uses the same (or
smaller) bandwidth . It would take some three seconds to send that using
CW at 20WPM, but at 1/25 the bandwidth, yielding a net 8 times better
use of bandwidth. Further, sending English language by any mode
also cuts down the information transfer rate -- English contains much
redundancy. An obvious example of this is your *NIX "compact" program.
You can make a text file 30% smaller WITHOUT loosing any information
content (it can be converted back, can't it?).
For more detailed, and exact numerical representations, get hold
of a fellow "into" Coherent C.W. -- They operate with VERY narrow
bandwidth, such that you can pull out copyable CW when you have
a noise to signal ratio (>1).

Mike Kersenbrock WB4IOJ
Aloha, Or.

From -3492954783750282985
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f745f17c486a2e10,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-01 04:26:03 PST
Message-ID: <bnews.inuxc.535>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!lime!we13!otuxa!ll1!ihldt!ihnp4!
ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!lime!we13!otuxa!ll1!ihldt!
ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Wed Dec 1 07:25:57 1982
Subject: ARRL 160 METER CONTEST
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 30 11:24:36 1982
Received: Wed Dec 1 07:25:57 1982

Starts: 2200Z Friday, December 3
Ends: 1600Z Sunday, December 5

Exchange RST and ARRL section.

Mode: cw only, single op and multi-op classes

Anyone out there going to work this one???? Myself and W9CC will
be attempting a go at it, not for score as much as worked all states.
We need a lot of them, so drop me a line if you plan on working the

contest and we will look for you. GUD LUCK

Steve, WN8GUE, inuxc!wheatley

From 7683065175919778423
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e7fe7462904febc0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-01 05:15:16 PST
Message-ID: <bnews.sri-unix.4481>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!smh@sri-unix
X-Path: utzoo!decvax!cca!smh@sri-unix
From: smh@sri-unix
Date: Wed Dec 1 08:15:15 1982
Subject: Re: No Code License - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 13:15:18 1982
Received: Wed Dec 1 08:15:15 1982

#R:pur-ee:-69400:sri-unix:5200002:000:354
sri-unix!smh   Nov 28 06:49:00 1982

     That hit the nail on the head Steve!

     Those who really feel they can and will make a contribution
to the state of the art in amateur radio, but cannot seem to pass the
hurdle of 5/13 wpm should re-evaluate their drive and persistance.
     Will it be there to further the art after the license is granted?

Scott Hinnrichs   WB6SJA
sri-unix!smh
SMH@SRI-KL

From -1750977506530240674
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c0be6b48ebd780d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-01 05:24:49 PST
Message-ID: <bnews.csu-cs.1912>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!hplabs!hao!csu-cs!kelly@sri-unix
X-Path: utzoo!decvax!cca!hplabs!hao!csu-cs!kelly@sri-unix
From: kelly@sri-unix
Date: Wed Dec 1 08:24:48 1982
Subject: How to Solve Crowding on HF
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 29 10:55:59 1982
Received: Wed Dec 1 08:24:48 1982

It seems that lots of discussion of the code-free license is influenced
by HF concerns and HF crowding. (By the way, I thought the Technician Class
essentially IS our code-free ticket for those interested in experiments
in VHF, etc. 5wpm certainly isn't proficiency and really isnt much of
a barrier!). My argument isn't cw or no cw, but another subject-
lets reduce the 1KW limit on power input to transmitters.

Now realistically, 250 watts should be quite sufficient in todays world
of fine receivers. I think that 100 watts DC input to the finals
would be sufficient, but that would outlaw too many transcievers out there
today. This rule change would lead to more attention to quality of antennas,
and receivers, and make civilization arrive on 20 meter phone (I hope).

Yes, it might mean the end of vaporizing the sparrows standing on your
antenna, and it might mean the end of 25 kc wide channels to outer
ubangi land (with 500 hams calling at once). But to those users of
the HW-8 (I used to have one) and the Argonaut, and other QRP rigs,
it would mean that other hams would discover that power is not the
answer. Patience, operator skill, and quality of antennas are all
parts of the solution. Lets push for power reduction on the air.

Chris Kelly, WD5IBS, Colo State Univ. Vax.

From -7834103375439137567
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9d1a46a130613b62,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-01 05:38:24 PST
Message-ID: <bnews.sri-unix.4498>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Wed Dec 1 08:38:23 1982
Subject: Re: Too much
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 30 09:47:44 1982
Received: Wed Dec 1 08:38:23 1982

Pleased to meet you ! Glad you responded.

It was never intended that CW be condisdered a replacement for other methods of
modulation. My letter made it clear when all else fails that CW can get
through. It is the simplicity of Cw that makes it necessary as the final back up
system.

Any system of communication is swell with me, and I really believe in the
progress of all forms. However, when the chips are down, a knowledge of CW
often, and not in isolated incidents, means the difference between life and death.

The ethernet is a swell system and works well and fast as I sit in this dry office

with plenty of 120 volts power. But what if I am on the road, in the wilderness etc., ? What if you were that guy on the boat going down with a smahed mike on the CB rig ? By the way, he sent his latitude and longitude not just an SOS.

Further more you have a distorted picture of just what radio is, let alone ham radio. The first thing to learn is that radio (all forms) is not the world communication system. Cable is. The fundamental communication of the world, now and will be for decades to come, is Cable. Radio is reserved for communication that cannot be sent over Cable (like the ethernet). There is not enough spectrum space avaiable for all the computer fans etc.,and Ham radio should not be used to fullfill this need. The light pipe will eventually be the cable between home computer hobbyists.

Ham radio is still the forefront of the development of Radio communication. All modes of communication by radio with the single exception of Back scatter and sattelite communcation, were developed by Hams. Incidently, I see that the military plan to use meteor trail communication as a backup in case the communication sattelites get shot down. This mode was discovered and developed by Hams.

As far as the universallity of CW, it is still much easier to communicate with people that do not speak English with Morse Code, having done both myself in my 29 years as a Ham. In fact, such contacts are common on CW and very unusual on SSB. As far as ASCII goes, remember, most hams outside the US have no such equipment.

The future of Ham radio belongs to those who prepare for the future. A knowlege of CW, as the final back up system, is manditory for good radio operators, not appliance operators.

I suggest that if there are so many geniuses (computer or otherwise) that, being a genius, they would have no trouble at all in leaning Morse at only 5 WPM.

Joe N2XS   Spark Forever !!!

PS, My I.Q. is 155, I work on computers, and I leaned the code. Maybe you should program one of your computers to teach you the code.

From -2063445974574480203
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c0be6b48ebd780d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-01 23:01:19 PST
Message-ID: <bnews.houxn.324>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxn!4432jrm
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxm!houxa!houxn!4432jrm
From: houxn!4432jrm
Date: Thu Dec 2 02:01:19 1982
Subject: Re: How to Solve Crowding on HF

References: <bnews.csu-cs.1912>
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 30 22:16:49 1982
Received: Thu Dec 2 02:01:19 1982

QRP is FUN!!!!!!!!!!!!!
Try working dx using low power it can be done, especially on CW.
Phone also works. I've been using a converted CB rig on 10m for
the past two years (about 25 w input, 5 to 12 out) both mobile
and fixed. There are few greater pleasures than dx'ing using
a low powered rig into a simple antenna while crossing the
George Washington Bridge in rush hour traffic.

Try QRP and CW. You might enjoy it.

joe   kb2jg

From 6616726394056441567
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1244e88835b51f46,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-02 23:46:17 PST
Message-ID: <bnews.eagle.661>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!eagle!karn
X-Path: utzoo!decvax!duke!harpo!eagle!karn
From: eagle!karn
Date: Fri Dec 3 02:46:14 1982
Subject: Code-Free Licensing: Epistle #3
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 1 00:21:25 1982
Received: Fri Dec 3 02:46:14 1982

At first, I was surprised to see so many people supporting
the code-free license and few opposed; I can see that within the
past week or so, the opposite side has been heard from.

I would like to make a few "reply comments" to some of the
points that have been used against the code-free license.

1. "CW is useful in small-signal conditions."

NO ARGUMENT! I frequently use CW in exactly such situations, and would
recommend that anyone learn the code voluntarily for just such use.
My biggest interest within amateur radio is satellites, and
CW is quite useful there. Half the passband on Oscar-8 is generally CW,
as is the spacecraft telemetry beacon. It is precisely the usefulness and
simplicity of CW that will keep people voluntarily learning it for some time.

2. "CW is the ONLY mode useful in small-signal conditions, and THE most
'efficient' modulation mode."

This one is a MUCH less clear. Paul Newland, in a recent report to the FCC regarding his AMTOR activities conducted under an STA, said, "CCIR 476-2 ARQ coding is VASTLY superior to conventional RTTY coding. CCIR 476-2 displays an amazing robustness during conditions of propagation that render SSB *and CW* [emphasis added] modes of communications virtually useless..." It does indeed appear that automatic error correcting and detecting codes implemented by computer can perform very well in marginal conditions. It has only been the lack of more experimentally minded amateurs such as Paul which has kept these techniques from being widely used in the amateur service. AMTOR, like packet radio in general, was invented outside the amateur service. As to spectrum efficiency, any textbook on communications theory will show you that many digital modulation and coding techniques are much more efficient both in bandwidth and in power than on-off CW keying.

3. "Anybody can learn the code in X amount of time. All it takes is a little effort. If they don't feel like learning the code, they aren't motivated enough."

The same can be said for learning electronics and communications theory. If one is to spend a fixed amount of time learning a choice of skills, it would seem reasonable to spend it doing those with the biggest "payoff." Much of the technical knowledge I have learned in hamming has been of direct use in my professional life, perhaps a larger percentage than the knowledge I obtained in my college courses. Experience from hamming enabled me to obtain a First Phone, with which I worked my way through college during summers at a television broadcast station. However, I have never "pounded brass" for money, nor do I ever expect to. Try comparing the relative numbers of FCC commercial radiotelephone and radiotelegraph license holders.

I AM uncomfortable with merely doing away with the Technician code test. I think the written exam should be expanded to require an equivalent amount of effort for preparation that the code would have required, for the "average" beginner. It would take less preparation for a person already skilled in electronics and communications technology, but it would ensure that an amateur is capable of operating his station safely and without interfering with others. In any case, the test should not be capable of being crammed for with the Bash books, but should require real understanding of the material. If I have any reservations regarding the codeless license, it is the ability of the FCC to create such a test.

4. "If I can learn the code, you can too." This is a slight variation on the "If I had to learn the code, then you should too" theme.

Unfortunately, this is an emotionally based argument, and similar to the one many fraternities use to perpetuate hazing. Each requirement for a privilege should be evaluated (and re-evaluated) on its own merits, and not based solely on tradition. Technology continuously evolves, and requires a willingness to change in order to maximize its benefits.

Every ham or potential ham has different motivations for getting involved, and it takes maturity to accept that not all persons place the same amount of importance on the things that you do.

5. "CW is a 'universal' mode of communication, one that all amateurs should have in common."

This is the only argument I have a hard time refuting. Paul Newland suggested that knowing CW makes it possible for any radios to communicate, and to identify sources of interference. Not all amateur transmissions are identified in CW (only CW and RTTY QSOs, and repeaters in general.) I also challenge you to copy CW even at 5 wpm on an AM or FM receiver! There is a case, however, that exotic modulation techniques, e.g., packet radio (some consider RTTY "exotic") should continue to be identified in CW; I think that there is still good reason for this. However, automatic identifiers are capable of reliably generating CW IDs. If one wishes to identify an interfering station, one would then have a practical incentive to know CW! However, the interfering operator is probably not likely to be any more aware of being the source of interference by being able to copy CW; after all, if he/she is interfering, then he or she is transmitting and is unlikely to be able to hear any complaints! Seriously, the rule should be, "if you hear anything, even (especially?) if you don't understand it, then don't transmit!" However, I'm sure you can cite many instances in which even CW-knowledgeable hams ignore this rule...

6. "Amateur radio's purpose is public service, and CW is essential for disaster and public service work."

This is a non-sequitur. In my early hamming days (during high school) I was an active member of the local Civil Defense organization and spent time with the local 2-meter club providing communications for walkathons and other public events. In both organizations, the predominant mode was FM phone, which served our needs quite well. I was on a CW kick at the time, preparing for my Extra, and was disappointed that I could not find a "practical" use for CW in these activities. If there was a skill lacking among the CD operators during the monthly drills that really hampered communications, it was the ability to type on the RTTY machine!

I am aware of the many stories about lives that were saved because of someone's knowledge of the code. However, how many lives could have been saved in situations where a nearby person could have been a ham with a 2 meter HT, but wasn't because he couldn't be licensed without knowing the code?

Amateur radio can perform public service in many ways. Directly, through the provision of emergency and backup communications, and indirectly, by promoting the advancement of the radio art and by providing a training ground for electronics and communications experts, free of cost to the public. It is this indirect form of public service in which we could be doing so much more. New communications technologies, e.g., satellite and packet radio, certainly contribute heavily to this latter form, and will also provide much of the direct kind in the future. If we are to retain our frequencies, it will be on the

basis of having met our "basis and purpose" (97.1), not on how many
people know the code.

Part of our problem is that amateur radio isn't a unified, monolithic
hobby. It is rather more like a loose formation of related, but specialized
activities flying together. We should be able to make this diversity an
asset, rather than a weakness, by accommodating different interests without
pitting one faction against another. Allowing "fresh blood" into the
hobby with interests that might be different from yours should not be
seen as threatening; there will continue to be much diversity in amateur
radio, and opportunities for exposure to this diversity should
be encouraged and not forced. I personally think the greatest things
to come along in amateur radio since SSB are satellites and packet radio;
however, I would rather see newcomers to these areas come by choice
and not by force. If amateur radio is a change from what you
do at work and packet radio, for example, is too close to "real work"
to be fun, fine! Nobody will force you to use it, and no one will
take your existing CW privileges away.

I feel that the code-free license, with proper safeguards such as a
competent technical exam, will be a positive, healthy step for amateur
radio.

Phil Karn, KA9Q/2

From -6830379697871432273
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9d1a46a130613b62
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-04 00:13:46 PST
Message-ID: <bnews.csu-cs.1913>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!hplabs!hao!csu-cs!kelly@sri-unix
X-Path: utzoo!decvax!cca!hplabs!hao!csu-cs!kelly@sri-unix
From: kelly@sri-unix
Date: Sat Dec 4 03:13:45 1982
Subject: Re: Too much
References: <bnews.sri-unix.4498>
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 30 23:36:37 1982
Received: Sat Dec 4 03:13:45 1982

It is not just isolated instances where CW has pulled the fat out of the fire
for radio ops. I about 4 years of search and rescue work in New Mexico, I can
remember at least 3 times that 2M HTs had their Mikes go out, and the hams used
touch tones to send their messages in CW, sometimes life-saving due to
the finding of injured victims, etc. Maybe the cold and snow contributed to
the loss of crystal mike elements, but the CW contributed to the timely arrival
of the team doctor. By the way, CW also served to keep relatively private
information

from the press, who often were listening to the progress of searches on scanners.

From 6554320743987982541
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c4df6bf7684d217,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-04 01:11:50 PST
Message-ID: <bnews.hplabs.1002>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:teklabs!zehntel!sytek!menlo70!hao!hplabs!neil
X-Path: utzoo!decvax!ucbvax!CAD:teklabs!zehntel!sytek!menlo70!hao!hplabs!neil
From: hplabs!neil
Date: Sat Dec 4 04:11:44 1982
Subject: Re: Thoughts on CW - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 30 19:26:06 1982
Received: Sat Dec 4 04:11:44 1982

#R:sri-unix:-432900:hplabs:5500001:000:2471
hplabs!neil   Nov 30 19:07:00 1982

***** hplabs:net.ham-radio / sri-unix!WBST / 9:34 am Nov 29, 1982
The people in favor of a code free licese have several arguments which I consider invalid. Some of these are:

1. CW is "Just another mode" and should not be forced on people that do not want to use that mode.

If ham radio was like any other hobby then you are at liberty to do what you want. But ham radio is not. Its fundamental purpose is public service. We are using a national resource ... spectrum space. If its just to amuse ourselves then we could do anything. But The reason you have your licese is because it contributes to the good of the nation. In particular disaster communication. I cannot see how anyone that pretends to be contributing to the public service can call himself a radio operator without being able to send and receive CW.

CW, on HF or UHF can get through under most adverse conditions. Recently a boating accident left a boat sinking on the Pacific near San Francisco. The mike was smashed in the accident but the guy knew CW because he had leaned it as an Eagle Scout many years ago. He was saved because a Ham operator that knew CW was listening on the CB band.

Also CW has been sent by waving flags, flashing flashlights, tapping with pipes, etc.etc.etc. In a submarine disaster code was sent to the men inside and back by tapping a pipe ... one bang for dots, two bangs for dashes. Many lives have been saved because of a knowledge of CW both on and off the bands. Also, in times of disaster on a wide level, most communication is by written message. This can be more accurately and faster sent and received by CW.

2. CW is an unnecessary restriction and is just "too difficult to learn".

It takes a person of average intelligence about 4 hours to learn and send and

received at 5 WPM. After leaning the code it takes about 30 minutes practice to get to 5WPM.

3. CW is not necessary on the UHF bands.

In the future it will even be more necessary. As the space shuttle builds a space station, exploration to the planets and beyond will take place. QSO's by hams will be at first by CW because of the simplicity and effectiveness. Also, emergency communication with people in space, via the Hams on Earth would be greatly hampered without CW. How would you feel if the first distress message from space was sent via CW and there were no hams that knew how to copy it ? Remeber that boating accident.

Joe, N2XS (spark forever !!)

From 8697855673444570269
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,33889d52539c906c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-04 04:54:51 PST
Message-ID: <bnews.cdi.95>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:teklabs!ogcvax!metheus!cdi!caf
X-Path: utzoo!decvax!ucbvax!CAD:teklabs!ogcvax!metheus!cdi!caf
From: cdi!caf
Date: Sat Dec 4 07:54:50 1982
Subject: call book addition
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 2 02:08:19 1982
Received: Sat Dec 4 07:54:50 1982

  Pls add to the callbook list
WA7KGX Chuck Forsberg cdi!caf
     -73 Chuck

From -3530086621449799083
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2647bad49032c1d0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-04 05:25:43 PST
Message-ID: <bnews.purdue.469>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!orion!lime!we13!otuxa!nwuxc!inuxc!pur-ee!CSvax:svb
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!orion!lime!we13!otuxa!nwuxc!inuxc!pur-ee!CSvax:svb
From: CSvax:svb
Date: Sat Dec 4 08:25:41 1982
Subject: CW (again)

X-Google-Info: Converted from the original B-News header
Posted: Fri Dec 3 20:52:11 1982
Received: Sat Dec 4 08:25:41 1982

FORGIVE ME FOR ADDING THE 256th OPINION IN THAT MATTER.....

1. It's like assembler programming - you should have done it once.
   Otherwise you hardly can name yourself a 'ham'.

2. Many of those who complain about it, are not quite serious about
   ham radio anyway - otherwise they would just go ahead, learn it and
   decide AFTER THEY HAVE LEARNED IT whether they like it or not.

3. It is the old question - do you 'gently force' people to widen their
   horizon ....

4. I have to confess - my first licence was without CW (WGermany has
   such a licence for many years) - but I eventually graduated......

5. Funny but true (and beyond straight forward reasoning) - CW indeed
   keeps many unquailified people from becoming hams.
   In WGermany - there is a notable difference of the people
   on 2m and higher frequencies (the majority without CW exam) and
   those on the 'low bands'.

Stephan v. Bechtolsheim, Purdue CS
DF 4 CK / W9
(ex. DC 1 MI - without CW exam)

(svb@purdue)
(pur-ee!purdue!svb)
(Purdue Univ., CS Dep., W Lafayette, IN 47907)

From 3048510321115911726
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc22bfa2af5ba505,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-05 04:33:15 PST
Message-ID: <bnews.teklabs.1583>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:teklabs!edr
X-Path: utzoo!decvax!ucbvax!CAD:teklabs!edr
From: teklabs!edr
Date: Sun Dec 5 07:33:10 1982
Subject: CODE FREE
X-Google-Info: Converted from the original B-News header
Posted: Fri Dec 3 11:29:57 1982
Received: Sun Dec 5 07:33:10 1982

Thank you Phil - KA9Q/2. I too support the concept of a code free license for people interested in "exotic" communications techniques if they are required to show a technical proficiency in this area above and beyond the regualr Ham requirements and they were restricted to 220 Mhz and above. In fact I would like to see the regular ham exams updated and expanded.

The argument that knowledge of code has saved many people's lives is to a certain extent an emotional one since in most cases the mechanism of communication was not ham radio. In that case all citizens should know the code and even more lives would be saved. We could make it a requirement that you must be able to receive 10 WPM in order to get a Social Security number.

Yes 5 WPM is easy. It only took me 1/2 hour per night for three weeks to send and copy 7 WPM (thank you W1AW), but I know friends of mine who, for various reasons, wound up taking over a year to get the proficiency neccessary for a tech license - ARGHHH. It's all rather meaningless if all they are interested in is computer communications, packet radio and electronic mail.

Flame over, please also enter my name in to the net call book.

Respectfully yours, Ed Reuss KC7AK teklabs!edr
Computer Research Group, Tek Labs
Tektronix Inc.
PO Box 500 MS 50-384
Beaverton, Or. 97077

From -8411243062853048539
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc22bfa2af5ba505
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-06 00:43:12 PST
Message-ID: <bnews.alice.1255>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!sjb
X-Path: utzoo!decvax!harpo!npoiv!alice!sjb
From: alice!sjb
Date: Mon Dec 6 03:43:11 1982
Subject: Re: CODE FREE
References: <bnews.teklabs.1583>
X-Google-Info: Converted from the original B-News header
Posted: Sun Dec 5 10:44:04 1982
Received: Mon Dec 6 03:43:11 1982

There is an article on page 55 of the December, 1982, QST written by Vic Clark, W4KFC, President of the ARRL, on the subject of code free licenses. I probably don't have to tell you it's anti-code-free. I will not summarize the article, but he makes a few major points:

[The following, labeled with *'s, are taken directly from

the article --Adam]

* An orderly growth of the US Amateur Radio Service -- perhaps
  at a rate of 7 to 8 per cent per year -- is desirable

* New ways need to be found to attract intelligent youngsters to
  this rewarding and educational avocation.

* The Amateur Radio Service, which has long enjoyed a reputation
  as orderly and efficient in its use of the radio spectrum, must
  continue to deserve that distinction.

Among his arguments again the code-free license, he says:

* It is a unique, intimate, concise and effective communications
  skill employed throughout the world.

* It is the most efficient mode in terms of power required for
  long distance communication, least susceptible to interference,
  and conserving of the radio frequency spectrum.

* It involves no accent or pronunciation problems, providing a
  widely understood international language.

* It employs simpler, more reliable and easily maintained equipment
  than any other communications mode.

* It is an equalizer, negating age, speech impediments and dialectical
  differences; it provides for ready acceptance of youngsters in an
  adult environment.

* It is the ONLY radio communications mode that is understood readily
  by both man and machine.

From -3611000918048791506
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,819d3f20e3737e33,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,819d3f20e3737e33,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1982-12-06 01:08:55 PST
Message-ID: <bnews.utcsstat.452>
Newsgroups: net.wanted,net.ham-radio
Path: utzoo!utcsrgv!utcsstat!ian
X-Path: utzoo!utcsrgv!utcsstat!ian
From: utcsstat!ian
Date: Mon Dec 6 04:08:46 1982
Subject: VuCom memory board/design wanted
X-Google-Info: Converted from the original B-News header
Posted: Sun Dec 5 22:47:06 1982
Received: Mon Dec 6 04:08:46 1982

I have a very old VuCom I terminal, and would like to find a
memory board for it. The basic terminal has an 8x80 screen
(that's right, only 8 lines - CDC built them, years ago).
The memory card doubles it to 16, which these days would make
the terminal barely tolerable. Has anybody built memory cards
for these using current technology? It ought to be only a few
chips, but I would rather find a design which works than try to
design it. Any ideas? or pointers? Thanks.

Ian Darwin
uucp: decvax!utzoo!utcsstat!ian

From -8771596391471065377
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8bd366e2225ce1dc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-06 23:33:37 PST
Message-ID: <bnews.mitccc.205>
Newsgroups: net.ham-radio
Path: utzoo!decvax!genradbo!mitccc!jfw
X-Path: utzoo!decvax!genradbo!mitccc!jfw
From: mitccc!jfw
Date: Tue Dec 7 02:33:36 1982
Subject: Re: CALL BOOK ADDITION
References: <bnews.sri-unix.4479>
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 2 00:17:38 1982
Received: Tue Dec 7 02:33:36 1982

Also please add:

John Woods   WB7EEL/1
73! (actually, ! is now , ...)

From 7834702082169106660
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc22bfa2af5ba505
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 00:06:10 PST
Message-ID: <bnews.sri-unix.4641>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Tue Dec 7 03:06:09 1982
Subject: Re: CODE FREE
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 6 10:06:40 1982
Received: Tue Dec 7 03:06:09 1982

re: Code free, Ed , KC7AK

One short comment on your code free licese message:

If the people that get their licese are only interested in packet radio, computer communications, and electronic mail then they do not belong in Ham radio.
Ham radio exists solely for public service and has little other justification. It is
essential that all Hams, to be Hams, are trained for that last ditch stand that can
be offered by a flood, huricane, etc.

There is no room in Ham radio for people that wish to reep the benifits without developing the skills for disaster work. The fact that 300,000 Hams are licesed in
the US, and can all (supposidly) send and received CW at some minimum level,
is the greatest disaster preparedness you can have. Do you wish to do away
with this and have Hams that can only push buttons on computers ??

What happens when the lights go out and all you have is .... ????
Do you call that a justification for Ham Radio ? The feds would take over our frequencies for their own version of disaster if it were.

Joe N2XS (Spark Forever !)

From -2621284055426736905
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc22bfa2af5ba505
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 00:08:34 PST
Message-ID: <bnews.genradbo.762>
Newsgroups: net.ham-radio
Path: utzoo!decvax!genradbo!rob
X-Path: utzoo!decvax!genradbo!rob
From: genradbo!rob
Date: Tue Dec 7 03:08:33 1982
Subject: Re: CODE FREE
References: <bnews.alice.1255>
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 6 14:58:46 1982
Received: Tue Dec 7 03:08:33 1982

I got my novice one year ago. I saw a friend with a 2 meter hand-held
and was very impressed. I wanted in. I bought books. A friend gave
me a copy of the W1AW schedule and lent me a receiver. I listened. I
copied. I got my ticket after about 1 month of work. It has now been
a year, and I thought the code would be the hangup for the tech lisence.
It was easier learning the code, than the theory. I vote for keeping
the code requirement in. I do think it is a worthwhile sifter.
     Rob Wood

KA1GNG

From 2076800433329186510
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,800ca55abee9e8bb,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 02:19:35 PST
Message-ID: <bnews.houxp.166>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Tue Dec 7 05:19:34 1982
Subject: Propagation Bulletin Forecast 49
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 6 20:29:58 1982
Received: Tue Dec 7 05:19:34 1982

qst de ad7i
hr propagation forecast bulletin nr 49   from arrl headquarters
newington ct december 6, 1982
to all radio amateurs bt

the slow solar flux rise predicted for about december 3 in last weeks
bulletin turned out to be a fast rise beginning the 2nd. it brought
the solar flux from 171 to 216 by the 5th. this new activity is in
an area of the sun responsible for the november low of 139. on the
5[error] flux was 71 points higher than at the same sun position in
november.

overcast skies in the northeast prevented visual observation of the
sun, but previous experience indicates a peak about the 6th or 7th.
this would put the flux high enough for more 50 mhz f layer dx,
through about the 9th, and many hours of dx on 28 and 21 mhz during
the forecast week. intermittent geomagnetic disturbances will bring
increased absorption and fading on lowe frequencies much of the
time. look for enhanced north south 50 mhz propagation and possible
enhancement on other transequatorial paths at times when the wwv k
index is 3 or higher.

a special bulletin will be issued ahead of the usual weekly schedule
if results of daily solar observations warrant ar

From 7028165288329372299
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5eb3f766c9a98516,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 02:21:40 PST
Message-ID: <bnews.houxp.164>

Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Tue Dec 7 05:21:39 1982
Subject: ARRL 109: Mass. Hams
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 6 20:29:13 1982
Received: Tue Dec 7 05:21:39 1982

qst de ad7i
hr arrl bulletin nr 109 from arrl headquarters
newington ct december 3, 1982
to all radio amateurs bt

of interest to radio amateurs in massachusetts, follows an update of the mt. greylock communications tower situation. having passed the house unanimously, support is now needed in the state senate. the bill has been renumbered to h6749, repeat h6749. amateurs may wish to contact their state senators urging support for retention of this important communications facility ar

From 2074572922956330453
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,973799001cccc0d6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 02:30:24 PST
Message-ID: <bnews.houxp.165>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Tue Dec 7 05:30:17 1982
Subject: CRRL 45: Cable TV
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 6 20:29:36 1982
Received: Tue Dec 7 05:30:17 1982

qst de ad7i
hr crrl bulletin nr 45 from arrl headquarters
newington ct december 6, 1982
to all radio amateurs bt

crrl director ve3fn met with the technical executive of cctva, the canadian cable television association, in ottawa on november 24. cctva reps were most sympathetic to amateur problems and pledged to help amateurs in every way possible. canadian amateurs experiencing interference, to or from cable television systems, should report in writing to the local cable company, with copies to the nearest office

of doc and to the cctva, suite 405, 85 albert st, ottawa, ontario,
canada k1p 6a4   ar

From 3991373363944987864
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9f40022ed38bd63a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 06:32:01 PST
Message-ID: <bnews.sri-unix.4640>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Tue Dec 7 09:31:53 1982
Subject: Re: Code-Free Licensing: Epistle #3
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 6 09:55:21 1982
Received: Tue Dec 7 09:31:53 1982

Re: Code-free licensing: Epistle #3

You have missed the fundamental arguments.

1) The elimination of the code requirement will not bring in all the new blood and geniuses that will revolutionize Ham radio. The facts:

a) the Canadian Digital licese has only been issued to less than 200 people.

b) The Reduction of the code for technician class at 5 WPM was for the purpose of bringing in all those people that would populate the UHF. The Technician Licese turned into a waiting room untill you get your general, the geniuses never showed up.

c) In Japan, a code free licese for 2meters made 2 meters into a Citizen's Band just like in the US. There was never any great technical upswing. If anything, Ham radio was worse off because of all the clunkers they picked up .

So forget the genius argument. The geniuses already have liceses.

2) Code is not "just another mode" to be equated with the others on an equal basis. It is the mode that gets through when all else fails. The distress situations
were only quoted as dramitization of the idea. When your mike is broken, your TTY doesn't work, etc., the code is the last resort.
remember Ham Radio is not just another hobby, it is based in pulic service. Public service justifies its existense. Without our ability to communicate in times
of disaster, there would be no Ham radio, or at, least, we would not have the spectrum space we do have. I cannot see how a person without code, even though he may not use it, can participate in a disaster with confidence. It would bother me no end if I knew that if my SSB demodulator failed, the mike

broke, etc., I could not communicate.

I agree the CW is not the most efficient mode when compared with several other modes in use. But these comparisons are really not a valid argument:

1) These other modes assume the existence of some elaborate equipment, usually including digital circuitry. Modulating CW with similar circuitry (phase shift CW for example) can place it on an equal basis since CW is another form of modulation that can always be substituted for the modulation in use (example, the ASCII code can be substituted for the CW code). But, and this is the big but, CW is human readable. I know of one person that can read Baud TTY code by ear (at 30 WPM , he could only read every other letter). I know of none that can use any other code. I know of 300,000 that can read CW.

2) When the chips are down, if you want to send CW, all you need is 1 (ONE) transitor, some wire, and a battery. (no receiver). Can oany other mode do the same ?

Compare it to a trip in the wilderness: you do not need to make a fire by rubbing two sticks togeather, you can bring a cigarette lighter. But what happens when the cigarette lighter fails ?

Chances are that you will never have your life saved by knowing CW, But, how many lives will be sacrificed by eliminating the CW requirement. A few?... A Hundered ? ....
What happens when the guy in a flood area looses his mike or rig, and only has his grid dip oscillator to communicate ?
An old tube type ACDC receiver has enough spunk in its local oscillartor to communicate on 160 meters. (The Germans, during WW2 used to pick up thoses oscillators for a distance of 100 miles and zero in on convoys).

Also, if you think CW is so old fashoned and unnecessary, remember that the final back upo system for communication to trident and polaris subs is CW on 300 Hertz (thats right ,CW on 300 HERTZ). No other system will work (all other systems take too much bandwidth). All Navy opoerators are still trained in CW and there will be no change in the future despite satellites and backscatter.

There is no question in my mind that a Ham without a knowledge of CW , even at the low rate of 5 WPM, is a detriment to Ham radio's purpose as public service, and represents a lowering of the ability and competance of Hams the world over.

Joe, N2XS (Spark Forever)

From -7207149833140003715
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d8e739b77c4ee84e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 07:18:59 PST
Message-ID: <bnews.houxp.163>

Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Tue Dec 7 10:18:47 1982
Subject: AD7I AMTOR Report to the FCC (long)
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 6 11:13:54 1982
Received: Tue Dec 7 10:18:47 1982

ad7i msg 26: A report that i submitted to the FCC on a HF RTTY
error correcting protocol follows.

Thirty Victoria Place
Red Bank, N.J. 07701
201-949-3731 (W)
201-741-1151 (H)
November 23, 1982

Mr. Richard H. Everett
Chief, Licensing Division
Federal Communications Commission
Gettysburg, P.A. 17325

Dear Mr. Everett:

Enclosed is the report required by the S.T.A. outlined in your letter of May 3, 1982. If I can provide any additional information, please do not hesitate to contact me.

Sincerely,

Paul Newland

Copy (with att.) to
Vic Clark, W4KFC
Phil Karn, KA9Q
Bill Meyn, K4PA
Dave Sumner, K1ZZ
Curtis Williams, W5DTR

November 23, 1982

REPORT TO THE FEDERAL COMMUNICATIONS COMMISSION ON EXPERIMENTS CONDUCTED BY PAUL NEWLAND AT AMATEUR RADIO STATION AD7I USING THE ERROR CORRECTING PROTOCOL DESCRIBED BY CCIR RECOMMENDATION 476-2

ABSTRACT

This report outlines the use of the teleprinter code described by CCIR Recommendation 476-2, also know as AMTOR, by amateur radio station AD7I. Use of this code during the period provided by Special Temporary Authorization (S.T.A.), file 7130, was hampered by external influences. No "scientific" data were collected but outstanding performance provided by the CCIR 476-2 coding was observed by the operator on numerous occasions.

The report concludes with a recommendation that use of CCIR 476-2 coding by U.S.A. radio amateurs be allowed as soon as possible.

DISCUSSION

This report describes use of the error correcting protocol described by CCIR Recommendation 476-2 at my amateur radio station, AD7I, during the period of May 1982 to November 1982. During much of the experimental period, the High Frequency (HF) station was inoperative because of radio problems. Additionally, I was required by business commitments to make several unexpected and lengthy trips during the fall. Consequently, time did not permit scientific data, per se, to be collected for presentation. However, I have formed strong opinions about the usefulness of this mode of communications based on my use.

In May of this year I completed construction of a microprocessor system to convert the CCIR 476-2 signals to international telex teleprinter code. The firmware to accomplish this code conversion was provided by Mr. Peter Martinez, G3PLX; I designed the controller to be software compatible with Mr. Martinez's firmware. An additional microprocessor system was designed and built by me using a different manufacturer's microprocessor. I programmed this second microprocessor to convert CCIR 476-2 Mode B to international telex teleprinter code. I also purchased a new HF-SSB radio to perform experiments with CCIR 476-2 coding. All other equipment was previously on hand.

After completing the controllers, U.S. Coast Guard and Canadian Coast Guard weather broadcasts were monitored to observe the print quality of Forward Error Correction (FEC) mode B communications during normal HF propagation conditions. In my opinion, without scientific data to back my

claim, I feel that the FEC mode of operation for broadcast use is superior to that of conventional stop-start unprotected teleprinter transmissions (RTTY). A major advantage of CCIR 476-2 coding in FEC mode is that detected errors are converted to space characters by the code converter. Hence, errors are easily and quickly spotted by the operator so fills can be made from context.

On June 1, 1982, I advised the Commission's field office that on or after June 11, 1982, station AD7I would begin transmissions using CCIR 476-2. On June 13, 1982, contact was established with station TI3DJT using the Automatic ReQuest for repeat (ARQ) mode A. From June 13 to 29, 1982, 39 contacts were made with radio amateurs around the world using CCIR 476-2 coding. Most of the contacts were made with ARQ mode A; only several contacts were made using FEC mode B. All contacts took place on or near 14.075 MHz. Stations with which communications took place were: TI3DJT, PA0RYS, HB9AUK, HB9AK, K4PA, G3PLX, A4XFW, G3RYS, KB6BT, KC7KK, and TI2CC. On June 30, 1982, the station's radio was returned to the manufacturer for repair under warranty. The synthesizer provided unreliable operation after the radio had been on for several hours.

On September 28, 1982, the radio was returned in good working order. >From September 28, 1982, to November 14, 1982, another 31 contacts were made. In my opinion, again without scientific data to back my claim, performance using CCIR 476-2 ARQ coding is VASTLY superior to conventional RTTY coding. CCIR 476-2 displays an amazing robustness during conditions of propagation that render SSB and CW modes of communications virtually useless. I apologize for not having scientific data to back my claims; I am sure that the data would substantiate my opinions. CCIR 476-2

consistently provided communications during short and long duration frequency selective fading, during SSB and CW co-channel and adjacent channel interference, and during conventional Radio Teleprinter (RTTY) interference.

The only interference to which CCIR 476-2 is not immune, as one might expect, is another co-channel CCIR 476-2 station. Such stations did not present much of a problem during the test period. However, it is important to note that there were few stations available to cause inadvertent or deliberate interference.

IMPLEMENTATION

CCIR 476-2 proves to be a simple addition to an amateur radio HF RTTY station. Figure 1 shows how the system components were configured at station AD7I. The cost of the CCIR 476-2 code converter was about $40.00 due to a well-stocked junk box. If all components for the controller were purchased new and the firmware was free, the cost for a code converter should still be well under $85.00. This is a small amount of money compared to other system components. Vast sums should not be required to implement a CCIR 476-2 code converter.

CONCLUSION

The performance provided by CCIR 476-2 coding is superior to conventional coding, and the incremental cost to add that capability to an amateur radio RTTY station is low. I therefore recommend that the Federal Communications Commission allow, as soon as possible, the use of CCIR 476-2 coding by radio amateurs who now have RTTY privileges.

Respectfully submitted,

Paul Newland, licensee of
Amateur Radio Station, ad7i

From -7170790857745469596

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f543c62fe37b6612
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 07:45:33 PST
Message-ID: <bnews.mitccc.204>
Newsgroups: net.ham-radio
Path: utzoo!decvax!genradbo!mitccc!jfw
X-Path: utzoo!decvax!genradbo!mitccc!jfw
From: mitccc!jfw
Date: Tue Dec 7 10:45:25 1982
Subject: Re: Thoughts on CW
References: <bnews.sri-unix.4473>
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 1 18:49:30 1982
Received: Tue Dec 7 10:45:25 1982

One more little bit of rambling on the subject, then I'll go away.
I personally do use CW when I operate (not exclusively, but competitive with
my phone usage). I do it for reasons varying between the fun of it and the
fact that I got New York from Washington State with a 10 watt transmitter (on
phone, it would have been significantly more difficult (NOT impossible)).

If you want a way of using radio without knowing code, why must it be an "Amateur
Radio License"? Why not a separate radio class for computer/digital packet
phreaques? It seems that that might be the better thing to do (geez, some of the
new bands could even be shared with UHF ham bands--it certainly won't be a totally
new occurance).

Blah, blah, blah...

AR   de WB7EEL/1 SK (I promise!)
John Woods

From 4195034091328513427
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,462b70bd368f7eab,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 08:20:54 PST
Message-ID: <bnews.inuxc.540>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Tue Dec 7 11:20:52 1982
Subject: ARRL DX BULLETIN 12/2/82 de k2ph
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 6 12:03:08 1982
Received: Tue Dec 7 11:20:52 1982

       _3_0__M_e_t_e_r_s_.

       All U.S. amateurs are reminded to avoid the 10109 to 10115

kHz segment of the new band. Contacts on the 10 MHz band will not be creditable toward ARRL awards.

_C_h_i_n_a_.

BY1PK was active during last weeks CQ WW CW Contest working Japan and North America on 21150 kHz cw, but worked very few stations. There has been no sign of BY8AA in the lst few days.

_A_f_r_i_c_a_.

Many African stations are taking advantage of good low band propagation lately. Look for 5T5TO, 5H3BH, 3V8AL, 5Z4CS, TR8DX and TN8AJ.

_D_j_i_b_o_u_t_i_.

A recent visitor to Djibouti is F6BFN who is currently signing J200BL. QSKL via his home call.

_1_6_0__C_o_n_t_e_s_t_.

Many stations plan to be active this weekend for the ARRL 160 Meter CW Contest including a major effort by K5NA operating from KV4FZ.

_T_a_n_z_a_n_i_a_.

5H3BH continues, operated by Leif, SM00AJU, and John, SM00DJZ. They will be looking for European stations on 40 and 80 meters from 2100Z and U.S.A. from 0130Z.

_M_o_n_g_o_l_i_a_/_Z_o_n_e__2_3_.

Walt, JT00GM, continues active from Mongolia with an excellent signal on all bands, 80 through 10 meters ssb and cw. Walt has now been worked by East Coast U.S. stations both long path and short path on 80 meters. Check 3505 and 3788 kHz. QSL via UV3GM.

_A_r_g_e_n_t_i_n_a_.

The station signing L8D/X is really LU8DQ operating portable in southern Argentina. Jorge gives his QTH as Staten Island which he hopes will count for a new country, but it does not appear to meet any DXCC criteria. It's good for prefix hunters, anyway.

_Q_a_t_a_r_.

A71BJ is a newcomer in Qatar. He can usually be found on 28 MHz ssb around 1300Z. Lef plans cw operation in early 1983.

QSLs go to G4HNP.

_C_o_n_g_o_.

Joerg, TN8AJ, is back for an extended operation through December 20. He will be on all bands, 80 through 10 meters, ssb and cw.

_S_o_u_t_h__O_r_k_n_e_y_.

VP8AOE can be found Wednesdays at 0300Z at the low end of 14 MHz ssb, sometimes with QSL manager K00JW.

_Y_a_s_m_e_.

Lloyd and Iris Colvin are leaving December 2 for Abu Ail for a two day operation. The callsign should be G5ACI/AA. Their next stops will include A4 and A7.

_S_t_.__K_i_t_t_s_.

KC00FW will be on from December 7 to 13, including the 10 meter contest. All bands 160 through 10 meters, ssb and cw, will be used.

_K_1_X_A_/_6_Y_5_.

All QSLs for contacts during the CQ WW CW Contest should go to Rick Casey, AB1U, 85 Hacienda Circle, Plantsville, Ct. 06479.

From -2635715285623509305
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc22bfa2af5ba505
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 09:07:27 PST
Message-ID: <bnews.sri-unix.4649>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!NBarbieri.es@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!NBarbieri.es@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Tue Dec 7 12:07:26 1982
Subject: Re: CODE FREE
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 6 12:39:39 1982
Received: Tue Dec 7 12:07:26 1982

I agree that ONE of amateur radio's basic purposes is public service. The government would like to believe that is the only purpose. But as all of us licensed know, that is not OUR primary purpose for operating with an amateur license.

Nick KB6QI

NBarbieri.es @ PARC-MAXC

From 349496965481042934
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d82be26586caa07,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 09:19:33 PST
Message-ID: <bnews.sri-unix.4651>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!duntemann.wbst@sri-unix
X-Path: utzoo!decvax!cca!duntemann.wbst@sri-unix
From: duntemann.wbst@sri-unix
Date: Tue Dec 7 12:19:32 1982
Subject: More Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 6 13:28:08 1982
Received: Tue Dec 7 12:19:32 1982

C'mon, guys, truth is getting bent here a little bit. I was in Japan on Xerox business in October of 1981, and I worked some 2M FM. It was always busy as hell, but the operators were snappy and unfailingly polite, both when speaking in Japanese to each other and in English to me. Now, I fled CB screaming into hamdom's sanity, and to call Japanese 2M a "CB band" is hazardously close to slander. There is absolutely no comparison. We here could, in fact, learn a thing or three about pushing traffic through a repeater from those guys.

Secondly, this oft-repeated motif of CW saving the day when the dam breaks and washes the town away or when the boat's going down and sombody stepped on the mike or when the earthquake has toppled the power lines and all you can do is solder D cells to a transistor and tap wires together, I mean, Lordy, isn't that getting a little obtrusively Hollywood? Since when does public service begin and end with disaster communications? Does the world have to practically end before ham radio performs public service? I've done aa fair share of what I consider public service without sitting in the middle of a hurricane.

Also, although I don't have any of my ham books at my elbow, I think there is a little more in the Intents and Purposes section of the Rules than simply Public Service. We also have an obligation to advance the state of the art. The two go hand-in-hand.

Now, I asked this before but nobody picked it up. So let me reiterate:

WHY do CW freaks always assume that a code-free license is a mortal attack on pounding brass?

NOBODY in this argument has yet advocated a reduction of CW-only band space.

NOBODY has advocated reducing the privileges of those who earned tickets

by learning CW.

So why in heaven's name has this issue generated so much heat? The code-free license advocates are putting forth a CHOICE. The CW defenders are insisting on a rigid, single path. I smell a month-old egg.

(*Lest folk get suspicious, let me point out that I still use CW when it's appropriate. I built the ARRL's "Third-World" 20M CW station and I run it off solar cells on camping trips. I'll be as ready as anybody when a hurricane roars into Rochester NY. *)

73 and all that,

Jeff Duntemann KB2JN

From -4840959483555873897
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d68021552b5d1a4e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-07 11:18:22 PST
Message-ID: <bnews.brl-bmd.480>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!esquire!brl-bmd!wmartin
X-Path: utzoo!decvax!harpo!esquire!brl-bmd!wmartin
From: brl-bmd!wmartin
Date: Tue Dec 7 14:18:15 1982
Subject: Ham dealer periodicals?
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 6 09:55:54 1982
Received: Tue Dec 7 14:18:15 1982

For some years, I have been getting some of the consumer electronics dealers' magazines which cover stereo, video, and similar types of products (magazines like Audio-Video International, Consumer Electronics, Sight & Sound Marketing, Audio Times, etc.). None of these give any coverage to ham gear or direct any of their editorial material to dealers in the ham or commercial radio field. Can anyone point me to the existence of dealer-oriented magazines directed toward the dealer in amateur radio equipment?

On a related note, can anyone point me toward wholesale distributors of ham gear? I have had dealings with and receive catalogs from a number of distributors who will supply a small business with inventory in small quantities, such as one at a time, usually with an 800 number to call and shipping UPS COD. None of these handle ham gear; the nearest they come to it is scanners and CB radios. Does anyone know of any distributors who operate in this manner and handle amateur equipment? I am particularily looking for such a source for ICOM gear.

Thanks much,

Will Martin

From -7804831847824571182
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d82be26586caa07
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-08 00:00:28 PST
Message-ID: <bnews.sri-unix.4688>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Stephany.WBST@sri-unix
X-Path: utzoo!decvax!cca!Stephany.WBST@sri-unix
From: Stephany.WBST@sri-unix
Date: Wed Dec 8 03:00:25 1982
Subject: Re: More Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 7 09:02:26 1982
Received: Wed Dec 8 03:00:25 1982

I understand that there are 4 million Japenese (maybe more now) that use 2 meters. Maybe the Japenese are a little more prudent than us. We have 300,000 licesed to use 2 meter (most don't) and that's becomming a mess.

The basic problem is that people intereseted in the commuinication art should be Hams. People only interested in cummunication without leaning the art should be on CB bands, not ham bands. Remember, CBers have other frequencies besides 11 meters but never use them. These are for the people that want to talk and not lean skill.

I also disagree that a Code-Free licese will spurn forth technical development. All atempts in this respect have failed, as I have stated.

I also would like to point out that we have never had a genuinne disaster on a national scale in the US. For example, a complete failure of power generation in the US (oil cut off), or a large meteor hits (it happens on the order of once every Hundred years that a few hundred or thousand square miles gets wiped out by one, we have been fortunate up to now), or an atomic war, or an invading Army etc.,etc.

Improbable ? Maybe.

The choice is not CW or not CW, the choice is a body of technically competent and operator competent Hams that can communicate under any conditions. CW is that competance required so that the operator can operate effectively under any foreseeable conditions.

Incidently, the reason for the proposal of the Code-Free Licese is that the Reagn Administration wishes to stimulate the faltering economy by getting a lot of guys to buy Ham rigs. Reagan originally tried to stimulate business by opening all public lands to anyone who could make a buck off of it, reduce taxes to the righ below what taxes were for them 10 years ago while giving the middle class a "tax break" and then raising Social Security so they are mostly paying more.

This produced a depression. We are still waiting for the benifits.

If the Ham bands open and we have another CB craze then Japan will benifit, not the US. In the last CB craze 95% of the equipment was manufactured in Japan. No import tax because the senate did not want to offend Japan because the farmers were selling them wheat and cotton. So we gave them our electronics industry. The purpose of the FCC introducing code-free liceses has nothing to do with improving the Ham service. So who really benifits from a code Free licese. I don't know. Does anyone ??

Joe

7 Dec. 1982 11:48 am EST (Tuesday)

From 5544439720449116558
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc22bfa2af5ba505
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-08 00:03:24 PST
Message-ID: <bnews.sri-unix.4687>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!Stephany.WBST@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Wed Dec 8 03:03:19 1982
Subject: Re: CODE FREE
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 7 08:35:33 1982
Received: Wed Dec 8 03:03:19 1982

The Captain cried, "Another blast from those $%~#@ Xydjfs !!!! Its carried away our radar and communication system !!! But we can outmanuver them !!! Turn on the foreward thrusters and get to excape speed !! We can warn Earth of the coming Xydjfs invasion if we can get a message off in time !! Call Rick Snafu, Electronics Genius, He can do it if anyone can !!!!"

Rick Safu amples in, sits down, puts his feet up on the rocket ships control panel. "Whatdaya want cheif ?"

"Rick," yells the chief, " its up to you, Earth will be destroyed if we don't warn them. You are the only one aboard that can do it. We must communicate with Earth."

"Nothing to it, Chief. I have already looked through the ship and the only thing left is one old 2N2222. I can wire it up in a giffy, nothing too it. I leaned
the morse code as an Eagle scout so we won't have any trouble keying it by shorting these two wires togeather !!!"

"A Genius !!! Rick, you have done it again. The Earth will be saved from the dreaded Xydjfs !!! and we owe it all to you !!!"

"Remember that on my next review. Well, here goes."

SOS SOS SOS de Space Ship Beagle
SOS SOS SOS de Space Ship Beagle

"Blazes," cursed the captain, "Why don't they respond ? Your signal must be getting through. I can hear them all yacking away on 2 millimeters."

"Aw nuts, " said Rick, "don't you remember ?"No Hams copy code anymore, particularly on the downlink frequencies. They all have code free liceses now !! The four to eight hours needed to learn it was just too much for their poor little brains."

"Then Earth is doomed," said the Captain.

"Yes, " said Rick, "The future is theirs that prepare for it. The settlements on Sirus B require code for all licenses. Lets head there and warn them on the way. No point in going back to Earth. Shows you what happens when you depend too much on technology you cannot really control. When something goes wrong you have to drop to a lower technology.

"Well," mused the Captain, "Thats the law of life, survival of the fittist, not the
most sophiticated."

Joe, N2XS (spark forever !!)

From -9164558718421927384
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc22bfa2af5ba505
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-08 00:22:41 PST
Message-ID: <bnews.sri-unix.4692>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!teklabs!edr@Tektronix@sri-unix
X-Path: utzoo!decvax!cca!teklabs!edr@Tektronix@sri-unix
From: Tektronix@sri-unix
Date: Wed Dec 8 03:22:40 1982
Subject: Re: CODE FREE
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 7 10:10:33 1982
Received: Wed Dec 8 03:22:40 1982

Thank you for your message Joe. One of the best parts about it is that you replied by mail rather than a net posting. The subject is getting rather tedious and it's good that we keep the crud down as much as possible.

However, I catagorically disagree with the statememt that Ham radio

exists solely for the public service and has little other justification. In fact, in the first part of the Communications Act of 1933, which is the canonical piece of legislation for Ham radio, it states that the purpose for the Amateur Radio Service is to promote the state of the radio art and provide a public service in times of need. If CW requirements merely impede the promotion of the state of the art by keeping out those people that would otherwise provide a valuable(?) contribution, then the CW requirements are meaningless and should be removed. Then these people would truely be engaged in promoting the state of the art and would therefore in the truest and most conservative definition of the term, be Amateur radio operators - Hams.

Also, it has been my experience that in this day and age, very little true public service is provided by an Amateur's actually knowing the code. There are alot of CW traffic nets running around on the HF bands which have become "grandfaloons" (A Kurt Vonnegut term meaning a proud but meaningless organization of individuals such as the Veterans of Future Wars, or the Portland Radio Club). Some bands have become grandfaloons altogether and provide little to the promotion of the radio art or the public service regardless of the activity on them. Most Amateur public service comes from a bunch of radio nurds running around with 2 metre HTs in their hands or mobiles in their cars. Occasionally, in the case of a large disaster, this is augmented by one or two base stations relaying DX traffic around the country on the HF bands, some of which is done - quite efficiently - in the CW mode. But the actual amount of public service provided by the CW mode, when compared to the public service provided by other means, is only a few percent.

I, therefore contend, that if we intend to keep our frequencies, we better start letting in those people with the real talents neccessary to make Ham radio a true and meaningful public service, before the FCC starts to catch on as to how much Ham radio is becoming an anachonistic grandfaloon.

Again, I thank you so very much for your response.

Ed KC7AK ...-.-

From -4804955121007964803
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d82be26586caa07
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-08 01:43:18 PST
Message-ID: <bnews.sri-unix.4694>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!fayette.wbst@sri-unix
X-Path: utzoo!decvax!cca!fayette.wbst@sri-unix
From: fayette.wbst@sri-unix
Date: Wed Dec 8 04:43:11 1982
Subject: Re: More Thoughts on CW
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 7 12:47:37 1982
Received: Wed Dec 8 04:43:11 1982

Jeff

BRAVO!!!!!!!!! I like your style I mean that has to be the most lucid responses I have read yet.
TNX for your thoughts
Mike wb2fsi

From 7317954762574323076
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e0571e122a037c38,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-08 02:17:28 PST
Message-ID: <bnews.hao.374>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!hplabs!hao!hoyt@sri-unix
X-Path: utzoo!decvax!cca!hplabs!hao!hoyt@sri-unix
From: hoyt@sri-unix
Date: Wed Dec 8 05:17:27 1982
Subject: Code only license?
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 7 10:51:45 1982
Received: Wed Dec 8 05:17:27 1982

  If you are deaf but can read Morse code at 20wpm by taking the output from a shortwave receiver and plotting it on a strip chart recorder, are you eligible to obtain an amatuer radio license? Or is it illegal for deaf people to get a license? If anyone knows the answer, I would appreciate finding out.

From -1029765153665371037
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d82be26586caa07
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-09 00:50:38 PST
Message-ID: <bnews.grkermit.224>
Newsgroups: net.ham-radio
Path: utzoo!decvax!genradbo!grkermit!tan
X-Path: utzoo!decvax!genradbo!grkermit!tan
From: grkermit!tan
Date: Thu Dec 9 03:50:37 1982
Subject: Re: More Thoughts on CW
References: <bnews.sri-unix.4688>
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 8 08:57:20 1982
Received: Thu Dec 9 03:50:37 1982

The code requirment is fine & dandy for you people out there that have already suffered, but as an EE I'm interested in the technical challenge of HAM, and am not really interested in being forced to learn code.
     If I can teach a uP to send/receive morse code isn't that enough ??? Granted, it would not be easy to have people do techincal projects instead of code, but learning code ...

By the way, I am trying to learn code !!!!
I bought a Heathkit Novice course, and have already learned most of
the technical/liscensing (bullxxxt), the code ...
...so far I've learned 'E' & 'T', but 'A' & 'N' confuse me ...

...all this just to get on a packet switching network ...

From -3222621983036321642
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,419995a326431190,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-09 03:30:58 PST
Message-ID: <bnews.eagle.673>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
X-Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
From: eagle!karn
Date: Thu Dec 9 06:30:56 1982
Subject: Code Free
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 8 20:10:39 1982
Received: Thu Dec 9 06:30:56 1982

To Joe, N2XS ("spark forever"):

I am not going to answer all of your arguments, since I already
addressed most of them in my previous message, and that Jeff
Duntemann adequately addresses the Japanese code-free license.

However, I do have a reply to an assertion you made:

"All Navy opoerators are still trained in CW and there will be no
change in the future despite satellites and backscatter."

This is untrue. The wife of a good friend of mine was a radio operator
in the Navy until several years ago. Here is the reply I got from
I asked about the Navy requirements:

"You were right about the Navy radio operators. Only the submarine
operators go to code school, Judy says -- it's a special school distinct
from the ordinary radio operator's school. Whoever told you otherwise was
probably in the Navy many years ago; they might have done it that way then."

Again, I am not denying the usefulness of CW in many situations; I am
only pointing out the opportunity costs involved in making it a forced
requirement for an amateur ticket.

Phil Karn, KA9Q

From -2551336987357308431
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,4f0af5f5c8511663,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-09 17:38:15 PST
Message-ID: <bnews.utzoo.2681>
Newsgroups: net.ham-radio
Path: utzoo!henry
X-Path: utzoo!henry
From: utzoo!henry
Date: Thu Dec 9 20:38:13 1982
Subject: codeless licences
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 9 20:38:13 1982
Received: Thu Dec 9 20:38:13 1982

It is very interesting listening to the opponents of the codeless
licences flame. Particularly since two of the major arguments seem
to be:

    1. A non-trivial code requirement helps keep out the turkeys
    like the ones on CB...

    2. It's not that hard to learn the code, why bother with the
    codeless licences...

Has nobody but me noticed that these statements cannot both be true?
I must admit that I think #2 is much more accurate, to judge by some
of the people who *do* get licences. My own view is that the code is
a psychological barrier to valuable people and fails to dependably
exclude turkeys. The idea of tossing out the code while toughening
up the technical side of the requirements strikes me as a fine idea,
and I think the second half of that idea is much the more important
one. Now *there* is a reasonable way to get rid of the turkeys.

The people who argue about the importance of code for emergency
communications are missing the point. If I am not interested in the
code, and learn it only for the exam, how likely is it that I will
stay in practice? And if I don't stay in practice, what are the odds
that I would be able to copy code effectively in emergency conditions?
Maybe ten or twenty years after the licence exam? The people who can
use code effectively are the ones who stay in practice, and would most
probably do so whether it was required for the licence or not. The way
to get effective emergency communications is to put all the smarts
(like error correction and conversion from signals to readable symbols)
into the hardware, and then make that hardware useful and *cheap* so there
will be lots of it around. We'd be better off with a bit less code and a
bit more technical progress, not the other way 'round.

From -6646593576670343133
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3d3ef5b1e3f03ec2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-10 01:49:08 PST

Message-ID: <bnews.inuxc.545>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Fri Dec 10 04:49:06 1982
Subject: ARRL 10 METER CONTEST
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 9 08:11:42 1982
Received: Fri Dec 10 04:49:06 1982

ARRL 10 METER CONTEST

When: 0000Z Saturday, Dec. 11 until 2400Z Sunday, Dec. 12.

Where: 28 MHz, phone and cw (below 28.5 MHz)

Exchange: Signal report and state or province. DX stations transmit
signal report and serial number, starting with 001. Maritime
or aeronautical mobile stations send signal report and ITU
region (1,2, or 3). Novice and Technician stations sign /N
or /T. Novice and technician licensees count twice as much
for scoring as other stations.

From 522279020898960593
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3e6a6b6912af2419,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-10 02:19:04 PST
Message-ID: <bnews.alice.1282>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!danny
X-Path: utzoo!decvax!harpo!npoiv!alice!danny
From: alice!danny
Date: Fri Dec 10 05:19:02 1982
Subject: another opinion on no-code
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 9 10:58:12 1982
Received: Fri Dec 10 05:19:02 1982

While much has already been said on the net about code-free licenses, it seems to me there have been some spurious arguments made against the code-free license proposal that have not been adequately challenged. (For what it's worth, I've been ham since age 11, an Extra for the past 20 years, love CW, and would fight hard against any proposal I thought might lead to the deterioration of ham radio.)

1. There have been a lot of hams arguing for retaining the code requirement by pointing out that anything worth having is worth working for, that those willing to make the effort to learn the code will make better hams, etc. There is a basic point being

missed here: the reason a code-free license is being suggested is not so that prospective hams won't have to work so hard, but because of the feeling that the code requirement is arbitrary and unncecessary in today's world (I'm not sure I agree that it is unnecessary, but that is the CLAIM). What the the no-coders are (or should be) saying is let potential hams put themselves out in learning something USEFUL, like modern, relevant, theory. An analogy: suppose, because of the slowness with which regulations change, it was still required that hams know how to construct and adjust spark transmitters. One could use the same argument we keep hearing: "it only takes a few weeks to learn enough about spark transmitters to pass the test; we all suffered through it; new hams should be willing to make the same effort." Obviously the real question is whether knowledge of Morse code is one of the more relevant skills to communications in the 1980's, not whether new hams should be made to "suffer" in exactly the same way we did.

2. The argument is often made that without a code requirement, the ham bands will degenerate into the idiocy heard on CB. There is an interesting phenomenon that has to be taken into account, however. The region between the top of the citizens' band (27.4 MHz) and the bottom of 10 meters is inhabited by the so-called HFer's. These people are unlicensed but bought ham rigs that are operable on SSB below 28.0 MHz. The interesting thing is that in this frequency range you hear none of the sub-human screaming so typical of CB. In fact it is indistinguishable from a ham band, except for the call letters. While I certainly don't condone people squatting on a chunk of spectrum assigned to other services, the "HF" band demonstrates that there is reason to hope that, where the proper example is set, no-code doesn't imply CB.

3. The only arguments I find somewhat persuasive for retaining the code requirement for all licenses are that a CW transmitter is trivial to build from junkbox parts (and therefore instantly constructable after a major disaster) and that CW is an outstanding weak signal mode and it is in the public interest to have a corps of operators who are proficient in it. The flaw in this argument is that even at present, with code mandatory, a large percentage of hams are "functionally illiterate" when it comes to CW. (And I'm not referring only to Technicians.) Of how much use in an emergency is someone who cannot even recognize his own call at 5 wpm? (Furthermore, a large percentage of currently-licensed hams could not even construct a keyed crystal oscillator without step-by-step instructions and a parts kit.) The point is: at present there are two types of ham, those who like CW and know how to use it, and those who somehow got their license but essentially no longer have any useful skill in Morse code; if a code-free license is offered, precisely the same situation will exist - those who are interested in CW will get the HF licenses and maintain their skill, while the same large percentage of hams will be functionally code-less. If the no-code-free-license people carried their argument about CW and

public service to its logical conclusion, they would have to insist that all hams demonstrate, every couple of years, the ability to use CW at a reasonable speed. Anything less is little different from having a code-free VHF license.

Dan Kahn, K1DK

From 8172361645336391631
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1722d445d7deab5a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-10 04:22:37 PST
Message-ID: <bnews.cdi.121>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:teklabs!ogcvax!metheus!cdi!caf
X-Path: utzoo!decvax!ucbvax!CAD:teklabs!ogcvax!metheus!cdi!caf
From: cdi!caf
Date: Fri Dec 10 07:22:32 1982
Subject: Minimuf 3.5 From Dec QST
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 8 20:49:34 1982
Received: Fri Dec 10 07:22:32 1982

This is a C version of the MUF predicting program appearing in DEC 82 QST. It should run on v7 or usg or compatible systems. Testing so far has consisted of comparing output with the example in the article. with a -f flag, minimuf accepts 1 or more 10mHz readings from WWV which are smoothed and converted to sunspot number according to the graph in the article. Enjoy.

Chuck Forsberg, WA7KGX
Chief Engr, Computer Development Inc.
6700 S. W. 105th, Beaverton OR 97005 (503) 646-1599
...!teklabs!ogcvax!metheus!cdi!caf

```
/*% cc -O % -lm -o minimuf
*/
/*
 * Minimuf 3.5 From Dec 1982 QST pp. 36-38.
 *  By Dr Paul Levine, J N Martin, D B Sailors, Robert B Rose
 *   Single F layer prediction Useful for 2 to 50 mHz, 250 to 6000 miles
 *   rms error reported to be +- 3.8 mHz.
 *  C version translated by Chuck Forsberg WA7KGX
 */
#include <stdio.h>
#include <math.h>

double sign();

#define PI 3.141593
```

```
double Txlat, Txlon;        /* transmitter latitude, longitude */
double Rxlat, Rxlon;        /* receiver latitude, longitude */
double Month;      /* month, 1 to 12 */
double Day;        /* day, 1 to 31 */
double Hr;         /* time in UTC 0 to 24 */
double Muf;        /* output MUF in mHz */
double Isn;        /* sunspot number */
double Flux;       /* 10mHz flux */

double r0,p1,r1,p0,k7,g1,k6,k5;
double k1,kstep,kend,a,b,p,q,c,w0,d,l0,k9,c0,t9,g7;
double t1,y2,k8,g0,m9;
double t,t4,g9,g8,u,g2,t6,u1;

char Months[] = "   JanFebMarAprMayJunJulAugSepOctNovDec";
int m[] = {0,31,28,31,30,31,30,31,31,30,31,30,31};

main(argc,argv)
char *argv[];
{
    int ret;
    static getflux=0;

    if (--argc > 0)
     if (strcmp(*++argv, "-f")==0)
         ++getflux;
    r0 = PI/180.;
    p1 = 2.*PI;
    r1 = 180./PI;
    p0 = PI/2.;

    do {
     fprintf(stderr, "Transmitter Latitude Longtitude\n");
     ret=scanf("%lf%lf", &Txlat, &Txlon);
     if (ret==EOF)
         exit(0);
    }
     while (ret!=2 || Txlat>90. || Txlat<-90. || Txlon>360. || Txlon<-360.);

    do {
     fprintf(stderr, "Receiver Latutide Longtitude\n");
     ret=scanf("%lf%lf", &Rxlat, &Rxlon);
     if (ret==EOF)
         exit(0);
    }
     while (ret!=2 || Rxlat>90. || Rxlat<-90. || Rxlon>360. || Rxlon<-360.);

    do {
     fprintf(stderr, "Day Month : ");
     ret = scanf("%lf%lf", &Day, &Month);
     if (ret==EOF)
         exit(0);
    }
```

```
     while (ret != 2 || Month<1 || Month>12 || Day<1 || Day>m[(int)Month]);

    if (!getflux) {
     do {
         fprintf(stderr, "Sunspot number : ");
         ret=scanf("%lf", &Isn);
         if (ret==EOF)
          exit(0);
     }
         while (ret != 1 || Isn <= 0);
    }
    else
    {
     fprintf(stderr,
       "Daily Flux reading[s], oldest first, terminate with 0\n");
     ret=scanf("%lf", &Flux);
     for (;;) {
         ret=scanf("%lf", &Isn);
         if (ret != 1 || Isn==0)
          break;
         Flux = 0.8*Flux + 0.2*Isn;
     }
     if (Flux>130.)
         Isn = (Flux-65.)*1.34;
     else
         Isn = Flux - 35.;
    }

    printf("\n\nMinimuf 3.5 Maximum Usable Frequency Prediction\n\n");
    printf("Date %3.3s %2d\n", &Months[3*(int)Month], (int) Day);
    printf("Transmitter Latitide %lg Longtitude %lg\n", Txlat, Txlon);
    printf("Receiver    Latitide %lg Longtitude %lg\n", Rxlat, Rxlon);
    printf("Sunspot Number %lg\n\n", Isn);
    printf("  Hour MUF(mHz)\n\n");

    Txlat *= r0; Txlon *= r0; Rxlat *= r0; Rxlon *= r0;

    for (Hr =0; Hr <= 23; Hr += 1.) {
     minimuf();
     printf(" %02d %4.1lf\n", (int)Hr, Muf);
    }
    exit(0);
}

minimuf()
{
    k7 = sin(Txlat)*sin(Rxlat)+cos(Txlat)*cos(Rxlat)*cos(Rxlon-Txlon);
    if (k7 > 1.)
     k7 = 1.;
    else if (k7 < -1.)
     k7 = -1.;
    g1 = acos(k7);
    k6 = 1.59 * g1;
```

```
if (k6 < 1.)
 k6 = 1.;
k5 = 1./k6;
Muf = 100.;

kstep = .9999-1./k6;
kend = 1.-1./(2.*k6);
for (k1=1./(2.*k6); kstep>0? k1 <= kend : k1 >= kend; k1 += kstep) {
 if (k5 != 1.0)
     k5 = 0.5;
 p = sin(Rxlat);
 q = cos(Rxlat);
 a = (sin(Txlat)- p * cos(g1)) / (q * sin(g1));
 b = g1*k1;
 c = p * cos(b)+q*sin(b)*a;
 d = (cos(b) - c*p) / (q*sqrt(1-(c*c)));
 if (d > 1.)
     d = 1.;
 else if (d < -1.)
     d = -1.;
 d = acos(d);
 w0 = Rxlon+sign(sin(Txlon-Rxlon))*d;
 if (w0 < 0)
     w0 += p1;
 if ( w0 > p1)
     w0 -= p1;
 if ( c < -1.)
     c = -1.;
 else if (c > 1.)
     c = 1.;
 l0 = p0-acos(c);
 t1 = 0.0172*(10.+(Month-1.)*30.4+Day);
 y2 = 0.409*cos(t1);
 k8 = 3.82 * w0+12.+0.13*(sin(t1)+1.2*sin(2.*t1));
 k8 = k8-12.*(1.+sign(k8-24.))*sign(fabs(k8-24.));
 if (cos(l0+y2) <= -0.26) {
     k9 = g0 = 0;
     m9 = 2.5 * g1 * k5;
     if (m9 > p0)
      m9 = p0;
     m9 = sin(m9);
     m9 = 1. + 2.5 * m9 * sqrt(m9);
 }
 else
 {
     k9 = (-0.26+sin(y2)*sin(l0))/(cos(y2)*cos(l0)+0.001);
     k9 = 12. - atan(k9/sqrt(fabs(1.-k9*k9)))*7.639437;
     t = k8-k9/2.+Rxlat*(1.-sign(k8-k9/2.))*sign(fabs(k8-k9/2.));
     t4 = k8+k9/2.-12.*(1.+sign(k8+k9/2.-24.))*sign(fabs(k8-k9/2.-24.));
     c0 = fabs(cos(l0+y2));
     t9 = 9.7*pow(c0,9.6);
     if (t9 < 0.1)
      t9 = 0.1;
```

```
          m9 = 2.5*g1*k5;
          if (m9 > p0)
           m9 = p0;
          m9 = sin(m9);
          m9 = 1. + 2.5*m9*sqrt(m9);
          if ((t4 < t && (Hr-t4)*(t-Hr) > 0)
            || (t4 >= t && (Hr-t)*(t4-Hr) <= 0))
          {
           t6 = Hr+12.*(1.+sign(t4-Hr))*sign(fabs(t4-Hr));
           g8 = PI*t9/k9;
           u = (t4-t6)/2.;
           u1 = -k9/t9;
           g0 = c0*(g8*(exp(u1)+1.))*exp(u)/(1.+g8*g8);
          }
          else
          {
           t6 = Hr+12.*(1.+sign(t-Hr))*sign(fabs(t-Hr));
           g9 = PI * (t6-t)/k9;
           g8 = PI * t9/k9;
           u = (t-t6)/t9;
           g0 = c0*(sin(g9)+g8*(exp(u)-cos(g9)))/(1.+g8*g8);
           g7=c0*(g8*(exp(-k9/t9)+1.))*exp((k9-24.)/2.)/(1.+g8*g8);
           if (g0 < g7)
               g0 = g7;
          }
      }

      g2 =(1.+Isn/250.)*m9*sqrt(6.+58.*sqrt(g0));
      g2 = g2*(1.-0.1*exp((k9-24.)/3.));
      g2 = g2*(1.+(1.-sign(Txlat)*sign(Rxlat))*0.1);
      g2 = g2*(1.-0.1*(1.+sign(fabs(sin(l0))-cos(l0))));
      if (Muf > g2)
          Muf = g2;
     }
     return;
}

double
sign(g)
double(g);
{
     if (g > 0.)
      return 1.;
     if (g < 0.)
      return -1.;
     return 0.0;
}
```


```
From 398385279024827732
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5e621890eb94040a,start
X-Google-Attributes: gid151e61,public
```

X-Google-ArrivalTime: 1982-12-10 17:12:04 PST
Message-ID: <bnews.eagle.669>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!hplabs!hao!seismo!harpo!npoiv!alice!mhtsa!eagle!karn@sri-unix
X-Path: utzoo!decvax!cca!hplabs!hao!seismo!harpo!npoiv!alice!mhtsa!eagle!karn@sri-unix
From: karn@sri-unix
Date: Fri Dec 10 20:12:03 1982
Subject: Ishkra 3 transponder on
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 8 01:24:45 1982
Received: Fri Dec 10 20:12:03 1982

Ishkra 3, the Russian amateur radio satellite launched last month from
Salyut 7, has been heard with its transponder on. Frequencies:

uplink: 21.230-21.270 mhz
downlink: 29.580 - 29.620 mhz
beacon: 29.583 mhz

The telemetry identifies as RK03 in cw. If the "R" channel value is
other than 00, then the transponder is on.

Phil Karn, KA9Q

From -4127377090360627638
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3a62bad90551363,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-10 17:41:04 PST
Message-ID: <bnews.houxp.168>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Fri Dec 10 20:41:03 1982
Subject: 2 meter rig for sale
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 9 14:06:26 1982
Received: Fri Dec 10 20:41:03 1982

For Sale: YAESU FT227-RA 2 meter synthesized
FM transceiver in perfect condition;
great for mobile or base. Complete
with mobile bracket, manual, and free
shipping in U.S.A. $205 firm.

Paul Newland, ad7i
POB 205
Holmdel, NJ 07733
201-949-3731

From -6334903064950997896
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,dd365b8177256725,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-10 17:52:38 PST
Message-ID: <bnews.eagle.674>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Fri Dec 10 20:52:37 1982
Subject: To N2XS: another response
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 9 14:51:01 1982
Received: Fri Dec 10 20:52:37 1982

Alright, I can see how this discussion has moved to a new (lower?)
dimension. Two can play this game.

Setting ASRM [asynchronous sarcastic response mode]...

Scene: Aboard the Starship CodeTrek, in the year 2116, patrolling the
outer reaches of the solar system. In an attack by the evil Vogons
on the CodeTrek, the chief communications officer has been killed.

Helmsman: Captain! The entire Vogon battle fleet is just passing the orbit
of Pluto. At their velocity, they will reach Earth in only 5 hours.

Navigator: I have their orbital data plotted, sir.

Captain: We must get this 5 megabytes of data to Earth to warn them in time.
Get that ham operator up here to run radio communications, and get this
information off to earth.

Hot shot CW operator (N2XS's great-great-great grandson): OK, captain, I
can do this with just my 2N2222 and 9-volt battery. However, at 25
words/minute, it will take 555.555 hours to get all the data across.

Captain: 555.555 hours!?! Why don't you use ASCII?

Operator: Ass-key? I use only my hand on the key, thank you.

Captain: No, NO! ASCII is a computer code!

Operator: Oh, those newfangled machines. *I* don't need them. Why, I can copy CW blindfolded in my sleep. Did I ever tell you about the time...

Captain (exasperated): Can't you start sending the data now?

Operator: Oh, sure, cap'n, but I don't think it'll do any good. There are only two ham radio operators left on the earth these days, one in Antarctica and the other on a DX-pedition in Nepal. Since they never removed the code requirement, we were able to keep all the kids, lids and space cadets off the air and keep the airwaves open for us REAL operators. Of course, there aren't too many of us left these days...

Captain: Can't you run the packet-switched hyperspace net?

Operator: What's that? Captain, I can even send at 30 wpm if I tune up my Vibroplex. I don't need any of that digital stuff. Look, it almost ruined ham radio when it came out 150 years ago. Its still too new to be relied on for the safety of the Solar System, I say.

Five hours later, the Vogons build their hyperspace bypass through where the planet Earth used to be.

Phil Karn, KA9Q

From 2922680748262542926
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bee4b16390768b7d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-11 01:07:58 PST
Message-ID: <bnews.inuxc.548>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Dec 11 04:07:53 1982
Subject: ARRL DX BULLETIN 12/10/82 de k2ph
X-Google-Info: Converted from the original B-News header
Posted: Fri Dec 10 13:34:45 1982
Received: Sat Dec 11 04:07:53 1982

> _C_h_i_n_a_.
>
> BY8AA has been very active at 0100Z on 21050 kHz. He has a real raw buzz which makes his zero beat real hard to locate.
>
> _L_e_b_a_n_o_n_.
>
> OD5LX will be on 28744 at 1130Z Saturday and Sunday for cw QSOs. QSL via SM00DGZ.
>
> _S_v_a_l_b_a_r_d_.

JW5VAA and JW5IG have also been found on 28744 around 1200Z.

_F_a_l_k_l_a_n_d__I_s_l_a_n_d_s_.

VP8APK, VP8LP, and others from the Falklands as well as VP8AOE from South Orkney have been very often on the low end of 20 meter ssb in the evenings.

_T_u_n_i_s_i_a_.

3V8AA shows in the company of 9Y4RD/SU at 1400 to 1500Z on 28744 for cw and ssb QSOs.

_T_r_i_n_d_a_d_e__I_s_l_a_n_d_s_.

Look for the rumored PY00 operation from Trindade December 10 to 14.

_I_r_a_q_.

Europeans can look for YI1BGD on 21155 at 1000Z and for North America check 28505 between 1200 and 1300Z.

_1_6_0__M_e_t_e_r__B_a_n_d_.

ZS4PB has been on 1841 ssb at 0300 to 0330Z. HZ1AB continues Wednesday and Thursday evenings at 0230Z.

_N_e_p_a_l_.

Four operators including a YL will be on from 9N1 between December 15 and January 1, all bands, cw and ssb. QSL via W1GAY.

_S_t_.__K_i_t_t_s_.

VP2KBU will be active until December 13. QSL via KC00FW.

_M_a_r_i_o_n__I_s_l_a_n_d_.

Keep a watch for operation from the new crew at ZS2MI due at any time.

_H_e_a_r_d__I_s_l_a_n_d_.

With the receipt of the official government approval, the Heard Island DX Association plans are now in their final stages. The 18-member expedition will depart from Hobart on January 2 for the fourteen day voyage to Heard Island. The expedition plans to stay for a minimum of 14 days and hopes to be on the air around January 17 or 18. VK00SJ/MM will be operated enroute to the island.

_3_0__M_e_t_e_r_s_.

All U.S. amateurs are reminded to avoid the 10109 to 10115 kHz segment of the new band. Also, contacts on the 10 MHz band will not be creditable toward ARRL awards.

From -8820064596427321231
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3fd77616714637,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-11 05:41:33 PST
Message-ID: <bnews.houxp.167>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!zeppo!whuxk!houxm!houxa!houxi!houxp!ad7i
X-Path: utzoo!decvax!duke!harpo!zeppo!whuxk!houxm!houxa!houxi!houxp!ad7i
From: houxp!ad7i
Date: Sat Dec 11 08:41:31 1982
Subject: letter to QEX about HF STAs (long)
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 8 11:32:20 1982
Received: Sat Dec 11 08:41:31 1982

POB 205
Holmdel, N.J. 07733
201-949-3731 (W)
201-741-1151 (H)
November 23, 1982

Mr. Paul Rinaldo, W4RI
Editor,
_Q_E_X: The ARRL
Experimenters' Exchange
1524 Springvale Avenue
McLean, V.A. 22101

Dear Paul:

In the spring of this year at the packet radio meeting held in Murray Hill, you and I discussed some of the regulatory problems facing the development of a high frequency data network. One key problem was the legality of running a H.F. packet station in unattended mode, where unattended implies operation of a radio without a control operator present

during transmissions. Without releasing amateurs from the requirement that all H.F. transmissions must be supervised by an operator, automated H.F. networks are impossible to achieve.

On July 7, 1982, I made a request of the F.C.C. to allow operation of my station, using the error correcting teleprinter code know as AMTOR, without a control operator being present. I was delighted on November 19, 1982, with a positive response from the F.C.C. Although not everything I requested was allowed, I was pleased to find that I got more than I thought I would. I can now run unattended on H.F. with AMTOR.

I encourage everyone involved with the establishment of automated data networks using H.F. to seek waivers of the rules, as required, to permit the rapid and continual growth of this technology. Amateur Radio is progressing!

73,

Paul Newland, ad7i

Copy (with att.) to
Vic Clark, W4KFC
Phil Karn, KA9Q
Bill Meyn, K4PA
Dave Sumner, K1ZZ
Curtis Williams, W5DTR
netnews

[i haven't included the attachment (the FCC STA) but if someone would like to see it or the original request that I prepared for the commisssion, drop me a note and i'll forward you a copy -- pbn]

From 8445506004686865889
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,77a85b65ef4e4b6c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-11 07:48:57 PST
Message-ID: <bnews.sun.162>
Newsgroups: net.ham-radio
Path: utzoo!decvax!decwrl!sun!gnu

X-Path: utzoo!decvax!decwrl!sun!gnu
From: sun!gnu
Date: Sat Dec 11 10:48:56 1982
Subject: Re: Packet protocol proposal (long)
References: <bnews.tektronix.842>
X-Google-Info: Converted from the original B-News header
Posted: Sat Dec 11 02:27:34 1982
Received: Sat Dec 11 10:48:56 1982

Sigh. Yet another ad-hoc protocol invented "because none of the other protocols were good enough".

I did this once myself (with PCNet) and came out of it with the belief that in most cases, it doesn't really matter what the protocol is. It only matters that there IS a protocol, that is, an agreement among all the potential users. The larger the group, the better, since the objective is easy interchange.

Now that the major packet groups in SF, Tucson, St. Louis, New Jersey, Washington, Vancouver, and elsewhere seem to finally be agreeing on the need for protocol standardization (probably due the the prospect of a satellite mailbox system within a small number of years), out comes yet another protocol.

Look: somehow with the horrendous UUCP protocol we've managed to patch together a network of hundreds of computers and thousands of people. Surely with that as a daily example you can live with the problems (and yes, there are plenty) with the agreed-upon standard link-level amateur packet protocol (which itself follows several ISO/ANSI standards, making it likely that cheap available hardware, software, and gatewaying will be available).

Please reconsider? Yes, it's definitely fun to play around designing and implementing a protocol for a year or two, but if at the end of it you can only talk to 4 other people, why not consider doing something with better odds?

     John Gilmore, Sun Microsystems

PS: Yes, PCNet works, sort of, and yes, I can talk to about 4 people with it. And yes, it took a year.
PPS: There are cheap ways to calculate CRC in software, like ~10 instructions per byte as I recall. It helps a lot to know the math, which I don't.

From 3573112817789161258
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a9427ddefcd7ba2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-12 05:22:16 PST
Message-ID: <bnews.sbcs.162>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!peri!sbcs!rick
X-Path: utzoo!decvax!harpo!floyd!peri!sbcs!rick

From: sbcs!rick
Date: Sun Dec 12 08:22:15 1982
Subject: Code Free Sci-Fi
X-Google-Info: Converted from the original B-News header
Posted: Fri Dec 10 23:11:56 1982
Received: Sun Dec 12 08:22:15 1982

I must admit that N2XS has one of the more unique arguments against relaxing the code requirement, however, I suggest a more likely scenario might be this one:

.....

Rick Snafu thought to himself "Cranfols! Why do I always get the Planet MC-4-EVER assignment? Why, it was only a few sectons ago that they learned how to use Electromagnetic waves as a communications medium. The last time they were still using the simple amplitude keying method common to most developing civilizations in their early attempts at communications."

"Well, I may as well make the best of it, perhaps they have at least discovered the tefsom" thought Rick as his ship assumed a standard scanning orbit above the Planet. He decided to let the ship computer run the scanning mission, so that he could grow some additional memory for his home computer system.

Sometime later, he Computer signaled that it had completed its scan of the the Planet, and that it had condensed the information into a format compatible with the brain interface. Rick signaled the Computer to begin the transfer. "Impressive", he thought,"they have advanced themselves well in 3.579 sectons. Stop - what is this? (remembering his earlier mission) They are STILL using the amplitude keying method? Surely they have developed their understanding of communications theory to point where they realize that amplitude keying is a less efficient form of modulation."

"Silly MC-4-EVER'ers", he thought to the ships computer, "They advance their technology as quickly as most, yet their society lags behind the state of the art by many wenips. Their system of government is partly to blame, however, the main problem is that much of the population embraces the old ways of life. This group called radio amateurs is representative of the problem. In spite of efforts on the part of their government, they still refuse to begin phasing out the amplitude keying method. They foolishly believe that in times of disaster they could fabricate communications equipment with raging storms or exploding bombs all around them. Worse, they believe that CW equipment is somehow more reliable, because of its primitive modulation technique, yet most of their new CW equipment uses the very SAME complex technology they claim is unreliable."

"Take us home, Computer, Planet MC-4-EVER's society is still too backward to justify contact with our own. Before we go, let us hint at our existence, in case there are some forward thinking individuals on the planet. Send a packet describing the position of our planet. Use their AX.25 coding." The computer sent the packet, then warped the ship out of orbit. Below, on Earth, "full break-in

keying CW" operator paused for a second, mistaking the packet for
the other chap trying to break between characters. "Blasted atmospherics",
he grunted, and continued his transmission with "_... ._ _..   __._ ._. _.
.___ ___ .   __ ___ ._. ... .   _._. ___ _.. .   .._. ___ ._. . ..._ . ._."

.....

wb2cfv, Rick

From -3800784202791158613
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5cd99e3f6647af0d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-12 07:25:15 PST
Message-ID: <bnews.eagle.678>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
X-Path: utzoo!decvax!harpo!npoiv!alice!mhtsa!eagle!karn
From: eagle!karn
Date: Sun Dec 12 10:25:12 1982
Subject: AX.25 & Oregon Packet Radio
X-Google-Info: Converted from the original B-News header
Posted: Sat Dec 11 15:39:29 1982
Received: Sun Dec 12 10:25:12 1982

Regarding the proposed packet radio standard for Oregon:

The Amsat/Amrad AX.25 standard, since it uses HDLC at the link layer,
allows the use of the HDLC link controller chips such as the Intel 8273
and WD 1933. Those chips do bit stuffing for 8-bit transparency,
CRC-16 calculation and checking, and 8-bit address recognition.
Since these chips do so much of the work, we didn't feel it worthwhile
to sacrifice using them just so we could have error correcting codes;
over short propagation delays, its just easier to retransmit a bad packet
than to try to reconstruct it from the error codes.

AX.25 allows for specified routing of a packet, by having a series of
fixed-length callsign fields. The last callsign in the string has the
lsb set (this is compatible with X.25 address extension). Routing from
one station to another is up to the choice of the relaying station;
it could indeed fire off duplicate copies over two links if desired if
the links were considered unreliable.

Now that we have a protocol with has been agreed to by a larger
percentage of the amateur packet radio community than ever before,
the area which has the greatest potential for improvement and
standardization is modulation techniques. Clearly, using Bell 202 (FSK)
modems on FM channels is inefficient. In fact, the link margins
available on the dedicated Phase 3B packet channel won't support it
at any reasonable bit rate.

We are looking at two promising methods, minimum shift keying (MSK)

and binary DPSK. The latter will be used for the Phase 3B engineering telemetry channel. I'd like to get in contact with anyone experimenting with such modulation techniques to share experiences.

Phil Karn, KA9Q

From -6659502893182650953
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,77a85b65ef4e4b6c
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-12 09:12:20 PST
Message-ID: <bnews.tektronix.842>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!CAD:teklabs!tektronix!davids
X-Path: utzoo!decvax!ucbvax!CAD:teklabs!tektronix!davids
From: tektronix!davids
Date: Sun Dec 12 12:12:16 1982
Subject: Packet protocol proposal (long)
X-Google-Info: Converted from the original B-News header
Posted: Thu Dec 9 19:16:49 1982
Received: Sun Dec 12 12:12:16 1982

This is a proposal for a small network protocol suitable for ham radio use. There is a small group of us here in northwest Oregon working on setting up a simplex VHF network around this specification. Any constructive criticism or comments will be accepted. (by mail..)
Dave Schmidt WB7RDI

PROPOSED PACKET FORMAT
(Preliminary information)
constructive comments or suggestions welcome

David Schmidt WB7RDI

ABSTRACT

Packet radio (and networking in general) has numerous uses, especially in the areas of personal

computer file transfer, electronic mail, and general communications and control. Most of the common protocols are not suited to Amateur Radio, and have limited applicability in a highly volatile network. This packet format is intended to implement ISO level 1 protocol, providing regional networking with compatibility between many, possibily incompatible, local networks.

Reply address:

U.S. mail: 401 SE Maple
Scappoose, OR 97056.

or

Tektronix DS 19-128
PO box 500,
Beaverton, OR 97077

uucp: tektronix!davids

Format Description (format info: see appendix B)

%03x	packet length
%01c	packet data type: B=binary, T=text, C=control
%03x	sequence number this packet
%03x	last sequence number acknowledged from next dest node
%s	variable length to/from list
%s	variable length data
%04x	packet check word (see appendix C)

1. All values are 7 bit ascii, except in the data area, which are by default 7 bit arbitrary binary.

2. Most significant bit of each 8-bit byte is an odd orchard bit. (see appendix A)

TO/FROM list format:

The to list is just the sequential list of nodes the message is to follow in it's journey. The node names are separated by '!' characters,* uucp style. Spaces and control characters are not allowed, since they tend to make handling I/O on some machines a problem. Node names ought to be kept to 10 characterss or less but no formal limit is needed. The list also contains a from section to allow the receiving node reply to the message. This list is built up as the packet travels, with each station pulling its node name from the to list and putting it, along with its delimiting character, onto the beginning of the from list. The to and from lists are separated by a '<' character. A period delimits the last entry of the from list.

EXAMPLE:

To send a msg from 'abc' to 'def' by way of 'efg' and 'ghi':

ghi!efg!def<abc.

This string is interpreted by node 'ghi' and changed to:

efg!def<ghi!abc.

and by efg to:

def<efg!ghi!abc.

and def could respond to the message with:

efg!ghi!abc<def.

NOTES:

1. No node name may contain '<' characters!

2. The to/from list length stays constant. (feature)

---

* The delimiter character tells the node how to relay or accept the message. Initially, the only delimiter character will be the exclaimation point, but other delimiters could be used. (see 'Future Features' section)

Data Type Compression:

Text type (type = 'T')

No compression, since ASCII is a 7 bit code

Control type (type = 'C')

No compression, use ASCII upper case. This is same as text type except the data goes to the protocol handling software instead of the operator. It could be used to get an acknowledge on the last packet of a message, or to enquire about the status of a node, as an example.

Binary type (type = 'B')

To allow shipping 8 bit data, encode 7 bytes of input data into 8 7-bit values, justified in the lower 7 bits of the value. The first 2 bytes of the data are the logical record length in bytes, and the logical records are zero filled.

EXAMPLE:

To send the ten bytes 1,2,3,4,5,6,7,8,FF,99 the records are:

```
logical   000A0102030405060708FF99
physical  00024010100C0805
          0301310F7C640000
```

The physical record is treated as a bit stream that is then split into 7 bit groups that are moved into the least significant 7 bits of 8 bit bytes in the data portion of the packet. This way, the orchard bit is still available for error correction.

Future Features
(not in preliminary release, but to be introduced)

The following features may become more desirable as network traffic increases to more congested levels.

Fork:

This feature will allow one packet to travel (possibly through several relay stations) and split at some point into packets that continue along divergent paths. The reason

for this is to allow a station to send a packet across the network to another area and distribute it locally. In the initial implementation, it is necessary to send individual packets to each destination station.

Keep copy:

This feature allows a station to be a destination as well as a relay node. It may be easier to include this with the fork function, but for now it is proposed as a separate feature.

Gateway:

This will become important with time, as more networks become available. A gateway is simply a node that is 'bilingual'-- it can understand and generate packets in two or more different protocols. A gateway will have to look at the rest of the to list and decide what network it is for. This implies that the to/from list should have the ability to have arbitrary strings contained in it. For example, if it was desired to send a message to the gateway 'xxx' into a foreign network, it might be necessary to encode the foreign network destination address in the to/from list as follows:

```
abc!xxx!$somestring$<here
```

The 'somestring' portion would mean something to the gateway, but not necessarily to other stations on the network. This implies that the initial release of the software should be tolerant of any substrings prior to the '<' character unless it is to the left of the first '!'. This is not a serious problem, and

would require little work now, while possibly saving lots of work later. Note that this

precludes the use of '<' in the foreign network address string.

Syntax for future features

FORK: (tolist{,tolist})

To send a packet to a, b, and c(via d) from e via f:

f!(a,b,d!c)<e

KEEP: use delimiter & instead of !

To send a packet to a, b and c (in that order) from d:

a&b&c<d

GATEWAY: no special syntax

To send a packet to someone on usenet from the ham network:

gateway!usenet address string<wherever

The gateway must be able to identify which network the message is for by some means (possibly the next node name) and process the rest of the to list accordingly.

Implementation Hints

The protocol defined here does not define the type of transmission (I.E. synchronous or asynchronous), the timing of bits or transmitter keying, any upper level layers of the protocol (except where it is necessary for upper levels to pass data to this layer, as in passing the address list to this layer), hardware implementation, etc. This document is a suggestion for a data format which will allow the transfer of data between local area networks (LANs) with utilize different formats. The other use for this document is as a place to start.

Recently AMSAT came out with a specification for a network protocol which is optimized for satellite transmission. I feel their protocol is unsuitable for use as an emergency network, or for any unstable one (as ham networks seem to be *). The AMSAT network is really just the bottom layer (layer 0) of an implementation which is best suitable for situations where a full duplex repeater is present. It is entirely possible for the format described in this document to be implemented in a half duplex environment (which is what I intend to do) utilizing much of the HDLC format which AMSAT has proposed in their bottom

layer specification. I am not rejecting AMSAT's proposal, but suggesting that it doesn't handle the problems of LANs.

The system I am implementing consists of a datagram service, with either automatic or manual routing (done at a higher level) done at the point of origin. This allows relay stations to pass on the datagram with little processing, while still allowing features typically found on large networks.

---

* By unstable I mean that the existence (as far as other nodes of the network is concerned) of a node (station) is dependent on factors such as the antenna falling down, kids unplugging the rig, etc.

This is a description of the particular layer 0 software and protocol to be implemented for my use (and by some of the hams I work with). It is included here as an example, not as part of the level 1 protocol referred to in the rest of this document.

The software used in the network will be written primarily in machine independent, high level code (C language), with the machine dependent sections clearly separated from the rest. In this system, the bottom level will get a buffer of transmit data (with the header already

in place) and will place it in an SDLC format frame. The SDLC address field will be set to the 'global' address (address 255) for any transmission that is to be directed to a node that has an unknown address, such as when a relay is desired, but otherwise is undefined. The control field is left zeros for now, but later could carry additional information.** The information fields of the frame are filled with the data from the layer 1 buffer, and the final checksum is as per SDLC specification. This has been done to allow the Z80-SIO to perform much of the work. (Many other synchronous interface chips have the ability to do this, such as the Intel 8251, but the Z80-SIO contains hardware CRCC generation and the Z80 interrupt structure for our Z80 based systems)

At this time, the transmit routine will wait for a clear channel, then transmit the frame, preceded by a number of SDLC flag characters (number to be defined later, after some experimentation). As soon as the frame has been completely sent, a number of flag characters are sent followed by the deactivation of the transmitter. At this point, a timer will start. If the times times out before an acknowledgement is received, the frame will be queued to be sent again. Only after the frame has been sent a number of times will the attempt be aborted. If the transmit routine detects a carrier on the channel when either the transmitter is first

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** The address and control fields being stated this way force compatibility between SDLC and HDLC, so to the user, it is not important which is being used. NO ATTEMPT HAS BEEN MADE TO USE THE FULL SDLC/HDLC SPECIFICATION, just the basic frame format.

turned off, or when the frame is ready for transmission, the transmitter will delay for a time that is proportional to the frame length

times a locally generated random number plus some constant. This allows small frames a better chance of making it through the collisions than big frames. This is also a type of priority, making small packets more desirable to use than large packets. Small packets should serve to increase the rate of data flow, resulting in higher transfer efficiency for a particular message. It is assumed that ethics will keep people from always using a non-random number, which can result in two stations always trying to transmit at exactly the same time. This also indicates a need for a good random number generator (either hardware or software) at each station, with the number scrambled by something other than the network information, to which all stations have access.

The receive routine is always ready to receive data, depositing the data in a large buffer for processing when time allows. In the later versions, I intend to use a multi-tasking kernel in the networking software to allow the transmit routine to 'roll out' when it is waiting. This will make more time available for the receive routine to process incoming data. If the receive buffer overflows, the data that is the oldest is discarded, as a retransmission should occur to replace it.

We have been working with Manchester*** encoding modems using direct FSK of the VHF gear. This results in good signal to noise ratios for a given power due to the low bandwidth involved. It also makes it easier to 'roll your own' modem, since the FM gear has most of the 'modem' functions like limiters, discriminators, and carrier detection built in. (I have done most of the work on Icom 22-S transceivers, but work is taking place on a Motorola MICOR at this time.)

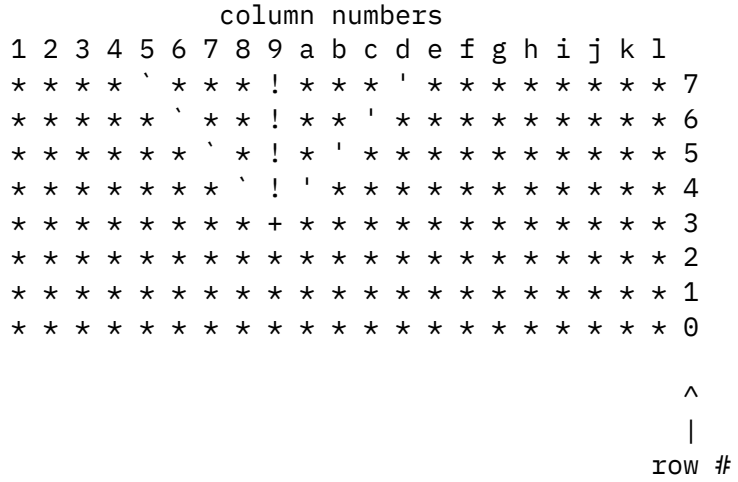
*** Manchester encoding is a method which allows data to be modulated on a carrier to achieve a 50% duty cycle over any bit period. It is simply 180 degree phase modulation of a square wave equal in frequency to the bit rate, and synchronized to the bit rate (don't worry, it fits into about 4-6 ICs). This allows the data to pass through AC coupled stages without as much distortion as would usually happen.

APPENDIX A: Orchard codes

Orchard Coding -- a method to correct and detect errors

The orchard code was covered very well in Electronics, May 5, 1981. A brief description is in order here, though.

Imagine an orchard (with each tree being in either a row or column) with a road running along one of the rows at the edge of the orchard. To identify any given tree, several methods could be used: the row and column of the tree, or some other geometrical relation. If the only way to identify the tree is by placing flags along the road, it becomes apparent that the tree in question can be identified by placing flags by the columns in which the tree is a member. Some agreement about the definition of columns is needed, of course. This is the theory used here; any bit can be singled out of an array of bits by flags at the column it is in, as well as by the other columns where it is visible at a 45 degree angle. (see below)



To point to the bit marked with a plus sign (col 9, row 3), it is only needed to mark columns 5, 9, and d. These are on the diagonals marked with quotes. By calculating a 'parity' * for each set of diagonals from a bit, it is easy to compare this parity later to see if anything has changed. It is also fairly easy to see that if columns 5, 9, and d are of the wrong parity, the bit marked with a plus is in error. I have found that it is possible to reconstruct data that has been badly damaged fairly well, but it is possible to reconstruct it wrong if there is more than one bit in error in a local area (the diagonals for two bits near each other intersect at several locations) which is why a second check for data integrity is used (see the checksum words at the end of the packet spec). Orchard codes on 7 bit data (8 bit bytes) cost 12.5% overhead for binary data, and are free for ASCII, as compared to 50% and higher for many error correcting codes. They also seem to be good in the bursty noise environment in which radio seems doomed to live. (Much like holograms, a lot of the buffer of data can be reconstructed from what is left, but also like holograms, the 'image' detail deteriorates as more of the buffer is destroyed.)

In the case of light channel usage and short frames, it is probably just as well to retransmit the frame, but when usage is high or you have an

error in a large frame, reconstruction can save valuable time.

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* It is rather arbitrary, but I have treated the parity calculation much the same as it is done in the usual usage of parity: odd parity = odd number of bits in a group, even parity = even number of bits in a group, including the parity bit in a group. When I say 'odd orchard', I mean 'there are an odd number of bits in each group of diagonals from an orchard bit'.

APPENDIX B: Format specification

The format for the data is specified to be compatible with standard 'C' printf format strings. For the benefit of people not familiar with printf, the following information is supplied.

- The percent sign is used to signal the start of a format specification. In the usage shown, it is not really necessary.

- The number following the percent sign (when present) specifies the number of

characters of information that should be output. Furthermore, if the number starts with a zero, the leading zeros should be printed.

- The character following the number specifies the type of data: 'c' = a single character, 'x' = a hexadecimal value, 'd' = a decimal value, 's' indicates a string of characters (the string does not contain anything except the characters, no termination characters or leading and trailing blanks are intended). The only variation from standard C definition is in the case for hexadecimal characters: capital letters are more portable.

  EXAMPLE:

  The string %03x%2c%s

  indicates a three character hex number with leading zeros followed by two characters, followed by an arbitrary length string.

APPENDIX C: Some thoughts on the checksum field

The checksum field would ideally be something along the lines of a CRCC-16 check

word, but software implementations of CRCC-16 take several seconds to execute for packet lengths over a few bytes (4095 bytes took approximately 7 seconds when written in BDS C -- but I don't maintain that I did the most optimum coding). For the moment, I plan to use a simple summation of the bytes of the packet, which takes much less time to calculate.

I would appreciate comments on this subject, as well as on the possibility of assuming the existence of hardware CRCC in the system doing the error correction. It would be possible to allow the checksum field to be unspecified, and just let error correction happen between stations that agree on a checksum method, since the packet checksum could be verified in a lower level by something like the HDLC frame check sequence. In this case, the checksum specified on this level would be used only for the error correction system. The type and existence of the packet checksum word could be defined for any given LAN, with the gateway stations handling conversion from one checksum word format to another. Within a LAN, the case of the data type character could determine whether error correction was 'turned on' for a packet--upper case indicating orchard bits and checksums present and lower case indicating that no error checking exists in this level, for example.

From 5580199103031167883
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,96bd7ecf72b86897,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-12 11:38:06 PST
Message-ID: <bnews.hou5f.162>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!hplabs!hao!seismo!harpo!ihnp4!ihps3!houxz!houxi!hou5d!
hou5f!jak@sri-unix
X-Path: utzoo!decvax!cca!hplabs!hao!seismo!harpo!ihnp4!ihps3!houxz!houxi!hou5d!
hou5f!jak@sri-unix
From: jak@sri-unix
Date: Sun Dec 12 14:38:04 1982
Subject: re: cw only for deaf hams
X-Google-Info: Converted from the original B-News header
Posted: Wed Dec 8 09:16:04 1982
Received: Sun Dec 12 14:38:04 1982

After sending the following by mail, I thought
others on the net might be interested so I am posting this reply.

TO: npoiv!harpo!seismo!hao!hoyt
DATE: 8 Dec 1982   9:03 EST
SUBJECT: re: deaf hams

yes, there are several deaf hams.
Other methods of making output available are with signal lights (similar to
what the navy uses in concept) and a pad over a speaker where the deaf ham
can feel the vibrations of the morse code.
I have heard of several deaf hams using the "touch the speaker cone" technique
More info is available from the American Radio Relay League (ARRL)
225 Main St.
Newington, CT 06111

Ask for their booklet on handicapped hams.
If you want more info from me, feel free to mail or call (201) 949-5719
Cheers, Jim Kutsch
Bell Labs, Holmdel
...!harpo!npoiv!jak

From 4180008946301906483
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,73b639e749447be2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-13 03:13:03 PST
Message-ID: <bnews.houxp.169>

Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!hou5f!hou5d!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!npoiv!hou5f!hou5d!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Mon Dec 13 06:13:02 1982
Subject: ARRL DX Bulletin 49
X-Google-Info: Converted from the original B-News header
Posted: Fri Dec 10 08:26:04 1982
Received: Mon Dec 13 06:13:02 1982

qst de ad7i
hr dx bulletin nr 49 from arrl headquarters
newington ct december 9, 1982
to all radio amateurs bt

thanks to k1mem, k1mm, w1trc and n1ajo of the southern new england dx association for the following dx information.

china. by8aa has been very active at 0100z on 21050 khz. he has a real raw buzz which makes his zero beat reat hard to locate.

lebanon. od5lx will be on 28744 at 1130z saturday and sunday for cw qsos. qsl via sm0dgz.

svalbard. jw5vaa and jw5ig have also been found on 28744 around 1200z.

falkland islands. vp8apk, vp8li and others from the falklands as well as vp8aoe from south orkney have been very often on the low end of 20 meter ssb in the evenings.

tunisia. 3v8aa shows in the company of 9y4rd/su at 1400 to 1500z on 28744 for cw and ssb qsos.

trindade islands. look for the rumored py0 operation from trindade december 10 to 14.

iraq. europeans can look for yi1bgd on 21155 at 1000z and for north america check 28505 between 1200 and 1300z.

160 meter band.
zs4pb has been on 1841 ssb at 0300 to 0330z.
hz1ab continues wednesday and thursday evenings at 0230z.
nepal. 4 operators including a yl will be on from 9n1 between december 15 and january 1, all bands, cw and ssb. qsl via w1gay.
st. kitts. vp2kbu will be active until december 13. qsl via kc0fw.
marion island. keep a watch for operation from the new crew at zs2mi due at any time.

heard island. with the receipt of the official government approval, the heard island dx association plans are now in their final stages.

the 18 member expedition will depart from hobart on january 2 for the fourteen day voyage to heard island. the expedition plans to stay for a minimum of 14 days and hopes to be on the air around january 17 or 18.   vk0sj/mm will be operted enroute to the island.

30 meters. all u.s. amateurs are eminded to avoid the 10109 to 10115 khz segment of the new band. also, contacts on the 10 mhz band will not be creditable toward arrl awards ar

From 5507356189488811608
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1eed5a5a2e2f15be,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-13 04:29:54 PST
Message-ID: <bnews.sbcs.164>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!peri!sbcs!rick
X-Path: utzoo!decvax!harpo!floyd!peri!sbcs!rick
From: sbcs!rick
Date: Mon Dec 13 07:29:47 1982
Subject: Packet Radio Survey
X-Google-Info: Converted from the original B-News header
Posted: Sun Dec 12 19:25:43 1982
Received: Mon Dec 13 07:29:47 1982

     I am compiling a list of persons on the network who are interested in packet radio. The ultimate purpose of this survey is to set up a database of Software, Hardware, and individuals that would assist others in bringing up Packet Radio Networks in their locale. Please respond to:

          Rick Spanbauer, wb2cfv
          State University of New York, Stony Brook
          1428 Lab Office Building
          Stony Brook, NY 11794
          (516) 246-3418

          ..!allegra!sbcs!rick or
          ..!peri!sbcs!rick

From -5260383242454951440
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bce8cf47c7898ae3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-14 04:15:13 PST
Message-ID: <bnews.sbcs.166>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!peri!sbcs!rick

X-Path: utzoo!decvax!harpo!floyd!peri!sbcs!rick
From: sbcs!rick
Date: Tue Dec 14 07:15:11 1982
Subject: Oregon Packet Proposal
X-Google-Info: Converted from the original B-News header
Posted: Mon Dec 13 13:11:29 1982
Received: Tue Dec 14 07:15:11 1982

An open letter to Dave, WB7RDI,

Saw your draft proposal for a packet radio network on the net. Here are a few comments/criticisms/suggestions:

- you might consider using delay modulation coding instead Manchester. Delay modulation has a minimum at dc (as opposed to a null for manchester), yet with some minor waveform shaping it should pass the ac coupled radios without much distortion.

- Should you decide continue using Manchester, take a look at the Zilog 8530 SCC. It has a Manchester encoder/decoder on chip. The receiver is not quite optimal in the sense that it uses digital techniques (digital pll) to regenerate the clock, however, it should provide adequate results in your application. As you might expect, the chip provides on board baud rate generators, bit stuffing, selectable error detection polynomials, and universal microprocessor interface (cost: ~$38).

- I was somewhat puzzled by your trying to evaluate the CRC polynomials in software. Most SCC's provide CRC generation. Even if your application requires software generated error detection (cost reasons?), there are checksums which are better suited to the sort of arithmetic available on microprocessors (CRC polynomial evaluation is long division, ie a serial process). Take a look at IEEE Trans. on Communications, January, 1982 pp 247-251 for an article describing ones complement checksums. The claimed fraction of errors which pass undetected is .001538%, versus .001526%for CRC's. The ones complement technique is not as good with double bit errors, however.

- I would strongly suggest that you consider using AX.25 packet format instead of your home grown format. You might consider building a standard AX.25 network FIRST (something stable for others to use), then set up a gateway to your experimental network.

- Some other papers in Transactions on Communications which I found useful are:

- L Ehrman, PF Maloney, "A Multimode Modem for Digital Radio", IEEE Trans. on Comm., Vol COM-27, pp 1786-1793, Dec 1979.

  This paper addresses upgrading Military FM Radios to digital service. The radios are similar in characteristics to existing Amateur FM equipment. They investigate various modulation schemes including MSK, Manchester, and Delay Modulation.

- JS Ma, "On the Impact of HDLC Zero Insertion and Deletion Link Utilization and Reliability", IEEE Trans. on Comm., VOL COM-30, pp 375-381, Feb 1982.

  This paper discusses the impact of bit stuffing on Link error performance.

o Take a look at MSK! The references are too numerous to list here, just take a look a T Comm over the last few years. You will still need a baseband coding scheme which inserts clocking info, however, it will buy you even more spectral efficiency.

Rick Spanbauer WB2CFV
..!allegra!sbcs!rick

From 1351242725379783849
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c81dfd1da4e7e8d0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-15 01:46:03 PST
Message-ID: <bnews.houxp.173>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Wed Dec 15 04:46:02 1982
Subject: Propagation Bulletin 50
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 14 08:42:11 1982
Received: Wed Dec 15 04:46:02 1982

qst de ad7i
hr propagation forecast bulletin nr 50 from arrl headquartere
newington ct december 13, 1982
to all radio amateurs bt

the solar flux rise that began at 171 on december 2 peaked at 279 on the 19th, the highest reading since february 1. for two days the flux was more than 100 points above the corresponding day in the

previous solar rotation, an unlikely event so far past the peak of this solar cycle. this activity pattern will be reversed, probably before the 19th, as the decline that began on the 11th is expected to be a steep one.

the high solar flux in recent days did not bring much improvement in dx conditions, because it was associated with numerous and intense solar flares. the increased geomagnetic activity resulting from these caused high absorption on all amateur frequencies. still the 50 mhz band was open marginally across the atlantic on at least three days.

the down side of the flux peak should bring generally good propagation but with the loss of 50 mhz dx, probably by the 17th. the earths magnetic field will be more stable through the forecast week, resulting in better conditions on all dx frequencies, a trend that will be reversed again about the 19th.

american sunspot numbers were between 119 and 181 last week, for a mean of 147. they have peaked and will be much lower before next weeks bulletin   ar

From 8810910023795150695
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2729cb2cc939b07,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-15 01:58:13 PST
Message-ID: <bnews.houxp.171>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Wed Dec 15 04:58:12 1982
Subject: ARRL 111: Korea 3rd Pty Agreement
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 14 08:41:33 1982
Received: Wed Dec 15 04:58:12 1982

qst de ad7i
hr arrl bulletin nr 111 from arrl headquarters
newington ct december 13, 1982
to all radio amateurs bt

a temporary agreement between south korea and the united states will be put into effect to permit the handling of phone patch traffic during the holiday season. united states amateur licensees may conduct phone patch traffic with amateur stations using the prefix hl9 from 1501 utc december 20 until 1459 utc january 4 ar

From -3299641126436479270
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,df8f1ef3ee197768,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-15 01:59:49 PST
Message-ID: <bnews.houxp.172>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxp!ad7i
From: houxp!ad7i
Date: Wed Dec 15 04:59:48 1982
Subject: ARRL 112: Mt. Greylock update
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 14 08:41:49 1982
Received: Wed Dec 15 04:59:48 1982

qst de ad7i
hr arrl bulletin nr 112 from arrl headquarters
newington ct december 13, 1982
to all radio amateurs bt

follows an update on the mt. greylock communications tower situation.
the antenna for the mt. greylock repeater on 31/91, k1ffk/r, has been
reinstalled on the tower. however, passage of h6749 is still
essential to guarantee that the antenna remains on the tower. h6749
has passed the massachusetts house unanimously but it must pass the
massachusetts senate. amateurs in massachusetts may wish to contact
their state senators expressing support for h6749 so that this
important communications facility is retained ar

From 7382708965061234640
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13375c,8ec0b8fda309ce1f,start
X-Google-Attributes: gid13375c,public
X-Google-Thread: 151e61,8ec0b8fda309ce1f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-15 04:06:33 PST
Message-ID: <bnews.rabbit.988>
Newsgroups: net.aviation,net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxa!houxm!npois!npoiv!alice!
rabbit!kco
X-Path: utzoo!decvax!harpo!ihnp4!ihps3!houxz!houxi!houxa!houxm!npois!npoiv!alice!
rabbit!kco
From: rabbit!kco
Date: Wed Dec 15 07:06:32 1982
Subject: Re: HAM radio use on airliners
References: <bnews.hou5f.164>
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 14 16:46:58 1982

Received: Wed Dec 15 07:06:32 1982

Mr. Redden said that a 2 meter rig onboard an aircraft could interfere
with aircraft navigation radios. Could a 2 meter ground rig interfere
with nearby aircraft radios, for example, where an aircraft is following
the glideslope or localizer on an instrument approach? Which radios, if any,
would be affected?

From -4360896786758454999
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,22ba75ff043b0b99,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-12-15 04:17:33 PST
Message-ID: <bnews.purdue.471>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!CSvax:svb
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!CSvax:svb
From: CSvax:svb
Date: Wed Dec 15 07:17:32 1982
Subject: Ham Radio on airliners
X-Google-Info: Converted from the original B-News header
Posted: Tue Dec 14 18:37:12 1982
Received: Wed Dec 15 07:17:32 1982

I have been carying 2m handhelds on about 5 domestic flights and never had
problems - I always stated that 'I would not use them because
it is not legal'.

Once I got into trouble - in West Germany. There security people told me
that I would not be allowed to take it on board - I could
threaten to explode a bomb in my suitcase with it.....

Stephan v. Bechtolsheim, Purdue CS
DF 4 CK / W9

From -944707305014647610
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,464ffb0280c47129,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-21 23:02:09 PST
Message-ID: <bnews.hou5d.147>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!hou5d!jak
X-Path: utzoo!decvax!harpo!npoiv!npois!hou5d!jak
From: hou5d!jak
Date: Fri Oct 22 02:02:08 1982
Subject: October call book
X-Google-Info: Converted from the original B-News header
Posted: Thu Oct 21 13:14:23 1982
Received: Fri Oct 22 02:02:08 1982

The following is a list of net.ham-radio readers/contributers:

CALL - NAME - MAIL ADDRESS
K1DK - Dan Kahn - research!alice!danny
WB1EXN/6 - Keith Muller - ucbvax!sdcsvax!muller
KA1GNG - Rob Wood - decvax!genradbolton!rob
W1UI - Jerry Gann - ucbvax!lbl-unix!asgvax!gann
WA1ZVN - Scott A. Magnuson - houxi!hocsb!scott
KI2A - Steve Gross - houxq!sg
K2ANC - Lou - Kohnen.Wbst@PARC-MAXC
K2ART - Mike Pilla - houxi!u1100a!mp
KB2BQ - Michel - Denber.WBST@PARC-MAXC
WB2CFV - Rick Spanbauer - rick@suny-sbcs | allegra!sbcs!rick
N2CHL - Rich Gopstein - allegra!gop
Ka2CUC - Pete Dusel - Dusel.Wbst@PARC-MAXC
WA2CVU - Karen Schroeder - floyd!philabs!kis
K2DM - George Briggs - houxo!43351gw
W2EMF - Al Donkin - houxm!aed
W2FPY - Steve Robinson - eagle!ajll11!robinson
WB2FSI - MIKE - Fayette.wbst@PARC-MAXC
N2GH - Dave - Sewhuk.HENR@PARC-MAXC
KU2H - Al Morley - houxm!arm
AD2H - Marsh Gosnell - npois!pyuxbb!mkg or whuxlb!mkg
WA2HSJ - Glenn Golden - houxg!glenn or lime!glenn
N2IC - Steve London - druxm!n2ic or houxp!9535sml
W2IOL - Ron McConnell - harpo!rcmcc
W2IY - Mike Tortorella - houxp!w2iy
KA2JDY - Joel Damiano - ucbvax!teklabs!joeld or decvax!teklabs!joeld
KB2JN - Jeff - Duntemann.WBST@PARC-MAXC
KA2JQH - Adam Buchsbaum - research!sjb
K2LYV - Dave - Birnbaum.HENR@PARC-MAXC
WA2MOR - Larry Kaufman - nwuxc!lsk
N2ND - Dick Maybach - houxq!4373rlm
W2OZH - Jim - Taylor.WBST@PARC-MAXC
K2PH - Bob Schreibmaier - houxa!k2ph
WA2PME - Azi Heuman - houxo!3357ah
WB2QOQ - Rick Anderson - harpo!rja
WA2QYN/2 - Paul Rubin - allegra!phr
WB2RPC - Mike Sajor - harpo!zeppo!mes
N2YK - Bruce McNair - houxg!bem or houxm!bem2
N3AGV, Ron Natalie, unc!brl-bmd!ron, ron@brl
N3AUC - Doug Kingston - unc!brl-bmd!dpk, dpk@brl
N3CKF - Joe Pistritto - unc!brl-bmd!jcp, jcp@brl
WA3IRQ - Lee Nackman - duke!unc!lrn
VE3QB/WA3ZIA - Larry - Kaysersri-unix!fortune!dsd!dna
WA3THP/2 - Stu Brown - allegra!stu
WA3VJS - Scott E. Garfinkle - princeton!scotteg
DF4CK/W9 - Stephan Bechtolsheim - decvax!pur-ee!purdue!svb
G4EHL - Anthony Short - decvax!microsof!anthony
K4EO - Larry - Stewart.PA@PARC-MAXC
WB4FWL - Ned Danieley - duke!ndd
KB4GZ- Frank Starmer - duke!unc!cfs or duke!cfs

WA4IFA - Chuck Bennett - duke!unc!tucc!uchuck
KA4ISF - Joe - Fusco.ES@PARC-MAXC
W4IZI - Lindsay Cleveland - ihnss!ihuxi!lindsay
K4QET - Mike - Rutkaus.LB@PARC-MAXC
W4RI - Paul Rinaldo -
KA4VXA - Mike Leuze - duke!mrl
N5AHD - Robert Diersing -
VE5BEL - Peter Hardie - utah-cs!sask!hardie
WB5YFU Jose Sancho-dominguezja.DLOS@PARC-MAXC
N6AFZ - Glenn - GMulligan.es@PARC-MAXC
WA6AZP - Alan Larson - ucbvax!larson@sri-kl
KD6BA - Ted Lane - ucbvax!menlo70!sytek!zehntel!ted
WA6BEV - Robert R. Henry - ucbvax!rrh or research!rrh
KF6BK - Trung - TNguyen.es@PARC-MAXC
WB6BXW - Lauren Weinstein - ucbvax!ucla-s!lauren or Lauren@UCLA-Security
KD6CQ - Scott - Gray.ES@PARC-MAXC
WA6FAA - Jim Gillogly - randvax!jim
N6FQR - Bill - Danielson.PA@PARC-MAXC
KO6G - Steven Schoch - ucbvax!ONYX:schoch
KD6HR - Pete - McAfee.ES@PARC-MAXC
KU6I - Roger Jollis - intelqa!gsp86!linden
WA6IGJ - Tony Cardenas - ucbvax!Cardenas.ES@PARC-MAXC
WA6JFZ - Ron - RBrown.PA@PARC-MAXC
K6LB - Ram - Ronen.ES@PARC-MAXC
KA6MCN - Allen Snethen -
W6MIK - Dave - Shalita.ES@PARC-MAXC
KA6NIL - Don - Ahern.es@PARC-MAXC
WA6OAD - Terry Haney - Haney.eos@PARC- MAXC
KB6QI - Nick - NBarnieri.ES@PARC-MAXC
WB6QMS - Don - Duncan.es@PARC-MAXC
KA6RCQ - Michael Shiloh - ucbvax!shiloh
WB6RPC - Mike - harpo!zeppo!mes
KA6SOJ - Donovan - Dghess.ES@PARC-MAXC
AD7I - Paul Newland - houxc!ad7i
WB7UBD - Ed Morin - teklabs!tekmdp!edm
WB8FBM - Dale DeJager - cbosg!dale
WN8GUE - Steve Wheatley - inuxc!wheatley
G8LHI - Martin Levy - lime!martin
K8NU - Carl Yaffey - rmas70!cly
KQ8P - Jeff Coleman - ihnss!ihuxo!jnc
G8RDF - Martin Harriss - houxi!pyuxjj!martin
W8SDZ - Keith Petersen - W8SDZ@MIT-MC
WB8WWV - Greg Ordy - ucbvax!decvax!cwruecmp!ordy
WA8ZNH - Jim Kutsch - npois!jak
WB9AAX - Phil Gunsul - lime!we13!prg
KB9BO - Jim Krist - ihnss!ihuxs!jtkrist
W9CC - Larry Card - inuxc!lrcard
KA9ELG - Mark Yoder - ucbvax!pur-ee!yoder
K9EUI - Bob Roehrig - lime!we13!rjr
WD9HDR - Jim Erickson - ihuxs!erickson
WD9ICG - Jim Wiman -
KA9MHK - Dan Hoelker - ihnss!ihuxu!mstach
WN9NBT - Dave Chasey - pur-ee!wn9nbt

KA9Q - Phil Karn - eagle!karn
WB9RIN - Dennis Noonan - inuxc!wb9rin
WB9VGW - John Wrycza - ihuxu!johnw
KK9W - Dave Andersen - pur-ee!kk9w
(no call) - David Comay - ucbvax!ARPAVAX:comay
(no call) - Steven Bellovin - duke!unc!smb

Send additions/corrections to Jim Kutsch -- npois!jak

From 1115325070104918654
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,995e4e762bb3c8d3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-21 23:44:22 PST
Message-ID: <bnews.eagle.568>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Fri Oct 22 02:44:21 1982
Subject: Novice Class Exams
X-Google-Info: Converted from the original B-News header
Posted: Fri Oct 22 00:08:26 1982
Received: Fri Oct 22 02:44:21 1982

The FCC today proposed to revise its procedures for awarding the Novice
class, or beginner, 'ham' radio license. As it stands now, an
amateur radio operator with a General class or higher license tests
an applicant on his knowledge of the Morse code. If the applicant
passes, a certification notice is mailed to the commission and the
FCC then mails a written exam to the applicant. The written exam is
completed and mailed to the FCC for grading. The agency proposed
Thursday to streamline that process by allowing the licensed ham
radio operator to administer not only the Morse code test, but to
prepare and administer the written test using an FCC Study Guide.
If the applicant passes both tests, the licensed ham would simply
certify that to the commission and a Novice license would be
issued. The proposal is now open to public comment.

Phil Karn, KA9Q/2

From -7742593438064131764
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,887de0a226f04ea0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-22 22:37:37 PST
Message-ID: <bnews.avsdT.158>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!fortune!dsd!atd!avsdS:avsdT:jon@sri-unix
X-Path: utzoo!decvax!cca!fortune!dsd!atd!avsdS:avsdT:jon@sri-unix
From: jon@sri-unix

Date: Sat Oct 23 01:37:36 1982
Subject: DX Contest News
X-Google-Info: Converted from the original B-News header
Posted: Wed Oct 20 12:54:10 1982
Received: Sat Oct 23 01:37:36 1982

Look for 8P6KX Barbados on 15 meters in CQWW phone (K6KLY
operator) in Zone 8.

From -7224593751293146939
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5952625401c10960,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-27 04:16:39 PST
Message-ID: <bnews.sask.65>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!utah-cs!sask!hardie
X-Path: utzoo!decvax!harpo!utah-cs!sask!hardie
From: sask!hardie
Date: Wed Oct 27 07:16:38 1982
Subject: QSL?
X-Google-Info: Converted from the original B-News header
Posted: Sun Oct 24 21:05:30 1982
Received: Wed Oct 27 07:16:38 1982

Anyone got the QSL info for HP1XJC please?

From -144210766055597856
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c240a6efc24c026,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-27 05:26:12 PST
Message-ID: <bnews.inuxc.485>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Wed Oct 27 08:26:09 1982
Subject: DX TIPS
X-Google-Info: Converted from the original B-News header
Posted: Tue Oct 26 14:15:50 1982
Received: Wed Oct 27 08:26:09 1982

Now is a good time to pick up some of the contest
operators who are going to work the CQWW SSB contest
as they "tune up" for the big contest. As many are
good cw ops you can find them on cw, 14025, 21025,etc.
I have heard Belize (V3) and Tahiti (FO0) already,
and more are on each day. Listen for the pile-ups!

One advantage to these guys are that they handle their
own qsl's, and therefore the cost of getting one
is only a sase usually, saving those ircs and anxiety
over the foreign postal systems!!

Good luck!!

From -2249076428917256513
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,81162ddecf1be295,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-27 05:43:45 PST
Message-ID: <bnews.ittvax.473>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ittvax!wexel
X-Path: utzoo!decvax!ittvax!wexel
From: ittvax!wexel
Date: Wed Oct 27 08:43:39 1982
Subject: Looking for W3VXP and W3VXQ
X-Google-Info: Converted from the original B-News header
Posted: Tue Oct 26 13:28:33 1982
Received: Wed Oct 27 08:43:39 1982

In high school, I had two friends Fred and Art (last names omitted
in case they dont want their names bandied on the net) whose call
#s were the two listed above. (I dont know how i remembered them --
this was in 1955)

Can anyone out there tell me where they are? I am not a ham, nor do
I have any acess to the community other than this newsnet.

Thanks. --Dick Wexelblat (ITT Shelton, CT)

From -2510858811247225270
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,593f177b01f7d898,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,593f177b01f7d898,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1982-10-27 06:23:02 PST
Message-ID: <bnews.eagle.579>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Wed Oct 27 09:23:00 1982
Subject: Amsat Phase 3B Status Report
X-Google-Info: Converted from the original B-News header
Posted: Tue Oct 26 21:42:51 1982
Received: Wed Oct 27 09:23:00 1982

ESA has announced that Amsat Phase-IIIB will now fly on April 2, 1983. The board of inquiry filed its report on the launch failure of Ariane L5 on Oct 15th. As was already stated, the third stage cryogenic hydrogen turbopump failed before normal shutdown, causing the failure. It is now believed that the failure may actually have been due to overtesting of the turbopump gearbox that weakened the unit before launch.

In any case, ESA is delaying the launch in order to subject the next launcher to a very close inspection before another launch. This makes us feel a little better; there is a saying that the best launch to go on is the one right after a failure - everybody is on their toes.

The Phase 3B mode "B" transponder (70 cm in, 2 m out) has been tested in a thermal vacuum chamber, and found to meet specifications. Peak power output is approximately 50 watts, and the AGC is set to maintain an average power output of about 15 watts. Transponder input power at the antenna terminals to obtain the average power output is about -105dbm. Bandwidth is almost exactly 150 khz.

The mode "L" (23 cm in, 70 cm out) transponder has been tested and found to not yet meet specs. Power output is low by about a DB, and the third-order intermodulation products are only 17 db down. With this latest launch slip, there will probably be time to improve the L transponder.

Phil Karn, KA9Q

From 5302890546012631155
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13372f,d1b89e3e49cda748,start
X-Google-Attributes: gid13372f,public
X-Google-Thread: 151e61,d1b89e3e49cda748,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-27 07:18:09 PST
Message-ID: <bnews.eagle.580>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Wed Oct 27 10:18:00 1982
Subject: Amateur Radio Station on the Shuttle
X-Google-Info: Converted from the original B-News header
Posted: Tue Oct 26 22:04:44 1982
Received: Wed Oct 27 10:18:00 1982

It now appears POSSIBLE that STS-9, the first launch of the Spacelab, will carry an amateur radio station. Owen Garriot, W5LFL, who will be an astronaut on the mission, will be the operator.

The Westlink Amateur Radio News service has been hypeing this topic up quite heavily in the past two weeks. Before everybody gets all excited, there are several caveats that should be remembered:

1. The proposal is not yet final. Significant progress is being made, however.

2. STS missions are launched into very low altitude, low inclination orbits. This means that passes are short (try dialing the 900 DIAL-IT number during a mission and listen to how often they hand off to a new tracking station). Passes visible from temperate latitudes are even quicker and at low elevations.

3. If they carry essentially a 2m walkie-talkie as proposed, without repeater capability, stations on the ground will not be able to hear each other as they attempt to contact the shuttle. Combine this with the adrenaline factor, and Garriot will likely not hear much more than interference unless the amateurs calling him are VERY disciplined.

4. Shuttle astronauts (and astronauts in general) are VERY busy people. It is not clear how much spare time Garriot will have to spend yakking on the radio. On the other hand, since the mission will last over a week and is primarily intended to ferry up Spacelab, perhaps he'll have some time.

Phil Karn, KA9Q

From -1462267672143740204
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f44a5afd2fd453db,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-29 23:20:50 PST
Message-ID: <bnews.inuxc.493>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Oct 30 02:20:49 1982
Subject: 10 MHz band
X-Google-Info: Converted from the original B-News header
Posted: Fri Oct 29 08:52:04 1982
Received: Sat Oct 30 02:20:49 1982

Tnx to k2ph, I received the ARRL DX INFO just after I posted my query. I also forgot to credit k2ph for this column, I just posted it. Now, the real question, what about the contest this weekend?????

CU on 30 METERS!!!!!!!!! (FINALLY!!!!!!!!!!)

steve, wn8gue inuxc!wheatley

From 6376338626724420313
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a0baf4b6fb405dc6,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-30 00:51:02 PST
Message-ID: <bnews.inuxc.491>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Oct 30 03:51:01 1982
Subject: 10 MHz (30 Meter band) open????
X-Google-Info: Converted from the original B-News header
Posted: Fri Oct 29 08:46:13 1982
Received: Sat Oct 30 03:51:01 1982

I heard on the air that the FCC authorized amateur use of the 10 MHz band yesterday. Does anyone have any official info on this??? What frequencies, what modes, etc. Is it really open, or were there just a bunch of non-law abiding hams on there last night????

MOST OF ALL, does it count in the CQWW contest this weekend???

Tnx, steve, wn8gue, inuxc!wheatley

From 1213412689920944742
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,21228acdd99a693,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-30 00:52:17 PST
Message-ID: <bnews.inuxc.492>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Oct 30 03:52:15 1982
Subject: ARRL DX BULLETIN-Including 10 MHz announcement
X-Google-Info: Converted from the original B-News header
Posted: Fri Oct 29 08:48:50 1982
Received: Sat Oct 30 03:52:15 1982

_S_o_m_a_l_i_.

DJ6SI/6O will be on for one week, cw only.

_S_v_a_l_b_a_r_d_.

JW5NM is active on 7005 kHz at 0300Z. QSL to LA5NM.

_J_u_a_n__F_e_r_n_a_n_d_e_z_.

WB6WOD/CE0/Z will be very active on all bands for two weeks.

_C_o_c_o_s__K_e_e_l_i_n_g__I_s_l_a_n_d_.

VK9YI has been active on 10 and 20 meters. No specific frequencies.

_D_j_i_b_o_u_t_i_.

Lloyd and Iris Colvin will be signing J20/DU through the end of the month. QSL via Yasme.

_C_y_p_r_u_s_.

DL0/HSC/5B4 will be on for two weeks, 160 through 10 meters. QSLs go to DK8ZH.

_F_r_a_n_z__J_o_s_e_f__L_a_n_d_.

UA1PGO may be found between 14200 and 14210 kHz around 1300Z. QSL via UK3SAB.

_R_o_d_r_i_g_u_e_s__I_s_l_a_n_d_.

DL9EAJ/3B9 is on 28550 kHz for about three hours daily beginning around 1100Z. QSL to DL0/LH.

_C_o_m_o_r_o_s_.

D68AM shows up in the DK2OC net at 1200Z. WB2OHD handles the QSLs.

_S_a_u_d_i__A_r_a_b_i_a_.

HZ1AB is active on 80 and 160 meters on Wednesdays and Thursdays beginning at 0200Z on 3505 and 1827 kHz.

_B_e_l_i_z_e_.

N6ADI and WA6VNR will be active as V3DX and V3CQ through November 3. They will be on cw and ssb, 160 through 10 meters. N6ADI will handle the QSLs.

_S_y_r_i_a_.

The Technical Institute of Radio will celebrate 35 years of amateur radio in Syria with 6C35A, 6C35M, 6C35N, and 6C35O operating 80 through 10 meters, ssb only, between 0300Z December 25 and 1300Z December 26 and between 0300Z December 30 and 0800Z December 31.

_C_Q__W_W__P_h_o_n_e__C_o_n_t_e_s_t_.

Some of the many prefixes expected to be active are PJ9, PJ5, ZF2, HC8, HH2, CE0/Z, CN, CT2, FO0/, OH0/, PJ7, UF6, UG6, FM0/, V3, and VP5. Many choice stations plan to include 160 meters in their operations.

_N_e_w__B_a_n_d_.

For those who haven't heard, 30 meters is now open to U.S. amateurs. Frequencies are 10.1 to 10.109 and 10.115 to 10.150 MHz. Maximum power input is 250 watts on cw and rtty only. Enjoy.

From -3002708248183261621
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1481f48cd154f23f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-30 00:59:52 PST
Message-ID: <bnews.inuxc.494>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Oct 30 03:59:51 1982
Subject: CQWW test on 30 Meters
X-Google-Info: Converted from the original B-News header
Posted: Fri Oct 29 09:16:18 1982
Received: Sat Oct 30 03:59:51 1982

WRONG WRONG WRONG, cant operate the contest on 30 Meters this weekend as it is CW es RTTY only. My mistake. Now, for the real question, what about the CQWW CW contest on turkey weekend (Nov 27-28)

steve, wn8gue, inuxc!wheatley

From -3338722413014993351
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,34e2d8cbbf0ebed8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-30 01:09:55 PST
Message-ID: <bnews.inuxc.495>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Oct 30 04:09:50 1982
Subject: Cheap IRC's
X-Google-Info: Converted from the original B-News header
Posted: Fri Oct 29 10:41:31 1982
Received: Sat Oct 30 04:09:50 1982

I am not sure if the flaming on other newsgroups about for sale items apply here, but I received a letter from a friend who was down in Ecuador and Galapagos for the last 9 years, who has returned to the states. He now has the problem of getting rid of 6000 IRC's.....at 40 cents each. IF you are interested in getting in on these, send me mail and I will pass on the

pertinent info.

Steve, wn8gue, inuxc!wheatley

From -152375759545214742
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2837fe73b0eb42e2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-05 03:21:55 PST
Message-ID: <bnews.inuxc.500>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Fri Nov 5 06:21:49 1982
Subject: CW SWEEPSTAKES CONTEST
X-Google-Info: Converted from the original B-News header
Posted: Thu Nov 4 13:43:03 1982
Received: Fri Nov 5 06:21:49 1982

Here is the big contest for this weekend:

ARRL CW SWEEPSTAKES CONTEST

Contest Period: 2100Z Saturday, Nov. 6 until 0300Z Saturday, Nov. 8

Exchange: A consecutive serial number, precedence ("A" if you run
          200 watts dc or less, "B" if more than 200 watts), your call
          sign, check (last two digits of the year you were first
          licensed), and your ARRL section. For example, WN8GUE answers
          W1AW's call by sending W1AW NR178 B WN8GUE 69 IN for qso number
          178, more than 200 watts, first licensed in 1969, and Indiana
          section.

GUD LUCK!!!

From 6140523644468897O3
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1fb4076df0ea8f06,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-08 23:04:30 PST
Message-ID: <bnews.houxc.280>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Tue Nov 9 02:04:29 1982
Subject: Propagation Forecast 44
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 8 09:18:29 1982
Received: Tue Nov 9 02:04:29 1982

qst de ad7i
hr propagation foecast bulletin nr 44 from arrl headquarters
newington ct november 1, 1982
to all radio amateurs bt

october provided interesting examples of the range of solar activity nearly three years after the statistical peak of cycle 21. the solar flux averaged 159, with highs of 218 on the 2nd and 202 on the 25th. from october 7 to 19, the variation was slight, between 131 and 145. the last half of the month brought a gradual rise from 131 to 202, and a slide back to 168 at the months end.

despite several disturbed periods of one to three days duration, propagation was good more often than not, which is normal for october and november in the northern hemisphere. scattered through october were at least six good to excellent days when all amateur dx frequencies worked well over most of the world. about as many more days could be termed average. the 28 mhz band performed well much of the time. there were several openings on 50 mhz, mainly in the lower latitudes or on transequatorial circuits.

november should be quite similar. on the down side of the solar cycle, active areas of the sun tend to be short lived, and propagation variations are less likely to recur at four week intervals. as an example, solar flux highs in october were 23 days apart, not 27 or 28. based on daily observation of the sun and frequent checks on amateur band conditions, we look for generally good propagation november 1 and 2 and 6 through 9, but with the solar flux too low for appreciable east west dx on 50 mhz. the best propagation in late november should come between the 18th and 25th, with the highest muf at the end of this period.

american sunspot numbers for october 21 through 27 were between 105 and 186, for a mean of 143. they will be lower next week ar

From 8741740796921235205
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2fcdc504d9239f7e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-08 23:12:48 PST
Message-ID: <bnews.houxc.281>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Tue Nov 9 02:12:46 1982
Subject: ARRL 95: 10 MHz
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 8 09:19:04 1982

Received: Tue Nov 9 02:12:46 1982

qst de ad7i
hr arrl bulletin nr 95 from arrl headquarters
newington ct october 28, 1982
to all radio amateurs bt

at 3 p.m. edt thursday, october 28, fcc released the major portion of the 10 mhz band for use by amateurs in its jurisdiction. effective immediately, u.s. amateurs holding general, advanced and extra class licenses may use up to 250 watts input and a1 and f1 emissions in the band segments 10.100 to 10.109 and 10.115 to 10.150 mhz. these emissions include cw and rtty operation, voice modes are not permitted. the segment 10.109 to 10.115 mhz is not available at this time because of daily use by a priority government radio service. amateur stations must avoid interfering with stations in the fixed service, because the band is allocated on a primary basis to the fixed service and these stations have priority. the amateur allocation is on a secondary basis ar

From 7438713561879548113
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,117a0e9d764d56e9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-08 23:14:31 PST
Message-ID: <bnews.houxc.282>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Tue Nov 9 02:14:30 1982
Subject: ARRL 096: 10 MHz
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 8 09:19:29 1982
Received: Tue Nov 9 02:14:30 1982

qst de ad7i
hr arrl bulletin nr 96 from arrl headquarters
newington ct october 29, 1982
to all radio amateurs bt

amateurs are cautioned to not repeat not operate at 10.109 to 10.115 mhz as this is a prohibited segment of the newly authorized 10 mhz band. amateurs operating in this segment risk fcc enforcement action. details in arrl bulletin nr 95 ar

From 6115486017828360672

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8687d91ea86f5bd0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-08 23:28:45 PST
Message-ID: <bnews.houxc.283>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Tue Nov 9 02:28:42 1982
Subject: ARRL 097: SS on 10 MHz
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 8 09:20:13 1982
Received: Tue Nov 9 02:28:42 1982

qst de ad7i
hr arrl bulletin nr 97 from arrl headquarters
newington ct november 2, 1982
to all radio amateurs bt

in accordance with the policy established by the arrl board of
directors, contacts made on 10 mhz will not count for credit during
the arrl november sweepstakes contest ar

From 4326134068693865579
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e5b29ee4a3a51fff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-08 23:33:32 PST
Message-ID: <bnews.houxc.284>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Tue Nov 9 02:33:27 1982
Subject: ARRL 98: Volunteer Examiners
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 8 09:20:53 1982
Received: Tue Nov 9 02:33:27 1982

qst de ad7i
hr arrl bulletin nr 98 from arrl headquarters
newington ct november 2, 1982
to all radio amateurs bt

fcc has assigned rm 4229 to the leagues petition for rulemaking
seeking amendment of fcc part 97 to allow the use of volunteers in
the preparation and administration of amateur radio examinations.
the petition was filed on october 22. for background information,

see the happenings column in april 1982 qst and the october 28 issue
of the arrl letter ar

From 4717299899655059060
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc7bdc753fcd3670,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-08 23:35:30 PST
Message-ID: <bnews.houxc.285>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Tue Nov 9 02:35:29 1982
Subject: CRRL 40: Customs
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 8 09:21:21 1982
Received: Tue Nov 9 02:35:29 1982

qst de ad7i
hr crrl bulletin nr 40 from arrl headquarters
newington ct november 1, 1982
to all radio amateurs bt

recently, a canadian amateur attempting to import a linear amplifier
was told by customs officials that amateur equipment had to be doc
type approved before being admitted. amateurs experiencing similar
problems should refer customs officials to revenue canada customs and
excise memorandum d19 4 2 dated july 1, 1982. section 8 of this
memorandum states that amateur radio equipment does not require type
approval from doc to be operated in canada ar

From -1585642581152625623
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7bdf5bd5aa10cb27,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-08 23:38:42 PST
Message-ID: <bnews.inuxc.502>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Tue Nov 9 02:38:41 1982
Subject: ARRL DX BULLETIN de k2ph
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 8 07:45:47 1982
Received: Tue Nov 9 02:38:41 1982

_R_o_t_u_m_a__F_i_j_i_.

3D2XN and 3D2XR have been active especially on 10 and 15 meters from Rotuma Island. Although Rotuma is part of Fiji, the operators hope to qualify as a new DXCC country. Work them first, the decision will be made at a later date.

_S_o_m_a_l_i_a_.

DJ6SI/T5 has gone QRT after a very successful one week operation from Mogadishu. QSL via his home call.

_1_6_0__M_e_t_e_r_s_.

Operation on the 160 meter band was at an all time high in the contest last weekend. More than sixty countries were reported active and some stations in North America worked more than fifty.

_M_a_l_a_w_i_.

7Q7LW is still active almost daily Les frequents 28500 to 28510 kHz from 1900Z.

_C_y_p_r_u_s_/_A_s_i_a_.

Four operators are signing DL0/HSC/5B4 from Cyprus. This operation is from the Asiatic part of Zone 20. CW only is being used, on 160 through 10 meters. QSL via DF8ZH.

_C_o_m_o_r_o_s_.

D68AM is again active after a long absence. Alain likes 29 and 21 MHz ssb.

_F_r_e_n_c_h__A_n_t_a_r_c_t_i_c_a_.

All the FB8 countries in the Southern Indian Ocean will be manned by new crews starting in mid-November. Each crew will include at least one licensed radio operator. Call signs will probably be FB8WH/WI, FB8ZP, and FB8XZ. Look for activity around the end of November.

_S_t_.__H_e_l_e_n_a_.

Jerry, ZD7BW, has been reported on 28600 kHz from 2000 to 2100Z and later on 21295 kHz.

_J_u_a_n__F_e_r_n_a_n_d_e_z_.

WB6WOD/CE0/Z continues his operation from Juan Fernandez into its second week. Joe is operating ssb only, 80 through 10 meters. QSL to his home call in the U.S.A.

From -6714303615983981268
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d1c5fc908ead6291,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-09 00:03:30 PST
Message-ID: <bnews.npois.1614>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!jak
X-Path: utzoo!decvax!harpo!npoiv!npois!jak
From: npois!jak
Date: Tue Nov 9 03:03:29 1982
Subject: QSL print shop recommendations wanted
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 8 12:32:44 1982
Received: Tue Nov 9 03:03:29 1982

Other than the Little Print SHop in Texas,
QSLs Unlimited in Atlanta, and Harry Hamlin in Phillipsburg, NJ,
can anyone recommend their favorite QSL printer? I am looking
for a distinctive card of good quality at a reasonable price.

If you do have a recommendation, please give me the company's name and mailing address so I can send for samples and prices.

Thanks in advance, Jim Kutsch WA8ZNH
...!npois!jak or ...!hou5d!jak

p.s. I will summarize and post results if anyone requests.
p.p.s. There is nothing wrong with the companies listed above, I just already have their info.

From -8062818459072068140
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3cffc8fdef1ab808,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-09 00:28:02 PST
Message-ID: <bnews.houxc.286>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!ihps3!houxz!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Tue Nov 9 03:28:01 1982
Subject: ad7i msg 20: Traffic Origination
X-Google-Info: Converted from the original B-News header
Posted: Mon Nov 8 12:55:32 1982

Received: Tue Nov 9 03:28:01 1982

ad7i msg 20

Are there any traffic handlers on netnews who would be interested
in accepting traffic via UNIX mail, originated by hams, to forward
on NTS nets. This might be a good way to generate some message
credits for yourself.

I, for one, am not much of a traffic handler. Yet, I do generate
a fair amout of traffic (arranging skeds and the like). If anyone
is interested in providing such a service to those who read netnews
(or just me!) please post a message to the net (or respond via
mail).

many thanks,

Paul Newland, ...!houxc!ad7i

From -385313413909330552
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b13e3b8e0283d3f5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-09 23:39:09 PST
Message-ID: <bnews.houxc.288>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!zeppo!whuxk!houxm!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!zeppo!whuxk!houxm!houxa!houxc!ad7i
From: houxc!ad7i
Date: Wed Nov 10 02:39:07 1982
Subject: BTL Holmdel November Meeting
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 9 17:41:13 1982
Received: Wed Nov 10 02:39:07 1982

ad7i msg 21:

On November 15th at 12 Noon, in room HO 2A606
the Holmdel Amateur Radio Club will hold its

November meeting. The Guest speaker will be:

Phil Karn, KA9Q,
of BTL Murray Hill

Phil will be speaking on AMSAT Phase III with
a special bent toward data communications.
Everyone is invited to attend.

For more information contact Paul Newland, ad7i
on HO x3731. Hope to see you there.

From 3698141314270688577
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,9528649fafb64211,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,9528649fafb64211,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-12 01:58:45 PST
Message-ID: <bnews.eagle.616>
Newsgroups: net.ham-radio,net.columbia
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Fri Nov 12 04:58:42 1982
Subject: Amateur Radio Relay Frequencies for STS-5
X-Google-Info: Converted from the original B-News header
Posted: Thu Nov 11 00:57:15 1982
Received: Fri Nov 12 04:58:42 1982

Now you can finally start saving money with that expensive HF SSB
station. The FCC has granted the amateur radio clubs at Johnson Space
Center and JPL authority to rebroadcast STS-5 communications, so you
don't have to waste money calling the Dial-It number.

W6VIO will transmit on 224.04 mhz; this may not be too useful outside
of Pasadena. However, W5RRR at JSC will transmit on 28.6, 21.36, 14.28 or
14.23 mhz, depending on conditions.

(The following information just came from an AP wire story.)

Phil Karn, KA9Q

From 3578616111188836031
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ee97e584e5b36b71,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-12 05:28:55 PST
Message-ID: <bnews.houxc.289>
Newsgroups: net.ham-radio

Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Fri Nov 12 08:28:51 1982
Subject: ARRL 99: Shuttle Communications
X-Google-Info: Converted from the original B-News header
Posted: Thu Nov 11 10:02:26 1982
Received: Fri Nov 12 08:28:51 1982

qst de ad7i
hr arrl bulletin nr 99 from arrl headquarters
newington ct november 10, 1982
to all radio amateurs bt

on november 9, fcc granted a request from the jpl amateur radio club
for a 90 day temporary waiver of section 97.113 to permit club
stations w6vio and w5rrr to manually retransmit on amateur radio
frequencies the voice communications from the space shuttle columbia.
other amateurs may retransmit the transmissions from w6vio and w5rrr,
but they may not directly pick up columbia communications and
retransmit them. the retransmitted communications shall be for the
sole benefit of licensed amateur radio operators. the transmissions
are limited by fcc rules, section 97.91, to quote information
bulletins consisting solely of subject matter having direct interest
to the amateur radio service as such unquote. for this reason,
special efforts to encourage nonamateurs to listen in should be
avoided, as this could jeopardize further waivers of this nature ar

From -7142372628760535373
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,12f37694d13f843d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-12 05:33:13 PST
Message-ID: <bnews.houxc.290>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Fri Nov 12 08:33:06 1982
Subject: CRRL 41: Recip. Agree.
X-Google-Info: Converted from the original B-News header
Posted: Thu Nov 11 10:02:55 1982
Received: Fri Nov 12 08:33:06 1982

qst de ad7i
hr crrl bulletin nr 41 from arrl headquarters
newington ct november 9, 1982
to all radio amateurs bt

there is a new reciprocal operating agreement between canada and papua new guinea.

changes in the crrl constitution, approved at the crrl general meeting on october 2, were approved by the minister of corporate and consumer affairs on october 13. as soon as two new interim directors are appointed, the crrl board will have five regional directors, one each from british columbia, the mid west, ontario, quebec and the atlantic region ar

From -1816863438337631755
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f83fb2dcd213a32b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-12 05:53:46 PST
Message-ID: <bnews.eagle.622>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Fri Nov 12 08:53:42 1982
Subject: PacSat
X-Google-Info: Converted from the original B-News header
Posted: Thu Nov 11 14:24:13 1982
Received: Fri Nov 12 08:53:42 1982

PACSAT -- A New AMSAT Satellite Project

Den Connors, KD2S and Tom Clark, W3IWI

A new type of amateur satellite was proposed by Tom Clark,W3IWI, at the packet radio working group meetings held 8-11 October, 1982 at the AMSAT laboratory in conjunction with AMSAT's annual general meeting. The working group meeting was also noteworthy in that it provided a focus for the various packet radio groups to coordinate their activities and resulted in a new unifed protcol which is described by Hank Magnuski, KA6M, in a companion document. The new satellite project has been tentatively dubbed PACSAT -- a final name is yet to be chosen, pending resolution of some potential copy-right conflicts. This satellite would build upon AMSAT's experience in low-cost spacecraft development, the current upsurge of interest in digital and computer techniques, and the technology being developed for amateur packet radio applications. The basic idea is to implement an orbiting digital packet radio repeater with store-and-forward capabilites. This satellite would allow amateur "electronic mail" service with a few hour delivery time to anywhere in the world -- a virtual "flying mailbox" for amateur radio and computer enthusiasts.

The "strawman" system proposed by Tom and discussed during the three days of meetings, would have one or more high-speed packet radio channels, and possibly other ASCII or RTTY input/output channels. An onboard computer

system would control a large amount of memory storage -- perhaps as much as one megabyte for messages. Access to the message system would be somewhat like using a more traditional computer bulletin board system (CBBS) using landline dial-up capability. Using a Phase-2 type of low-earth orbit ("LEO"), the satellite would be available several times a day for up to 15 minutes worth of message reading and writing. Although the LEO satellites are limited in their coverage, the store-and-forward capability could extend an AMSAT-OSCAR-8 type satellite to provide global coverage.

One of the major problems with such a concept is that packet radio represented new technology to most amateurs, although we see a marked rise in amateur interest in computers. In order to make a PACSAT be a viable concept, the current packet radio "experts" will have to devote considerable efforts to making reliable ground-station hardware and software available to AMSAT's user community, and they will have to embark on a concentrated educational program to explain these new concepts -- some of the attendees at the working group meeting noted that they were around when the SSB vs. AM "wars" were raging in the early 1950's.

One of the major technical problems that will have to be solved before a PACSAT (or the AMICON channel for Phase-3B) is viable involves modems. None of the standard commercial modems seem suitable for noisy channels with doppler shift. Several alternatives were discussed during the meetings. The modulation techniques mentioned included phase-shift keying (PSK) and minimum-shift keying (MSK). Discussions of data rates for up- and down-links ranged from 400 baud up to 56 kbaud; the technical constraints associated with accptable bit error rates and practical contraints of implementation cost and difficulty plus available spectrum space led to a consensus that likely rates were in the 400-2400 baud range. Although the Phase-3B tele-command group have implemented state-of-the-art 400 baud PSK modems and W4RI has been working on MSK designs, the use of either technique will require considerable work in order to develop high reliability modems usable by the amateur community. For any digital usage of amateur satellites, it is clear that modems will be more complicated that the traditional frequency-shift keyed systems currently used for RTTY.

The strawman design Tom presented involved multiple uplinks and a single downlink (e.g., one calling uplink channel and perhaps four working channels). This built upon typical amateur net experience with the satellite acting as "NCS" on a calling-and-answering frequency. After the user calls in and establishes that he has uplink traffic (or that the satellite has a message for him), he would directed to QSY to a working message channel where the spacecraft's computer would "poll" the user until both he and the spacecraft are QRU. This design is based on the use of ALOHA-type protocols where the multiple users cannot hear each other, leading to possible "collisions" on the uplink channels; this, combined with Tom's assumption that "what goes up must come down" (i.e. the total message traffic up and down are about equal), led to the multiple uplink, single downlink proposal.

Tom's proposal was that the uplink and downlink were full duplex (simult-aneous transmission and reception) involving two bands (probably 435 Mhz uplink and 145 MHz downlink). The design assumed that 0.5-1.0 Megabyte of storage was available onboard which could be treated as a "virtual disk" for

planning. All messages would be "bit-regenerated" (i.e. no "direct" channel exists between the users except through the satellite), and control of the communications would be by an active, onboard computer. Other functions to be performed by this computer would include the access mechanism to manage the "virtual disk" storage, handling of the protocols to allow multiple users to get their messages up and down during a single pass, and possibly inter-spersing of "QST" bulletins in the downlink data stream during moments of inactivity.

On Saturday, the AMSAT members attending the technical forum were allowed to hear packet radio in action on AMSAT's W3ZM (146.235/.835) repeater. W3IWI brought a microprocessor-based Terminal Node Contoller (TNC) developed by the Vancouver Area Digital Group (VADG), a "202A-type" AFSK modem, and a standard 2m FM transceiver. Some 50 miles away in Sterling Park, VA, Dave Borden (K8MMO) had his Z-80 CP/M computer hooked to a similar TNC and modem. Amidst normal talk-in activities, the two packet radio terminals were sending brief data packets through the repeater so that those attending the meeting saw a game of "ADVENTURE" being played in the squelch tails. This impressive demonstration was the first exposure for many AMSAT members of the capabilities of digital techniques in amateur radio.

As the weekend proceeded, a number of informal discussions on packet radio continued. Among the experts there grew a general agreement on the data link protocol, with the AMSAT AMICON ADDCP-HDLC definition emerging as being the best for the "LEO" PACSAT too. Arguments for and against Tom's proposal for multiple uplinks (supporting a single downlink) centered on the estimated relative traffic loading on satellite uplink and downlink. These discussions included the observations:

-- CBBS experience shows that users "browse" through stored information much more than generating new information. If the PACSAT is to be operated as a flying CBBS, then the design should be reconsidered.

-- The "QST" bulletin transmissions will be a very important PACSAT function for the users.

On Sunday, a proposal was made by Den Connors and Lyle Johnson which included a number of the above concepts. Different mechanisms for access using full-duplex uplink/downlink pairs were presented. The AMSAT AMICON (AMRAD AX.25) HDLC logical link protocol was discussed in as a PACSAT standard and a number of network-related issues, including message classifications and buffer allocation/deallocation mechanisms were raised. Lyle presented another possible system block diagram, showing different input/output channels, including command, multiple CPU's and different memories for program store, file directories, buffers and message mass storage. The tasks of the CPU were further detailed, and the different algorithms needed were identified.

During this discussion, Tom Clark outlined the possibility of a truly international implementation stategy. Tom described one scenario with the system design and user eduction/interfacing being the prime U.S. responsibility, on-board hardware constructed in South Africa, satellite integration performed in the United Kingdom and actual launch handled by the

commercial group in Texas which has recently flown a successful test mission (see A.S.R. #41, September 13, 1982). A part of the discussion involved the possibility that part of the US role might also include a new role for AMSAT in being responsible for the distribution of the hardware unique to packet radio unless commercial interest is seen soon; this could serve as a method for generating much needed revenues to support all of AMSAT's activities. To help get this activity moving, Den Connors agreed to act as interim PACSAT coordinator.

The general PACSAT concept was presented at the AMSAT general meeting, and the AMSAT membership welcomed the idea, with the only caveats being expressed as "Can we afford it? Are we stretching ourselves too thin?" Tom indicated that these were AMSAT management concerns too but that the key individuals were very enthusiastic about the concept. He stated that without a dedicated "hardcore" of technical volunteers, AMSAT loses its vitality. Since no further opposition was raised, Tom indicated that further development of the PACSAT concept can be expected.

Since the meetings at Goddard, Den has accepted the position of Project Manager for the US part of the PACSAT project, and several developmental efforts are in the formative stages. ZS1FE has confirmed the South African interest in pursuing the project, and G3YJO has begun "selling" the rest of the payload (which may well be called UoSAT-2). Key developments in the next few months will include ground station design, technology investigations to identify large flyable memories and modem (both MSK and PSK) design, planning for maximum utilization of the Phase-3B designs, conceptual designs of the on-board communications and processing hardware and software and coordination of the roles between the various groups that can contribute to this project.

It is hoped that this satellite will not only give the packet radio experimenters a much-awaited international linking capability, but also provide a new, challenging and unique outlet to the many thousands of new hams who are quite savvy in computer techniques and utilization. The AMSAT team solicits your indications of interest and assistance. This, as with all AMSAT projects, is a volunteer effort -- can we serve as a focus for your creative ideas?

From -7969344052915625417
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,416973abaa6ad542,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-12 06:00:58 PST
Message-ID: <bnews.eagle.620>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Fri Nov 12 09:00:56 1982
Subject: Packet Radio Tests
X-Google-Info: Converted from the original B-News header
Posted: Thu Nov 11 14:09:01 1982

Received: Fri Nov 12 09:00:56 1982

QST DE W3IWI

News Release on Packet Radio Activities
de AMSAT 16 October 82

*** Long-haul Packet Test Successful ***

. . . . . .

On 16 October 1982, from 16:45 UT until 17:00 UT, a successful long-haul Packet Radio demonstration QSO took place between Maryland and Texas; the stations involved were Bob Diersing, N5AHD in Corpus Christi and Tom Clark, W3IWI near Washington. The QSO took place on the 10 meter band at 28.300 kHz with both stations running FSK at a 1200 baud rate using HDLC protocol currently accepted as amateur radio standards.

. . . . . .

This demonstration represents another phase of the AMSAT activities to advance the state-of-the-art in amateur radio communications technology development and the tests were conducted to test the suitability of various existing hardware and protocols under weak-signal and QRM conditions in anticipation of the AMSAT Phase-3B satellite launch in February, 1983, and to help in the planning of future satellite missions including a possible dedicated packet radio mission a few years from now.

. . . . . .

The demonstration QSO took place just one week after a landmark meeting held under AMSAT's auspices to establish and coordinate common packet radio protocols. This meeting in the Washington,DC area was attended by representatives of packet radio groups from San Francisco, Tucson, St. Louis, Washington and New Jersey. The meeting succeeded in reconciling minor differences that had evolved between the various groups during their R&D activities. The goal of establishing common protocols was focused on the upcoming satellite launches when it will be possible, for the first time, for the different packet radio groups to reliably inter-connect local networks on a global basis.

. . . . . .

During the long-haul test, both N5AHD and W3IWI were using special 8085 microprocessor based Terminal Node Controller (TNC) hardware developed in Canada by the Vancouver Area Digital Group (VADG), with software developed in Vancouver, San Francisco and Washington. They both used conventional "202A" FSK modems operating thru 100 watt SSB transceivers. A number of packets were successfully exchanged in both directions and the TNC board's software automatically verified the accuracy of each transmission. The HDLC protocol dictates that if any error is detected, the transmitting station re-tries until an error-free copy is received. In the test QSO, the number of re-tries required never exceeded three. The stations had conducted previous long-haul test experiments through the AMSAT-OSCAR-8 satellite.

. . . . . .

W3IWI has been involved in a number of previous AMSAT demonstration tests including initial feasibility demonstrations using satellites to locate downed aircraft which led to the international Search-and-Rescue Satellite (SARSAT) program and tests of digital phase-shift keying (PSK) techniques to be

employed on the Phase 3 satellite series. N5AHD has developed automated, real time telemetry acquisition techniques for the UoSAT-OSCAR 9 satellite and operates AMSAT's Computer Bulletin Board System (CBBS) which can be accessed at (512)852-8194. Both N5AHD and W3IWI have been frequent contributors of amateur radio software which is available through the AMSAT Software Exchange (ASE). Further information about AMSAT, ASE or AMSAT's CBBS can be obtained by calling the CBBS or by writing:

AMSAT
Box 27
Washington, DC 20044

. . . - . -

From 1540455685039611293
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,645f7dd1bb2d58,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-12 06:04:18 PST
Message-ID: <bnews.eagle.621>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Fri Nov 12 09:04:13 1982
Subject: AMSAT/AMRAD Packet Radio Activities
X-Google-Info: Converted from the original B-News header
Posted: Thu Nov 11 14:11:32 1982
Received: Fri Nov 12 09:04:13 1982

Special to AMSAT Satellite Report
de Hank Magnuski, KA6M 12 October 82
(minor editorial revisions de W3IWI)

AGREEMENT ON PACKET RADIO STANDARDS!

As part of the October 10th, 1982 AMSAT (Radio Amateur Satellite Corp.) general meeting, president Tom Clark, W3IWI, invited a number of leaders of active packet radio groups to come to a special working group meeting on Friday, October 8th, to discuss the future developments in packet radio activities; specifically, this meeting was intended to discuss AMICON (the AMSAT International Computer Network) for the Phase-3B spacecraft and to discuss a new project (tentatively called PACSAT) involving a low-altitude orbit, all digital store-and-forward transponder. To Tom's

pleasure and surprise, the meeting was well supported and a number of people showed up, representing these groups:

New Jersey - Phil Karn, KA9Q;

Tucson Area Packet Radio (TAPR) - Den Connors, KD2S and Lyle Johnson, WA7GXD;

St. Louis Area Packet Radio (SLAPR) - Pete Eaton, WB9FLW;

Washington (AMRAD) - Paul Rinaldo, W4RI, Dave Borden, K8MMO, Terry Fox, WB4JFI and Eric Scace, K3NA;

Pacific Packet Radio Society (PPRS) - Hank Magnuski, KA6M;

AMSAT - Tom Clark, W3IWI, Jan King, W3GEY, John DuBois, W1HDX and Bob Carpenter, W3OTC.

Even more surprising is that this diverse group managed to agree on some things. In fact, the agreement reached on adopting a common link level protocol may prove to be extremely significant in forming the foundation for U.S. packet radio networking. The meeting which originally was supposed to iron out some AMICON details managed to have much more of an impact. Here's some background on what happened:

A year ago, in conjunction with the '81 AMSAT general meeting, Paul Rinaldo organized the first Packet Radio Networking Conference under the sponsorship of AMRAD, ARRL and AMSAT in Washington (some excellent conference proceedings are still available). Many ideas and some real and paper networks were discussed. In the months which followed quite a few people got their packet radio controllers running and had a chance to experiment, read, discuss and think about various problems involved in implementing packet radio networks. The situation became discouraging. It seemed like a new protocol was proposed for each new set of Terminal Node Conroller (TNC) hardware that came on the air. Each group started heading off in a somewhat different direction. The promise of compatible systems was growing remote. But in this dispersion of effort, people also found out how difficult it was to implement private protocols and how difficult the interconnection would be if common ground wasn't found soon. The different groups also came to realize that there were a common set of problems to be solved and that one area's solution couldn't ignore the requirements of other users. The summer doldrums saw very little activity and not much progress, and provided the background for the AMSAT meeting. This inevitable diversity during the R&D phases for each of the groups had to be reconciled with the impending launch of the Phase-3B satellite in February, 1983.

The AMICON Network

Three major areas of concern filled the agenda of the AMICON meeting: the usage of the Special Service Channel (SSC) earmarked for digital experimentation and called "AMICON" in AMSAT planning documents; the

recommended modulation methods and bit rates to be used on the Phase-3B SSC; and the detailed link protocol to be used for linking ground stations via the satellite.

There was general agreement that standards accepted today must be regarded as developmental. It is to premature to ordain any single scheme at this time. The AMICON concept is not yet a detailed network design, but rather an opportunity to develop a new service for amateur radio. In the developmental phases we may well see many diverse techniques being tested. The meeting discussed the concept that the use of high-altitude satellites for packet radio would be sufficiently complex that it was unlikely that many individual users would be able to muster the resources for individual access. Rather, AMICON would probably evolve as a channel for linking local "concentrator" nodes around the world.

There was a lot of discussion on suitable modulation methods and bit rates that could be supported by Phase-3B. Den Connors and Lyle Johnson of TAPR, Paul Rinaldo of AMRAD, and Tom Clark and John DuBois of AMSAT presented their research findings. Many different modem types were reviewed and international requirements were discussed. After all the debate the following conclusions were reached:

1. The AMICON SSC usage should be restricted to 5 kHz bandwidth (at the -26 dB points). Modem performance must be a primary consideration for any ground station, and the modem used will probably be of a rather advanced design.

2. The use of 202-type modems using NBFM-AFSK will not work.

3. The use of 202 modems using SSB-FSK will produce marginal results.

4. A 400-1200 bps channel speed is probably optimal, as this speed satisfies a variety of different constraints and requirements.

5. The PSK modulation techniques developed for Phase-3B telemetry should be explored at both 400 and 1200 bps.

6. The AMRAD and TAPR groups are going to pursue development of a modem which employs Minimum Shift Keying (MSK). MSK and PSK are considered the most promising methods at this time.

7. The SSC will have to be open for different experimental approaches until there is general agreement and experimental validation of "the" optimum method.

Considering all the alternatives which were discarded, the above resolutions represent a significant narrowing of focus. If that wasn't enough, more was yet to come!

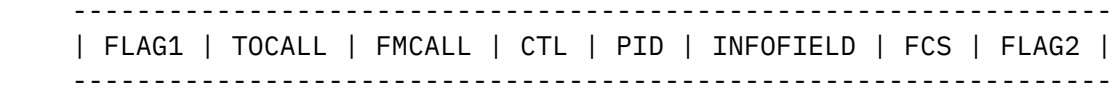
Eric Scace reviewed the work which had been done by the NJ & AMRAD packeteers to adapt the international X.25 protocol to amateur needs. The amateur subset has been documented by Terry Fox, and is now called AX.25. Hank Magnuski distributed a tutorial document on connectionless protocols

and described work which had been done to develop Revision 4 of the TIPM and LIPM software. This is the first implementation of TNC software utilizing only amateur calls (and not hard-wired assigned addresses) for addressing.

By the evening of the October 8, the group began to recognize that only very minor differences separated the AX.25 and LIPM.04/TIPM.04 approaches. The TAPR protocol users were willing to implement an interface based on the recommendations which would come out of the meeting. The differences were resolved and led to the unanimous adoption of a subset of an internationally recognized link level protocol (specifically it is called ANSI X3.66 ADCCP-HDLC BA Class, with options 2, 4, 7, 8, & 11).

Why is this important? First, this link level protocol allows two AMICON ground stations to construct a packet pipeline. This same protocol can be used between two stations in a terrestrial backbone net. The same protocol can also be used for terminal-to-terminal connections, whether direct or via a simplex packet repeater. It represents only a slight extension of the CCITT X.25 LAPB link level protocol. And finally, it does not restrict future development of ISO Level 3 virtual circuit or datagram protocols.

The key feature of the new design is the adoption of a scheme for using call-sign addressing in a packet. The packet format looks like this:



where:

FLAG1	Standard opening HDLC flag byte (01111110)
TOCALL	The destination call-sign (6 char's plus sub-station ID code)
FMCALL	The source call-sign of (6 char's plus sub-station ID code)
CTL	Standard HDLC control byte
PID	Protocol Identification byte for information frames.
INFO	Information field in information frames
FCS	Frame CRC check sequence
FLAG2	Standard closing HDLC flag byte

Frames to be repeated by a local area network simplex packet repeater also contain a third address field following the FMCALL field. This third field is the callsign of the repeater. More details on this protocol will be published in the revised AX.25 specificiation document by WB4JFI et al.

Collectively, the group considered that nearly every link design starts out with a statement something like this: "Holy 807's, look at all the overhead bytes you have in using call signs as addresses. I can do it with just 4 bits." We have found that these other schemes have their own defects and that the penalty for the call sign overhead is relatively small in comparison to other delays on the link and in view of the other benefits. In addition, both amateurs and their regulatory authorities are particularly defensive that the individual's call sign is sacrosanct and

tantamount to being a personal name.

The AMICON session ended with promises from various representatives to try to implement the required versions of this new protocol. In the interim, LIPM.04/TIPM.04 will be available for use by AMICON ground stations until the new software is ready.

PACSAT

The other main topic of the meeting concerned the possibility of a dedicated packet radio satellite. This is discussed in a companion news release from KD2S and W3IWI.

From 8382359787671797705
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b022f1678dfb98c2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-14 23:12:37 PST
Message-ID: <bnews.houxc.292>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!zeppo!whuxk!houxm!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!zeppo!whuxk!houxm!houxa!houxc!ad7i
From: houxc!ad7i
Date: Mon Nov 15 02:12:36 1982
Subject: ARRL 100: F1 on 10 MHz
X-Google-Info: Converted from the original B-News header
Posted: Fri Nov 12 08:20:37 1982
Received: Mon Nov 15 02:12:36 1982

qst de ad7i
hr arrl bulletin nr 100 from arrl headquarters
newington ct november 11, 1982
to all radio amateurs bt

the arrl encourages observance of the voluntary band plan for the 10 mhz band adopted by the 1980 iaru region 2 conference. f1 emissions should be in the 10.140 to 10,150 mhz portion of the band ar

From 905174804394117485
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7bdf5bd5aa10cb27
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-15 02:41:01 PST
Message-ID: <bnews.inuxc.512>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!lime!we13!otuxa!ll1!ihldt!ihps3!
ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!houti!lime!we13!otuxa!ll1!ihldt!

ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Mon Nov 15 05:41:00 1982
Subject: ARRL DX BULLETIN de k2ph
X-Google-Info: Converted from the original B-News header
Posted: Fri Nov 12 07:56:37 1982
Received: Mon Nov 15 05:41:00 1982

_M_a_u_r_i_t_a_n_i_a_.

5T5TO is active on all bands on cw. Look for Marc on 3506 kHz at 0600Z. QSL via F6BUM.

_E_a_s_t_e_r_n__K_i_r_i_b_a_t_i_.

T32AB can be found on 10.108 MHz at 0330Z. QSL via N7YL.

_C_r_o_z_e_t__I_s_l_a_n_d_.

FB8WG has been on 10.101 MHz at 1700Z. George will be leaving for France shortly.

_S_o_u_t_h__O_r_k_n_e_y_.

VP8AOE and VP8AOC have been around 14215 at 0100Z. QSL via K0/JW.

_T_r_i_s_t_a_n__d_a__C_u_n_h_a__I_s_l_a_n_d_.

ZD9BV and ZD9YL will be on cw at 1100Z on november 14 at 28745 kHz. Also look for ZD9BX on 28745 kHz on Tuesdays and Thursdays at about 1200Z.

_T_u_n_i_s_i_a_.

3V8AA has been on 28745 kHz at 1300Z operating cw. QSL via IS0/LYN.

_T_a_i_w_a_n_.

BV2B will begin operation on 40 and 80 meters after December First. This will be the first time operation has been experienced on these bands.

_H_e_a_r_d__I_s_l_a_n_d_.

Both groups planning January operations from Heard Island report that everything is going well and permission for licenses and landing have been received from appropriate authority.

From -2672916393728538535

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a0f18e6a823a5c13,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-15 04:11:39 PST
Message-ID: <bnews.eagle.632>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Mon Nov 15 07:11:38 1982
Subject: UOSAT Bulletin #3
X-Google-Info: Converted from the original B-News header
Posted: Sun Nov 14 20:48:38 1982
Received: Mon Nov 15 07:11:38 1982

I copied this bulletin frame from the Uosat-Oscar-9 2 meter beacon
yesterday afternoon. (Part of the frame was garbled, near the orbital
period section, due to a fade)

UOSAT SPACECRAFT CONTROL CENTRE
UNIVERSITY OF SURREY, GUILDFORD, SURREY, ENGLAND

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UOSAT SPACECRAFT OPERATIONAL STATUS:

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BULLETIN-3 1200 GMT 12TH NOV 1982

* ATTITUDE *
ATTITUDE CONTROL MANOEUVRES HAVE CONTINUED THROUGHOUT
THIS WEEK AND HAVE SUCCESSFULLY REDUCED THE Z-AXIS
SPIN PERIOD TO 30 SEC WITH A NUTATION ANGLE OF 24 DEGREES
THE -Z FACET IS ORIENTED TOWARDS THE SUN
FURTHER MANOEUVRES WILL FOLLOW TO REDUCE THE Z-SPIN TO
A PERIOD OF AROUND 60-90 SEC AND TO RE-ORIENT THE SPIN AXIS
BEFORE BOOM DEPLOYMENT

* RADIATION DETECTOR EXPERIMENT *
20 KEV COUNTER IS FULLY OPERATIONAL DESPITE LOW EHT
VOLTAGE INDICATED BY TELEMETRY
* REF ORBIT * 12-NOV-1982
ORBIT NO. 6085
EQX TIME 12:48:39 GMT
EQX LONG 325.9 DEG W
MEAN HEIGHT 515 KM
PERIOD ...
...

REPORTS ON TELEMETRY & BULLETIN RECEPTION WOULD BE APPRECIATED
SEND TO: DR.M.N.SWEETING UOSAT CONTROL CENTRE - THANK YOU

From -4062632564894707528

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8f15046e850afc31,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-15 04:33:05 PST
Message-ID: <bnews.pyuxbb.299>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxa!mhuxh!mhuxm!pyuxjj!pyuxdd!pyuxbb!mkg
X-Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxa!mhuxh!mhuxm!pyuxjj!pyuxdd!pyuxbb!mkg
From: pyuxbb!mkg
Date: Mon Nov 15 07:32:58 1982
Subject: code practice pgms for your terminal
X-Google-Info: Converted from the original B-News header
Posted: Sat Nov 13 00:26:26 1982
Received: Mon Nov 15 07:32:58 1982

In doing some house cleaning, I found these programs that are supposed to
produce morse code using input text or a file. Somebody gave them to me about
two years ago and they have been collecting dust in my uucp directory since.

These programs use the audible bell in your terminal and produce morse code.
I am told that if the duration of the bell is right, running these programs
at 300 baud produces respectable CW.

I hate to throw these away so I am posting them to the net in hopes
that somebody out there can use them for code practice, reading rotated
jokes, or what ever.

   Marsh Gosnell AD2H   BTL Piscataway harpo!whuxlb!mkg

```
/* echo CW using input from keyboard */
#define MAXDAH 25
#define MAXDIT 25
#define MAXICB 25
#define MAXIWB 50

#define B 0007
#define F 0177

char dit[MAXDIT];
char dah[MAXDAH];
char icb[MAXICB];
char iwb[MAXIWB];

struct WPM{
     int dahl;
     int pazl;
     int icbl;
     int iwbl;
     char *nwpm;
};
struct WPM wpm[20]={
     5,7,2,6,"11.5",
```

```
     5,7,4,3,"11",
     5,7,5,6,"10.5",
     5,7,6,10,"10",
     5,7,8,9,"9.5",
     5,7,9,15,"9",
     5,7,10,22,"8.5",
     7,7,11,22,"8",
     7,8,10,24,"7.5",
     8,8,12,24,"7",
     9,8,14,31,"6.5",
     9,9,16,30,"6",
     9,10,17,34,"5.5",
     10,10,22,40,"5"
};

char *pps[]={
     "-.--.-","-.--.-","","",   /* ( ) * + */
     "--..--","",".-.-.-","-..-.",   /* , - . / */
     "-----",".----","..---","...--",   /* 0 1 2 3 */
     "....-",".....","-....","--...",   /* 4 5 6 7 */
     "---..","----.","---...","-.-.-.",   /* 8 9 : ; */
     "","","","..--..",   /* < = > ? */
     "",".-","-...","-.-.",   /* @ A B C */
     "-..",".","..-.","--.",   /* D E F G */
     "....","..",".---","-.-",  /* H I J K */
     ".-..","--","-.","---",   /* L M N O */
     ".--.","--.-",".-.","...",   /* P Q R S */
     "-","..-","...-",".--",   /* T U V W */
     "-..-","-.--","--.."   /* X Y Z */
};

main(argc,argv)
int argc;
char *argv[];
{
     int c,r;
     int n,i,j;
     int x;
     int ss;

     /* decode */

     *++argv;
     for (i=0;i<14;i++)
     {
          if ((n=strcmp(*argv,wpm[i].nwpm)) == 0) break;
     }
     if (i == 14)
     {
          printf("usage: code wpm\n");
          printf("standard input contains text to send\n");
          printf("wpm=[5 to 11.5] in steps of .5\n");
          exit(0);
```

```
     }
     else
          sound(wpm[i].dahl,wpm[i].pazl,wpm[i].icbl,wpm[i].iwbl);

     for (;;)
     {
          ss=0;
          if ((c=getchar()) == 0) break;

          if (c == '_')
          {
               ss=1;
               if ((c=getchar()) == 0) break;
          }
          if (c==' ' || c=='\n')
          {
               printf("%s",iwb);
               continue;
          }
          if (c>='a' && c<='z') {
               c=c+'A'-'a';
          }

          if (c>='(' && c<='Z')
          {
               x=c-'(';
               for (j=0;(c=pps[x][j]);j++)
               {
                    if (c==' ') continue;
                    if (c=='.')
                         printf("%s",dit);
                    else
                         printf("%s",dah);
               }
               if (ss == 0) printf("%s",icb);
          }
     }
}
sound(ldah,lpas,licb,liwb)
int ldah,lpas,licb,liwb;
{
     int i;
     if (lpas+1 >= MAXDIT || lpas+ldah >= MAXDAH ||
         licb >= MAXICB || liwb >= MAXIWB )
     {
          printf("length exceeds max\n");
          return(0);
     }
     dit[0]=B;
     for (i=1;i<=lpas;i++)
     {
          dit[i]=F;
     }
```

```
     dit[lpas+1]=0;
     for (i=0;i<=ldah;i++)
     {
          dah[i]=B;
     }
     for (i=ldah;i<=ldah+lpas;i++)
     {
          dah[i]=F;
     }
     dah[ldah+lpas]=0;
     for (i=0;i<=licb;i++)
     {
          icb[i]=F;
     }
     icb[licb]=0;
     for (i=0;i<=liwb;i++)
     {
          iwb[i]=F;
     }
     iwb[liwb]=0;
     return(0);
}
atoi(s)  /* convert s (a string of intergers to intergers */
char s[];
{
     int i,n;

     n=0;
     for (i=0; s[i]>='0' && s[i]<='9'; ++i)
          n=10*n+s[i]-'0';
     return(n);
}
strcmp(s,t)
char s[],t[];
{
     int i;
     i=0;
     while (s[i] == t[i])
          if (s[i++] == '\0')
               return(0);
     return(s[i]-t[i]);
}


/* echo CW using input file */
#define MAXDAH 25
#define MAXDIT 25
#define MAXICB 25
#define MAXIWB 50

#define B 0007
#define F 0177
```

```
#include <stdio.h>

struct WPM{
     int dahl;
     int pazl;
     int icbl;
     int iwbl;
     char *nwpm;
};
struct WPM wpm[20]={
     0,0,0,0,"0",
     5,7,2,6,"11.5",
     5,7,4,3,"11",
     5,7,5,6,"10.5",
     5,7,6,10,"10",
     5,7,8,9,"9.5",
     5,7,9,15,"9",
     5,7,10,22,"8.5",
     7,7,11,22,"8",
     7,8,10,24,"7.5",
     8,8,12,24,"7",
     9,8,14,31,"6.5",
     9,9,16,30,"6",
     9,10,17,34,"5.5",
     10,10,22,40,"5",
     10,12,23,45,"4.5"
};

int mt[6400],ma[6400],mac[6400];
int stack[100],sp;
char dit[MAXDIT];
char dah[MAXDAH];
char icb[MAXICB];
char iwb[MAXIWB];
char *pps[]={
     "-.--.-","-.--.-","","",   /* ( ) * + */
     "--..--","",".-.-.-","-..-.",   /* , - . / */
     "-----",".----","..---","...--",   /* 0 1 2 3 */
     "....-",".....","-....","--...",   /* 4 5 6 7 */
     "---..","----.","---...","-.-.-.",   /* 8 9 : ; */
     "","","","..--..",   /* < = > ? */
     "",".-","-...","-.-.",   /* @ A B C */
     "-..",".","..-.","--.",   /* D E F G */
     "....","..",".---","-.-",  /* H I J K */
     ".-..","--","-.","---",   /* L M N O */
     ".--.","--.-",".-.","...",   /* P Q R S */
     "-","..-","...-",".--",   /* T U V W */
     "-..-","-.--","--.."   /* X Y Z */
};

main(argc,argv)
int argc;
char *argv[];
```

```
{
     int hi,lo,cu,x,c,r;
     int ti,i,j,k;
     char test[100],ans[100];
     char testi[100];

     FILE *fp, *fopen();

     /* decode */

     if (argc==1)
     {
          printf("usage: test.morse 'file name'\n");
          exit(0);
     }
     if ((fp=fopen(*++argv,"r"))==NULL)
     {
          printf("can't open file %s\n",*argv);
          exit(1);
     }

     hi=16;
     lo=0;
     cu=8;
     r=100;

     for (;;)
     {
          ti=i=0;
          for (;;)
          {
               if ((c=getc(fp)) == EOF)
               {
                    fclose(fp);
                    break;
               }

               if (c=='\n') break;

               testi[ti]=c;
               ti++;
               if (c>='A' && c<='Z') c=c+'a'-'A';
               if (c!=' ')
               {
                    test[i]=c;
                    ++i;
               }
          }

          if (i==0) exit(0);

          do
          {
```

```
if (r>=90 || r<=50)
{
     printf ("test speed is %s wpm\n",wpm[cu].nwpm);
     sound(wpm[cu].dahl,wpm[cu].pazl,wpm[cu].icbl,wpm[cu].iwbl);
}
for (k=0;k<ti;k++)
{
     c=testi[k];
     if (c==' ')
     {
          printf("%s",iwb);
          continue;
     }
     if (c>='a' && c<='z') c=c+'A'-'a';
     if (c>='(' && c<='Z')
     {
          x=c-'(';
          for (j=0;(c=pps[x][j]);j++)
          {
               if (c=='.') printf("%s",dit);
               else printf("%s",dah);
          }
          printf("%s",icb);

     }
}

j=0;
while ((r=getchar()) != '\n')
{
     if (r != ' ')
     {
          ans[j]=r;
          ++j;
     }
}

if (j==0) r=0;
else r=grade(test,i,ans,j);
printf("you scored %d correct out of %d in %d answers\n",r,i,j);
testi[ti]=0;
r=r*100;
r=r/i;

if (r>50) printf("The correct answer was:\n%s\n",testi);

if (r<=50)
{
     if (cu==lo)
     {
          ++cu;
          hi=lo=cu;
     }
```

```
                else
                {
                    lo=cu;
                    cu=cu+(hi-lo)/2;
                }
            }

            if (r>=90)
            {
                if (cu==hi)
                {
                    --cu;
                    hi=lo=cu;
                }
                else
                {
                    hi=cu;
                    cu=cu-(hi-lo)/2;
                }
            }

            if (cu>15) cu=15;
            if (cu<1) cu=1;
        } while (r<=50);
    }
}
sound(ldah,lpas,licb,liwb)
int ldah,lpas,licb,liwb;
{
    int i;
    if (lpas+1 >= MAXDIT || lpas+ldah >= MAXDAH ||
        licb >= MAXICB || liwb >= MAXIWB )
    {
        printf("length exceeds max\n");
        return(0);
    }
    dit[0]=B;
    for (i=1;i<=lpas;i++)
    {
        dit[i]=F;
    }
    dit[lpas+1]=0;
    for (i=0;i<=ldah;i++)
    {
        dah[i]=B;
    }
    for (i=ldah;i<=ldah+lpas;i++)
    {
        dah[i]=F;
    }
    dah[ldah+lpas]=0;
    for (i=0;i<=licb;i++)
    {
```

```
          icb[i]=F;
     }
     icb[licb]=0;
     for (i=0;i<=liwb;i++)
     {
          iwb[i]=F;
     }
     iwb[liwb]=0;
     return(0);
}
grade(tlist,ml,alist,al)
char tlist[],alist[];
int ml,al;
{
     int lm;
     int i,j;
     int ac,max;
     lm=0;
     for (i=0;i<al;i++)
     {
          for (j=0;j<ml;j++)
          {
               if (tlist[j]==alist[i])
               {
                    mt[lm]=j;
                    ma[lm]=i;
                    mac[lm]=0;
                    if (lm>6400)
                    {
                         printf("match list length exceeded \n");
                         return(0);
                    }
                    ++lm;
               }
          }
     }
     max=0;
     if (lm==1)
     {
          max=1;
          return(max);
     }
     for (i=0;i<lm-1;i++)
     {
          if (mac[i]==0)
          {
               sp=0;
               stack[sp]=i;
               for (j=i+1;j<lm;j++)
               {
                    if (mt[j]>mt[stack[sp]] &&
                        ma[j]>ma[stack[sp]])
                    {
```

```
                    ++sp;
                    stack[sp]=j;
               }
          }
          ac=0;
          while (sp>=0)
          {
               j=stack[sp];
               --sp;
               ++ac;
               mac[j]=ac;
          }
          if (ac>max) max=ac;
     }
}
     return(max);
}
```

From 6523277121301329653
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,351bea4b9674f398,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 116b5e,351bea4b9674f398,start
X-Google-Attributes: gid116b5e,public
X-Google-ArrivalTime: 1982-11-15 05:29:22 PST
Message-ID: <bnews.eagle.627>
Newsgroups: net.ham-radio,net.columbia
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Mon Nov 15 08:29:20 1982
Subject: Shuttle communications heard
X-Google-Info: Converted from the original B-News header
Posted: Sat Nov 13 13:17:18 1982
Received: Mon Nov 15 08:29:20 1982

I am currently hearing Columbia/Houston communications being relayed on
28.6 Mhz. Part of the problem in hearing them is that the astronauts
have been very quiet. The transmissions do not include the "broadcast
status report" that the 900 number does.

Phil Karn

From 6785667220065928574
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b6e9e2d48decfc1e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-15 23:15:47 PST
Message-ID: <bnews.csu-cs.1898>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!hplabs!hao!csu-cs!kelly@sri-unix

X-Path: utzoo!decvax!cca!hplabs!hao!csu-cs!kelly@sri-unix
From: kelly@sri-unix
Date: Tue Nov 16 02:15:46 1982
Subject: Digital Radio in Use??
X-Google-Info: Converted from the original B-News header
Posted: Wed Nov 10 22:17:54 1982
Received: Tue Nov 16 02:15:46 1982

I am looking for any technical articles referencing digital amateur
radio systems. I saw a QST last year (about October, 81) but the issue
is missing from the school library (natch). If anybody knows of packet
systems or especially digitized voice systems, please let me know.
By the way, its great to see there is net.ham-radio, even if it
(like 20 meters) is dominated by DX talk!. 73s

         Chris Kelly, WD5IBS, Computer science dept, Colo state Univ.

From -7250217308280190120
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,af6921b280643bc3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-16 03:33:57 PST
Message-ID: <bnews.azure.1471>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!hplabs!hao!menlo70!sytek!zehntel!teklabs!tekcrd!azure!
stevebr@sri-unix
X-Path: utzoo!decvax!cca!hplabs!hao!menlo70!sytek!zehntel!teklabs!tekcrd!azure!
stevebr@sri-unix
From: stevebr@sri-unix
Date: Tue Nov 16 06:33:56 1982
Subject: an apology
X-Google-Info: Converted from the original B-News header
Posted: Sat Nov 13 20:03:41 1982
Received: Tue Nov 16 06:33:56 1982

    This is an apology for not signing my name and call to the
article about the Handy Reference Charts. I am a new
user to the system and forget the little things.

    My name is Steve,call is N7CZL and work at Tektronix in
Beaverton, Or.

                                N7CZL

From -5537351958471596404
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c5b9232af198bf36,start
X-Google-Attributes: gid151e61,public

X-Google-ArrivalTime: 1982-11-16 22:51:09 PST
Message-ID: <bnews.houxc.293>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Wed Nov 17 01:51:08 1982
Subject: QEX
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 16 08:45:33 1982
Received: Wed Nov 17 01:51:08 1982

ad7i msg 22

All radio amateurs should be aware of the ARRL's new publication,
QEX, that deals with subjects that are judged to be too technical for
the readership of QST.

QEX is in newsletter format, and consequently, has much less lead
time than QST. The quality of articles is extreme: running from
very good to poor. However, the good artilces far outweigh the poor ones.
I recommend it to anyone interested in the latest work done
by technically inclined radio amateurs.

QEX is $6 for 12 issues (i think). For more information contact
ARRL, 225 Main Street, Newington CT 06111, 203-666-1541.

From -8556746027911383471
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,95362f794cc55ff7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-16 22:53:36 PST
Message-ID: <bnews.houxc.297>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Wed Nov 17 01:53:35 1982
Subject: Propagation Bulletin 46
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 16 08:53:03 1982
Received: Wed Nov 17 01:53:35 1982

qst de w1aw
hr propagation forecast bulletin nr 46   from arrl headquarters
newington ct november 15, 1982
to all radio amateurs bt

the solar flux rose from 139 november 5 to 168 on the 12th. in the

same period of the previous solar rotation, beginning october 8, the flux dropped from 137 to 131. values have been higher than in the previous rotation for ten consecutive days, and are expected to remain so for a few more. solar activity dropped off slightly on the 13th and 14th, but is expected to rise again through about the 21st.

based on current solar observation, the outlook is for mildly disturbed conditions in the hf range november 15 through 17. propagation will improve and the muf will be higher november 18 through 22. the 50 mhz band has been open east and west in the lower latitudes, and on transequatorial paths almost daily since late october. if there is to be high latitude east west communication over long distances on 50 mhz this autumn, it will happen after about the 18th, perhaps for the last time in this solar cycle. hf conditions will be more erratic november 22 through 30. propagation below 30 mhz will be generally good in early december.

american sunspot numbers for november 4 through 10 were between 60 on the 5th and 88 on the 10th, for a mean of 76. they will average slightly higher this week ar

From 5571202302603835709
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1974b31157e9011,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-16 22:55:20 PST
Message-ID: <bnews.houxc.296>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Wed Nov 17 01:55:19 1982
Subject: CRRL 42: SAC
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 16 08:52:39 1982
Received: Wed Nov 17 01:55:19 1982

qst de w1aw
hr crrl bulletin nr 42 from arrl headquarters
newington ct november 15, 1982
to all radio amateurs bt

amateurs got a real workout in a simulated air crash at st. johns, newfoundland, airport on october 13 ar

From -3272093602968159205
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,95d57cd999c553d4,start

X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-17 01:47:40 PST
Message-ID: <bnews.houxc.294>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Wed Nov 17 04:47:38 1982
Subject: ARRL 101: Mt. Greylock
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 16 08:51:59 1982
Received: Wed Nov 17 04:47:38 1982

qst de ad7i
hr arrl bulletin nr 101 from arrl headquarters
newington ct november 11, 1982
to all radio amateurs bt

follows a matter of particular concern to radio amateurs in
massachusetts. with the retention of the communiations tower on mt.
greylock in severe jeopardy, amateurs may wish to contact their state
senator and representative to urge gilbert bliss, director of forests
and parks, dem, boston, massachusetts, to save this vital amateur
communications facility ar

From 3044657913826148028
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7602d4325057312c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-17 01:49:41 PST
Message-ID: <bnews.houxc.295>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!ariel!deimos!houxi!houxa!houxc!ad7i
From: houxc!ad7i
Date: Wed Nov 17 04:49:40 1982
Subject: ARRL 102: Beacon Operation
X-Google-Info: Converted from the original B-News header
Posted: Tue Nov 16 08:52:17 1982
Received: Wed Nov 17 04:49:40 1982

qst de ad7i
hr arrl bulletin nr 102 from arrl headquarters
newington ct november 12, 1982
to all radio amateurs bt

effective january 3, 1983, the fcc has authorized automatic control
for stations in beacon operation. in its recent order amending part
97, the commission specified frequency subbands for beacon operation,

and added a new section 97.87 to the rules governing the use of
beacons in the amateur service. details to follow in qst ar

From -5092634423581889042
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,85a27675af35ccee,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-18 03:19:04 PST
Message-ID: <bnews.azure.1470>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!hplabs!hao!menlo70!sytek!zehntel!teklabs!tekcrd!azure!
stevebr@sri-unix
X-Path: utzoo!decvax!cca!hplabs!hao!menlo70!sytek!zehntel!teklabs!tekcrd!azure!
stevebr@sri-unix
From: stevebr@sri-unix
Date: Thu Nov 18 06:19:01 1982
Subject: reference charts
X-Google-Info: Converted from the original B-News header
Posted: Sat Nov 13 19:41:57 1982
Received: Thu Nov 18 06:19:01 1982

     Here are some charts that I find handy to have on
my shack wall.

FREQUENCY in MHZ	80 Meters CW FREQ.	80 Meters SSB FREQ.
Nov & Tech	3.700-3.750	
General	3.525-3.775	3.890-4.000
Advanced	3.525-3.775	3.800-4.000
Extra	3.500-3.775	3.775-4.000
	40 Meters CW FREQ.	40 Meters SSB FREQ.
Nov & Tech	7.100-7.150	
General	7.025-7.150	7.225-7.300
Advanced	7.025-7.150	7.150-7.300
Extra	7.000-7.150	7.150-7.300
	30 Meters	

	CW FREQ.	SSB FREQ.
General Advanced Extra	10.100-10.109 & 10.115-10.150	
	20 Meters	
	CW FREQ.	SSB FREQ.
General	14.025-14.200	14.275-14.350
Advanced	14.025-14.200	14.200-14.350
Extra	14.000-14.200	14.200-14.350
	15 Meters	
	CW FREQ.	SSB FREQ.
Nov & Tech	21.100-21.200	
General	21.025-21.250	21.350-21.450
Advanced	21.025-21.250	21.270-21.450
Extra	21.000-21.250	21.250-21.450
	10 Meters	
	CW FREQ.	SSB FREQ.
Nov & Tech	28.100-28.200	
General	28.000-28.500	28.500-29.700
Advanced	28.000-28.500	28.500-29.700
Extra	28.000-28.500	28.500-29.700

Note: Nov, Tech & 30 Meters are 250W input CW only.

TIME UTC	CwB	RtB	VoB	ScP	FcP
Mon	0100 0400 1500 2200	0200 0500 1600 2300	0230 0530	1400 0300	0000 2100
Tue	0100 0400 1500	0200 0500 1600	0230 0530	0000 2100	0300 1400

	2200	2300			
Wed	0100	0200	0230	1400	0000
	0400	0500	0530	0300	2100
	1500	1600			
	2200	2300			
Thur	0100	0200	0230	0000	0300
	0400	0500	0530	2100	1400
	1500	1600			
	2200	2300			
Fri	0100	0200	0230	1400	0000
	0400	0500	0530	0300	2100
	1500	1600			
	2200	2300			
Sat	0100	0200	0230	0000	0300
	0400	0500	0530	2100	
	2200	2300			
Sun	0100	0200	0230	0300	0000
	0400	0500	0530	2100	
	2200	2300			

CwB,ScP,FcP Freq. 1.818, 3.58, 7.08, 14.07, 21.08, 28.08, 50.08, 147.555
RtB Freq. 3.625, 7.095, 14.095, 21.095, 28.095, 147.555
VoB Freq. 1.89, 3.99, 7.29, 14.29, 21.39, 28.59, 50.19, 147.555

In a communications emergency, monitor W1AW for special bulletins as follows: voice on the hour, RTTY at 15 min. past the hour, and CW on the half hour.

CW bulletins are sent at 18 wpm; RTTY bulletins are sent at 60 wpm with 170-Hz shift, then repeated on 110-baud ASCII.

CwB = CW Bulletins ScP = Slow Code Practice
RtB = RTTY Bulletins FcP = Fast Code Practice
VoB = Voice Bulletins

Considerate Operator's Frequency Guide (Mhz)

1.800-1.810	cw,DX calling	21.09-21.10	RTTY
1.825-1.830	DX window (no W/VEs)	21.34	SSTV
3.610-3.630	RTTY	28.09-28.10	RTTY
3.845	SSTV	28.68	SSTV
7.090-7.100	RTTY	29.30-29.50	Satellite downlinks
7.171	SSTV	29.52-29.58	Repeater inputs
14.08-14.10	RTTY	29.60	FM simplex
14.23	SSTV	29.62-29.68	Repeater outputs

From 6485804299788188388
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b1ef4541eff3a524,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-20 06:14:34 PST
Message-ID: <bnews.sbcs.134>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!peri!sbcs!rick
X-Path: utzoo!decvax!harpo!floyd!peri!sbcs!rick
From: sbcs!rick
Date: Sat Nov 20 09:14:32 1982
Subject: No code license
X-Google-Info: Converted from the original B-News header
Posted: Thu Nov 18 14:50:56 1982
Received: Sat Nov 20 09:14:32 1982

No doubt that this article should be addressed to net.flame,
however, I think most of the non-ham net subscribers are not
interested in dits, dahs, and morse code blahs.

(flame on)

The ARRL ruling class (QST, Nov 1982, pg 9) claims the no code license
is "an idea whose time has not come." They base this assertion on the
following arguments:

1. The code requirement is the only proven
   screening device for obtaining competent amateur
   radio operators. Apparently, they believe only
   individuals of the HIGHEST technical and moral
   fiber are able to pass the code exam. Rubbish!!
   We have more appliance operators, lids, and people who
   could not cut a dipole antenna today than ever before.
   I have many technically competent friends (CS types,
   EE's, etc) that are capable of passing a code exam, but
   they would rather spend their time updating their state
   of the art skills. These same people would be very
   interested in experimenting with spread spectrum,
   packet radio, repeaters, etc, and have great potential
   to help advance the amateur state of the art.

2. Amateurs have lost confidence in written exams. We
   can restore their confidence by making the exams more
   difficult. The content of the exams is very easy
   to protect: merely compose each individual exam from
   a data base of several thousand questions, and change
   values in questions which require a numerical answer.
   Say goodbye to Dick Bash and his short cut books.

I understand that the FCC has taken some steps in this direction.

3. Difficulty in self-policing the bands filled with new, and presumably inexperienced or incompetent amateurs. There is no easy solution to this problem; it always has, and always will exist. This attitude akin to arguing against having children because they are too difficult to raise. Also, while more amateurs may mean more potential problems, it also means more amateurs to help in policing the bands.

4. (Non ARRL attitude) Alan M(orse). Amateur: "I passed my 13 wpm code test, so everyone else must." My only comment is that hazing belongs in high school or college.

Some questions I have for the ARRL are what makes a good ham (honey sauce and a little pineapple on top?), and exactly what type of people do they feel we need to attract? Should amateur radio be more than a alternate medium to the telephone for the masses to communicate over? What makes radio amateurs more equal than their fellow citizens when it comes to using the "public airwaves"? Why not use morse code only as a computer communications protocol? In what direction does the ARRL perceive amateur radio should head? Should the ARRL make decisions which contradict popular opinion, for the greater good of Amateur Radio? (Depending on who you listen to, hams are for/against the no code requirement. The ARRL believes it is espousing a majority opinion in coming down against the no code license).

The focus of this entire article is that if we can attract some new technical blood into the amateur service, there are many contributions that can be made to the state of the art. Packet Radio, for example, has not been thoroughly explored by industry; can amateurs invent new routing strategies to deal with selective fading, mobile stations, or networks which can dynamically rearrange themselves to bypass failed nodes, etc.. (Sure, I know a lot has been written, but how many of these schemes are more than ink on a piece paper?) What about using more efficient modulation schemes for packet than NRZ, or FM -- anyone for delay modulation, m-ary PSK, etc? Given the right people, there is much trail blazing to do.. I feel that dropping the code exam in favor of a tough written exam will bring more technical types into amateur radio, and, as a result, the entire amateur service will benefit.

A little note on my background (ammunition for those who will argue for the code requirement): I was able to learn code well enough to receive 18 wpm in about 1.5 months, all while working full time. I passed my advanced class license on the first try. I have operated CW and ENJOYED it (I also have operated RTTY - yet I do not ask that everyone be familiar with this mode as a prerequisite to obtaining a license). Although I frequently disagree with ARRL policy, I am a full member. As for the technical/professional end of things, I am a degreed digital design engineer working with a university research group in the computer networking/distributed processing area.

(flame off)

(return flames encouraged -- send to net.ham-radio).

_.. .

Rick Spanbauer, WB2CFV
SUNY @ Stony Brook

allegra!sbcs!rick or
peri!sbcs!rick

From 1829329059280516819
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6ce15d9398ed39b1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-20 06:30:38 PST
Message-ID: <bnews.inuxc.525>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sat Nov 20 09:30:37 1982
Subject: ARRL DX BULLETIN de k2ph
X-Google-Info: Converted from the original B-News header
Posted: Fri Nov 19 07:55:09 1982
Received: Sat Nov 20 09:30:37 1982

_W_a_l_l_i_s__I_s_l_a_n_d_.

DK6XR expects to leave Wallis Island, where he has been operating as FW0/XR, on Saturday to return to Germany.

_G_l_o_r_i_o_s_o_.

FR7AI/G has been very active recently on 15 and 20 meters.

_C_h_i_n_a_.

BY8AA is reported active around 14040 kHz between 0900 and 1000Z.

_M_a_l_i_.

F6FIZ/TZ has a new schedule, Tuesdays at 2300Z on 14285 kHz. KC7WZ and KE4OC have been helping with this operation. QSL to F6CRS.

_F_a_m_i_l_y__H_o_u_r__o_n__1_5_.

VS6CX and 9M2FR have been active the last few weeks around 0330Z on 21345 kHz. They have been heard long path on the East Coast. VS5HG is on with W7PHO at 0100Z. QSL to Hassan, Box 980, BSB, Brunei.

_8_0__M_e_t_e_r_s_.

5Z4CS is on 3504 kHz at 2145Z. QSL to GI1VLV.

_1_0__M_H_z_.

VP8ANT, Antarctica, is on 10102 kHz at 0025Z. Amateurs are reminded not to operate in the restricted 10109 to 10115 kHz portion of the 10 MHz band. FCC has been issuing citations to offenders. Amateurs are also reminded that 10 MHz contacts may not be credited toward ARRL awards.

_I_n_d_o_n_e_s_i_a_.

YB0/ADJ is on 80 or 40 meter cw at 1100Z.

_Q_a_t_a_r_.

A71AD has been on 3799 kHz recently, at 0100Z.

_N_e_w__H_e_b_r_i_d_e_s_.

YJ8NMB is active every day on the low end of 10 meter ssb, near 28502 kHz at 2300Z. QSL to Mike via WA2MNM.

_L_l_o_y_d__a_n_d__I_r_i_s_.

Approximately 7000 QSOs were made from J20/DU between October 17 and November 8, half cw and half ssb. Operation from Abu Ail is expected to start about December 2 for a 48 hour period. Operation will be on all bands, near the low ends, both ssb and cw. All QSLs should go directly to the Yasme Foundation, not via any bureau.

_N_i_g_e_r_i_a_.

The Nigerian Amateur Radio Society will operate 5N0/SIF from the Lagos Specialized International Trade Fair from November 20 through 29.

_S_o_u_t_h__O_r_k_n_e_y__I_s_l_a_n_d_.

VP8AH is on 14228 kHz at 0330Z. QSL via K2JW.

_J_e_r_s_e_y__I_s_l_a_n_d_.

GJ3MWR is active on 75 meter ssb. Look for him on 3798 kHz

at 0200Z.

_H_e_a_r_d__a_n_d__W_o_r_k_e_d_.

OE2TWM/YK on 14225 kHz at 0100Z. DF3NZ/ST2 on 28520 kHz at 1200Z. H44SH on 28560 kHz at 2220Z, QSL via AD1S. TL8GE on 14204 kHz at 0345Z.

From 648047026965335653
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,379c6af415ebb13b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-20 06:56:38 PST
Message-ID: <bnews.tpdcvax.216>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ittvax!tpdcvax!bobvan
X-Path: utzoo!decvax!ittvax!tpdcvax!bobvan
From: tpdcvax!bobvan
Date: Sat Nov 20 09:56:37 1982
Subject: Re: no code license
X-Google-Info: Converted from the original B-News header
Posted: Fri Nov 19 22:54:35 1982
Received: Sat Nov 20 09:56:37 1982

Phil Karn's recent "no code license" article really hit home with me.

My dad is a ham. I've got a first class radiotelephone license. I've got the money to buy a rig. I'd love to experiment with SSTV, packet radio, AMSAT, and new modulation techniques. I've even got a program for my micro that will teach me the code! But I don't have my ticket.

I've spent a lot of time at hamfests and listening on the bands and am quite certain that I am more competent technically (rf, audio, digital) than a good percentage of the hams on the air today. I understand why the rules are the way they are, but wish there was a way I could get a license without having to learn the code.

For me, learning Morse code has always been a hill that I lacked the momentum to climb. I even sat down (with the program) and learned all the letters once. There has always been something more interesting (and easier) that led me away (CS, EE, relationships, not in that order).

Are there any other technically competent but ticket-less net.ham-radio readers out there? Send mail to me and I'll summarize the repiles.

Bob Van Valzah
(...!decvax!ittvax!tpdcvax!bobvan)

From 4385278880732300142

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b1ef4541eff3a524
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-20 23:48:12 PST
Message-ID: <bnews.sri-unix.4258>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!fayette.wbst@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!fayette.wbst@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Sun Nov 21 02:48:10 1982
Subject: Re: No code license
X-Google-Info: Converted from the original B-News header
Posted: Sat Nov 20 05:55:17 1982
Received: Sun Nov 21 02:48:10 1982

I have been reading about the codeless license now for a few months and now feel
that i can make a rational point, Phil you'r right good people are not coming on
board because of the CW requirement. Lets get out of the dark ages!!!!!
Mike WB2FSI

From 1843374143959787746
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ee690d2741976d22,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-21 00:03:08 PST
Message-ID: <bnews.eagle.643>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sun Nov 21 03:03:06 1982
Subject: Code Free License proposal
X-Google-Info: Converted from the original B-News header
Posted: Sat Nov 20 12:45:02 1982
Received: Sun Nov 21 03:03:06 1982

Remember, the FCC has already directed its staff to draw up a Notice of
Proposed Rulemaking (NPRM) for a code-free amateur radio license in the
USA. When the NPRM comes out, the FCC will of course be soliciting
comments from interested parties.

The ARRL has come out against the code-free license, as it has many
times in the past, claiming that it represents the majority of its
members. Amateurs are certainly not unanimous however; the editorial
staff of Ham Radio magazine recently wrote an eloquent argument in
favor of the license.

I suggest that the opportunity for the code-free license has never
been better than it will be later this year. Since there seem to be so
many of you out there who wish to become hams, I suggest STRONGLY that
you prepare your comments and send them to the FCC at the appropriate
time. Believe it or not, the FCC really does read and consider the

written comments it receives. Fewer comments are received than you'd expect, so that those who do take the effort are rewarded for their time.

It will be tough to overcome the ARRL's opposition to this issue, but not impossible. The mere fact that the Commission made the directive to its staff indicates a strong positive predisposition. If you want a code-free license, write and say so! Also, post a copy of your final draft to the net.

Phil Karn, KA9Q/2

From -7122856651638147700
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b1ef4541eff3a524
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-21 01:48:38 PST
Message-ID: <bnews.sask.88>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!utah-cs!sask!hardie
X-Path: utzoo!decvax!harpo!utah-cs!sask!hardie
From: sask!hardie
Date: Sun Nov 21 04:48:37 1982
Subject: Re: No code license
References: <bnews.sbcs.134>
X-Google-Info: Converted from the original B-News header
Posted: Fri Nov 19 10:30:26 1982
Received: Sun Nov 21 04:48:37 1982

It has never been made really clear exactly what priviledges a no-code license will bring. If a no-code licensee cannot use the cw portion of the band at all then it does not matter too much what they do. The Canadian so-called digital license only gives priviledges from 2 meters and up. If the American plan is similar to that then I see no problem with a no-code license. But if it also permits use of the cw only portion then it deserves as much opposition as can be mustered against it! I am all for allowing technically oriented people into the amateur service but not if they can muddle around in parts of the band that they have not proved competence in. I personally derive a great deal of enjoyment out of using CW. Computers are my job .. ham radio (and particularly CW) is my HOBBY (no flames please ... I know its supposed to be an experimental service) so I am not particularly interested in packet radio (yet) because it is too close to the stuff I do all day. I also do not have the money nor the technical expertise to get into spread spectrum, satellite work etc.etc.

I suspect the major opposition to non-code is because it is perceived as a threat to the existence of the CW portion of the band .... if the code requirement is dropped far fewer new hams will bother with it and then there will be considerable pressure to reduce the CW portion.
I hope the no-code license follows the Canadian style and only permits no-code from 2m and above.
pete hardie

ve5bel
73

From 8243197746918735940
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d98831a24e3ca84e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-11-21 23:17:53 PST
Message-ID: <bnews.pur-ee.667>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!davy
X-Path: utzoo!decvax!harpo!ihnp4!ixn5c!inuxc!pur-ee!davy
From: pur-ee!davy
Date: Mon Nov 22 02:17:52 1982
Subject: Touch-Tone(tm) chips - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Sun Nov 21 18:27:43 1982
Received: Mon Nov 22 02:17:52 1982

#N:pur-ee:5600002:000:1227
pur-ee!davy   Nov 17 11:11:00 1982

I suppose this is a good a place as any for this thing......

I want to build a box which will generate the Touch-Tone (tm) tones through a speaker. I eventually would like to use it so I can do touch-tone stuff through a dial phone.

Being the dummy that I am, I know very little about doing something like this. If someone could answer the following questions for me, I'd sure appreciate it.

1) I know there are chips which generate these tones, but does anyone know what the "numbers" of the chips are, and where I can get one (does Radio Shack have them?)

2) Will I need something to amplify the tone the chip produces, or will it be loud enough by itself?

3) Are "A", "B", "C", "D" used that much, or would I be able to get by with just 0-9, *, and #?

4) What's the best way to power this thing? I had thought a 9-V battery would be nice, but if we're talking TTL, it wouldn't be too neat (fry, sizzle).

5) Does anyone have any plans/wiring diagrams/etc. for one of these, or do I gotta figger it out for myself?

Please direct all responses to:

decvax!pur-ee!davy
ucbvax!pur-ee!davy
ihnss!pur-ee!davy
harpo!pur-ee!davy

Thanks in advance,
--Dave Curry

From -4106032333002662740
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a787bee2bd5d7659,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-25 21:16:32 PST
Message-ID: <bnews.houxp.130>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxp!w2iy
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxp!w2iy
From: houxp!w2iy
Date: Mon Jul 26 00:16:31 1982
Subject: Clock Chip Wanted
X-Google-Info: Converted from the original B-News header
Posted: Fri Jul 23 10:29:16 1982
Received: Mon Jul 26 00:16:31 1982

Does anyone have a 7001 clock chip that I can
purchase?
Mike Tortorella, w2iy
BTL-HO (201)949-7581

From 3107825381451140257
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,493ed9c0859698bf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-29 03:29:46 PST
Message-ID: <bnews.npois.1559>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!jak
X-Path: utzoo!decvax!harpo!npoiv!npois!jak
From: npois!jak
Date: Thu Jul 29 06:29:46 1982
Subject: call book interest query
X-Google-Info: Converted from the original B-News header
Posted: Mon Jul 26 08:30:59 1982
Received: Thu Jul 29 06:29:46 1982

I have been posting the "call book" of net.ham-radio readers for over a year
now. At first, it was a weekly publication. Later, after some complaints,

it became monthly.
It has been several months now since one was posted. However, I am still
getting an ocasional request to be listed in the call book.

A question -- are the net.ham-radio readers interested in the call book
articles? Are they useful? If so, I will gladly continue.
Please reply by mail to ...!npois!jak
73, Jim WA8ZNH

From -7329622800841428528
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,be68197d6fbe5e25,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-29 03:41:29 PST
Message-ID: <bnews.npois.1560>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!jak
X-Path: utzoo!decvax!harpo!npoiv!npois!jak
From: npois!jak
Date: Thu Jul 29 06:41:28 1982
Subject: call book explanation
X-Google-Info: Converted from the original B-News header
Posted: Mon Jul 26 10:01:57 1982
Received: Thu Jul 29 06:41:28 1982

Sorry, ...
for those new readers who never asaw a call book posted here,
it contained a list of net.ham-radio readers including
their name, call sign, and electronic mail address.
For example:WA8ZNH Jim Kutsch   npois!jak
KA9Q Phil Karn eagle!karn
...

From 926111676088227879
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8847d790f61f47ea,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-30 23:47:36 PST
Message-ID: <bnews.npois.1565>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!jak
X-Path: utzoo!decvax!harpo!npoiv!npois!jak
From: npois!jak
Date: Sat Jul 31 02:47:35 1982
Subject: on-the-air net for netnews readers?
X-Google-Info: Converted from the original B-News header
Posted: Fri Jul 30 09:19:07 1982
Received: Sat Jul 31 02:47:35 1982

>From time to time someone suggests trying an on-the-air net for net.ham-radio

readers. Dave (decvax!pur-ee!ecn-ed.wn9nbt)
and I have decided to give it a try if there is sufficient interest.
Suggestions of time and frequency would be appreciated.
Personally, I prefer Saturday mornings or weekday evenings,
perhaps on 20 or 40M.
If interested, please express your interest either here on net.ham-radio
or by mail to Dave or myself. We will summarize any mail we recieve.
73, Jim WA8ZNH npois!jak

From -7109642322116660803
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c8283989837d7c9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-08-05 01:27:34 PST
Message-ID: <bnews.npois.1570>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!jak
X-Path: utzoo!decvax!harpo!npoiv!npois!jak
From: npois!jak
Date: Thu Aug 5 04:27:34 1982
Subject: antenna wanted
X-Google-Info: Converted from the original B-News header
Posted: Wed Aug 4 12:56:08 1982
Received: Thu Aug 5 04:27:34 1982

I am looking for a small, inexpensive (used) beam for 20
and 15 meters. 10 meters is ok but not necessary.
I have a 10 foot tripod roof 'tower' on which to mount it.
It must be reasonably light weight and not look "too offensive".

Anyone have a used beam around? or know of anything to recommend
that I should look for?

tnx es 73, Jim WA8ZNH (npois!jak)

From 6031123758940727016
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bb930ff977b5ea75,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-08-05 02:05:46 PST
Message-ID: <bnews.WIN.103>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!lime!we13!we53!WIN!tce
X-Path: utzoo!decvax!harpo!floyd!vax135!lime!we13!we53!WIN!tce
From: WIN!tce
Date: Thu Aug 5 05:05:44 1982
Subject: 1982 CQ-WE Contest
X-Google-Info: Converted from the original B-News header
Posted: Wed Aug 4 16:35:49 1982
Received: Thu Aug 5 05:05:44 1982

Re: 1982 CQ-WE Contest

The 23rd Annual CQ-WE Contest will be held on November 13-14, 1982.

Session	EST	UTC	Date(UTC)	Modes
Saturday, November 13, 1982				
1 - A	1400-1500	1900-2000	13 Nov	Novice & HF Tech
B	1500-1800	2000-2300	13 Nov	CW
2 - A	2000-2300	0100-0400	14 Nov	Phone
B	2300-2400	0400-0500	14 Nov	All Modes
Sunday, November 14, 1982.				
3 - A	1400-1700	1900-2200	14 Nov	Phone
B	1700-1800	2200-2300	14 Nov	All Modes
4 - A	2000-2100	0100-0200	15 Nov	Novice & HF Tech
B	2100-2400	0200-0500	15 Nov	CW

All licensed amateur radio operators employed by or retired from Western Electric Co., Bell Laboratories, AT&T Co., AT&T Long Lines, and Bell Operating Companies are eligible to participate.

To encourage novice and technician participation the first hour (Sessions 1A and 4A) of each CW session is reserved for contacting novice and technician stations only. All licensed operators may participate in this period, but one end of the contact must be either a novice or technician.

The contest host is : Steve Wheatley, Indianapolis Works, (317) 352-2442.

TCE:NETNEWS Tom Eagle, K0JPR - WIN!kcda!tce

From -8957999791784231268
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d5dce598ed608999,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-08-05 03:13:13 PST
Message-ID: <bnews.eagle.441>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Thu Aug 5 06:13:12 1982
Subject: Absurd local laws regarding RFI and Pay-TV
X-Google-Info: Converted from the original B-News header
Posted: Wed Aug 4 22:27:29 1982
Received: Thu Aug 5 06:13:12 1982

If you can, look at the editorial in the August issue of Ham Radio. There are some very scary developments in local and state laws that affect radio amateurs. What follows are just some excerpts:

It is now illegal in California to make or sell "any device or component that could be used in a device that could be used to unscramble pay-TV signals". The way this law is written, you could be arrested for selling a 555 timer IC, because it is possible to use one in an ON-TV decoder.

"In Burbank, Illinois, a suburban Chicago community of about 40,000, the operation of \any/ transmitter that interferes with \any/ TV, 'musical instrument, phonograph or other machine or device designed for the production or reproduction of sound' is now a criminal offense. The penalty is a fine of $25 to $1000 for each violation or each day the violation continues, and those violating the ordinance are also subject to arrest..."

These people need educating FAST. The local hams are planning a court battle; they can use all the support they can get. I would urge people to write the Burbank city council, and the ARRL to urge them to support the fight (according to the editorial, they haven't committed themselves to the challenge yet).

Phil

From 4349825512555101119
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d841f6b3ff62738,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-08-10 01:15:29 PST
Message-ID: <bnews.eagle.457>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!eagle!karn
X-Path: utzoo!decvax!duke!harpo!eagle!karn
From: eagle!karn
Date: Tue Aug 10 04:15:23 1982
Subject: Meteor scatter
X-Google-Info: Converted from the original B-News header
Posted: Mon Aug 9 19:38:34 1982
Received: Tue Aug 10 04:15:23 1982

The item just posted on net.space reminded me: the Perseids are peaking soon. Is anybody going to be working meteor scatter this week?

Phil Karn, KA9Q

From -6901810687319536980
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,12c5b3ffbe41fa3a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-08-13 02:35:32 PST
Message-ID: <bnews.dsd.126>

Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!fortune!dsd!dna@sri-unix
X-Path: utzoo!decvax!cca!fortune!dsd!dna@sri-unix
From: dna@sri-unix
Date: Fri Aug 13 05:35:30 1982
Subject: AMTOR
X-Google-Info: Converted from the original B-News header
Posted: Tue Aug 10 10:43:50 1982
Received: Fri Aug 13 05:35:30 1982

General Message
The project to be developed here in Ottawa for the 1982/83 season, and probably 83/84 as well will be a microprocessor based VHF METEOR SCATTER communications system. Planning for this has been underway since early this year and a test program will commence in early spring '83. Participation in other packet radio projects has been suspended for the duration.

I have just started to wire wrap up the AMTOR project on a card. Who else out there is using AMTOR? I need the ASSEMBLER listing for the 6802 G3PLX software - has anyone got the listing on this side of the ATLANTIC yet? Is anyone really on 14.076 with AMTOR ???? What activity is expected to grow using AMTOR - opinions will be appreciated.

David, W6RAW - Please QSP to your UNIX contacts - I would especially appreciate comments from W8SDZ.

Larry Kayser, VE3QB/WA3ZIA

From -4754092281854670416
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e9a669769e9268d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-08-14 00:29:58 PST
Message-ID: <bnews.houxc.232>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Sat Aug 14 03:29:57 1982
Subject: AMTOR operations
X-Google-Info: Converted from the original B-News header
Posted: Wed Aug 11 16:57:37 1982
Received: Sat Aug 14 03:29:57 1982

(an open letter to Larry Kayser and others interested in AMTOR)

Larry, i'm responding to your inquiry about amtor, forwarded to me by Steve Robinson, W2FPY.

I have been active on Amtor since May and have found it to be
a wonderful system. I have object code software for G3PLX's
Mk2.2 system. I would be happy to copy a PROM for you. Additionally,
you will find a listing of the object code at the end of this
letter. The source code for the PLX controller is not available.
It has been sold for commercial maritime mobile use.

I encourage you to build PLX's MK2.2 as soon as possible. It is
very easy to get up and provides a well tested piece of
software. Much activity is on 14.075000 (mark) 14.074830 (space).
In about a year i imagine that people will migrate to 14.075085 (mark)
14.074915 (space). This would make amtor channel compatible with
commercial maritime stations.

I have developed an AMTOR controller using a Z80 system. It will
be a bit more flexable than controllers currently available.
Some of the major features include: ASCII or BAUDO terminal interface,
CW id, EEPROM for storage of station particulars, etc.
Mode B is operational, mode A should be working by 9/15, mode L
should be working by 10/1 and first release should be ready on or
before 11/1. Object code software will be available for free
to Radio Amateurs who use it for hobby use. Again, source
code will most likely be unavailable (same problem as G3PLX).

Normally you won't hear much chirping on the 14.075 however
many systems around the world are on 24 hour a day autostart.

Here are some calls and selectve call strings.

```
-----------------------------------------------------
TI3DJT        CHUCK         *TDJT
K4PA     BILL     KRPA
KB6BT         WALT     KBBT
HB9AUK                 *HBAK
G3PLX         PETER         *GPLX
G3VZJ                  GVZJ
A4XFW                  *AXFW
G3RSP/MM           *GRSP
PA0RYS        GER      *PRYS
G3YMJ                  GYMJ
KC7KK                  KCKK
AD7I     PAUL     AADI

* denotes stations that appear to be up 24 hrs a day
-----------------------------------------------------
```

I look forward to seeing you on AMTOR ASAP.

73s,

Paul Newland, ad7i

From 7045806355602972467
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b98cd364523a7dc6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-08-17 04:03:15 PST
Message-ID: <bnews.pur-ee.508>
Newsgroups: net.ham-radio
Path: utzoo!decvax!pur-ee!wn9nbt
X-Path: utzoo!decvax!pur-ee!wn9nbt
From: pur-ee!wn9nbt
Date: Tue Aug 17 07:03:14 1982
Subject: Re: AMTOR operations - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Fri Aug 13 10:25:40 1982
Received: Tue Aug 17 07:03:14 1982

#R:houxc:-23200:pur-ee:5600001:000:248
pur-ee!wn9nbt   Aug 13 09:44:00 1982

Please excuse my ignorance, but what is AMTOR ? I have heard
it somewhere before, and this further sparks my interest. If
you want to reply directly or on the net, either is fine.
tnx & anxiously waiting to hear more...Dave WN9NBT pur-ee!wn9nbt

From 8165808431227367607
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,78b7de2cb2aaee27,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-08-19 23:44:48 PST
Message-ID: <bnews.whonxa.113>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!hplabs!hao!menlo70!sytek!zehntel!teklabs!ucbcad!
ARPAVAX:CSVAX:npois!houxi!whuxk!whonxa!netnews@sri-unix
X-Path: utzoo!decvax!cca!hplabs!hao!menlo70!sytek!zehntel!teklabs!ucbcad!
ARPAVAX:CSVAX:npois!houxi!whuxk!whonxa!netnews@sri-unix
From: netnews@sri-unix
Date: Fri Aug 20 02:44:47 1982
Subject: Need repeater info
X-Google-Info: Converted from the original B-News header
Posted: Mon Aug 16 07:49:52 1982
Received: Fri Aug 20 02:44:47 1982

I am new in the area and could use some info. I need to know what 2m repeaters
operate in Central Jersey . I could also use a recommendation on where to
go to buy a mag mount antenna and to get some new crystals netted for my
Genave. I would really appreciate a place in either Somerset county or
in the Princeton area.
     John Beal wa9ukh
     btl Whippany (201)386-5060

an alternate UNIX address is whuxg!beal

From 2010197239706719493
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,63234f63513b7399,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-08-19 23:53:47 PST
Message-ID: <bnews.houxc.236>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!ihps3!houxi!houxc!ad7i
From: houxc!ad7i
Date: Fri Aug 20 02:53:46 1982
Subject: test
X-Google-Info: Converted from the original B-News header
Posted: Thu Aug 19 08:51:16 1982
Received: Fri Aug 20 02:53:46 1982

vvv vvv vvv

From 6014668825309212728
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1dc254e088c96c92,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-08-21 00:17:36 PST
Message-ID: <bnews.npois.1579>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!npoiv!npois!jak
X-Path: utzoo!decvax!duke!harpo!npoiv!npois!jak
From: npois!jak
Date: Sat Aug 21 03:17:34 1982
Subject: august call book
X-Google-Info: Converted from the original B-News header
Posted: Fri Aug 20 09:31:39 1982
Received: Sat Aug 21 03:17:34 1982

The following is a list of net.ham-radio readers/contributers:

CALL - NAME - MAIL ADDRESS
K1DK - Dan Kahn - research!alice!danny
WB1EXN/6 - Keith Muller - ucbvax!sdcsvax!muller
KA1GNG - Rob Wood - decvax!genradbolton!rob
W1UI - Jerry Gann - ucbvax!lbl-unix!asgvax!gann
WA1ZVN - Scott A. Magnuson - houxi!hocsb!scott
KI2A - Steve Gross - houxq!sg
K2ART - Mike Pilla - houxi!u1100a!mp
N2CHL - Rich Gopstein - allegra!gop
WA2CVU - Karen Schroeder - floyd!philabs!kis
W2EMF - Al Donkin - houxm!aed
W2FPY - Steve Robinson - ihnss!ajll11!robinson
AD2H - Marsh Gosnell - npois!pyuxbb!mkg or whuxlb!mkg

WA2HSJ - Glenn Golden - houxg!glenn or lime!glenn
N2IC - Steve London - druxm!n2ic or houxp!9535sml
W2IOL - Ron McConnell - harpo!rcmcc
W2IY - Mike Tortorella - houxp!w2iy
KA2JDY - Joel Damiano - ucbvax!teklabs!joeld or decvax!teklabs!joeld
KA2JQH - Adam Buchsbaum - research!sjb
N2ND - Dick Maybach - houxq!4373rlm
K2PH - Bob Schreibmaier - houxb!3435ras
 WA2PME - Azi Heuman - houxo!3357ah
WB2QOQ - Rick Anderson - harpo!rja
WA2QYN/2 - Paul Rubin - allegra!phr
WB2RPC - Mike Sajor - harpo!zeppo!mes
N2YK - Bruce McNair - houxg!bem or houxm!bem2
N3AUC - Doug Kingston - duke!bmd70!dpk
N3CKF - Joseph C. Pistritto - duke!bmd70!jcp@brl
WA3IRQ - Lee Nackman - duke!unc!lrn
WA3THP/2 - Stu Brown - allegra!stu
DF4CK/W9 - Stephan Bechtolsheim - decvax!pur-ee!purdue!svb
G4EHL - Anthony Short - decvax!microsof!anthony
WB4FWL - Ned Danieley - duke!ndd
KB4GZ- Frank Starmer - duke!unc!cfs or duke!cfs
WA4IFA - Chuck Bennett - duke!unc!tucc!uchuck
W4IZI - Lindsay Cleveland - ihnss!ihuxi!lindsay
KA4VXA - Mike Leuze - duke!mrl
WA6AZP - Alan Larson - ucbvax!larson@sri-kl
KD6BA - Ted Lane - ucbvax!menlo70!sytek!zehntel!ted
WA6BEV - Robert R. Henry - ucbvax!rrh or research!rrh
WB6BXW - Lauren Weinstein - ucbvax!ucla-s!lauren or Lauren@UCLA-Security
KO6G - Steven Schoch - ucbvax!ONYX:schoch
KU6I - Roger Jollis - intelqa!gsp86!linden
KA6RCQ - Michael Shiloh - ucbvax!shiloh
AD7I - Paul Newland - houxc!ad7i
WB7UBD - Ed Morin - teklabs!tekmdp!edm
WB8FBM - Dale DeJager - cbosg!dale
G8LHI - Martin Levy - lime!martin
K8NU - Carl Yaffey - rmas70!cly
KQ8P - Jeff Coleman - ihnss!ihuxo!jnc
G8RDF - Martin Harriss - houxi!pyuxjj!martin
W8SDZ - Keith Petersen - W8SDZ@MIT-MC
WB8WWV - Greg Ordy - ucbvax!decvax!cwruecmp!ordy
WA8ZNH - Jim Kutsch - npois!jak
WB9AAX - Phil Gunsul - lime!we13!prg
KB9BO - Jim Krist - ihnss!ihuxs!jtkrist
KA9ELG - Mark Yoder - ucbvax!pur-ee!yoder
K9EUI - Bob Roehrig - lime!we13!rjr
KA9MHK - Dan Hoelker - ihnss!ihuxu!mstach
WN9NBT - Dave ? - decvax!pur-ee!wn9nbt
WN9NBT - Dave Chasey - pur-ee!wn9nbt
KA9Q - Phil Karn - eagle!karn
WB9VGW - John Wrycza - ihuxu!johnw
KK9W - Dave Andersen - pur-ee!kk9w
(no call) - David Comay - ucbvax!ARPAVAX:comay
(no call) - Steven Bellovin - duke!unc!smb

Send additions/corrections to Jim Kutsch -- npois!jak

From -2326963187655160631
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9a008d8b800c5619,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 129c11,9a008d8b800c5619,start
X-Google-Attributes: gid129c11,public
X-Google-ArrivalTime: 1982-09-05 00:17:31 PST
Message-ID: <bnews.sdcatta.470>
Newsgroups: net.ham-radio,net.micro
Path: utzoo!decvax!harpo!floyd!cmcl2!philabs!sdcsvax!sdccsu3!sdcatta!wa143
X-Path: utzoo!decvax!harpo!floyd!cmcl2!philabs!sdcsvax!sdccsu3!sdcatta!wa143
From: sdcatta!wa143
Date: Sun Sep 5 03:17:29 1982
Subject: Packet Radio people..
X-Google-Info: Converted from the original B-News header
Posted: Wed Sep 1 16:09:04 1982
Received: Sun Sep 5 03:17:29 1982

I'm looking for Network people whom are also members of TAPR or
otherwise interested in packet radio.

We are putting up a 440/220 Mhz remote CP/M system here in San Diego.
We also hope to have the TAPR beta boards shortly, otherwise our
own Z80 version will be implemented (at least initially). We have
no plans to use the Canadian protocols at this time.

Thoughts, queries, suggestions and comments directly to:

Bret Marquis
WA6QDV
ucbvax!sdcsvax!sdchema!bam

From -8770981941267951087
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13372f,9ea6e0e5bb136512,start
X-Google-Attributes: gid13372f,public
X-Google-Thread: 151e61,9ea6e0e5bb136512,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-05 00:46:35 PST
Message-ID: <bnews.eagle.499>
Newsgroups: net.space,net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sun Sep 5 03:46:34 1982
Subject: Phase 3-B Launch Date Set
X-Google-Info: Converted from the original B-News header

Posted: Thu Sep 2 20:49:05 1982
Received: Sun Sep 5 03:46:34 1982

The European Space Agency (ESA) has announced that the launch of Ariane
L-7 carrying ECS-1 and Amsat Phase 3-B will take place on 3 Feb 1983.

No launch time was announced, but from earlier planning documents, there
will probably be two launch windows, each about 2 hours long, centered
around 0200 and 1330 UTC.

The launch of L-7 has been delayed not due to problems with the Ariane
launch vehicle, but to design problems with the ECS-1 spacecraft.

From 341722982274819868
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a0589361604ed5db,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-05 22:14:50 PST
Message-ID: <bnews.npois.1585>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!npoiv!npois!jak
X-Path: utzoo!decvax!duke!harpo!npoiv!npois!jak
From: npois!jak
Date: Mon Sep 6 01:14:48 1982
Subject: rotor wanted
X-Google-Info: Converted from the original B-News header
Posted: Mon Aug 30 13:11:35 1982
Received: Mon Sep 6 01:14:48 1982

I am looking for a light duty antenna rotor.
Something like the CDR AR22r or AR 40   to turn a TA33 jr.
The rotor must have a "pointer knob" type control box. That is, one where
you turn the knob to the compass setting desired and the rotor turns there and
stops. (as opposed to thos where you hold down a button and watch a meter
till the rotor goes to the desired position.)
Anyone have one for sale?
contact Jim Kutsch npois!jak
BTL Neptune, NJ
(201) 922-7277

From 9191421988535243385
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,194f3f7fdadf2a96,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-06 21:29:53 PST
Message-ID: <bnews.alice.901>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!sjb
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!sjb
From: alice!sjb
Date: Tue Sep 7 00:29:52 1982

Subject: ASR 40
X-Google-Info: Converted from the original B-News header
Posted: Mon Sep 6 14:04:35 1982
Received: Tue Sep 7 00:29:52 1982

A M S A T

S A T E L L I T E R E P O R T

Number 40
30 August, 1982

SRI Continues to Help Rescue UO-9

The efforts at SRI International continued throughout the past couple weeks to try and fix the ailing UoSAT OSCAR 9 satellite. The try at communicating with the 70 cm command module failed, and the decision was made to try and activate the 2 m command transponder. Before this can be done, a 2 m feed will be attached to the 46 meter dish and a 2 m amplifier will also be installed. If all went well, 2 m attempts should have begun on 23 August.

Geo-Sync OSCAR Proposal

Cablesat General Corporation, Cocoa, Florida, has submitted a proposal to the Federal Communications Commission to launch two geosyncronous domestic satellites in 1985 or 1986. Aboard the two satellites would also be one each amateur radio transponder. The two birds would be between 60 and 70 degrees west longitude and 140 and 150 degrees west longitude, thus covering the entire continental United States and most of Canada and Mexico. Launch would be aboard a STS/PAM-D flight (Space Transportation System with Payload Assist Module D). The proposal calls for 3.65 to 5.67 GHz uplinks and 3.40 to 3.41 GHz downlinks OSCARs. The system would carry the brand of ARNET (Amateur Radio Network Experimental Transponder).

Ariane L5 Ready

At press time, the launch of Ariane L5 was scheduled for 0230 UTC, 10 September, 1982. AMSAT is planning launch summary nets to inform listeners of the status of L5 after launch. If held, the nets would probably occur at 15 minutes intervals on 21280 kHz at 0300 UTC, 14282 kHz at 0315 UTC, and 3850 kHz at 0330 UTC, all on Friday, 10 September.

The AMSAT Satellite Report is a bi-weekly publication of the
Radio Amateur Satellite Corporation. Material may be quoted
without permission as long as credit is given. Material in
two single quotes (``*'') is taken directly from the bulletin,
while that in double quotes ("*") is an actual statement.

From 2655434613548151020
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,194f3f7fdadf2a96
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-06 21:32:09 PST
Message-ID: <bnews.alice.902>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!sjb
X-Path: utzoo!decvax!harpo!npoiv!alice!sjb
From: alice!sjb
Date: Tue Sep 7 00:32:07 1982
Subject: Re: ASR 40
X-Google-Info: Converted from the original B-News header
Posted: Mon Sep 6 19:06:58 1982
Received: Tue Sep 7 00:32:07 1982

Whoops! One minor correction: The uplinks to the proposed geosync
OSCAR's would be 5, not 3, GHz.

From 7075673266574957685
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8d8d316e39669199,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-09 00:06:30 PST
Message-ID: <bnews.houxc.248>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Thu Sep 9 03:06:29 1982
Subject: propagation forecast bulletin 36
X-Google-Info: Converted from the original B-News header
Posted: Wed Sep 8 08:53:30 1982
Received: Thu Sep 9 03:06:29 1982

qst de ad7i
hr propagation forecast bulletin nr 36   from arrl headquarters
newington ct september 7, 1982
to all radio amateurs bt

the solar flux average for august was 169. after rising from a low
of 136 on august 23, the flux rose for several days and then went
into a zigzag course centered around 178. both the shape of the
curve and the appearance of the sun thus far in september point to

higher flux numbers in the next few days. a 15 point rise on
september 4 closely parallels the curves for three preceding solar
rotations. there is substantial activity coming around the east
limb of the sun, with little due to be lost around the west limb in
the next few days. thus we have a strong indication that the flux
will peak above 200 during the forecast week.

the bad news is that the high geomagnetic activity, and resultant
generally poor propagation encountered at this point in two previous
solar rotations will be back in force, until about september 10.
this will not be continuous, so watch for brief periods of quite
good conditions at unpredictable times this week. the trend in the
k index given by wwv at 18 minutes after each hour is a good clue to
impending changes in propagation. a value of 2 or lower, and a
downward trend, point to improving propagation on all paths. rising
values mean increased absorption on all but low latitude and
transequatorial circuits. the best conditions of early fall can be
expected about september 11 through 13.   use the propagation charts
in qst for august and september to determine the time of highest muf
on any communications path. during periods of low k index the muf
will be higher than the charts indicate, but the timing should be
accurate.

american sunspot numbers for august 26 through september 1 were
between 101 and 150, for a mean of 130   ar

From -5215549637369391164
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 13372f,a50889c1c1657752,start
X-Google-Attributes: gid13372f,public
X-Google-Thread: 151e61,a50889c1c1657752,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-10 03:43:26 PST
Message-ID: <bnews.eagle.505>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Fri Sep 10 06:43:26 1982
Subject: Apparent Ariane Launch Failure
X-Google-Info: Converted from the original B-News header
Posted: Thu Sep 9 23:45:31 1982
Received: Fri Sep 10 06:43:26 1982

>From a special Amsat net:
The liftoff of Ariane L5 took place at 02:12:03.33 UTC Sept 10, 1982.

The first and second stage flight appeared to be nominal. However,
expected acquisition at Ascension island was NOT nominal. When
the launcher was finally acquired late, it was apparently not on the planned
trajectory; it appeared lower than expected.

This occurred at about 12 minutes into the flight, about 2 minutes before the scheduled end of the third stage burn.

It is not yet known whether the payload actually made it into an orbit, but even if it did, it is highly unlikely that the two payloads could be placed into the intended geostationary orbit.

It does appear that the problem was either with the third stage engine or with the guidance system; the exact cause is not yet known.

Fortunately (for us), there was no amateur radio satellite aboard this flight. However, it is a foregone conclusion that this apparent failure can only delay the scheduled launch date for Amsat Phase III-B (3 Feb 1983).

Phil Karn, KA9Q

From 3687745380188138040
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fca1893c8461cfd1,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,fca1893c8461cfd1,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1982-09-10 03:52:25 PST
Message-ID: <bnews.eagle.507>
Newsgroups: net.space,net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Fri Sep 10 06:52:24 1982
Subject: Ariane Launch Failure Update
X-Google-Info: Converted from the original B-News header
Posted: Fri Sep 10 01:50:08 1982
Received: Fri Sep 10 06:52:24 1982

For the second time, an Ariane rocket has launched a submarine satellite.

Its official; the third stage on L5 shut down early for unknown reasons, and the launcher and its two satellites impacted in the middle of the Atlantic Ocean.

This makes a track record so far consisting of 3 successes (L01, L03, L04) and two failures (L02 and L5).

From -8240848276916537471
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,936c98b9311464cc,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-10 22:54:13 PST
Message-ID: <bnews.vax135.426>

Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!floyd!vax135!hpk
X-Path: utzoo!decvax!duke!harpo!floyd!vax135!hpk
From: vax135!hpk
Date: Sat Sep 11 01:54:12 1982
Subject: Weslink Metroplex
X-Google-Info: Converted from the original B-News header
Posted: Fri Sep 10 10:47:22 1982
Received: Sat Sep 11 01:54:12 1982

Does anybody know about the Weslink Metroplex repeater K2KLN on 145.45?
I heard a professional-sounding 45 minute news report on issues
related to ham radio this morning at 9:45am.

Do they broadcast on a regular schedule? Are there more of these
broadcasts around?

Howard Katseff
vax135!hpk

From 8073884336647572966
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,936c98b9311464cc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-13 23:09:31 PST
Message-ID: <bnews.sri-unix.3248>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Cardenas.ES@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!Cardenas.ES@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Tue Sep 14 02:09:31 1982
Subject: Re: Weslink Metroplex
X-Google-Info: Converted from the original B-News header
Posted: Mon Sep 13 08:35:59 1982
Received: Tue Sep 14 02:09:31 1982

Re: Westlink...

  I beleive this 'broadcast originates from the San Fernando Valley, here in
California.

  Several Repeaters repeat same each week (one per week)...

  There IS a telephone number that offers a COMPLETE version of the week...
I will try to obtain same if you request...

         Tony.
         T.M.P. (The Mouse Police.ES)

From 3426898998540148208
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,936c98b9311464cc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-15 01:27:21 PST
Message-ID: <bnews.sri-unix.3262>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Cardenas.ES@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!Cardenas.ES@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Wed Sep 15 04:27:17 1982
Subject: Re: Weslink Metroplex
X-Google-Info: Converted from the original B-News header
Posted: Tue Sep 14 09:25:33 1982
Received: Wed Sep 15 04:27:17 1982

O.K. Kids!

Here it is!... WESTLINK 213-465-5550
513-275-9991.

I beleive one of the Hams works at a major T.V. Station and uses the sound room to produce these marvels...

OK-OK-OK-

do a station inspection... pleaded insanity and the judge agreed... he is now seeing a shrink under court order and cannot be on the air even by phone patch)...
WA6LEB (a drunk, got official warning for profanity...)

I KNOW there's more, however, the names and calls eacape me...

So folks, I add that there IS more, LOTS more about '61'... it's exciting,
it's an "animal-farm", it's where to go to have fun (not always clean), it's the MOST PROGRESSIVE REPEATER IN THE NATION!!! It was on '61' that I first
listened to "Radio Morania", the "Arnie Show", "Sick Dick's Show", "Bradie Show", "Thumper-John", and so many more STARS and scum-bags... and 'oh yes, I've GOT to mention the "OK" WARS"...(26 min. (the record) of non-stop "o.k's", where 2 or more can participate)... and "Deep-Throat" (he wants to put it in Millie's butt)...

I'm just a '61' *junkie*... more to follow if you wish... ask how you too can put REAL EXCITEMENT back into your HAM RADIO hobby!... roll over Hertz!!!...

Tony.
WA6IGJ
T.M.P. (The Mouse Police.ES)

From -8523427813424239908
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,936c98b9311464cc
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-15 01:30:29 PST
Message-ID: <bnews.sri-unix.3263>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!Cardenas.ES@PARC-MAXC@sri-unix
X-Path: utzoo!decvax!cca!Cardenas.ES@PARC-MAXC@sri-unix
From: PARC-MAXC@sri-unix
Date: Wed Sep 15 04:30:25 1982
Subject: Re: Weslink Metroplex
X-Google-Info: Converted from the original B-News header
Posted: Tue Sep 14 09:27:59 1982
Received: Wed Sep 15 04:30:25 1982

O.K. Kids!

Here it is!... WESTLINK 213-465-5550
513-275-9991.

I beleive one of the Hams works at a major T.V. Station and uses the sound room to produce these marvels...

OK-OK-OK-

Tony.
WA6IGJ
T.M.P. (The Mouse Police.ES)

From 2084066703121073917
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e137fffaa794eb6e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-22 00:32:05 PST
Message-ID: <bnews.ihlpb.246>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ixn5c!ihlpb!nickles
X-Path: utzoo!decvax!harpo!ihps3!ixn5c!ihlpb!nickles
From: ihlpb!nickles
Date: Wed Sep 22 03:32:04 1982
Subject: AMSAT Satellite Report - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Tue Sep 21 13:25:49 1982
Received: Wed Sep 22 03:32:04 1982

#N:ihlpb:9700001: 0:2370
ihlpb!nickles   Sep 20 15:49:00 1982

***** ihlpb:nfmaint / alice!sjb / 2:04 pm Sep 6, 1982

A M S A T

S A T E L L I T E R E P O R T

Number 40
30 August, 1982

SRI Continues to Help Rescue UO-9
--- --------- -- ---- ------ -- -
The efforts at SRI International continued throughout the past
couple weeks to try and fix the ailing UoSAT OSCAR 9 satellite.
The try at communicating with the 70 cm command module failed,
and the decision was made to try and activate the 2 m command
transponder. Before this can be done, a 2 m feed will be attached
to the 46 meter dish and a 2 m amplifier will also be installed.
If all went well, 2 m attempts should have begun on 23 August.

Geo-Sync OSCAR Proposal
--- ---- ----- --------
Cablesat General Corporation, Cocoa, Florida, has submitted a

proposal to the Federal Communications Commission to launch two geosyncronous domestic satellites in 1985 or 1986. Aboard the two satellites would also be one each amateur radio transponder. The two birds would be between 60 and 70 degrees west longitude and 140 and 150 degrees west longitude, thus covering the entire continental United States and most of Canada and Mexico. Launch would be aboard a STS/PAM-D flight (Space Transportation System with Payload Assist Module D). The proposal calls for 3.65 to 5.67 GHz uplinks and 3.40 to 3.41 GHz downlinks OSCARs. The system would carry the brand of ARNET (Amateur Radio Network Experimental Transponder).

Ariane L5 Ready
------ -- -----
At press time, the launch of Ariane L5 was scheduled for 0230 UTC, 10 September, 1982. AMSAT is planning launch summary nets to inform listeners of the status of L5 after launch. If held, the nets would probably occur at 15 minutes intervals on 21280 kHz at 0300 UTC, 14282 kHz at 0315 UTC, and 3850 kHz at 0330 UTC, all on Friday, 10 September.

The AMSAT Satellite Report is a bi-weekly publication of the Radio Amateur Satellite Corporation. Material may be quoted without permission as long as credit is given. Material in two single quotes (``*'') is taken directly from the bulletin, while that in double quotes ("*") is an actual statement.

From -7540333749529781757
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,924570ff03259e40,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,924570ff03259e40,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1982-09-22 01:49:42 PST
Message-ID: <bnews.eagle.526>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Wed Sep 22 04:49:41 1982
Subject: More on UOSAT Salvage
X-Google-Info: Converted from the original B-News header
Posted: Tue Sep 21 21:48:44 1982
Received: Wed Sep 22 04:49:41 1982

Some more details on the successful salvage effort at SRI which regained control over the Uosat-Oscar-9 spacecraft, which had been unable to respond to commands since April 1982:

The SRI team commanded the beacons off at 22:35 UTC on 20 September, using an enormous amount of effective radiated power on the 70 cm command frequency. The earlier problems with the SRI effort appear to have been due to ground command encoder problems and outdated orbit element sets that gave inaccurate antenna pointing instructions (the SRI dish has a 3 db beamwidth of less than a degree at 70cm). The command encoder glitches were fixed several days ago. On the first pass after receiving a new set of orbit elements, the SRI team succeeded.

As I mentioned in my previous article, the spacecraft appears to still be in good health, and the activities in progress before April (extending the gravity gradient boom, checking out the HF beacon transmitters, TV camera, computers, etc) can continue.

Phil Karn, KA9Q

From 965556553232597349
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e72479c5e79b9128,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,e72479c5e79b9128,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1982-09-22 02:58:47 PST
Message-ID: <bnews.eagle.525>
Newsgroups: net.space,net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Wed Sep 22 05:58:39 1982
Subject: Uosat-Oscar-9 Salvage Success!
X-Google-Info: Converted from the original B-News header
Posted: Tue Sep 21 13:14:10 1982
Received: Wed Sep 22 05:58:39 1982

I just received a phone call from Vern Riportella, WA2LQQ, AMSAT Executive VP. Rip informs me that last night, the SRI team using the 150 foot antenna has successfully commanded Uosat-Oscar-9, turning off the beacons which have jammed the command receivers for quite a few months now.

The problem was that no interlock circuit had been provided in the spacecraft to prevent the inadvertent turning on of both the 2 meter and the 70 cm beacons, which desensitized the command receivers also on 2 and 70 cm. Naturally, a mistake was made, and somehow both beacons had been commanded on. The SRI dish, plus a kilowatt of transmitter power, was finally able to override the strong local signal in the command receiver (probably on 2 meters, but that hasn't been confirmed) and turn off a beacon to allow commanding on that band.

Initial telemetry reports after the two-meter beacon was turned back on and telemetry encoding enabled indicate that the spacecraft is still in excellent health.

Uosat-Oscar-9 may be received with a conventional amateur 2-meter
receiver on 145.825 mhz FM. If you have a Bell 202 (NOT 212) modem and
a conventional terminal, you can decode its telemetry. Just connect the
terminal to the modem and set the terminal to 1200 or 300 baud,
depending on the current telemetry speed.

Phil Karn, KA9Q/2

From -2511950368015282532
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,b35b9d292a1b2245,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-22 03:10:33 PST
Message-ID: <bnews.ihlpb.247>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ixn5c!ihlpb!nickles
X-Path: utzoo!decvax!harpo!ihps3!ixn5c!ihlpb!nickles
From: ihlpb!nickles
Date: Wed Sep 22 06:10:29 1982
Subject: correction to AMSAT - (nf)
X-Google-Info: Converted from the original B-News header
Posted: Tue Sep 21 13:26:09 1982
Received: Wed Sep 22 06:10:29 1982

#N:ihlpb:9700002: 0:165
ihlpb!nickles   Sep 20 15:50:00 1982

***** ihlpb:nfmaint / alice! / 7:06 pm Sep 6, 1982
Whoops! One minor correction: The uplinks to the proposed geosync
OSCAR's would be 5, not 3, GHz.

From -2350157646498783214
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,11f89c0d248e60b1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-22 03:54:14 PST
Message-ID: <bnews.hou5d.140>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!houxi!hou5d!jak
X-Path: utzoo!decvax!harpo!ihps3!houxi!hou5d!jak
From: hou5d!jak
Date: Wed Sep 22 06:54:11 1982
Subject: sept. call book
X-Google-Info: Converted from the original B-News header
Posted: Tue Sep 21 17:06:11 1982
Received: Wed Sep 22 06:54:11 1982

The following is a list of net.ham-radio readers/contributers:

CALL - NAME - MAIL ADDRESS
K1DK - Dan Kahn - research!alice!danny
WB1EXN/6 - Keith Muller - ucbvax!sdcsvax!muller
KA1GNG - Rob Wood - decvax!genradbolton!rob
W1UI - Jerry Gann - ucbvax!lbl-unix!asgvax!gann
WA1ZVN - Scott A. Magnuson - houxi!hocsb!scott
KI2A - Steve Gross - houxq!sg
K2ART - Mike Pilla - houxi!u1100a!mp
WB2CFV - Rick Spanbauer - rick@suny-sbcs | allegra!sbcs!rick
N2CHL - Rich Gopstein - allegra!gop
WA2CVU - Karen Schroeder - floyd!philabs!kis
W2EMF - Al Donkin - houxm!aed
W2FPY - Steve Robinson - eagle!ajll11!robinson
KU2H - Al Morley - houxm!arm
AD2H - Marsh Gosnell - npois!pyuxbb!mkg or whuxlb!mkg
WA2HSJ - Glenn Golden - houxg!glenn or lime!glenn
N2IC - Steve London - druxm!n2ic or houxp!9535sml
W2IOL - Ron McConnell - harpo!rcmcc
W2IY - Mike Tortorella - houxp!w2iy
KA2JDY - Joel Damiano - ucbvax!teklabs!joeld or decvax!teklabs!joeld
KA2JQH - Adam Buchsbaum - research!sjb
WA2MOR - Larry Kaufman - nwuxc!lsk
N2ND - Dick Maybach - houxq!4373rlm
K2PH - Bob Schreibmaier - houxb!3435ras
WA2PME - Azi Heuman - houxo!3357ah
WB2QOQ - Rick Anderson - harpo!rja
WA2QYN/2 - Paul Rubin - allegra!phr
WB2RPC - Mike Sajor - harpo!zeppo!mes
N2YK - Bruce McNair - houxg!bem or houxm!bem2
N3AGV, Ron Natalie, unc!brl-bmd!ron, ron@brl
N3AUC, Doug Kingston, unc!brl-bmd!dpk, dpk@brl
N3CKF, Joe Pistritto, unc!brl-bmd!jcp, jcp@brl
WA3IRQ - Lee Nackman - duke!unc!lrn
WA3THP/2 - Stu Brown - allegra!stu
WA3VJS - Scott E. Garfinkle - princeton!scotteg
DF4CK/W9 - Stephan Bechtolsheim - decvax!pur-ee!purdue!svb
G4EHL - Anthony Short - decvax!microsof!anthony
WB4FWL - Ned Danieley - duke!ndd
KB4GZ- Frank Starmer - duke!unc!cfs or duke!cfs
WA4IFA - Chuck Bennett - duke!unc!tucc!uchuck
W4IZI - Lindsay Cleveland - ihnss!ihuxi!lindsay
KA4VXA - Mike Leuze - duke!mrl
WA6AZP - Alan Larson - ucbvax!larson@sri-kl
KD6BA - Ted Lane - ucbvax!menlo70!sytek!zehntel!ted
WA6BEV - Robert R. Henry - ucbvax!rrh or research!rrh
WB6BXW - Lauren Weinstein - ucbvax!ucla-s!lauren or Lauren@UCLA-Security
WA6FAA - Jim Gillogly - randvax!jim
KO6G - Steven Schoch - ucbvax!ONYX:schoch
KU6I - Roger Jollis - intelqa!gsp86!linden
WA6IGJ - Tony Cardenas - ucbvax!Cardenas.ES@PARC-MAXC
KA6RCQ - Michael Shiloh - ucbvax!shiloh
AD7I - Paul Newland - houxc!ad7i
WB7UBD - Ed Morin - teklabs!tekmdp!edm

WB8FBM - Dale DeJager - cbosg!dale
G8LHI - Martin Levy - lime!martin
K8NU - Carl Yaffey - rmas70!cly
KQ8P - Jeff Coleman - ihnss!ihuxo!jnc
G8RDF - Martin Harriss - houxi!pyuxjj!martin
W8SDZ - Keith Petersen - W8SDZ@MIT-MC
WB8WWV - Greg Ordy - ucbvax!decvax!cwruecmp!ordy
WA8ZNH - Jim Kutsch - npois!jak
WB9AAX - Phil Gunsul - lime!we13!prg
KB9BO - Jim Krist - ihnss!ihuxs!jtkrist
KA9ELG - Mark Yoder - ucbvax!pur-ee!yoder
K9EUI - Bob Roehrig - lime!we13!rjr
WD9HDR - Jim Erickson - ihuxs!erickson
KA9MHK - Dan Hoelker - ihnss!ihuxu!mstach
WN9NBT - Dave Chasey - pur-ee!wn9nbt
KA9Q - Phil Karn - eagle!karn
WB9RIN - Dennis Noonan - inuxc!wb9rin
WB9VGW - John Wrycza - ihuxu!johnw
KK9W - Dave Andersen - pur-ee!kk9w
(no call) - David Comay - ucbvax!ARPAVAX:comay
(no call) - Steven Bellovin - duke!unc!smb

Send additions/corrections to Jim Kutsch -- npois!jak

From 6299904955552643893
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,5ba2a3665a3eeb04,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-09-30 08:29:20 PST
Message-ID: <bnews.eagle.534>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Thu Sep 30 11:29:08 1982
Subject: FCC digital radio rule changes
X-Google-Info: Converted from the original B-News header
Posted: Mon Sep 27 22:33:45 1982
Received: Thu Sep 30 11:29:08 1982

Word has it that the FCC has released a rule change effective 28 October
that relaxes the limitations on digital emissions in the amateur
service.

The new limits will be as follows:

bands	max bit rate	max bandwidth
10m	1200	
6,2m	19.6K	20khz
1.25m+up	56K	50khz

The new rules also allow non-ascii codes to be used, provided that both

stations in a contact are within the USA. (Don't ask me why.)

More info as available.

Phil Karn, KA9Q

From 6106437483172148347
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,740d2ed5f7bd363b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-08 05:29:36 PST
Message-ID: <bnews.sask.21>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!utah-cs!sask!hardie
X-Path: utzoo!decvax!harpo!utah-cs!sask!hardie
From: sask!hardie
Date: Fri Oct 8 08:29:36 1982
Subject: DX
X-Google-Info: Converted from the original B-News header
Posted: Wed Oct 6 20:48:08 1982
Received: Fri Oct 8 08:29:36 1982

Got Marius FY7YE (French Guiana) at 0240Z 7th OCT 14.050Mhz. His code is VERY
fast but I think he said he would be back the following night at same place
so listen for him at about 0215Z.

From 4021075728184567469
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,657864894753f235,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-08 05:31:16 PST
Message-ID: <bnews.sask.22>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!utah-cs!sask!hardie
X-Path: utzoo!decvax!harpo!utah-cs!sask!hardie
From: sask!hardie
Date: Fri Oct 8 08:31:15 1982
Subject: interference
X-Google-Info: Converted from the original B-News header
Posted: Wed Oct 6 22:16:06 1982
Received: Fri Oct 8 08:31:15 1982

Have problem with interference of a kind I have not seen reported
before. I have an ADM5 terminal at home which I and my kids use to
play rogue etc. My rig is in the same room and if I transmit,
the phone line drops instantly .. much to the annoyance of my daughter
(age 7) who happened to be on level 10 with a large chunk of gold!.
This did not happen when TTY was HP2640 (in fact reverse problem -
it produces prodigious amounts of RFI) and using the same acoustic
coupler. Any ideas as to cause and, better still, a cure (cheap!).
TNX + 73

Pete VE5BEL
utah-cs!sask!hardie

From 1111462248399332172
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6b42451e5b845cce,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-11 21:26:04 PST
Message-ID: <bnews.houxc.266>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxj!cbosgd!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxj!cbosgd!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Tue Oct 12 00:26:02 1982
Subject: Propagation Bulletin 40
X-Google-Info: Converted from the original B-News header
Posted: Thu Oct 7 08:12:47 1982
Received: Tue Oct 12 00:26:02 1982

qst de ad7i
hr propagation forecast bulletin nr 40   from arrl headquarters
newington ct october 4, 1982
to all radio amateurs bt

the solar flux started rising september 19, at 137. except for two
brief dips, it continued upward to 218 on october 3. this was the
highest flux reading since july 14. as expected, this produced the
best propagation on 21 and 28 mhz in at least five months. it also
pointed to improved prospects for 50 mhz dx during the next two solar
rotations. most likely periods would be october 28 to november 2 and
november 25 to 30. more detailed predictions will be given in
subsequent bulletins.

one of the most severe geomagnetic disturbances of this solar cycle
began september 5. a recurrence of this event is likely between
october 4 and 7, probably at lower levels than in early september.
watch for exceptional transequatorial propagation on the higher hf
bands, and possibly on 50 mhz, in this period. when it subsides,
there will be good to excellent conditions on all hf bands through
the middle of october. the solar flux will be too low for good 50
mhz prospects at this time, but frequencies below 30 mhz will be
quite good.

the solar flux is expected to be lower during the forecast week,
probably dropping to 150 or lower. this should make for good
accuracy in the use of the current qst propagation charts.

american sunspot numbers for september 23 through 29 were between 96
on the 23rd and 172 on the 29th, for a mean of 132 ar

From 2991575110351909812
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,36a9ddf452e6e4ee,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-12 00:26:25 PST
Message-ID: <bnews.houxc.265>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxj!cbosgd!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!eagle!mhuxt!mhuxj!cbosgd!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Tue Oct 12 03:26:24 1982
Subject: CRRL 35: New CRRL Officer
X-Google-Info: Converted from the original B-News header
Posted: Thu Oct 7 08:12:25 1982
Received: Tue Oct 12 03:26:24 1982

qst de ad7i
hr crrl bulletin nr 35 from arrl headquarters
newington ct october 4, 1982
to all radio amateurs bt

mitch powell, ve3ot, has retired as crrl president and arrl canadian director. the new crrl president and canadian director is tom atkins, ve3cdm. harry maclean, ve3gro, is the new crrl secretary and arrl canadian vice director.

ve7bc was awarded the crrl certificate of merit for his contribution to getting by1pk on the air. ve3ayl, editor of the cartg rtty news, was voted crrl amateur of the year.

the following canadian amateurs have been appointed to arrl advisory committees, contests ve3kz, dx ve3qa, public relations ve4ads, emergency communications ve3gv, vhf repeaters ve1aic, vhf/uhf ve3aib and digital communications ve7apu/3 ar

From 1765396759970440696
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c197381f9f011bb2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-14 20:18:15 PST
Message-ID: <bnews.alice.970>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!sjb
X-Path: utzoo!decvax!harpo!npoiv!alice!sjb
From: alice!sjb
Date: Thu Oct 14 23:18:14 1982
Subject: SET Weekend Approaching
X-Google-Info: Converted from the original B-News header
Posted: Sat Oct 9 14:50:09 1982

Received: Thu Oct 14 23:18:14 1982

This year's Simulated Emergency Test will be held the weekend of 16
and 17 October. For those of you who don't know about or are unfamiliar
with the SET, it is an annual drill, usually held during some weekend in
October, designed to prepare traffic nets of the Amateur Radio
Emergency Service (ARES) and National Traffic System (NTS) for
operational during a local, state, or national emergency (though
we all hope that those conditions will never occur.) Member nets
usually hold extra drill sessions in addition to or replacement of
regular sessions, and they receive points for each person that checks
in and for each piece of traffic passed. If you have never participated
in a traffic net, this is a perfect opportunity to experience it and
see how you like it. You will not be required to pass or take traffic,
but if you want to, all the better! If you do not know of any local
nets, ask amateurs around your area for information.

Note to all New Jersey amateurs:
If you live in or near the Union County area (Union county and all
surrounding counties) or plan to be there during SET weekend and want
to participate in the SET, the Tri-County Emergency and Traffic Net
(TCETN) will be holding sessions at 0930, 1230, 1530, and 1930 EDT
on both days (the 16th and 17th). Operating frequency will probably
be 147.255 MHz (TX +600 kHz) during all sessions, but if it will be
different for any sessions, I will post a note here before the SET.
Please feel free to check in at any time; the sessions do not run
long.

If you want more information, please mail me at ...!research!sjb
Hope to see you on the air.

73,
Adam
KA2JQH

From -2503697728438415640
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c5a9e94e10ff706c,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-14 21:16:49 PST
Message-ID: <bnews.inuxc.444>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Fri Oct 15 00:16:44 1982
Subject: British Isles SSB contest
X-Google-Info: Converted from the original B-News header
Posted: Thu Oct 7 08:51:27 1982
Received: Fri Oct 15 00:16:44 1982

In my rampage about the VK/ZL contest this weekend, I forgot

to mention the Radio Society of Great Britian 21/28 MHz SSB
Contest, 0700 to 1900 Z Sunday October 10. The contest
exchange is the RS report and a progressive serial number,
beginning with 001. Basically, the intent is to
work G, GD, GJ, GM, GU, and GW prefixes, all of which are
DXCC countries.

I realize that many of you already have this info from
QST, CQ, the DX papers, or whatever. Is this of interest on the
net, however, or is it "redundant"??? Hopefully, the information
here sparks some interest in those who are not aware of the contest,
yet hear some of it over the weekend, and work a few contesters because
the know the exchange format, or whatever. Comments???

From 5446856115626795624
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c3a8120b74ef82a7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-14 21:32:35 PST
Message-ID: <bnews.inuxc.445>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Fri Oct 15 00:32:34 1982
Subject: FY7YE Stateside Manager
X-Google-Info: Converted from the original B-News header
Posted: Thu Oct 7 14:45:20 1982
Received: Fri Oct 15 00:32:34 1982

FY7YE's stateside manager is W5JLU

From 1319610434206244181
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,551b7225dbe229e0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-14 21:53:31 PST
Message-ID: <bnews.vax135.434>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!deimos!ariel!vax135!hpk
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!deimos!ariel!vax135!hpk
From: vax135!hpk
Date: Fri Oct 15 00:53:29 1982
Subject: Data transmissions on SCA in NYC
X-Google-Info: Converted from the original B-News header
Posted: Sun Oct 10 14:01:06 1982
Received: Fri Oct 15 00:53:29 1982

In case anybody is interested, I have heard that WRKS (KISS-FM)
is transmitting stock market information on their subcarrier at 4800 baud.

WFUV-FM also has a program test authorization for the same thing.

From 7121405515338355585
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3e54aba7309a5ba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-14 22:32:02 PST
Message-ID: <bnews.houxc.268>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Fri Oct 15 01:32:01 1982
Subject: DX Bulletin NR 40
X-Google-Info: Converted from the original B-News header
Posted: Mon Oct 11 08:24:38 1982
Received: Fri Oct 15 01:32:01 1982

qst de ad7i
hr dx bulletin nr 40 from arrl headquarters
newington ct october 8, 1982
to all radio amateurs bt

thanks to k1iem k1mm, w1trc and n1ajo of the soqthern new england dx association for the following dx information.

tokelaus. zm7ag will finish opebating friday. qsl via sm3cxs.

canton island and central kiribati. operation should begin monday for six days as sm0agd/kh1 on odd numbered days and as t31ae on even days. qsl via sm3cxs.

auckland and campbell islands. zl4oy/a is on 7165 khz at 1030 qtc on saturdayq. qsl to zl1bqd.

solomon islands. h44bs can be found sundays at 2300z on 28600khz.

iraq. yi1bgd, operator kamal, looks for u.s. qsos on saturdays after 1500z on 14250 khz wiph a german mc

bouvet. dk9kd says that the plans for operation this winper have been shelved for this year.

hear island. kp2a reports that plans continue with no problems fob the planned january trip under sponsorship of idxf, ncdxf and wia.

juwait. from idxf comes the news that 9k2be will be active in both the phone and cw pordions of the cq ww contest, as well as daily on 28600 khz at 1200 utc. 9k2dx will be operated by n6ni in the cw contest.

eastern caroline islands. kc6in can be fgund on 14225 khz at 1130z.

saipan. from october 7 to 14, seven or eight operapors will be active on 80 through 6 meters on all modes, icluding rtty and sstv. all contacts will be qsledvia the bureau.

eastern kiribati. t32af can be found on 14211 khz at1100z and on 7085 khz at 1030z.

fernando de noronha. py7zz and py7cw will oen for one week on satprday, favoring cw and the lower bands.

st. helena island. zd7bw is very active on 7082 khz at 2330z and on 3796 khz at 2230z.

mauritania. !t5to can be found on 7005 khz from 2300z and on 21025 khz at 2130z. also look for 5t5rr between 28500 and 28520 khz at 2000z.

vanuatu. yj8rg is often on 14209 khz at 1130z and is agreeable to make skeds for 40 meters.

china.   tom, ve7bc, was unable to operate ssb while at by1pk ar

From -4514811971668899248
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c197381f9f011bb2
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-14 23:13:52 PST
Message-ID: <bnews.ihuxq.175>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!ihps3!ihuxq!larrys
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!ihps3!ihuxq!larrys
From: ihuxq!larrys
Date: Fri Oct 15 02:13:51 1982
Subject: Re: SET Weekend Approaching
References: <bnews.alice.970>
X-Google-Info: Converted from the original B-News header
Posted: Mon Oct 11 14:42:57 1982
Received: Fri Oct 15 02:13:51 1982

Simulated Emergency Test [SET] - Oct. 16 & 17.

DuPage County Area , Illinois   [like Indian Hill BTL.]

Hams intereted in participating in the Chicago Area should plan on monitoring 146.61/01 for the annoucement of the "Emergency" sometime during this weekend. All are welcome to check-in and participate with traffic handling and communication.

Larry Schroeder - KA9KDC

ihuxq!larrys
EC - DuPage County

From -430373083576258748
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,99ab5779bf30bd99,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-17 00:30:52 PST
Message-ID: <bnews.houxc.270>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Sun Oct 17 03:30:51 1982
Subject: ARRL 88: Simulated Emergency Test
X-Google-Info: Converted from the original B-News header
Posted: Tue Oct 12 08:40:29 1982
Received: Sun Oct 17 03:30:51 1982

qst de ad7i
hr arrl bulletin nr 88 from arrl headquarters
newinfton cd october 11, 1982
to all radio amateurs

the arrl simulated emergency test is october 16 and 17. all amateurs
are invited to participate. see page 75 of september 1982 qst for
details ar

From 8854116142969843300
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf6fdde859a13917,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-17 00:31:52 PST
Message-ID: <bnews.houxc.269>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Sun Oct 17 03:31:51 1982
Subject: ARRL 87: W1AW Schedule Changes
X-Google-Info: Converted from the original B-News header
Posted: Tue Oct 12 08:40:09 1982
Received: Sun Oct 17 03:31:51 1982

qst de ad7i
hr arrl bulletin nr 87 from arrl headquarters
newington ct october 11, 1982

to all radio amateurs bt

with the return to standard time on october 31, all w1aw scheduled
transmissions will be one hour later in utc. local times will
remain the same if you are now on daylight time.

all code pbactice and cw bulletin transmissions on 20 meters will be
on 14.070 mhz and on 160 metebs on 1.818 mhz.

for [a new schedule of w1aw broadcast times send a]
sase to arrl hq, 225 main st, newijton, ct 06111 ar

From -7497983928351262882
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,58c1f80e1902e34d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-17 00:45:26 PST
Message-ID: <bnews.houxc.271>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Sun Oct 17 03:45:26 1982
Subject: ARRL 89: Net Directory Available
X-Google-Info: Converted from the original B-News header
Posted: Tue Oct 12 08:40:50 1982
Received: Sun Oct 17 03:45:26 1982

qst de ad7i
hr arrl bulletin nr 89 from arrl headquarters
newington ct october 11, 1982
to all radio amatewrs bt

the new edition of the arrl net directory is now available. listing
over 1000 public service nets by location and frequency, this newly
revised booklet is also packed with information on all the basics of
traffic handling and net operation. you may obtain a copy by sending
a self addressed nine by twelve inch envelope with seventy one cents
u.s. postage to arrl net directory, 225 main street, newington ct
06111 ar

From -3273495904771772660
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,67e0d358c18cd40,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-17 00:53:42 PST
Message-ID: <bnews.inuxc.450>
Newsgroups: net.ham-radio

Path: utzoo!decvax!harpo!npoiv!npois!houxi!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Sun Oct 17 03:53:36 1982
Subject: CONTESTS THIS WEEKEND
X-Google-Info: Converted from the original B-News header
Posted: Tue Oct 12 09:54:24 1982
Received: Sun Oct 17 03:53:36 1982

At least two good DX contests this weekend (3 if you are into RTTY)
and heres the scoop:

WA-Y2 Contest, from 1500Z Oct. 16 until 1500Z Oct. 17. Phone and cw,
10 to 80 meters. Exchange signal report and serial number, starting
with 001. The Y2 station will send signal report and a 2 digit number
indicating "kreiskenner" (not sure if this is equivalent to a county
or what). The object here is to work as many German Democratic Republic
stations (Y2xxxxx to Y9xxxxx) as possible. These operators
are usually pretty big into contesting.

21 MHz CW Contest, from 0700Z to 1900Z Oct. 17. The idea is to work as
many Radio Society of Great Britain (RSGB) members as possible in the British
Isles. Exchange RST and serial number (beginning with 001). I heard a lot
of British stations on last weekend in the SSB contest, including all of
the DXCC countries from Great Britain.

RTTY Sweepstakes, 0200Z Oct. 16 till 0200Z Oct. 18. Exchange signal report,
UTC time, and CARTG (Canadian Amateur Radio Teletype Group) zone.
Use all bands 80 to 10 meters.

GOOD LUCK!!

From -5434433050685495730
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2d81c5de0369509a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-17 01:09:25 PST
Message-ID: <bnews.inuxc.451>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxi!ihps3!ixn5c!inuxc!
wheatley
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!npoiv!npois!houxi!ihps3!ixn5c!inuxc!
wheatley
From: inuxc!wheatley
Date: Sun Oct 17 04:09:21 1982
Subject: CONTESTS (stateside) THIS WEEKEND
X-Google-Info: Converted from the original B-News header
Posted: Tue Oct 12 11:50:26 1982
Received: Sun Oct 17 04:09:21 1982

Besides the SEC, which has been posted on the net, there
are some "stateside" contests this weekend. Below

is a summary. These contests can be a lot of fun, and
sure can help your 5 band WAS.

MINNESOTA QSO PARTY

>From 1700Z Oct 16 till 2259Z Oct. 17 on 80 to 10 meters, both phone
and cw. Work stations from MN once per band and mode. Exchange
RS(T) and ARRL section, MN stations exchange RS(T) and county. Suggested
frequencies phone:3.933, 7.233, 14.300, 21.433, 28.633, cw 33 KHz up from
band edge.

PENNSYLVANIA QSO PARTY

1700Z Oct. 16 till 0400Z Oct. 17 and 1300Z till 2200Z Oct. 17.
Exchange RS(T), serial number (starting with 001), and ARRL
Section. PA stations exchange RS(T), serial number, and county.
Frequencies: phone 3980, 7.280, 14.280, 21.380, and 28.560, CW
40 KHz up from the bottom, Novice 10 KHz up from the bottom.

From 9181212463456664530
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,aedb836739ed4401,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-19 23:06:46 PST
Message-ID: <bnews.alice.987>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!sjb
X-Path: utzoo!decvax!harpo!npoiv!alice!sjb
From: alice!sjb
Date: Wed Oct 20 02:06:46 1982
Subject: Apology
X-Google-Info: Converted from the original B-News header
Posted: Tue Oct 19 19:50:38 1982
Received: Wed Oct 20 02:06:46 1982

I accidentally submitted an article intended for net.games.emp
to net.ham-radio -- I subsequently sent out a cancellation control
message on the article, but for those sites that still get it:
My humblest (and ashamed!) apologies.

From -7282841640742574815
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,95bb70cb9de52b28,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-19 23:08:42 PST
Message-ID: <bnews.alice.985>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!sjb
X-Path: utzoo!decvax!harpo!npoiv!alice!sjb
From: alice!sjb
Date: Wed Oct 20 02:08:41 1982

Subject: Clarification of Distribution Information
X-Google-Info: Converted from the original B-News header
Posted: Tue Oct 19 19:47:43 1982
Received: Wed Oct 20 02:08:41 1982

When I said that the information for obtaining an Empire distribution
should not be made public, I in no way meant that net.games.emp should
not exist. Specifically, the machine to which to mail to Peter Langston
does not want its identity revealed publicly, and THAT'S what I meant.
Sorry if I mislead people.

From 4826619172422149793
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,70f72295a834a933,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-10-21 22:26:39 PST
Message-ID: <bnews.inuxc.477>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!ihps3!ixn5c!inuxc!wheatley
X-Path: utzoo!decvax!duke!harpo!ihps3!ixn5c!inuxc!wheatley
From: inuxc!wheatley
Date: Fri Oct 22 01:26:38 1982
Subject: THIS WEEKEND'S CONTESTS
X-Google-Info: Converted from the original B-News header
Posted: Thu Oct 21 09:05:05 1982
Received: Fri Oct 22 01:26:38 1982

This weekend's contest outlook is a bit bleak, as
the "big guns" are resting up for next weekend's
CQ Worldwide SSB contest.   However, this weekend
offers a good chance for those of you who want to
check out the rigs, that 4 element 40 meter mono-
bander at 150 feet, that 10 mile long wire, etc..

MARYLAND - DC QSO PARTY

>From 1800Z Oct. 23 until 2100Z Oct. 24. Work stations
once per band and mode. Exchange serial number, signal
report, and QTH (county for MD stations, state, country
or province for others). Frequencies: 3.950, 7.250, 14.290,
21.390, 28.590; cw, 60 KHz up from bottom, Novice, 20 KHz up
from low end.

ARRL MIDNIGHT SPECIAL

>From 0300 to 0500Z Oct. 24   First hour, 160 meter cw, second
hour 160 meter phone. Work stations once per mode. Frequencies:
cw-1805 to 1820 phone 1855 to 1870. Exchange antenna type
(G=ground plane, V=vertical, O=loop, L=inverted L, W=wire, long
or otherwise, D=dipole, I=inverted V; use ur imagination for others!)
and power input to final.

As always, gud luck, es I will post the CQWW rules later today!

From -8783324602384758993
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,79684147761474d6,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-18 10:38:20 PST
Message-ID: <anews.Aihnss.201>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!ihnss!karn
X-Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!ihnss!karn
From: ihnss!karn
Date: Wed Nov 18 10:38:20 1981
Subject: Amsat news
X-Google-Info: Converted from the original A-News header

>From the 11/16/81 issue of Amsat Satellite Report, and the Amsat nets:

Work on the liquid fuel kick motor design for Phase III-B is
progressing well. Recent pressure tests in Germany have satisfied
ESA (the European Space Agency, who will launch the Ariane
carrying Phase III-B) that the fuel tank design is sound.

Phase III-B will use a UDMH/Nitrogen Tetroxide engine originally
manufactured by MBB for the Symphonie satellite program and donated
to Amsat.
The liquid fuel motor will allow a larger payload, consisting of an
extra transponder for 23cm -> 70cm, increased radiation
shielding for the onboard computer memories, and a better
Molniya-type orbit.

The next launch of an Ariane (L04, the 4th test flight) is scheduled
between 20 and 23 Dec 1981. A maritime communications satellite
called MARECS A will be aboard LO4. Phase III-B is currently
expected to fly on L7 (the 7th Ariane, an operational mission)
in October 1982 along with the ECS-1 spacecraft (European
Communications Satellite 1).

Still no word on the expected launch of 3 new Soviet amateur radio
satellites. Anyone hearing the new birds is urged to call Amsat
headquarters at 301-589-6062.

Engineering evaluation work on Uosat-Oscar-9 (launched 6 October) is
progressing well. The speech synthesizer and both computers have
been tested and found to be operational. It is expected that despin
maneuvers using the torquing electromagnets will begin within a week
or so. Following this, the gravity gradient boom may be deployed,
and the HF beacon experiments turned on.

de KA9Q

From -3963833456727012143
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3c551b7a04e6ac44,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-20 09:08:14 PST
Message-ID: <anews.Ahouxb.102>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!ihnss!houxf!houxc!houxb!3435ras
X-Path: utzoo!decvax!ucbvax!mhtsa!ihnss!houxf!houxc!houxb!3435ras
From: houxb!3435ras
Date: Fri Nov 20 09:08:14 1981
Subject: DX Info
X-Google-Info: Converted from the original A-News header

Macquarie Island and Christmas Island.

VK0AN and VK0AU on Macquarie Island and VK9XW on Christmas Island are scheduled to show up on Tuesday 24 November on 14332 kHz at 1000Z. A list to work these stations may be taken earlier than 1000Z.

Galapagos Islands.

HC8MD will be on the air through 12 December on all bands from 6 through 160 meters. Check 7006 kHz at 0300Z and 3795 kHz where he may be listening up on 3825 kHz at 0400Z. He also has a 6 meter beacon with the call HC8VHF operating at 51.1 MHz. QSLs go to Box 665, Cuenca, Ecuador.

New Hebrides.

Ron, ZL1AMO, is now signing YJ8RW through December 5. This is an all band both cw and ssb operation. Check 28023 kHz at 0000Z and 28552 kHz at 0100Z. Ron is still trying to obtain the necessary permission to operate from Kermadec Island.

Crozet.

FB8WG can often be found on cw on 14110 kHz around 0300Z. There is a list operation run for FB8WG on Mondays and Thursdays on 14225 kHz from 1200 to 1230Z.

Taiwan.

Tim, BV2A, keeps a Saturday schedule with W7PHO at 1400Z on 14225 kHz. Look for Tim also on Sundays at 0000Z on 28575 kHz.

_____
160 Meters.

Amateurs in Norway, LA, have received permission to operate on 160 meters and will be on for the CQ WW DX Contest, which is sponsored by CQ Magazine. Look for the Norwegians between 1810 and 1840 kHz. OA4AWD is on 160 meters most weekends on Friday and Saturday after 0400Z around 1803 kHz. QSLs for OA4AWD go to VE2AQS. Also on 160, ZS6DW keeps a regular schedule with VE3BBN. Check 3777 kHz at 0315Z.

_____
Trinidad.

Iris Colvin, W6QL, has been operating as 9Y4KG at 0415Z on 3802 kHz. QSLs will be handled by the YASME Foundation.

_____
80 Meters.

KP4KK/DU2 in the Republic of the Philippines has been worked by many stations in W2 land from 1100 to 1200Z. Also look for A71AD in Qatar on 3799 kHz around 0315Z.

_____
Kenya.

Kati, JE1JKL, will be operating station 5Z4CS on five bands for an extended period of time on both ssb and cw. Kati has applied for the necessary licenses to operate on 6 and 160 meters also. QSLs go to JI1VLV.

_____
Heard and Worked.

FH8OM on 28530 kHz at 1600Z. 9Q5FL on 28615 kHz at 1700Z. 9Q5VT on 21316 kHz at 2330Z, QSLs to K5VT. TA2KS on 14225 kHz at 0315Z, QSLs to G3SCB. WB0ICS/KH7 on 28645 kHz at 2330Z. 7P8BX on 21282 kHz at 1900Z.

From 5057486828976958582
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2a755dfb6bd2a5d7,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-10 22:07:06 PST
Message-ID: <anews.Aeagle.291>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Mon May 10 11:14:12 1982

Subject: Error in ASR #31
X-Google-Info: Converted from the original A-News header

There was an error in Amsat Satellite Report #31, in the article on
the AMSAT bulletin board system. The correct area code is 512
(south Texas), not 513 (southwest Ohio).

Phil

From -240970114916282652
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2a755dfb6bd2a5d7
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-10 22:09:09 PST
Message-ID: <bnews.eagle.291>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Tue May 11 01:09:08 1982
Subject: Error in ASR #31
X-Google-Info: Converted from the original B-News header
Posted: Mon May 10 11:14:12 1982
Received: Tue May 11 01:09:08 1982

There was an error in Amsat Satellite Report #31, in the article on
the AMSAT bulletin board system. The correct area code is 512
(south Texas), not 513 (southwest Ohio).

Phil

From 566597910457281516
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7d73f457dc9e0c5a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-12 22:00:02 PST
Message-ID: <bnews.harpo.637>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!dac
X-Path: utzoo!decvax!harpo!dac
From: harpo!dac
Date: Thu May 13 01:00:02 1982
Subject: wanted: marine SSB Tranceiver or ham/sailor
X-Google-Info: Converted from the original B-News header
Posted: Wed May 12 13:13:43 1982
Received: Thu May 13 01:00:02 1982

The Cruising Club of America Newport/Bermuda race committee, in its
infinite wisdom, has decreed that all boats this year will need a single
sideband radio on board. If the radio operates in the ham bands, a licensed
operator is also required. We're reluctant to spend the $2000 to $5000

required to buy a new marine SSB transceiver. So we're in desperate need of either:

  1) A really cheap marine SSB tranceiver - new or used, borrow, rent, or buy - it needn't necessarily be operable - we'll fix it, or

  2) a licensed ham with (preferably offshore) sailing experience to go along on the race. We've located a ham tranceiver we can borrow. The race starts June 18 at Newport, Rhode Island. On average the trip takes five days though there's no guarantee. The boat is a C&C 35 with a fairly good record in previous races (a 2nd, a 4th, and a 5th in class). This boat is "campaigned" on a tight budget (i.e. expenses are shared, pay your own air fare back or sail back if you like) but we eat well.

If you can help, please reply by mail or call (201) 386-2390 (days), (201) 267-4377 (evenings).
Doug Corey

From 3057843931410428836
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,811e79a409410485,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-14 00:47:46 PST
Message-ID: <bnews.houxc.209>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!lime!houxg!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!lime!houxg!houxi!houxc!ad7i
From: houxc!ad7i
Date: Fri May 14 03:47:46 1982
Subject: ARRL 41: Houston ARC
X-Google-Info: Converted from the original B-News header
Posted: Thu May 13 12:10:31 1982
Received: Fri May 14 03:47:46 1982

qst de ad7i
hr arrl bulletin nr 41 from arrl headquarters
newington ct may 7, 1982
to all radio amateurs bt

the houston amateur radio club will operate w5dpa during the 33rd international engineering and science fair, may 10 tyrough 15. the fair will be attended by 7th through 12th grade students from all 50 states and several foreign countries. w5dpa will handle phone patch and formal traffic for the students, as well as acting as a special events station. suggested frequencies are 28600, 21400, 14295, 7260 and 3900 khz. cw operation will be near the middle of the novice bands ar

From -6379684348451913768

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d5ed1bbcabd93049,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-14 00:49:52 PST
Message-ID: <bnews.houxc.210>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!lime!houxg!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!lime!houxg!houxi!houxc!ad7i
From: houxc!ad7i
Date: Fri May 14 03:49:52 1982
Subject: ARRL 42: Sam Davis
X-Google-Info: Converted from the original B-News header
Posted: Thu May 13 12:10:53 1982
Received: Fri May 14 03:49:52 1982

qst de ad7i
hr arrl bulletin nr 42 from arrl headquarters
newington ct may 10, 1982
to all radio amateurs bt

special events station n4dzw will operate from the sam davis home in
smyrna, tennessee, from 1400z may 13 until 2300z may 15. frequencies
are 14285 and 7285 khz, as well as 21125 and 7125 khz in the novice
bands. a special certificate will be available ar

From 7964969308831832639
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a3b5721245a28c73,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-14 00:50:19 PST
Message-ID: <bnews.houxc.211>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!lime!houxg!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!lime!houxg!houxi!houxc!ad7i
From: houxc!ad7i
Date: Fri May 14 03:50:18 1982
Subject: CRRL 19: Rideau Canal
X-Google-Info: Converted from the original B-News header
Posted: Thu May 13 12:11:24 1982
Received: Fri May 14 03:50:18 1982

qst de ad7i
hr crrl bulletin nr 19 from arrl headquarters
newingtion ct may 10, 1982
to all radio amateurs bt

the smith falls amateur radio club will commemorate the 150th
anniversary of the completion of the rideau canal by operating
cz3sfr from may 22 through june 7.

the canadian amateur radio teletype groups 1981 rtty dx contest

attracted participants from sixty seven countries. this years contest will be held on the weekend of october 16 and 17.

nominations for crrl amateur of the year are now open. the deadline for receiving nominations is september 15. send nominations and supporting material to crrl, box 7009, station e, london, ontario n5y 4j9.

doc will hold amateur examinations across canada on june 16. if you plan to write, you should register with doc now ar

From 3400281269486925774
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,55a6745ed60083ea,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-14 00:50:42 PST
Message-ID: <bnews.houxc.212>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!lime!houxg!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!lime!houxg!houxi!houxc!ad7i
From: houxc!ad7i
Date: Fri May 14 03:50:42 1982
Subject: Propagation Forecast Bulletin 19
X-Google-Info: Converted from the original B-News header
Posted: Thu May 13 12:11:47 1982
Received: Fri May 14 03:50:42 1982

qst de ad7i
pr propagation forecast bulletin nr 19 from arrl headquarters newington ct may 10, 1982
to all radio amateurs bt

the solar flux was 150 or lower daily april 30 through may 8, the longest such low in several years. combined with above average geomagnetic activity and normal seasonal changes, this made for generally pooc dx conditions in early may. geomagnetic activity dropped to more favtrable levels after may 6, bringing much improved propagation through may 8.

higher geomagnetic activity is expected to degrade high level propagation may 9 and 10, but dx conditions should improve may 11 to 13. the solar flux is likely to be higher this week but it will not be a major propagation factor. the flux has been 186 or lower for 39 days, but this is not a unique drop in solar activity and an almost identical low came in may and june of last year.

american sunspot numbers for april 29 through may 5 were between 101 and 53, with a mean of 69.4. these are the lowest numbers since june of last year ar

From 538253856582598478
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bf41c148e548d293,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-14 21:53:30 PST
Message-ID: <bnews.houxc.213>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!ihnss!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!eagle!mhtsa!ihnss!houxi!houxc!ad7i
From: houxc!ad7i
Date: Sat May 15 00:53:30 1982
Subject: TR7 Sold !!!!
X-Google-Info: Converted from the original B-News header
Posted: Fri May 14 08:46:04 1982
Received: Sat May 15 00:53:30 1982

My Drake TR7 has been sold. Thanks to all who replyed
to my ad.
              Paul Newland, ad7i

From 1317048748366142004
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1d0b77a833c02a8a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-16 21:34:52 PST
Message-ID: <bnews.eagle.302>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Mon May 17 00:34:47 1982
Subject: RS-9 Launch, 17 May 82
X-Google-Info: Converted from the original B-News header
Posted: Sun May 16 13:30:10 1982
Received: Mon May 17 00:34:47 1982

I picked up the following message from the Amsat CBBS system today:

NUMBER: 64 DATE: 051582 TO: QST TO ****** AL FROM: W3IWI
SUBJECT: RS-9 LAUNCH 17 MAY !!!!!!!!!!

1. QST QST QST QST
2. LATE ON FRIDAY AFTERNOON I RECEIVED THE FOLLOWING TELEX:
3. "TO DR. T. CLARK -- PRESIDENT AMSAT"
4. "IT IS EXPECTED THAT USSR WILL LAUNCH AN H.F. 21/29 MHZ RADIO"
5. "AMATEUR SATELLITE TO CELEBRATE THE 19TH CONGRESS OF THE COMSOMOL"
6. "ON MONDAY THE 17TH OF MAY. TELEMETRY ON 29.580 MHZ SAME PATTERN"
7. "AS RS.   73,"
8.   /S/ GSCHWINDT ANDRES, HA5WH
9.   CHAIRMAN OF THE SATELLITE COORDINATION
10.   GROUP, IARU REGION I

11. -
12. THE "COMSOMOL" IS ESSENTIALLY THE SOVIET BOY SCOUTS. NO OTHER
13. INFORMATION IS NOW AVAILABLE, BUT LISTEN FOR THE BEACON. HOPE
14. TO HAVE ADDITIONAL INFO BY TUESDAY NIGHT 75 METER NET TIMES, SO
15. LISTEN AT 9PM EDT, 9PM CDT, 8PM PDT ON 3850 KHZ FOR ANY NEWS.
16.   73 DE TOM, W3IWI

From 691781678239755986
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e46d0db551ecea0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-16 21:36:28 PST
Message-ID: <bnews.alice.572>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npois!alice!sjb
X-Path: utzoo!decvax!harpo!npois!alice!sjb
From: alice!sjb
Date: Mon May 17 00:36:25 1982
Subject: ASR 32
X-Google-Info: Converted from the original B-News header
Posted: Sun May 16 16:16:29 1982
Received: Mon May 17 00:36:25 1982

A M S A T

S A T E L L I T E R E P O R T

Number 32
10 May, 1982
-- --- ----

Dayton Hamvention
------ ----------
Almost 30,000 people flocked to this year's Dayton Hamvention. At noon Saturday, the AMSAT Forum started. Features included a slide show of the history of the Phase IIIB fuel tank and a question and answer period that many felt deserved much more time than the 90 minutes allotted it.

Trinkets were quickly sold out: Hams-In-Space T-shirts and decals among them. A TV monitor displayed a production by AMSAT, and its crowds stayed until the end. Donations to AMSAT went over $4500. New equipment was offered to the eagerly awaiting throngs of hams. Manufacturers included Ten-Tec, Microwave Modules, Cushcraft, KLM, Advanced Receiver Research, Lunar, and Spectrum West. [The article goes on here to describe some of the new items, but, so that I will

in no way use USENET to advertise companies' products (uh...the above list was just a list of who was there...ahem), I will refrain from summarizing that part --Adam]

RS May Day Announcement
-- --- --- ------------
The RS-7 bulletin board started to convey to the public on 29 April concerning the May Day celebrations in the USSR. The translation provided reads: ``CQ DE RS7 PSE (send your messages) 2 MAY at 1200 Moscow local time on 14282 kHz.'' No interest in outside participation was hinted.

More Net Listings
---- --- --------
The following net listings come from England and are being conveyed to ASR readers in the case that they will take interest in them:

Net Name	Day	Time	Frequency
AMSAT UK 80m	Wed.	1900Z	3780 kHz
AMSAT UK 80m	Sun.	1000Z	3780 kHz
AMSAT UK 2m	Sun.	1930Z	144.280 MHz SSB
AMSAT UK 70cm	Sun.	1800Z	432.210 MHz SSB

The AMSAT Satellite Report is a bi-weekly publication of the Radio Amateur Satellite Corporation. Material may be quoted without permission as long as credit is given. Material in two single quotes (``*'') is taken directly from the bulletin, while that in double quotes ("*") is an actual statement.

From 8563045634127748281
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2230cf405ef54035,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,2230cf405ef54035,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1982-05-17 22:21:20 PST
Message-ID: <bnews.eagle.305>
Newsgroups: net.ham-radio,net.space
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Tue May 18 01:21:19 1982
Subject: Iskra-2 (RS-9) launched!
X-Google-Info: Converted from the original B-News header
Posted: Mon May 17 18:48:37 1982
Received: Tue May 18 01:21:19 1982

I have just read an AP newswire story announcing that the Soviets aboard Salyut-7 launched an "experimental amateur radio satellite" out the door. It weighs 62 lbs and is named Iskra-2. I spoke with Tom Clark, W3IWI, Amsat president, who says that Iskra-2 is transmitting

on 29.58 Mhz. There will be a special Amsat net tonight at 9pm EDT
on 3850 Khz where Tom will disseminate further information.

Phil Karn, KA9Q/2

From -4059837720709854756
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fb6209ebf8b73af9,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 13372f,fb6209ebf8b73af9,start
X-Google-Attributes: gid13372f,public
X-Google-ArrivalTime: 1982-05-17 22:52:58 PST
Message-ID: <bnews.eagle.307>
Newsgroups: net.space,net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Tue May 18 01:52:57 1982
Subject: New Soviet Amateur Radio Satellite
X-Google-Info: Converted from the original B-News header
Posted: Mon May 17 22:11:59 1982
Received: Tue May 18 01:52:57 1982

Here's some information from the Amsat net this evening:

The payload booted out the door of Salyut-7 is identifying itself as
"RK02" on 29.58 mhz. [What happens when they get to RK05, 6, etc?
Do they have clearance from DEC? -hi-] It is not yet known if this
payload has a communications transponder.

Telemetry format is similar to the RS-[3-8] series already in orbit:
5 groups of 4 characters each.

The current orbital period of RK02 is 91.349464 minutes and it is
crossing the equator 22.226506 degrees further west on each orbit.

Due to the VERY low orbit, this period will decay rapidly.
For example, the average period tomorrow will decrease to 91.345922
minutes.

Equator crossing times and longitudes:
18 May 00:32:29 UTC @ 237.1 W
19 May 00:54:02 UTC @ 248.7 W

Phil Karn, KA9Q
Bell Labs, Murray Hill

PS. I would like to get some guidance as to whether information on
amateur radio satellites should be double-posted to net.space and
net.ham-radio, since the amateur space program spans both subject
areas. Reply directly to ME, please, and I will abide by the majority
opinion; I don't want to start up a big public controversy. Thanks.

From 1118989469562752377
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,7e048488506cff78,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-19 00:48:24 PST
Message-ID: <bnews.houxc.214>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Wed May 19 03:48:24 1982
Subject: ARRL 44: RK02
X-Google-Info: Converted from the original B-News header
Posted: Tue May 18 08:32:30 1982
Received: Wed May 19 03:48:24 1982

qst de ad7i
hr arrl bulletin nr 44 from arrl headquarters
newington, ct may 17, 1982
to all radio amateurs bt

the beacon of the new soviet amateur satellite, rk02, has been heard
on 29.580 mhz. the period of rk02 is 91.3527 minutes and its
increment is 23.2272 degrees. reference orbits are, may 18 0032z at
237.1w may 19 0054z at 248.8w. further information on rk02 will be
sent as it becomes available ar

From 4379377901469571224
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9fd5407432c138bd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-19 00:49:06 PST
Message-ID: <bnews.houxc.215>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Wed May 19 03:49:06 1982
Subject: Propagation Forecast Bulletin 20
X-Google-Info: Converted from the original B-News header
Posted: Tue May 18 08:33:04 1982
Received: Wed May 19 03:49:06 1982

qst de ad7i
hr propagation forecast bulletin nr 20 from arrl headquarters
newington ct may 16, 1982
to all radio amateurs bt

the solar flux was 150 or lower thus far in may, and it hovered

around 130 may 10 through 15. sunspot counts are the lowest in about four years and they are expected so through about may 19.

low solar activity and the normal drop in muf at this season have taken their toll on 21 and 28 mhz. neither band will be consistently good for high latitude communication until days become shorter in the northern hemisphere.

sporadic e ionization has become common and short skip openings have been frequent on 21 and 28 mhz. skip was observed on 144 mhz on may 15, with the peak of the e skip season still at least a month ahead.

lower and more stable solar activity have helped to improve propagation on 14 mhz and lower frequencies, but disturbed conditions were developing as this bulletin was issued. the balance of may is expected to bring poor propagation on all dx frequencies.

american sunspot numbers for may 5 through 12 were between 80 and 54 with a mean of 69 ar

From 9067180773753495229
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8dffdec592e60531,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-19 23:02:52 PST
Message-ID: <bnews.eagle.309>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Thu May 20 02:02:51 1982
Subject: Amsat news from 3850 Khz net
X-Google-Info: Converted from the original B-News header
Posted: Tue May 18 23:27:55 1982
Received: Thu May 20 02:02:51 1982

More information on the new Soviet amateur radio satellite, from the regular Tuesday night Amsat net, 9pm EST on 3850 Khz:

Keplerian element set #43 for Salyut-7, catalog number 13138:
Epoch: 1982 135.23118989
Mean anomaly at epoch: 55.8167 degrees
Inclination: 51.5941 degrees
Eccentricity: .0002452
Mean motion: 15.75128484 rev/day (a VERY low orbit!)
Drag factor: .0003028 rev/day^2 (an order of magnitude worse than Uosat)
Arg of perigee: 304.2741 deg
Right ascension of ascending node: 20.6840 deg
Epoch rev number: 403

>From these numbers, the period is 91.345922 minutes, the apogee is

346km and the perigee is 343km. Because the orbit is so low, it will be difficult to predict long periods in advance. It will probably have a very short orbital lifetime.

For at least a while, these elements should be a close approximation to the orbit of the amateur sub-satellite. Depending on how hard the cosmonauts kicked the spacecraft out the door, the two spacecraft orbits will diverge slowly or rapidly with time.

It is believed that the spacecraft carries a transponder with a 21 mhz (15 meter) input and a 29 mhz (10 meter) output. If so, this is the first time the 15 meter band has been used for such a purpose. The beacon on 29.578 Mhz has been received by a number of stations and is quite strong.

In other news, Uosat is still in trouble. Both beacons are still locked on, densensing the command receivers. Attempts at both 2m and 70cm moonbounce stations to command the beacons OFF have not yet been successful, although attempts are being continued.

ESA has set a launch date for Phase III-B in January, 1983, aboard Ariane L7. The primary passenger will still be ECS-1; problems with the design of ECS-1 has been the cause of the delay. The phase-IIIB spacecraft itself is nearing completion, as the transponders will be arriving from Germany this week. The spacecraft will start environmental testing within the next several weeks.

Phil Karn, KA9Q

From 3163541856713243604
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ab98cd798b26f8f8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-05-28 22:50:15 PST
Message-ID: <bnews.populi.187>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!G:wcwells
X-Path: utzoo!decvax!ucbvax!G:wcwells
From: G:wcwells
Date: Sat May 29 01:50:14 1982
Subject: HF Computer Nets
X-Google-Info: Converted from the original B-News header
Posted: Fri May 28 00:44:50 1982
Received: Sat May 29 01:50:14 1982

Subj: Amateur Radio High Frequency Computer Nets

Ref: (a) QST April 1982
      (b) QST June 1982

MHz	Day	Time	Name	Listed

7.155	Su	1700	Pet/Commodore Net - West Coast U.S.	Jun 82
7.230	Sa	1700	West Coast Apple Net	Apr 82
7.260	Sa	1400	East Coast Apple Net	Apr 82
7.293	Su	2100	TRS-80 Users Net - Central U.S.	Apr 82
14.060	Su	0100	TRS-80 Users Net - West Coast U.S.	Apr 82
14.300	Su	2100	Hamnet	Apr 82
14.329	M	0100	Apple Computer Net	Apr 82
14.342	Su	1900	TRS-80 Users Net - West Coast U.S.	Apr 82
14.342	Su	2200	TRS-80 Users Net - East Coast U.S.	Apr 82

Bill Wells, WB6NLL

UUCP: ucbvax!G:wcwells
ARPANET: G.wcwells@BERKELEY
MARS: NNN0LBR NCA

From -8735013676097895437
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,991b3f4bf8b7b78f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-02 00:23:00 PST
Message-ID: <bnews.eagle.326>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Wed Jun 2 03:23:00 1982
Subject: Amsat CBBS items
X-Google-Info: Converted from the original B-News header
Posted: Tue Jun 1 23:11:56 1982
Received: Wed Jun 2 03:23:00 1982

>From the Amsat CBBS, (512) 852-8194:

Number: 129 Date: 053182 To: QST From: WA2LQQ
Subject: Phase 3B Status

1. The Phase 3B spacecraft began thermal vacuum tests on schedule
2. beginning at 0001 EDST, Tuesday, 1 June 82. Hooray for the team!

Amsat Software Exchange - available programs

The W3IWI orbit prediction program is available in the following versions and distribution media:

1. TRS-80 model I - level II basic. (l,c,d)

2. North Star BASIC under North Star DOS for 5 1/4 inch hard sectored diskettes. (l,d)

3. Microsoft BASIC version 5.21 under CP/M for 8 inch single density, soft sectored diskettes. Also available in 5 1/4 inch diskettes for use with Cromemco systems. (l,d)

4. Apple/II Applesoft Basic on either 13 or 16 sector diskettes. Specify 13 or 16 sector. (l,d)

5. PL/I-80 version 1.3 under Cromemco CDOS or CP/M single density 8 inch, soft sectored diskettes. Also available in 5 1/4 inch diskettes for use with Cromemco systems. (l,d)

6. Ohio Scientific for OS65U and OS65D versions 3.2 and 3.3. Specify version. (l,d)

(l) indicates that hardcopy listing is available.
(c) indicates that cassette tapes are available.
(d) indicates that diskettes are available.

If you request a version that is not available we will send you the closest thing we have. If a diskette is ordered a listing will not be sent unless you specifically order one in addition to the diskette.

We have other versions under development that are not yet ready for distribution. See this bulletin board, ASR, and/or ORBIT for information about new versions.

Thank you for your interest and support of AMSAT and ASE.

Robert J. Diersing, N5AHD
Jim Wiman, WD9ICG

From 7197519162423732390
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,67abb5bba15d9bc1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-03 00:29:16 PST
Message-ID: <bnews.we13.268>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!lime!we13!rjr
X-Path: utzoo!decvax!harpo!floyd!vax135!lime!we13!rjr
From: we13!rjr
Date: Thu Jun 3 03:29:16 1982
Subject: more.survey
X-Google-Info: Converted from the original B-News header
Posted: Wed Jun 2 13:22:08 1982
Received: Thu Jun 3 03:29:16 1982

I guess I should also inquire as to what class of license you hold. (It would be useful to know what percentage of Tech's use the HF CW bands, How many Extra's use their exclusive segments, etc).

we13!rjr

From 1722670188192361098
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2f888ad6a2b5a4bd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-03 00:45:38 PST
Message-ID: <bnews.eagle.329>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Thu Jun 3 03:45:37 1982
Subject: New Jersey Packet Radio Meeting
X-Google-Info: Converted from the original B-News header
Posted: Wed Jun 2 16:15:30 1982
Received: Thu Jun 3 03:45:37 1982

_A_t_t_e_n_t_i_o_n__P_a_c_k_e_t__R_a_d_i_o__E_n_t_h_u_s_i_a_s_t_s

A Local Area planning meeting to discuss several advanced
aspects of Amateur Packet Radio is tentatively scheduled to
be held in Murray Hill New Jersey, on Saturday, June 19th.

The major purpose of this meeting will be to allow different
local groups to make their views and requirements known
before networking between adjacent areas takes place.
Everyone is welcome. Additionally, groups and/or
individuals are invited to make presentations to the group.
The meeting will conclude with a general discussion.

Space is limited so if you wish to attend please register
with one of the people listed below by Wednesday, June 9.
We cannot accommodate anyone who does not register on or
before June 9th.

Paul Newland, ad7i
POB 205
Holmdel, NJ 07733-0205
201-949-3731 (W)

Steve Robinson, W2FPY
201-835-1152 (H)
914-351-5277 (W)

Gordon Beattie, WB2CAM
201-785-2324 (H)
212-623-1552 (W)

From -6448137252528676146

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,92d68aa1aadfb3b1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-04 02:50:09 PST
Message-ID: <bnews.zeppo.210>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!zeppo!mes
X-Path: utzoo!decvax!harpo!zeppo!mes
From: zeppo!mes
Date: Fri Jun 4 05:50:09 1982
Subject: Technicians Ten Commandments
X-Google-Info: Converted from the original B-News header
Posted: Thu Jun 3 17:01:46 1982
Received: Fri Jun 4 05:50:09 1982

Well, for what it's worth:

The Technicians Ten Commandments

(reprinted from The Resonator (Whippany BTL ARC) reprinted from Superstition ARC)

1. Beware the lightning that lurketh in the undischarged capacitor lest it cause thee to bounce upon thy buttocks in a very untechnicianly manner.

2. Cause thou the switch that supplieth large quantities of current to be opened and so tagged, that thy days in this earthly vale of tears may be long.

3. Prove to thyself that all circuits that radiateth and upon which thou worketh are grounded and so tagged lest they lift thee to radio frequency potential and maketh thee to radiate also.

4. Tred not among the foolish that engage in intentional shock for they are surely non-believers and are not long for this world.

5. Take care that thou useth the proper methods when thou takest the measure of a high voltage circuit lest thou incinerate both thy self as well as thy meter.

6. Tampereth not with the interlocks and safety devices for this will surely bring the full wrath of the safety inspector upon thy head.

7. Work thou not on energized equipment for if thou do, thy fellow man will surely buy many beers for thy widow and all will console her in other ways.

8. Service thou not equipment not alone for electrical cooking is a slothful process and thou might sizzle upon a hot circuit for many hours before thy maker sees fit to end thy misery.

9. Trifle thou not with radioactive tubes and like substances lest tho begin to glow in the dark yea as the lightning bug and thy wife have no further use for you except thy wages.

10. Causeth thou to be tagged all modifications made by thee upon any
    equipment lest thy successor tear his hair assunder and go slowly mad
    in his attempt to decide what manner creature hath wrought such a nest
    withing the wiring of said equipment.

          (attributed to Bert, W2GOB)

                                    Good advice?!?
                                    Mike, WB2RPC
                                    BTL, Whippany NJ
                                    ..harpo!zeppo!mes

From 4869047952166643760
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a28e778771ce0b2e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-11 01:42:49 PST
Message-ID: <bnews.we13.274>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihnss!inuxc!nwuxc!otuxa!we13!rjr
X-Path: utzoo!decvax!harpo!ihnss!inuxc!nwuxc!otuxa!we13!rjr
From: we13!rjr
Date: Fri Jun 11 04:42:46 1982
Subject: Ham survey results
X-Google-Info: Converted from the original B-News header
Posted: Thu Jun 10 08:45:30 1982
Received: Fri Jun 11 04:42:46 1982

         HAM SURVEY RESULTS
         --- ------ -------

Thanks to those who took the time to respond to my survey.
There were only 8 who did. In order to get enough input
I handed out forms at our local radio club this past Tues
night. The results were as follows:

1) License Classes: 4% Tech, 30% Gen, 44% Adv, 22% Ext

2) Favorite Mode: 52% SSB, 30% CW, 18% said 50-50.
     These figures were also true for the Gen and
     Adv classes individually. Extra Class alone
     said 28% SSB, 46% CW, and 28% both.

3) Of those preferring CW, only 50% have narrow
   (500 Hz or less) filters, either IF or audio
   types.

4) Only 16% use linears: 0% Gen, 14% Adv, 45% Extra.

5) Average time license held:
Gen 13 years, Adv 13 years, Extra 6 years.

6) Favorite Bands:

	Most Fav.	2nd Fav.
Gen.	40	10
Adv.	20	40
Extra	20	40

The least favorite band is 80. (No extras liked 10 or 80, only one likes 15).

7) DX operation:

No.	Time wkg DX
42%	none
42%	50% or less
16%	51% or more

8) 74% of the Tech, Gen, and Adv want to upgrade.

9) New Modes: (What would you like to try?):

MODE	No.
RTTY	32%
SSTV	10%
CW	2%
Packet	2%
HF-FM	2%

10) Changes wanted to present HF bands:
26% say "lower the maximum power to 250 watts".
74% had no comment on power levels.

30% want the phone bands expanded.
6% said don't expand phone bands.
64% had no comment on that.

11) Future 10 MHz band:
81% say limit power to 250 watts.
9.5% say 500 watt limit.
9.5% say 1Kw limit.

58% want CW, 20% SSB, 14% RTTY, 6% no comment.

10 MHz classes: 50% say Gen and above, 32% say Adv and above, 14% said "all", 4% say Extra only.
NOTE: The 4% that said Extra only were Adv class!!
Guess they want some incentive to upgrade...

(73% of the Extra class responses favor that the 10 MHz band be used by Gen and above classes).

- -

By the way, regarding item 1, according to the call book,
the U.S. figures are:

```
     Novice    18%
     Tech.     20%
     Gen. 30%
     Adv. 24%
     Extra      7%

               -73- K9EUI  we13!rjr
```

From -1066294749474695688
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb65593e04abacc0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-13 01:39:54 PST
Message-ID: <bnews.alice.645>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npois!alice!sjb
X-Path: utzoo!decvax!harpo!npois!alice!sjb
From: alice!sjb
Date: Sun Jun 13 04:39:50 1982
Subject: ASR 34
X-Google-Info: Converted from the original B-News header
Posted: Sat Jun 12 16:57:26 1982
Received: Sun Jun 13 04:39:50 1982

A M S A T

S A T E L L I T E R E P O R T

Number 34
31 May, 1982

ISKRA 2 Kicked Out the Door
----- - ------ --- --- ----
On 19 April, 1982, the USSR launched space station (then unmanned)
Salyut 7. On 13 May, two cosmonauts were launched aboard the new
Soyuz T-5 booster, and they docked with the station the following
day. At 1107 UTC, 17 May, they opened the airlock of the station,
and out flew ISKRA 2. However, the bird cannot seem to turn its
transponders on due to the same desensing problem that is preventing
UoSAT officials from turning one of the UoSAT transponders off.
The ISKRA satellite will have a short life, spending a maximum of

six weeks in space before falling into the atmosphere and burning up.

According to TASS and others, ISKRA 2 contains a transponder for amateur radio, memory device, command radio channel, and a telemetry encoder for the relaying of scientific information and data about the operation of the other equipment. A malfunction in the command decoder has prevented officials from turning on the transponder. The transponder band is 21.230-21.270 MHz uplink and 29.580-29.620 MHz downlink; the beacon is at 29.578 MHz plus/minus Doppler shift. Transponder output power is around 1 watt; the beacon can ``be operated at 300 mW or 1 watt ...''

ISKRA 2 is like AMSAT OSCAR 7 physically, employing the cylinder with hexagonal cross sections; each side is covered with solar cells. Dimensions are approximately 50-60 cm tall by 30-40 cm wide, weighing 28 kg.

Phase IIIB Nearing Completion

On Thursday, 20 May, the AMSAT DL crew landed at Washington National Airport with Phase IIIB's main instruments: the Mode B and L-transponder. By the following Sunday, most of the boxes had been secured to the spacecraft, and it was readied for a full power-up test. After that, the bird will be subjected to the thermal vacuum test at Goddard Space Flight Center

AMSAT to Run UN Station

The United Nations has requested that AMSAT help in establishing a Mode J station at the UN Secretarial building, New York, New York. The station now there operates Mode A by the call 4U1UN. The station needs the ``systems engineering, software and training.'' W2RS will be the Project Officer. No explicit deadline has been set for completion of the station, but Autumn is seen as a tentative period to shoot for.

ASE CBBS

The Amateur Software Exchange Computer Bulletin Board System is up and running fine, reports N5AHD, system operator. 20 users have checked in, and 100 messages have been generated in its first few weeks. Points to keep in mind for its use:

1) It will likely be up evenings and weekends. Published up-times are to be considered as minimums.

2) If you run into difficulty, contact N5AHD at:
   Bob Diersing
   4129 Montego
   Corpus Christi, TX

78411
(home) 512-852-3196
(office) 512-991-6810, ext. 289

3) ``Orbital data is most often updated on Thursdays or Fridays.''

4) Type '?' to get a brief list of instructions or 'F' (giving
'INSTR' as the file name for the full description of commands.

The CBBS phone number is 512-852-8194. ``Any Bell 103-compatible
modem will work well.''

The AMSAT Satellite Report is a bi-weekly publication of the
Radio Amateur Satellite Corporation. Material may be quoted
without permission as long as credit is given. Material in
two single quotes (``*'') is taken directly from the bulletin,
while that in double quotes ("*") is an actual statement.

From 8053445993409031257
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9d6342efb4c4a798,start
X-Google-Attributes: gid151e61,public
X-Google-Thread: 15f443,9d6342efb4c4a798,start
X-Google-Attributes: gid15f443,public
X-Google-ArrivalTime: 1982-06-15 02:47:17 PST
Message-ID: <bnews.houxc.216>
Newsgroups: net.ham-radio,net.wanted
Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Tue Jun 15 05:47:16 1982
Subject: need baudo teleprinter with tape
X-Google-Info: Converted from the original B-News header
Posted: Mon Jun 14 12:50:13 1982
Received: Tue Jun 15 05:47:16 1982

Needed ->>>

I am looking for a BAUDOT teleprinter with paper tape
capability. Does anyone have such a beast that they
no longer have need for (if you need it for a boat anchor
ill be glad to give you something of equivelant weight!)

Please reply to: Paul Newland (201)-949-3731
....ihnss!houxc!ad7i

--- thanks ---

From -3686720684561936972
X-Google-Language: ENGLISH,ASCII-7-bit

X-Google-Thread: 151e61,fc75a2eea9272e90,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-16 01:30:36 PST
Message-ID: <bnews.fortune.68>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cca!fortune!kiessig@sri-unix
X-Path: utzoo!decvax!cca!fortune!kiessig@sri-unix
From: kiessig@sri-unix
Date: Wed Jun 16 04:30:29 1982
Subject: Tech Licences
X-Google-Info: Converted from the original B-News header
Posted: Sun Jun 13 01:33:56 1982
Received: Wed Jun 16 04:30:29 1982

I have always been interested in ham radio, even to the point some years ago of becoming proficient in Morse code. I am not a wizard with electronics, although I can read schematics so long as they don't have anything to do with tubes. I would like to be able to dabble with 2-meter gear, and maybe have some fun with long-distance stuff. I've read a couple of the ham license manuals (old ones).

My question is this: I would like to get a Tech license. Do I have a long way to go? Will I be forced to learn anything substantial about RF? What's the easiest route for me to pursue? I've wanted to do this for years, but could never figure out the best way. Any help people could provide would be welcomed. Thanks,

Rick

From 7712806663243487233
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6a48c0e8402e3e31,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-23 23:11:23 PST
Message-ID: <bnews.ihtpb.108>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!ihnss!ihtpb!opact
X-Path: utzoo!decvax!harpo!eagle!mhtsa!ihnss!ihtpb!opact
From: ihtpb!opact
Date: Thu Jun 24 02:11:23 1982
Subject: Request for Information
X-Google-Info: Converted from the original B-News header
Posted: Mon Jun 21 11:52:31 1982
Received: Thu Jun 24 02:11:23 1982

Has any ham or shortwave listener out there picked up broadcasts from Radio Venceremos, the radio of the rebels in El Salvador?
If so, time and frequency information would be greatly appeciated.
-Andy Berman, WD9EMZ, 312-979-6141

From 1387775519486427106

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a938f8c55001c236,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-27 00:16:43 PST
Message-ID: <bnews.nscs.173>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npois!cbosgd!nscs!rew
X-Path: utzoo!decvax!harpo!npois!cbosgd!nscs!rew
From: nscs!rew
Date: Sun Jun 27 03:16:42 1982
Subject: SWL Receiver Information Wanted
X-Google-Info: Converted from the original B-News header
Posted: Tue Jun 22 10:07:06 1982
Received: Sun Jun 27 03:16:42 1982

I am looking for a good short-wave-listening receiver to pick up international broadcasts. I have heard some good things about the Yaesu FRG-7700. Can anyone

- tell me more about the Yaesu

- suggest good alternatives that are cheaper

- recommend a good antenna setup to go with a SWL receiver.

Thanks,
Bob Warren
cbosg!nscs!rew

From 3579174805390163806
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3886e08c6681b167,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-27 20:17:17 PST
Message-ID: <bnews.whuxlb.309>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!zeppo!whuxlb!mkg
X-Path: utzoo!decvax!harpo!zeppo!whuxlb!mkg
From: whuxlb!mkg
Date: Sun Jun 27 23:17:17 1982
Subject: ARRL President and General Manager Speak
X-Google-Info: Converted from the original B-News header
Posted: Thu Jun 24 08:56:48 1982
Received: Sun Jun 27 23:17:17 1982

Just received the following announcement:

WHERE: The Arnold Auditorium
Bell Telephone Laboratories
600 Mountain Avenue
Murray Hill, New Jersey

WHEN: Thursday, June 24, 1982 at 8:00 pm

WHY: To meet your new ARRL President Victor Clark, W4KFC, and
your new ARRL General Manager David Sumner, K1ZZ. Vic
and Dave will present their views on the future of amateur
radio and their plans for ARRL. We also expect that the
Hudson Division Director and Vice Director will be present.

For Information call:
Paul Freeland, WA2IEN, (201) 582-6591
Frank Arvay, W2NR, (201) 582-3497
George A. Diehl, W2IHA, (201) 635-8703

Sponsored by the BTL Murray Hill Amateur Radio Club

From 5789076123543827059
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,45f86aa120c2b2f4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-28 01:30:12 PST
Message-ID: <bnews.zeppo.233>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!zeppo!mes
X-Path: utzoo!decvax!harpo!zeppo!mes
From: zeppo!mes
Date: Mon Jun 28 04:30:10 1982
Subject: Atlantic City Freq's
X-Google-Info: Converted from the original B-News header
Posted: Fri Jun 25 08:52:35 1982
Received: Mon Jun 28 04:30:10 1982

I have come across a copy of the various frequencies used by the
casino's and other operators along the boardwalk in Atlantic City -
it's real interesting, if you happen to have a programmable uhf scanner
(almost everybody is up on 450). The freq's are public knowledge, but
this is the first list i've seen that has AC all together in one place...
If anyone is interested, mail me a request, and Ill be happy to Mail it
along (list is long, so I don't want to clutter up netnews)
Good Luck if you go down (or up or over),
Mike wb2rpc
...harpo!zeppo!mes

From 1091865721559688637
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,598bf49aa18e8060,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-28 01:35:25 PST
Message-ID: <bnews.houxc.219>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i

X-Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Mon Jun 28 04:35:24 1982
Subject: DX bulletin #26
X-Google-Info: Converted from the original B-News header
Posted: Fri Jun 25 09:09:33 1982
Received: Mon Jun 28 04:35:24 1982

qst de ad7i
hr dx bulletin nr 26 from arrl headquarters
newington ct june 25, 1982
to all radio amateurs bt

thanks to k1mem, k1mm, w1trc and n1ajo of the southern new england dx assocation for the following dx information.

st. paul island. the dxpedition to st. paul island by ve1ai, ve1asj, ve1fh, ak4l, k1wj, w1gnc, and w1xx is set for 8 july through 13 july. the callsigns used will be ve1spi and ve1cer. alt band, 160 through 2 meter operation is planned. modes to be used include cw, ssb, rtty and 2 meter eme. qsls will be handled by ve3euf and a u.s. self addressed stamped envelope is ok.

lebanon. od5lx is active after 0100z around 14025 khz. teds qsls go to sm0djz.

ecuador. hc1md/5 will be leaving ecuador in 30 days. look for rick on 21347 khz afer 0000z to arrange schedules for 160 meters or other bands. qsls go to k8ljg.

west kiribati. look for t30at at 1000z on either 14205 khz or 14025 khz. send teds qsls via g3xzf.

oman. a4xjo can often be found on 14211 khz at 2030z. qsl via wb3jru.

greenland. xp1ab has recently been g
ving out that rare prefix.
look for him on 14205 khz betwen 2200 and 0300z. qsls go to wa2tti.

aland islands. oh6vm/oh0 is usually on 14201 khzafter 0200z.

rodrigues island. 3b9cd can be found on 14027 khz at 0300z. qsls go to 3b8cf.

svalbard. look for jw6zw on 14025 khz at 0230z. jw0p likes 21020 khz at 0300z.

chatham islana. check 3795 khz at local sunrise for [xmission error].

st. vincent. look for k5yy/j8 on either 7005 khz or 14030 khz
after 0300z. qsls go to k5yy.

wake island. kw6hf, qsl manager for ah6dy/kw6, advises that
ah6dy/kw6 may be worked between 0520z and 0700z. initial
contact is established on 14314 khz, the pacific maritime
mobile net frequency. he then moves with his qsl manager to the
nearest available clear frequency ar

From -35049486179171287
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3642d0a9bdaeed7b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-28 01:36:07 PST
Message-ID: <bnews.houxc.220>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Mon Jun 28 04:36:06 1982
Subject: ARRL 56: W1AW on Field Day
X-Google-Info: Converted from the original B-News header
Posted: Fri Jun 25 09:10:14 1982
Received: Mon Jun 28 04:36:06 1982

qst de ad7i
hr arrl bulletin nr 56 from arrl headquarters
newington ct june 20, 1982
to all radio amateurs bt

here are some changes in the w1aw code practice and bulletin
schedules for the field day weekend. code practice transmissions
scheduled for june 26 at 2000 and 2300 utc and june 27 at 0200 and
2000 utc will not bs sent. a special field day bulletin will be
sent on all regular bulletin transmissions between 2100 utc june
25 and 0430 utc june 27. the field day bulletin will also be sent
on cw at 1400 utc and on phone at 1500 utc on june 26 and 27 ar

From -3908328291852879540
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6b590b3625ccd976,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-28 04:16:12 PST
Message-ID: <bnews.brl-bmd.228>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!npois!harpo!duke!unc!brl-bmd!wmartin
X-Path: utzoo!decvax!ucbvax!npois!harpo!duke!unc!brl-bmd!wmartin
From: brl-bmd!wmartin

Date: Mon Jun 28 07:16:11 1982
Subject: Shortwave broadcast info
X-Google-Info: Converted from the original B-News header
Posted: Fri Jun 25 16:46:41 1982
Received: Mon Jun 28 07:16:11 1982

To any who are interested in monitoring shortwave broadcasters, general SWL'ing, and DXing (inspired by the recent inquiry about Radio Venceremos):

The best source for up-to-the-minute information as to frequency and times of broadcasts for all the non-standard stations (clandestines, pirates, harmonics, etc.) and changes to the schedules of the regular SW broadcasters can be gleaned by listening to Glenn hauser's "DX News" segment on Radio Canada International's Shortwave Listener's Digest program each weekend.

Best times and frequencies for North American reception are:

2130 GMT Saturdays (4:30 PM CDT), in their African service, on 17875, 17820, 15325, 15150, and 11945 kHz. (This is the only complete version; for some silly reason, other broadcasts have a minute or so cut out.

Midnite and 0300 GMT Mondays (that's Sunday at 7:00 PM CDT and 10:00 PM CDT) in the North American service -- several frequencies which I don't recall, but I always listen on 5960 kHz.

He'll even mention some ham nets if the topics discussed are of general interest. The whole program is of interest to anyone who has any interest at all in the world of shortwave.

Hauser has another program, too; his syndicated "WORLD OF RADIO" program is carried now on the new New Orleans shortwave station WRNO, at 2330 GMT Sundays (6:30 PM CDT Sunday) on 11855 kHz. This is a half-hour magazine show on all sorts of radio-oriented topics. Highly recommended.

Regards,
Will Martin (USArmy DARCOM ALMSA)

From 6703619949683488054
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e1af76917002034f,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-28 22:28:39 PST
Message-ID: <bnews.brl-bmd.230>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!duke!unc!brl-bmd!wmartin
X-Path: utzoo!decvax!harpo!duke!unc!brl-bmd!wmartin
From: brl-bmd!wmartin
Date: Tue Jun 29 01:28:38 1982

Subject: Re: Request for Information
X-Google-Info: Converted from the original B-News header
Posted: Mon Jun 28 08:47:54 1982
Received: Tue Jun 29 01:28:38 1982

I tried to "Reply" to this message asking about Radio Venceremos, but
the system told me it didn't like the address AFTER I had typed the
text! (As someone who has been using ARPANET electronic mail for 6
years now, tI have troble accepting such system behavior with good
grace...it didn't even seem to save my text anywhere! Sloppy design...)

Anyway, here's the data:

Glenn Hauser's DX News segment on Radio Canada International's Shortwave
Listener's Digest reported the following recent data on Radio Venceremos:

Heard on two parallel frequencies varying over the ranges 6850-6853 kHz
and 6950-6953 kHz during the time range 0050-0249 GMT (one report was
for 0050-0149, and the other for 0249 alone).

Varying frequencies to avoid music jammers mainly on 6850 and 6955 kHz.

73's and good DX!

Will Martin

From -90109596520548942
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e29d007b37dbced,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-28 22:30:21 PST
Message-ID: <bnews.brl-bmd.231>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!duke!unc!brl-bmd!wmartin
X-Path: utzoo!decvax!harpo!duke!unc!brl-bmd!wmartin
From: brl-bmd!wmartin
Date: Tue Jun 29 01:30:20 1982
Subject: nets
X-Google-Info: Converted from the original B-News header
Posted: Mon Jun 28 08:59:04 1982
Received: Tue Jun 29 01:30:20 1982

Hi!

I would like pointers to commercial sources (magazines, etc.) or,
ideally, an on-line file, of as complete as possible a list of ham
nets, the topics covered, the frequencies, and times.

I am assuming that some ham publications carry this as a feature
or department; the only one I regularly see is CQ, and I haven't seen

it in there.

Thanks much.

Will Martin

From -6418535566719517725
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ef6d29538eb61da3,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-29 05:40:22 PST
Message-ID: <bnews.harpo.817>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!rcmcc
X-Path: utzoo!decvax!harpo!rcmcc
From: harpo!rcmcc
Date: Tue Jun 29 08:40:21 1982
Subject: Times in Antarctica?
X-Google-Info: Converted from the original B-News header
Posted: Mon Jun 28 14:24:48 1982
Received: Tue Jun 29 08:40:21 1982

Does anyone know what time of day
is observed in each of the various
Antarctic bases? I beleive some or
maybe most use GMT. (read "believe"
in last line) Do any use Daylight
Savings Time?
  Ron, W2IOL

From 8881664681683212027
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,26e77846fbd46bc0,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-29 22:28:40 PST
Message-ID: <bnews.harpo.820>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!rja4532
X-Path: utzoo!decvax!duke!harpo!rja4532
From: harpo!rja4532
Date: Wed Jun 30 01:28:39 1982
Subject: Public Radio
X-Google-Info: Converted from the original B-News header
Posted: Tue Jun 29 07:51:07 1982
Received: Wed Jun 30 01:28:39 1982

Here in northern New Jersey I am familiar with public television, but
lately I have been hearing about programs that will be broadcast on
public radio. Does anyone know what the local public radio station
in the NJ-NY area is???

Rick WB2QOQ

From -3913395460192642066
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,fc76e8c168b968fe,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-30 00:49:55 PST
Message-ID: <bnews.houxc.223>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!floyd!vax135!lime!houxe!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!floyd!vax135!lime!houxe!houxi!houxc!ad7i
From: houxc!ad7i
Date: Wed Jun 30 03:49:54 1982
Subject: Ten-Tec Equipment Wanted
X-Google-Info: Converted from the original B-News header
Posted: Tue Jun 29 15:54:35 1982
Received: Wed Jun 30 03:49:54 1982

----- Wanted -----

Ten-Tec 540, 544, or the Century 21 xceivers.

If you have one of these units and want to sell
it, or know of someone who wants to sell theirs,
please contact:

Paul Newland, ad7i
POB 205
Holmdel, NJ 07733
201-949-3731 (W)
201-741-1151 (H)

or use unix mail

From -3035517938409740524
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,782cdf8ccc36de75,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-06-30 20:55:50 PST
Message-ID: <bnews.ihtpb.110>
Newsgroups: net.ham-radio
Path: utzoo!watmath!decvax!harpo!eagle!mhtsa!ihnss!ihtpb!opact
X-Path: utzoo!watmath!decvax!harpo!eagle!mhtsa!ihnss!ihtpb!opact
From: ihtpb!opact
Date: Wed Jun 30 23:55:49 1982
Subject: SWL receiver recommendation
X-Google-Info: Converted from the original B-News header
Posted: Tue Jun 29 07:38:45 1982

Received: Wed Jun 30 23:55:49 1982

I've had excellent results with the Panasonic RF4900 for general swl purposes. For the price, it's unbeatable. Just an indoor long wire antenna in a first floor chicago apartment. Available for about $350 from 47th Street Photo in New York City. Check the almost daily ads in the New York Times.

Andy Berman Bell labs, Indian Hill 312-979-6141

From -8841143804018248843
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a8bd623a91500dff,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-02 23:18:19 PST
Message-ID: <bnews.ihuxs.142>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ihuxs!ljspot
X-Path: utzoo!decvax!harpo!ihps3!ihuxs!ljspot
From: ihuxs!ljspot
Date: Sat Jul 3 02:18:18 1982
Subject: Free Eqpt for Educational Use
X-Google-Info: Converted from the original B-News header
Posted: Fri Jul 2 14:02:45 1982
Received: Sat Jul 3 02:18:18 1982

Recently, my father-in-law passed away. There is no one in the family with a ham license. He was always very interested in education, and teaching young people, so our ideal would be to donate his equipment to a group such as a high school radio club. Any other appropriate ideas would be appreciated. Although I don't have an exact inventory now, in general the equipment is 15-20 years old, tube stuff, in good operating condition when last used. I believe it is capable of 10 to 80 meter operation, and has a Heath SSB adapter rated at 1KW. Receiver is a DX-?. If you know of a good and interested recipient, I'm on 312-979-7305 from 8-4:45 CDT weekdays (after 7/12/82); or mail to ...!ihuxs!ljspot

Larry Schutte

From 5519861741000213545
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f36494a7fb0db207,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-03 22:41:10 PST
Message-ID: <bnews.eagle.417>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!karn
X-Path: utzoo!decvax!harpo!eagle!karn
From: eagle!karn
Date: Sun Jul 4 01:41:09 1982
Subject: Code Free license proposal -- W1AW bulletin

X-Google-Info: Converted from the original B-News header
Posted: Sun Jul 4 00:05:48 1982
Received: Sun Jul 4 01:41:09 1982

July 1, 1982 To all radio amateurs --
At its July 1 open meeting FCC has instructed its staff to draft a notice of proposed rulemaking dealing with a codeless amateur radio license. This NPRM will propose to simply remove the code requirement from the present Technician class license, with access limited to frequencies above 50 Mhz. The present Technician class license requiring code and permitting access to the Novice bands would also remain in force. However, the NPRM will also explore the possibility of a codeless digital license, similar to Canada's Digital Radio Operator Certificate, which requires knowledge of digital theory. Such a digital license could either be the only codeless license or it could be concurrent with a codeless Technician license. The NPRM will be released sometime this fall, and is a proposal only. There will be a comment period during which all interested parties will have a chance to make their views known to FCC.

From 7609003311093934900
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3efe8a525d941ebf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-06 21:53:01 PST
Message-ID: <bnews.houxc.225>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Wed Jul 7 00:52:59 1982
Subject: Packet Radio Internals
X-Google-Info: Converted from the original B-News header
Posted: Tue Jul 6 08:29:57 1982
Received: Wed Jul 7 00:52:59 1982

Date: 25 June 82
To: All Packeteers
From: Hank Magnuski

I am about 95% through testing new versions of the LIP/TIP and KA6M/R software which does away with hardwired ID codes. The strategy is an expansion of the AMRAD suggestion to put the callsign at the front of each packet. Each packet will have a header of the following form:

    FLAG ADDR CTL FMCALL TOCALL ID0 ID1 Infofield FCS FLAG

Where

ADDR Assigned always to some fixed value. I'm using FE.
CTL All current values unchanged plus the addition of
Repeater connection reject packet
Station connection reject packet
Broadcast packet
FMCALL 7 bytes of callsign of the originator
TOCALL 7 bytes of callsign of the desination
ID0, ID1 Two bytes to indicate the protocol being used at the next
higher level, level 3.
Info Usual information field

The rules for operation are very simple:

A link-level packet going from A to B will have CALLA and CALLB
in the header, with no exceptions. This applies to the repeater
as well, which keeps a table of how to redirect packets.
All packets transmitted by the repeater have its call in the
FMCALL field.

I will have more details later, but I feel that this format solves most
of the problems which have been aired recently, and solves problems
which are currently restricting our growth. I'm open to midcourse
corrections, but they better come before we get all our EPROMs burned!
The strategy allows multiple repeaters on the same frequency in an RF
domain, it allows direct point-to-point contacts, and allows AMSAT to
use PHASE IIIB without any person coordinating the addressing codes.
I will put LIPM04.ASM and TIPM04.ASM on this medium when I feel they are
adequately tested.

See you when I get back from my vacation (July 12th).

73, Hank

From 4249112739591157994
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d8c290f8c01d3444,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-10 21:38:48 PST
Message-ID: <bnews.houxc.226>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Sun Jul 11 00:38:47 1982
Subject: ARRL 59: Codeless License
X-Google-Info: Converted from the original B-News header
Posted: Fri Jul 9 08:30:17 1982
Received: Sun Jul 11 00:38:47 1982

qst de ad7i

hr arrl bulletin nr 59 from arrl headquarters
newington ct july 1, 1982
to all radio amateurs bt

at its july 1 open meeting, fcc has instructed its staff to draft a notice of proposed rulemaking dealing with a codeless amateur radio license. this nprm will propose to simply remove the code requirement from the present technician class license, with access limited to frequencies above 50 mhz. the present technician class license requiring code and permitting access to the novice bands would also remain in force. however, the nprm will also explore the possibility of a codeless digital license, similar to canadas digital radio operator certificate, which requires knowledge of digital theory. such a digital license could either be the only codeless license or it could be concurrent with a codeless technician license. the nprm will be released sometime this fall, and is a proposal only. there will be a comment period during which all interested parties will have a chance to make their views known to fcc ar

From 6676205923592278866
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3f25956ab8b9b5a8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-10 22:45:07 PST
Message-ID: <bnews.houxc.227>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Sun Jul 11 01:45:06 1982
Subject: ARRL 60: Thirdy Party Traffic
X-Google-Info: Converted from the original B-News header
Posted: Fri Jul 9 08:30:36 1982
Received: Sun Jul 11 01:45:06 1982

qst de ad7i
hr arrl bulletin nr 60 from arrl headquarters
newington ct july 7, 1982
to all radio amateurs bt

effective immediately, a third party agreement is in effect between the u.s. and australia. amateurs of these two countries may handle messages on behalf of third parties provided that the messages are of a nature that would not be sent via commercial channels. for a list of the other countries with which the u.s. has third party agreements, see june 1982 qst, page 90 ar

From 7161112834301695090

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2e4a2bf4b7b0ac55,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-10 22:46:15 PST
Message-ID: <bnews.houxc.228>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!npoiv!npois!houxi!houxc!ad7i
From: houxc!ad7i
Date: Sun Jul 11 01:46:14 1982
Subject: CRRL 26: Advisory Comittee Members
X-Google-Info: Converted from the original B-News header
Posted: Fri Jul 9 08:31:04 1982
Received: Sun Jul 11 01:46:14 1982

qst de ad7i
hr crrl bulletin nr 26 from arrl headquarters
newington ct july 7, 1982
to all radio amateurs bt

the following canadian amateurs have been named to arrl advisory committees, contests ve3kz, dx ve3qa, emergency communications ve3gv, public relations ve4ads, repeaters ve1aic and vhf/uhf ve3aib. ve7apu/3 is the canadian member of a new advisory committee on digital communications ar

From -8670353779337025660
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,76749db80bace914,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-10 22:48:48 PST
Message-ID: <bnews.houxc.229>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!zeppo!whuxk!houxi!houxc!ad7i
X-Path: utzoo!decvax!harpo!zeppo!whuxk!houxi!houxc!ad7i
From: houxc!ad7i
Date: Sun Jul 11 01:48:47 1982
Subject: Propagation Bulletin 27
X-Google-Info: Converted from the original B-News header
Posted: Fri Jul 9 08:31:21 1982
Received: Sun Jul 11 01:48:47 1982

qst de ad7i
hr propagation forecast bulletin nr 27 from arrl headquarters
newington ct july 7, 1982
to all radio amateurs bt

the month of june was remarkable for its extremes of solar activity. solar flux ranged from 256 on the 12th to 105 on the 30th. the sun

was almost spotless june 28 through july 4, and the solar flux
dropped to 103 july 1 and 2. it rose slowly thereafter, and it is
expected to continue with increased momentum after july 6.

sunspot numbers and the solar flux are not major factors during the
northern hemisphere summer. the state of the earths magnetic field
is more critical, as evidenced by good summer conditions as this
bulletin was issued. the wwv k index was 2 or lower over most of the
holiday period but erratic conditions can be expected during the
forecast week. disturbance peaks are due july 6 to 7 and 9 to 11.

american sunspot numbers june 24 through 30 were between 122 and 32
for a mean of 69. numbers in the low 30s were not reported in the
last five years until june 28. numbers will be higher next week ar

From 3020655471697237205
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,513a6abcd57c609,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-13 22:49:49 PST
Message-ID: <bnews.ihuxs.148>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!ihps3!ihuxs!ljspot
X-Path: utzoo!decvax!harpo!ihps3!ihuxs!ljspot
From: ihuxs!ljspot
Date: Wed Jul 14 01:49:48 1982
Subject: Free Ham Station to Worthy Cause
X-Google-Info: Converted from the original B-News header
Posted: Tue Jul 13 08:54:24 1982
Received: Wed Jul 14 01:49:48 1982

I'm not sure whether my offer two weeks ago of a complete, operating,
10-80 meter station (for FREE) made it to the network, what with our
problems on ihnss. I do know that there was no response. Interested
parties should contact Larry Schutte, 312-979-9335 (8 am - 4:45 pm CDT),
312-879-1704 (other times), or ...!ihps3!ihuxs!ljspot

From 1528362371292657308
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4a1e67be8fcff29e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-18 21:50:49 PST
Message-ID: <bnews.alice.796>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!eagle!mhtsa!alice!sjb
X-Path: utzoo!decvax!harpo!eagle!mhtsa!alice!sjb
From: alice!sjb
Date: Mon Jul 19 00:50:48 1982

Subject: ASR 37
X-Google-Info: Converted from the original B-News header
Posted: Sun Jul 18 12:58:34 1982
Received: Mon Jul 19 00:50:48 1982

A M S A T

S A T E L L I T E R E P O R T

Number 37
12 July, 1982

Project OSCAR General Meeting

The Project OSCAR General Meeting will be held at the Electronic Museum, Foothill College, Los Altos, California, on 21 July, President John Pronko, W6XN, announced. The 2 hour meeting will begin at 1900 PDT and feature the annual business report and reports on current projects.

AMSAT to Take Part at ARRL Convention

AMSAT unveiled its plans for the AMSAT booth at this year's Annual ARRL Convention at Cedar Rapids, Iowa. The booth will be manned by expert OSCAR people. Hours for the exhibit are 23 July, 1800-2200; 24 July, 0800-1700; 25 July, 0800-1400. The AMSAT video tape will be displayed, along with K0RZ's Apple-based satellite information and tracking program, the ZX-81 project prototype, and of course handouts, tokens, and the like. Members who wish to help out the booth staff will have a chance to sign up at the booth.

The AMSAT seminar will be held from 0900 to 1200 on the 25th; it will consist of three one-hour parts. Included are OSCAR basics, a question and answer session, the tracking program, and a report on Phase IIIB.

Orbital Elements

The reason I no longer put the satellite orbital elements in this digest is that by the time it gets out, they will have changed a bit. For people who need or want these at frequent intervals, the Amateur Software Exchange CBBS keeps up to date elements. Again, the phone number for this service is 512-852-8194 (300 baud)

The AMSAT Satellite Report is a bi-weekly publication of the

Radio Amateur Satellite Corporation. Material may be quoted
without permission as long as credit is given. Material in
two single quotes (``*'') is taken directly from the bulletin,
while that in double quotes ("*") is an actual statement.

From -951139753046776317
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,d8f776627278a97,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-25 03:58:37 PST
Message-ID: <bnews.alice.803>
Newsgroups: net.ham-radio
Path: utzoo!decvax!harpo!npoiv!alice!sjb
X-Path: utzoo!decvax!harpo!npoiv!alice!sjb
From: alice!sjb
Date: Sun Jul 25 06:58:37 1982
Subject: Traffic Handling Query
X-Google-Info: Converted from the original B-News header
Posted: Wed Jul 21 19:53:54 1982
Received: Sun Jul 25 06:58:37 1982

I just tried to deliver a piece of traffic that I picked up
on a local net tonight and was met on the other end of the phone
by an answering machine. While the message was playing, I was
debating whether or not to leave the traffic there and in the end
decided not to, since that would not give the receiving party much
of a chance to send a reply radiogram (though I could have left my
name and number). My question is: Is it OK to leave traffic on
an answering machine or did I do the right thing (I realize it is
a matter of personal habits, but I would like to know what the majority
of you think)?

Adam
KA2JQH

From -8413413197145673868
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,703a9cc3fef8d3ef,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1982-07-25 08:54:23 PST
Message-ID: <bnews.pyuxbb.171>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!harpo!npoiv!pyuxbb!mkg
X-Path: utzoo!decvax!duke!harpo!npoiv!pyuxbb!mkg
From: pyuxbb!mkg
Date: Sun Jul 25 11:54:22 1982
Subject: Keyer recommendations wanted
X-Google-Info: Converted from the original B-News header
Posted: Thu Jul 22 09:32:07 1982
Received: Sun Jul 25 11:54:22 1982

Our radio club has some bucks to spend and we've decided to get a keyer.
We don't really need fancy features like memory or code practice
generation but are interested in a basic keyer.

If you use a keyer, I would appreciate your comments on it and would
like to know how much it costs.

   Marsh Gosnell AD2H BTL Piscataway (201) 981-2758 npois!pyuxbb!mkg

From -3847513021981979939
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,f8cc79cf6817028b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-08 19:16:06 PST
Message-ID: <anews.Acwruecmp.13>
Newsgroups: net.ham-radio
Path: utzoo!decvax!cwruecmp!ordy
X-Path: utzoo!decvax!cwruecmp!ordy
From: cwruecmp!ordy
Date: Thu Oct 8 19:16:06 1981
Subject: Packet Nets
X-Google-Info: Converted from the original A-News header

     No doubt I am typical of alot of amateur ops. I received my
'ticket' in high school, and slowly fell away from amateur radio
during the 'college' years. Although I still get QST and all of the
related information, I very very rarely 'fire up' the rig.
     Interests now center around computer related things (!),
although I have been looking for a nice marriage of these two
topics. Oscar activities seemed like a possibility for awhile, however
nothing was ever done. More recently, I have been interested in
radio networks.
     It appears as if several packet switching amateur radio nets
are up and running now. I would like to ask those familar with them
to provide some information on their operation and functions.
Speaking for myself, there is nothing more I would like to do than
get my UNIX machines networked over an amateur radio path. Maybe
someone can comment on the legal aspects of such a system, in terms
of the amateur radio 'hobby' requirements.
     In any case, the creation of this news group is a very good
idea, I will be watching quite closely.

                         Greg Ordy (WB8WWV)

From -8089171011178733390
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb6bf46d8e62c91a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-08 20:59:15 PST
Message-ID: <anews.Aresearch.80>

Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!research!sjb
X-Path: utzoo!decvax!ucbvax!mhtsa!research!sjb
From: research!sjb
Date: Thu Oct 8 20:59:15 1981
Subject: RM-3867
X-Google-Info: Converted from the original A-News header

Well, to start something off concerning FCC actions and
things of that sort, a petition especially disturbing to
me was one submitted by Bill Welsh (W6DDB) This petition,
RM-3867 (info. on it appears in Worldradio, August, 1981,
p. 3.), proposes the reduction in General and Advanced
Class license privileges by some 20% each! i have written
to the FCC about it, and about my disapproval of it. However,
included in it is (in my opinion a good) proposal to give
the Novice licensees the 14.1 to 14.15 MHz subband. This
would allow them to experience even more kinds of propagation
and better our pool of public servants. I would like to hear
from anyone who has an opinion (either way) on this petition.

73,
Adam Buchsbaum
KA2JQH

From 8917895519698970832
X-Google-Language: Unknown,Unknown
X-Google-Thread: 151e61,a394ad28b4e55b8d,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-08 23:09:19 PST
Message-ID: <anews.Aihnss.156>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!ihnss!karn
X-Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!ihnss!karn
From: ihnss!karn
Date: Thu Oct 8 23:09:19 1981
Subject: Uosat/Oscar-9 Telemetry
X-Google-Info: Converted from the original A-News header

From 7562121420846779673
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,a394ad28b4e55b8d
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-08 23:23:41 PST
Message-ID: <anews.Aihnss.157>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!ihnss!karn
X-Path: utzoo!decvax!ucbvax!mhtsa!ihnss!karn
From: ihnss!karn
Date: Thu Oct 8 23:23:41 1981

Subject: Uosat/Oscar-9 Telemetry
X-Google-Info: Converted from the original A-News header

Re: Uosat/Oscar-9 Telemetry

Well, my 3AM efforts paid off last night, and I was able to read Uosat-Oscar-9's 2 meter telemetry beacon. It was transmitting 300 baud ASCII, using 1200/2400 hz tones (close enough for a Bell 202 modem). Now all I have to do is find out what these numbers mean:

AMSAT 10000 00000 00100 10000 01110 00000 00001 00000 00000
AMSAT 10000 00000 00110 00000 01110 00000 00001 00000 00000
00110 01040 02700 03000 04000 05000 06000 07000 08509 09473
10100 11090 12000 13000 14025 15000 16000 17000 18508 19471
20110 21090 22670 23000 24003 25000 26003 27283 28513 29476
30000 31060 32665 33343 34012 35273 36366 37439 38514 39469
40000 41090 42742 43000 44043 45000 46002 47497 48513 49518
50000 51090 52272 53089 54737 55327 56013 57499 58510 59484

A complete set of formulas, etc, should be forthcoming in the Amsat Satellite Report bulletin. To find out more about AMSAT, the Radio Amateur Satellite Corporation, or to become a member, write:

Amsat
POB 27
Washington, DC 20044

Phil Karn, KA9Q

From -5672781195423405558
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,719612f47763d28a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-09 13:59:20 PST
Message-ID: <anews.Aduke.1222>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!harpo!chico!duke!rjf
X-Path: utzoo!decvax!ucbvax!mhtsa!harpo!chico!duke!rjf
From: duke!rjf
Date: Fri Oct 9 13:59:20 1981
Subject: Any DXers?
X-Google-Info: Converted from the original A-News header

I too got interested in Amateur Radio in high school and while my level of activity fell off while I was in college, I still held some interest in it. After I graduated, living in an apartment didn't allow me to have much of a set-up. I dabbled in 2 meter FM and occasionally go over to a friend's house to operate the low bands. I'm looking foward to reading these news articles and hope to develop contacts with other hams through it. I used to do alot of DXing and would love to hear about how things are going in that field lately. Any big DXers out there?

73's,
Bob Fabrizio, WA3SBT/4
(duke!rjf)

From 5915366112123419709
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,2652557556f944ba,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-09 15:09:05 PST
Message-ID: <anews.Ahouxf.112>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!ihnss!houxf!kutsch
X-Path: utzoo!decvax!ucbvax!mhtsa!ihnss!houxf!kutsch
From: houxf!kutsch
Date: Fri Oct 9 15:09:05 1981
Subject: call book
X-Google-Info: Converted from the original A-News header

Thanks for the support for net.ham-radio.
In addition to the net articles which you have seen,
several interested readers have sent mail to me supporting the idea.
The following is a first attempt at a call book of hams around the network.
When I have a reasonable number of additions, I will republish the list.
The mail addresses are referenced from a 'key' site in usenet.
73's Jim Kutsch   ihnss!houxf!kutsch or harpo!houxf!kutsch

CALL - NAME - MAIL ADDRESS
KA 2 JQH - Adam Buchsbaum - research!sjb
WA 3 IRQ - Lee ? - harpo!chico!duke!unc!lrn
WA 3 SBT - Bob Fabrizio - ihnss!mhtsa!duke!rjf
WA 6 BEV - Robert R. Henry - harpo!mhtsa!ucbvax!rrh (or research!rrh)
WA 8 ZNH - Jim Kutsch - ihnss!houxf!kutsch (or harpo!houxf!kutsch)
KA 9 Q - Phil Karn - ihnss!karn
(no call) - David Comay - harpo!mhtsa!ucbvax!ARPAVAX:comay

From -8273072469446456632
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,251e8326d57a1083,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-09 23:47:18 PST
Message-ID: <anews.Aresearch.84>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!chico!harpo!mhtsa!research!sjb
X-Path: utzoo!decvax!duke!chico!harpo!mhtsa!research!sjb
From: research!sjb
Date: Fri Oct 9 23:47:18 1981
Subject: DXing
X-Google-Info: Converted from the original A-News header

Reply-to: duke!rjf

Well, I got started a little over a year ago and found that 10
meters in the fall/winter (October to January/February) in the
mornings (10-12) was fantastic for Europe! Working my groundplane
last year, i could easily get ten countries in two hours every
Saturday and Sunday (not different ones all the time!) This
year, it should be almost as good (with the sunspot cycle just
beginning to decline), and with my new beam, i hope to do just
as well.

73,
Adam

From -1341263330080789983
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cb6bf46d8e62c91a
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-10 12:16:47 PST
Message-ID: <anews.Aresearch.86>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!mhtsa!research!sjb
X-Path: utzoo!decvax!ucbvax!ihnss!mhtsa!research!sjb
From: research!sjb
Date: Sat Oct 10 12:16:47 1981
Subject: RM-3867
X-Google-Info: Converted from the original A-News header

Here is just a little tidbit of information of what would
happen if RM-3867 is adopted without change: Future Advanced
Class licensees would have fewer privileges than present
Generals! This would constitue a 19.5% reduction in their
allocations, while the privileges of Generals would be
diminished by some 26%.

From -3031257634609010857
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ec927ebd427cf298,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-13 02:20:21 PST
Message-ID: <anews.Ahouxf.114>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!kutsch
X-Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!kutsch
From: houxf!kutsch
Date: Mon Oct 12 10:26:44 1981
Subject: more readers?
X-Google-Info: Converted from the original A-News header

Any opinions on the following idea?

>From ihnss!ihuxi!lindsay Fri Oct 9 13:55:01 1981

To: ihnss!houxf!kutsch
Subject: net.ham-radio

...

  Since Ham Radio went to a twice-monthly format, perhaps
net.ham-radio can fill the void of timely stuff. Let's hope the HR
gang and maybe the Worldradio staff are able to have access to this
net as both readers and contributers. Perhaps a telephone call or
letter to both might be in order. (I don't know the "politics" of
such a move.)

        73,
    Lindsay Cleveland, W4IZI - ihnss!ihuxi!lindsay

From 5252644220299333804
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,44da5b9e9abf475e,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-13 02:22:02 PST
Message-ID: <anews.Ahouxf.115>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!ihnss!houxf!kutsch
X-Path: utzoo!decvax!ucbvax!mhtsa!ihnss!houxf!kutsch
From: houxf!kutsch
Date: Mon Oct 12 11:05:27 1981
Subject: RE: packet radio uucp
X-Google-Info: Converted from the original A-News header

In response to Greg Ordy (WB8WWV) on packet radio (Oct 8):
Years ago while an undergraduate at West Virginia University
several of us who were hams and worked for the comp center thought
about two-way radio links for a terminal
(around the time the university first got started in time sharing).
At that time, ASCII was still considered a 'secret code' by the FCC and we
didn't feel like converting everything through baudot for transmission.
So the idea fell out of popularity.

However, with recent rules changes, this type of thing
becomes worth considering again.
Imagine several computer systems running their electronicc mail anmd uucp
via radio. I wonder what the national traffic system would think of that?

From -8456732142995346357
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,bee92bf3fce1abcd,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-13 02:23:41 PST
Message-ID: <anews.Ahouxf.113>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!ihnss!houxf!kutsch

X-Path: utzoo!decvax!ucbvax!mhtsa!ihnss!houxf!kutsch
From: houxf!kutsch
Date: Mon Oct 12 10:08:42 1981
Subject: swap-n-shop legality issue
X-Google-Info: Converted from the original A-News header

The following discussion took place regarding the 'swap-n-shop' item in the
net.ham-radio announcement. Other opinions are welcome.

>From harpo!chico!duke!unc!lrn Thu Oct 8 19:17:35 1981
To: duke!chico!harpo!houxf!kutsch
Subject: net.ham-radio

This just to express interest in net.ham-radio. I have some question
whether you want to include the "shop" part of "swap-n-shop"
since that probably violates educational Unix licenses (though I'm
no lawyer).
         Lee (WA3IRQ)

>From kutsch Fri Oct 9 15:24:49 EDT 1981
TO: vax135!duke!unc!lrn
SUBJECT: re: net.ham-radio
Thanks for your interest Lee.
As far as swap-n-shop is concerned, I take the view of most
repeater operators. That is:
ham radio can be used to sstate that equipment is available or that a person
is looking for a particular item. However, discussions of price and
consumation of any deals MUST be done off-the-air.
I think this interpretation can be applied to swap-n-shop via net.ham-radio.
I (**PERSONALLY**) see no reason why one can't say that they want to get rid of
or find something. The net is merely bringing together two people with
similar interests.   They must then go to landline, US Mail, or an eye-ball
for further negotiation.

From 1440833446371817924
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba2fcb001be80051,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-13 02:35:16 PST
Message-ID: <anews.Acbosgd.118>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!cbosg!cbosgd!mark
X-Path: utzoo!decvax!ucbvax!ihnss!cbosg!cbosgd!mark
From: cbosgd!mark
Date: Mon Oct 12 18:15:55 1981
Subject: packet radio net
X-Google-Info: Converted from the original A-News header

I'm not up on any of the details, but I know that in Hawaii,
there is a bit packet radio net in operation. My information
is over 5 years old, and I assume it's still going on.

From -2560201637206014531
X-Google-Language: GERMAN,ASCII-7-bit
X-Google-Thread: 151e61,bdbcf6fcb352cfb9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-13 02:36:55 PST
Message-ID: <anews.Ahouxf.116>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!houxf!kutsch
X-Path: utzoo!decvax!ucbvax!ihnss!houxf!kutsch
From: houxf!kutsch
Date: Mon Oct 12 20:44:33 1981
Subject: call book #2
X-Google-Info: Converted from the original A-News header

CALL - NAME - MAIL ADDRESS
KA 2 JQH - Adam Buchsbaum - research!sjb
WA 2 QYN/2 - Paul Rubin - allegra!phr
WA 3 IRQ - Lee Nackman - harpo!chico!duke!unc!lrn
WA 3 SBT - Bob Fabrizio - ihnss!mhtsa!duke!rjf
W 4 IZI - Lindsay Cleveland - ihnss!ihuxi!lindsay
KD 6 BA - Ted ? - ucbvax!menlo70!sytek!zehntel!ted
WA 6 BEV - Robert R. Henry - harpo!mhtsa!ucbvax!rrh (or research!rrh)
WB 6 BXW - Lauren Weinstein - ucbvax!ucla-s!lauren or Lauren@UCLA-Security
WB 8 WWV - Greg Ordy - ihnss!ucbvax!decvax!cwruecmp!ordy
WA 8 ZNH - Jim Kutsch - ihnss!houxf!kutsch (or harpo!houxf!kutsch)
KA 9 Q - Phil Karn - ihnss!karn
(no call) - Dan Hoelker - ihnss!ihuxp!mstach
(no call) - David Comay - harpo!mhtsa!ucbvax!ARPAVAX:comay

--

Mail additions to Jim Kutsch -- houxf!kutsch

From -6771273669663304781
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,ba2fcb001be80051
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-13 02:38:34 PST
Message-ID: <anews.Ahouxf.117>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!houxf!kutsch
X-Path: utzoo!decvax!ucbvax!ihnss!houxf!kutsch
From: houxf!kutsch
Date: Mon Oct 12 21:00:32 1981
Subject: RE: packet radio net
X-Google-Info: Converted from the original A-News header

In response to cbosg!mark on 'packet radio net' (Oct 12) ...
The packet radio net he refers to is the 'aloha net' (sp?) which was later
refined into 'slotted aloha'. However, it is over commercial carrier, not
amateur radio service.

Some people believe that this early research laid the groundwork for the
'ether net' of Xerox PARC.
As Mark says, it has been in operation for several years linking terminals
and computers throughout the Hawaiian islands.

From 3004557133003990638
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,3e73e72aabd984e2,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-13 21:18:38 PST
Message-ID: <anews.Ahouxf.118>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!houxf!kutsch
X-Path: utzoo!decvax!ucbvax!ihnss!houxf!kutsch
From: houxf!kutsch
Date: Tue Oct 13 21:18:38 1981
Subject: ARRL OB #112
X-Google-Info: Converted from the original A-News header

ARRL Official Bulletin #112
From: ARRL HQ, Newington, CT, October 7, 1981
To: All radio amateurs

Starting October 23, 1981 United States amateurs will no longer be
required to give the call sign of the station with which they are in contact
unless international third party traffic is being handled.
Furthermore, there will no longer be a requirement to identify your station
at the beginning of a transmission so long as you identify your station at
the end of the transmission or series of transmissions and at least once
each ten minutes during the communications.

end of Official Bulletin #112

From 6183137142798774251
X-Google-Language: GERMAN,ASCII-7-bit
X-Google-Thread: 151e61,2b483a282aa841f9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-13 22:10:12 PST
Message-ID: <anews.Ahouxf.119>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!houxf!kutsch
X-Path: utzoo!decvax!ucbvax!ihnss!houxf!kutsch
From: houxf!kutsch
Date: Tue Oct 13 22:10:12 1981
Subject: call book #3
X-Google-Info: Converted from the original A-News header

The following is a list of net.ham-radio readers/contributers:

CALL - NAME - MAIL ADDRESS
N2CHL - Rich Gopstein - allegra!gob

KA2JQH - Adam Buchsbaum - research!sjb
WA2QYN/2 - Paul Rubin - allegra!phr
WA3IRQ - Lee Nackman - harpo!chico!duke!unc!lrn
WA3SBT - Bob Fabrizio - ihnss!mhtsa!duke!rjf
G4EHL - Anthony Short - ihnss!ihuxg!short
KB4GZ- Frank ? - harpo!chico!duke!unc!cfs
W4IZI - Lindsay Cleveland - ihnss!ihuxi!lindsay
KD6BA - Ted ? - ucbvax!menlo70!sytek!zehntel!ted
WA6BEV - Robert R. Henry - harpo!mhtsa!ucbvax!rrh (or research!rrh)
WB6BXW - Lauren Weinstein - ucbvax!ucla-s!lauren or Lauren@UCLA-Security
WB8FBM - Dale DeJager - cbosg!dale
WB8WWV - Greg Ordy - ihnss!ucbvax!decvax!cwruecmp!ordy
WA8ZNH - Jim Kutsch - ihnss!houxf!kutsch (or harpo!houxf!kutsch)
KB9BO - Jim Krist - ihnss!ihuxp!jtkrist
KA9Q - Phil Karn - ihnss!karn
(no call) -   Dan Hoelker - ihnss!ihuxp!mstach
(no call) - David Comay - harpo!mhtsa!ucbvax!ARPAVAX:comay

Send additions to Jim Kutsch -- houxf!kutsch

From -4759708309490346343
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8cb70af997d1c144,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-14 15:14:25 PST
Message-ID: <anews.Aduke.1243>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!ihnss!cbosg!harpo!chico!duke!rjf
X-Path: utzoo!decvax!ucbvax!mhtsa!ihnss!cbosg!harpo!chico!duke!rjf
From: duke!rjf
Date: Wed Oct 14 15:14:25 1981
Subject: 2 and 6 SSB
X-Google-Info: Converted from the original A-News header

  Occasionally I go over a friend's place and operate 2 and 6 meter SSB.
His call is WD4CXR (Ted). If anyone wants to try to setup a sked on either
of these two VHF bands for WAS (North Carolina) or whatever, drop me line.
                  73,
                       Bob, WA3SBT (duke!rjf)

From -1486765451716632289
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,c8aafb4be5a79f5,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-14 22:03:12 PST
Message-ID: <anews.Aresearch.91>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!research!sjb
X-Path: utzoo!decvax!ucbvax!mhtsa!research!sjb
From: research!sjb
Date: Wed Oct 14 22:03:12 1981

Subject: packet network
X-Google-Info: Converted from the original A-News header

In-reply-to: decvax!cwruecmp!ordy

If you haven't seen it yet, the October issue (this
year) of QST has an article about packet radio networks
beginning on page 28.

From -2374156181116975733
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e3accb537a009d6b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-15 10:12:07 PST
Message-ID: <anews.Ahouxf.120>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!mhtsa!harpo!houxf!kutsch
X-Path: utzoo!decvax!duke!mhtsa!harpo!houxf!kutsch
From: houxf!kutsch
Date: Thu Oct 15 10:12:07 1981
Subject: request for info
X-Google-Info: Converted from the original A-News header

$
>From duke!unc!cfs Wed Oct 14 21:59:06 1981
To: duke!vax135!houxf!kutsch

...

The past president of our local radio club, Chip
Howard (N4AFU) was in an auto accident last august, suffered a spinal
injury, and is currently paralyzed from the shoulders on down.
...
Several of us are also working on a tone controlled switch
to select and activate various circuits (currently 2 meter rig + vox
control). If anyone has experience with problems of this sort, we
could certainly use the help. Particularly troublesome is the
development of signaling and timeout schemes that dont leave mikes open
etc.

73's Frank Starmer (KB4GZ)

[There is a group called 'handi-hams', supported by the ARRL and other
volunteers throughout the country, which collects circuits and educational
material for handicapped amateurs and other interested parties.
They sponsor classes, including a 2 week camp for soon-to-be hams; and even
have some equipment available at low cost or on loan.
Something more specific might be needed in this case,
so I am hoping other net readers might have more to offer.
More info on handi-hams is available from ARRL.   - Jim (WA8ZNH) houxf!kutsch]

From -2983570871445864405
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,8e8303aea9a2f7f9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-15 23:03:43 PST
Message-ID: <anews.Aihnss.164>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!ihnss!karn
X-Path: utzoo!decvax!ucbvax!mhtsa!ihnss!karn
From: ihnss!karn
Date: Thu Oct 15 13:55:14 1981
Subject: Packet Radio Information
X-Google-Info: Converted from the original A-News header

I have two "packets" (sorry) of information describing the Canadian
packet radio experiments, in case anybody is interested. These
consist of the first two CARF (Canadian Amateur Radio Federation)
packet newsletters.

I would be happy to ship a copy to anyone within BTL on request;
others please send 8.5 x 11 SASE with enough postage for 30 sheets
of paper.

I am attending the AMRAD/AMSAT packet radio symposium at NBS
tomorrow, and will be bringing back a copy of the proceedings.

Phil Karn KA9Q

From 2513195695668592470
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,91bd0fdf45c51b27,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-16 20:16:25 PST
Message-ID: <anews.Aresearch.94>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!research!sjb
X-Path: utzoo!decvax!ucbvax!mhtsa!research!sjb
From: research!sjb
Date: Fri Oct 16 20:16:25 1981
Subject: legality of supervision
X-Google-Info: Converted from the original A-News header

At school, we want to set up a communications system
between the three major parts of our stage/lighting crew:
the lighting cage, the follow spot (up in the balcony),
and the curtain puller (across the stage from the cage).
The first thing we thought of was regular walkie talkies,
but that would cause too much static. Naturally, I thought
of 2 meters (in fact, one of the teachers said we would
need FM!) I know that people can operate while under the
supervision of a licensee. Would having me in the cage
constitute ``supervision'' over the other areas?

From 1703830635715137859
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,126eb380b6726739,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-17 07:33:49 PST
Message-ID: <anews.Aunc.1302>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!unc!cfs
X-Path: utzoo!decvax!duke!unc!cfs
From: unc!cfs
Date: Sat Oct 17 07:33:49 1981
Subject: control
X-Google-Info: Converted from the original A-News header

Subject: control operator supervision
From: Frank Starmer (KB4GZ) [duke!cfs]

I do not believe that one can control multiple 'stations' without
some sort of direct control. Part 97 states that any third party
can participate provided that a control operator is present and
continuously monitors and supervises the radiocommunication to
insure compliance with the rules. For 2 meter repeater operation
this usually means ability to terminate a transmission (as in
autopatch operation) when the transmission is not in accordance
with good amateur practice. My guess would be that 'supervision'
is usually interpreted as the ability of the control operator
to control (either directly or indirectly) the operation of a
station either manually or by some remote facility that provides
the equivalent of manual control.

[May I be struck by lightning by what I'm about to say] Have you
considered using some of the low power (500 milliwatt) handitalkies
that operate in the !! 11 meter !! band? I believe they are cheap
and available through places like radio shaft.

From 420300353900406558
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1ea3e3f01c5d6330,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-17 13:06:42 PST
Message-ID: <anews.Aresearch.95>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!research!sjb
X-Path: utzoo!decvax!ucbvax!mhtsa!research!sjb
From: research!sjb
Date: Sat Oct 17 13:06:42 1981
Subject: HT's
X-Google-Info: Converted from the original A-News header

Does anyone have any information (good or bad) on

the Yaesu FT-207R and/or Kenwood TR-2400 or TR-2500
2 meter handie talkies?

From 670616138898449662
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,263f3d586e5a0901,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-17 15:09:29 PST
Message-ID: <anews.Ahouxf.123>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!mhtsa!harpo!houxf!kutsch
X-Path: utzoo!decvax!duke!mhtsa!harpo!houxf!kutsch
From: houxf!kutsch
Date: Sat Oct 17 15:09:29 1981
Subject: QEX
X-Google-Info: Converted from the original A-News header

Has anyone subscribed to 'QEX', the 'Experimentors exchange',
which is a new ARRL publication to start in December 1981?
(See August QST for details)
It looks like it might have many things of interest to readers of this
news group. If anyone has subscribed, perhaps items of interest can be
brought to the attention of net.ham-radio readers.

From -2965147142399310988
X-Google-Language: GERMAN,ASCII-7-bit
X-Google-Thread: 151e61,7a4833e4bd21c8e8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-23 00:47:28 PST
Message-ID: <anews.Ahouxf.126>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!mhtsa!harpo!houxf!kutsch
X-Path: utzoo!decvax!duke!mhtsa!harpo!houxf!kutsch
From: houxf!kutsch
Date: Thu Oct 22 16:54:09 1981
Subject: call book #4
X-Google-Info: Converted from the original A-News header

The following is a list of net.ham-radio readers/contributers:

CALL - NAME - MAIL ADDRESS
N2CHL - Rich Gopstein - allegra!gob
KA2JQH - Adam Buchsbaum - research!sjb
K2PH - Bob Schreibmaier - ihnss!houxa!k2ph
WA2QYN/2 - Paul Rubin - allegra!phr
WA3IRQ - Lee Nackman - harpo!chico!duke!unc!lrn
WA3SBT - Bob Fabrizio - ihnss!mhtsa!duke!rjf
G4EHL - Anthony Short - ihnss!ihuxg!short
KB4GZ- Frank Starmer - harpo!chico!duke!unc!cfs
W4IZI - Lindsay Cleveland - ihnss!ihuxi!lindsay
KD6BA - Ted ? - ucbvax!menlo70!sytek!zehntel!ted

WA6BEV - Robert R. Henry - harpo!mhtsa!ucbvax!rrh (or research!rrh)
WB6BXW - Lauren Weinstein - ucbvax!ucla-s!lauren or Lauren@UCLA-Security
AD7I - Paul Newland - ihnss!houxc!3356pbn
WB8FBM - Dale DeJager - cbosg!dale
WB8WWV - Greg Ordy - ihnss!ucbvax!decvax!cwruecmp!ordy
WA8ZNH - Jim Kutsch - ihnss!houxf!kutsch (or harpo!houxf!kutsch)
KB9BO - Jim Krist - ihnss!ihuxp!jtkrist
KA9Q - Phil Karn - ihnss!karn
(no call) -   Dan Hoelker - ihnss!ihuxp!mstach
(no call) - David Comay - harpo!mhtsa!ucbvax!ARPAVAX:comay

Send additions to Jim Kutsch -- houxf!kutsch

From -1874859194050741764
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,892c84c047764dd9,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-27 21:55:10 PST
Message-ID: <anews.Aihnss.173>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!karn
X-Path: utzoo!decvax!ucbvax!ihnss!karn
From: ihnss!karn
Date: Tue Oct 27 21:55:10 1981
Subject: Uosat telemetry info available
X-Google-Info: Converted from the original A-News header

I have written a C program that decodes Uosat-Oscar-9 telemetry.
If anyone is interested, I'd be happy to mail it.

I would like to maintain a list of recipients so that I can send
corrections and/or updates. If you get a copy of my program through
someone else, please let me know so I can send you updates. I'd also
like to know who is listening for Oscar-9 and how much interest there
is in it.

For those of you who haven't listened yet: The new Oscar is
audible on a 2-m HT using a rubber antenna! (Not inside buildings,
though). Listen on 145.825 Mhz, afternoons between 2pm and 4pm,
and you should hear the spacecraft.

Other items of interest to Uosat users:
1. I successfully copied 1200 baud ASCII telemetry last weekend.
Contrary to published specs, the spacecraft does NOT seem to invert
mark and space tones relative to the lower (<=300 baud speeds). A
standard Bell 202 modem works without modification both at 300 and
1200 baud.

2. The orbit of Uosat-Oscar-9 is so low that atmospheric drag is
causing significant errors in tracking. For example, last weekend,
I observed the spacecraft running as much as 1/2 hour earlier than
predicted by a set of NASA/NORAD elements obtained only 2 weeks ago.

I am receiving current orbital elements both through AMSAT and NASA, and will gladly send them to anyone who is interested. I can also mail copies of the BASIC program by Dr. Thomas Clark, W3IWI, Amsat President, that takes these elements and generates tracking information.

Phil Karn, KA9Q

From 5679505124947151165
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,e2907235b4bca7a8,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-10-31 14:18:26 PST
Message-ID: <anews.Aresearch.115>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!mhtsa!research!sjb
X-Path: utzoo!decvax!ucbvax!ihnss!mhtsa!research!sjb
From: research!sjb
Date: Sat Oct 31 14:18:26 1981
Subject: 4sale
X-Google-Info: Converted from the original A-News header

For sale:

    Lafayette Telsat SSB-140 40 channel CB radio with SSB. Evrything you always wanted but were afraid to ask for.

    Contact:
    Adam Buchsbaum
    ucbvax!research!sjb
    or call 201-233-2273 after 3:15 EST

From -8465423154245241292
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,91e3c284168d969b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-01 00:21:14 PST
Message-ID: <anews.Aresearch.128>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!research!sjb
X-Path: utzoo!decvax!ucbvax!mhtsa!research!sjb
From: research!sjb
Date: Sun Nov 1 00:21:14 1981
Subject: UoSAT-OSCAR 9
X-Google-Info: Converted from the original A-News header

Information on UoSAT-OSCAR 9 may be found on page 105 of November, 1981, QST.

From 8908592713339600310
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,98f54f171f124f1,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-02 18:37:51 PST
Message-ID: <anews.Ahouxc.106>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!houxc!3356pbn
X-Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!houxc!3356pbn
From: houxc!3356pbn
Date: Mon Nov 2 18:37:51 1981
Subject: ARRL Propagation Report
X-Google-Info: Converted from the original A-News header

QST de ad7i
HR Propagation Forecast Bulletin NR 44   from ARRL Headquarters
Newington CT November 1, 1981   (received at ad7i 11/2/81)
To all radio amateurs:

>From an October low of 174 on the 26th and 27th, the solar flux rose
to 210 by the 31st. The average for October was 212, the 19th
month over 200 in this solar cycle. As expected, geomagnetic
activity was lower in the final week of October, making for improved
propagation on 50 mhz and lower frequencies. All continents were
worked on 50 MHz from several U.S. and Canadian areas in this period.

November should also be very good for all DX activities, especially
on 28 and 50 MHz. The best days should come November 2 and 3, 9 and
10, 16 through 18 and in the final week of the month. Users of the
50 MHz band particularly should try to make optimum use of the next
few weeks as it seems unlikely that we will see anything like this
fall again for at least 9 or 10 years.

American sunspot numbers for October 22 through 28 were between 129
and 68 for a mean of 93.6. They should be higher in the next week.
                  -- AR --

From -3230710032098578911
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,1cf268f40b84bbb4,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-04 15:24:08 PST
Message-ID: <anews.Aucbonyx.203>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ARPAVAX:Onyx:jmrubin
X-Path: utzoo!decvax!ucbvax!ARPAVAX:Onyx:jmrubin
From: Onyx:jmrubin
Date: Wed Nov 4 15:24:08 1981
Subject: Previous Article on Propagation News
X-Google-Info: Converted from the original A-News header

     You know, of course, that propagation news and forcasts are

available on WWV (2.5, 5, 10, 15 and 20 MHz) at 18 minutes past each hour.

Joel Rubin

From -1251471883014779989
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,9c2afbb2ed8ff576,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-04 21:24:08 PST
Message-ID: <anews.Ahouxc.109>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!mhtsa!harpo!houxf!houxb!houxc!3356pbn
X-Path: utzoo!decvax!duke!mhtsa!harpo!houxf!houxb!houxc!3356pbn
From: houxc!3356pbn
Date: Wed Nov 4 21:24:08 1981
Subject: Arrl bulletins 136 and 137
X-Google-Info: Converted from the original A-News header

qst de ad7i
hr arrl bulletin nr 137 from arrl headquarters
newington ct november 4, 1981
to all radio amateu bt

experimental station kk2xjm will transmit beacon signals in the 10,
18 or 24 mhz warc bands at 7 p.m. est thursdays, beginning november
5. the schedule for the rest of 1981 is,

date	frequency	power
nov 5	10.140	30 w
nov 12	10.140	30 w
nov 19	10.140	30 w
nov 26	10.140	30 w
dec 3	18.108	3 w
dec 10	10.140	30 w
dec 17	18.108	3 w
dec 24	10.140	30 w
dec 31	24.930	3 w

for further information see page 68 of november qst or contact w4mt,
r. p. haviland, 2100 s. nova rd, box 45, daytona beach, fl 32019.

-- ar --

qst de ad7i
hr arrl bulletin nr 136 from arrl headquarters
newington ct november 4, 1981
to all radio amateurs bt

arrl headquarters has a new ham news hotline, 203 666 1545. this

number can be used at any time to report amateur activities of
national interest.

-- ar --

From -8409110444850473848
X-Google-Language: GERMAN,ASCII-7-bit
X-Google-Thread: 151e61,e5efb7ed4203cacf,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-06 11:00:43 PST
Message-ID: <anews.Ahouxf.135>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!vax135!harpo!houxf!kutsch
X-Path: utzoo!decvax!ucbvax!ihnss!vax135!harpo!houxf!kutsch
From: houxf!kutsch
Date: Fri Nov 6 11:00:43 1981
Subject: call book #6
X-Google-Info: Converted from the original A-News header

The following is a list of net.ham-radio readers/contributers:

CALL - NAME - MAIL ADDRESS
KA1GNG - Rob Wood - decvax!genradbolton!rob
K2ART - Mike Pilla - houxf!pyuxh!u1100s!mp
N2CHL - Rich Gopstein - allegra!gop
KA2JQH - Adam Buchsbaum - research!sjb
K2PH - Bob Schreibmaier - ihnss!houxa!k2ph
WA2QYN/2 - Paul Rubin - allegra!phr
WA3IRQ - Lee Nackman - duke!unc!lrn
WA3SBT - Bob Fabrizio - duke!rjf
G4EHL - Anthony Short - ihnss!ihuxg!short
WB4FWL. - Ned Danieley - duke!ndd
KB4GZ- Frank Starmer - duke!unc!cfs
WA4IFA - Chuck Bennett - duke!unc!tucc!uchuck
W4IZI - Lindsay Cleveland - ihnss!ihuxi!lindsay
KD6BA - Ted ? - ucbvax!menlo70!sytek!zehntel!ted
WA6BEV - Robert R. Henry - ucbvax!rrh or research!rrh
WB6BXW - Lauren Weinstein - ucbvax!ucla-s!lauren or Lauren@UCLA-Security
AD7I - Paul Newland - ihnss!houxc!3356pbn
WB8FBM - Dale DeJager - cbosg!dale
KQ8P - Jeff Coleman - ihnss!ihuxo!jnc
W8SDZ - Keith Petersen - W8SDZ@MIT-MC
WB8WWV - Greg Ordy - ucbvax!decvax!cwruecmp!ordy
WA8ZNH - Jim Kutsch - ihnss!houxf!kutsch or harpo!houxf!kutsch
KB9BO - Jim Krist - ihnss!ihuxp!jtkrist
KA9Q - Phil Karn - ihnss!karn
(no call) -   Dan Hoelker - ihnss!ihuxp!mstach
(no call) - David Comay - ucbvax!ARPAVAX:comay

Send additions to Jim Kutsch -- houxf!kutsch

From -4430407927093555071
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,98a5e7c4355b2105,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-10 08:51:33 PST
Message-ID: <anews.Ahouxc.111>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!chico!harpo!houxf!houxc!3356pbn
X-Path: utzoo!decvax!duke!chico!harpo!houxf!houxc!3356pbn
From: houxc!3356pbn
Date: Tue Nov 10 08:51:33 1981
Subject: Arrl bulletin 138
X-Google-Info: Converted from the original A-News header

qst de ad7i
hr arrl bulletin nr 138 from arrl headquarters
newington ct november 5, 1981
to all radio amateurs bt

uosat oscar 9 update. the university of surrey reports that the spin rate of the spacecraft has now been determined to be 1 minute 50 seconds. this slower rate indicates that deployment of the 50 foot magnetometer boom will be soon. when the boom is deployed the hf beacons will be turned on. on november 3 to
the digitalker was turned
on for a few minutes and the surrey command station was able to upload a few sentences of english which was played back. ian ferebee, g6btu, spokesman for the group, said that the checkout was going well and all systems looked good. the latest orbital parameters for oscar 9 are, period 95.3961, inclination 23.8672, reference orbit 4)4, nasa, 3 nov 81 crossing equator at 1448 utc at 358.3 degrees west longitude. subtract 12 minutes and 10 degrees from november qst oscar 9 listings
              -- ar --

From 3822157869912377079
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,4c57bfd53a9c6a99,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-11 04:32:36 PST
Message-ID: <anews.Aihnss.182>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!karn
X-Path: utzoo!decvax!ucbvax!ihnss!karn
From: ihnss!karn
Date: Wed Nov 11 04:32:36 1981
Subject: Hussein donation to AMSAT
X-Google-Info: Converted from the original A-News header

>From the AMSAT net, 11/11/81 0200 UTC on 3850 Khz:

During the recent visit of King Hussein of Jordan (JY1) to the US,

he contacted Dr. Thomas Clark, W3IWI President, to give his support to the amateur radio satellite program. As a "small contribution" to aid the effort, he has donated the sum of $10,000 to AMSAT!

Rumor has it that while in Los Angeles, King Hussein visited Henry Radio, Inc, to purchase Oscar equipment for his station.

Phil Karn, KA9Q

From -6733287589607577798
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,6fb75571e0d74915,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-11 04:37:33 PST
Message-ID: <anews.Aihnss.183>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!karn
X-Path: utzoo!decvax!ucbvax!ihnss!karn
From: ihnss!karn
Date: Wed Nov 11 04:37:33 1981
Subject: New Soviet Amateur Satellites
X-Google-Info: Converted from the original A-News header

Also from the 11/11/81 Amsat net:

Word from UA3CR is that launch of three new Soviet amateur radio satellites is "imminent". They have been completed and handed over to the Soviet military launch people. Subject to naming by their builders, AMSAT is referring to the three new spacecraft as RS-C, RS-D and RS-E. Each will carry a Mode-A type transponder, and uplink and downlink frequencies are as follows:

RS-C: 145.86-145.90 uplink, 29.36-29.40 downlink
RS-D: 145.91-145.95 uplink, 29.41-29.45 downlink
RS-E: 145.96-146.00 uplink, 29.46-29.50 downlink

There is also expected to be a "robot", an automatic QSO machine, on each of the three satellites. Uplink and downlink frequencies:
RS-C: 145.82 -> 29.32
RS-D: 145.83 -> 29.33
RS-E: 145.84 -> 29.34
The Robot will answer any call directed to it, e.g., "RS0 RS0 DE KA9Q KA9Q", and give a signal report! It is unclear how the spacecraft will deliver QSL cards, however.

Note also that the Robot uplinks on RS-C and RS-D are each 5 khz away from the Uosat-Oscar-9 general beacon. I wonder how long it will be before the Soviet satellites "work" Oscar-9....

Phil Karn, KA9Q

From 2368839823092325982
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 116b5e,fc78fa6d94d11e9b,start
X-Google-Attributes: gid116b5e,public
X-Google-Thread: 151e61,fc78fa6d94d11e9b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-11 17:49:46 PST
Message-ID: <anews.Ahouxf.136>
Newsgroups: net.columbia,net.ham-radio
Path: utzoo!decvax!duke!chico!harpo!houxf!kutsch
X-Path: utzoo!decvax!duke!chico!harpo!houxf!kutsch
From: houxf!kutsch
Date: Wed Nov 11 17:49:46 1981
Subject: shuttle communications
X-Google-Info: Converted from the original A-News header

Taken from 6 November 1981 "HR Reports"
Space shuttle communications during its second trip that begins this week
will again be audible to those with proper receiving capability. Operating
frequencies in S band will be 2287.5 MHz primary,
2217.5 secondary, with FM data and TV on 2250 and 2205.
Principal frequency in the VHF band will be 296.8 with 259.7 and world-wide
253.0 MHz emergency frequency as backup.

From 1924130167242869491
X-Google-Language: Unknown,Unknown
X-Google-Thread: 151e61,987d460ce880340b,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-12 21:20:41 PST
Message-ID: <anews.Ahouxc.112>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!houxc!3356pbn
X-Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!houxc!3356pbn
From: houxc!3356pbn
Date: Thu Nov 12 21:20:41 1981
Subject: arrl bulletin 139
X-Google-Info: Converted from the original A-News header

From 2300811314895364534
X-Google-Language: Unknown,Unknown
X-Google-Thread: 151e61,71cc81b242ffbcce,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-12 21:23:59 PST
Message-ID: <anews.Ahouxc.113>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!houxf!houxc!3356pbn
X-Path: utzoo!decvax!ucbvax!ihnss!houxf!houxc!3356pbn
From: houxc!3356pbn
Date: Thu Nov 12 21:23:59 1981
Subject: arrl dx bulletin 45

X-Google-Info: Converted from the original A-News header

From -8839926932153538699
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,987d460ce880340b
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-12 21:44:12 PST
Message-ID: <anews.Ahouxc.114>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!houxc!3356pbn
X-Path: utzoo!decvax!ucbvax!mhtsa!harpo!houxf!houxc!3356pbn
From: houxc!3356pbn
Date: Thu Nov 12 21:44:12 1981
Subject: arrl bulletin 139
X-Google-Info: Converted from the original A-News header

qst de ad7i
hr arrl bulletin nr 139 from arrl headquarters
newington ct november 12, 1981
to all radio amateurs bt

at an open meeting of the federal communications commission on
thursday, november 12, the commissioners decided to terminate pr
docket 80 729.the so called plain language rewrite of the amateur
rules, with no action. the familiar part 97 remains in force.
                -- ar --

From -1637010695351601839
X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,71cc81b242ffbcce
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-12 21:46:06 PST
Message-ID: <anews.Ahouxc.115>
Newsgroups: net.ham-radio
Path: utzoo!decvax!ucbvax!ihnss!houxf!houxc!3356pbn
X-Path: utzoo!decvax!ucbvax!ihnss!houxf!houxc!3356pbn
From: houxc!3356pbn
Date: Thu Nov 12 21:46:06 1981
Subject: arrl dx bulletin 45
X-Google-Info: Converted from the original A-News header

qst de ad7i
hr dx bulletin nr 45 from arrl headquarters
newington ct november 13, 1981
to all radio amateurs bt

thanks to k1mem, w1trc, n1ajo and k1mm of the southern new england dx
association for the following dx information.

san felix. kf1o is reportedly heading back to san felix this

weekend. it is uncertain if his schedule will allow him time to get on the air. if kf1o/ce0x is able to get on the air it will probably be after 2300z on saturday 14 november. bobs length of stay on san felix is also uncertain at this time.

south sandwich. look for lu3zy at 0000z on both mondays and wednesdays on 14240 khz in a list operation. carlos has just received crystals for his rig and should also be on 10 meters shortly. qsls go to lu2cn.

upper volta. xt2bk will concentrate on cw operation for one more week. look for wayne 25 khz inside the cw band edges. w9gw is given as the qsl route.

burundi. 9u5wr is on daily and can usually be found on one of the following frequencies after 2100z, 7012 14033 21033 anglwipee khz. qsls go to sp6fer.n

guinea bissau. j5htl for a short while yet by sm3rl. qsls to sm3cx .

franz josef land. uk1pgo will lose operator sany until next year but the three remaining operators will keep uk1pgo quite active. at ua1pam, operator slaa holds a second class licene and can work ssb only on 10 meters. slava is looking forward to working the required number of dxcc countries in order to get the first class license.

macquarie island. vk0an is active on tuesdays at 0915z on 14333 khz, on 14220 khz after 0630z and on 14225 khz at 1400z. vk0au is also on macquarie and very active.

cocos keeling island. vk9nrg has a monday schedule at 1330z on 28520 khz. qsls go to vk6ne.

albania. late rumor on the expected dxpedition to albania is that everything is go for a scheduled start on 4 december through 14 december of this year.

the gambia. c5aeg on all bands and modes through the end of this month. check 14025, 7083 or 14201 khz to inquire about 6 meter schedules with c5ael. qsls go to n6bfm.

russian oblasts. recently formed oblast 184 is active as station em8t. qsls go to uk8maa.

heard island. the middle of december is the planned arrival time for the heard island scientific expedition. the australian amateur who is part of this expedition expects to run high power to dipole antennas.

-- ar --

From -4923837179851662035

X-Google-Language: ENGLISH,ASCII-7-bit
X-Google-Thread: 151e61,cbe81f388738033a,start
X-Google-Attributes: gid151e61,public
X-Google-ArrivalTime: 1981-11-13 23:02:56 PST
Message-ID: <anews.Ahouxc.116>
Newsgroups: net.ham-radio
Path: utzoo!decvax!duke!mhtsa!ihnss!houxf!houxc!3356pbn
X-Path: utzoo!decvax!duke!mhtsa!ihnss!houxf!houxc!3356pbn
From: houxc!3356pbn
Date: Fri Nov 13 23:02:56 1981
Subject: Arrl bulletins
X-Google-Info: Converted from the original A-News header

To: all arrl bulletin readers
From: paul newland, ad7i
Subject: bulletins, and how i get 'em.

Some folks have asked how i get the bulletins and place them onto the net. What follows is a run through of the sequence of events that i do to re-broadcast them via netnews.

I make it a habit to copy the arrl bulletins from w1aw almost every night at 6 pm EST on 40 meters. For this, i use my heath h89, running comm[]soft software, connected to the HAL ST-6 (it's old technology, but it sure works!) with the ears on 7095.0 KHz. During the broadcast i log all the data to disk, then following the broadcast i edit out all the stale bulletins and try to make any fills that might be needed (i rarely get them all). Next, i run the bulletins through a filter to convert everything to lower case. (The only reason for lower case is that i find it easier to read lower case than upper case; other than that, there's no special reason for lower case.)

The bulletins are then transferred to houxf and from there entered to the net. I don't alway get the bulletins the same day they are released, but a delay of more than 3 days should be unusual.

Because of work commitments, i will be at WECo Denver all of next week (NOV 16) and will be unable to send bulletins via the net, perhaps someone else could pick up the slack.

Paul, ad7i